



INTEGRATED DISTRICT DEVELOPMENT PLAN

KOLLAM

EXECUTION PLAN



DISTRICT PLANNING COMMITTEE, LOCAL GOVERNMENTS, SPECIAL TECHNICAL ADVISORY COMMITTEE - KOLLAM,
DEPARTMENT OF TOWN AND COUNTRY PLANNING - GOVERNMENT OF KERALA

DRAFT
INTEGRATED DISTRICT DEVELOPMENT PLAN
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Volume II



**DISTRICT PLANNING COMMITTEE, LOCAL GOVERNMENTS, SPECIAL TECHNICAL ADVISORY COMMITTEE - KOLLAM,
DEPARTMENT OF TOWN AND COUNTRY PLANNING - GOVERNMENT OF KERALA**

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DISTRICT PLANNING COMMITTEE, KOLLAM
LOCAL GOVERNMENTS, KOLLAM
SPECIAL TECHNICAL ADVISORY COMMITTEE, KOLLAM
DEPARTMENT OF TOWN AND COUNTRY PLANNING, GOVERNMENT OF KERALA

INTEGRATED DISTRICT DEVELOPMENT PLAN
FOR KOLLAM (Draft)

VOLUME- II
Execution Plan

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MESSAGE

Comprehensive development with social justice is the declared agenda of the Government. Development becomes comprehensive when the economic, social and physical dimensions are integrated. Equal accessibility to opportunities for all sections of the society will ensure social justice. Accessibility to opportunities shall be guaranteed to the present society, considering the ability of the future generation to meet their needs as well. Such a development ought to be achieved in a democratic manner for which people's participation in development is inevitable. In order to fulfil the Government's commitment towards decentralized planning, the People's Planning Campaign movement was introduced in our State during the Ninth Five Year Plan. Efforts were made in successive Five Year Plans to strengthen decentralization. District planning has become the most important link in the whole system of decentralized planning because this is the cutting edge of administration. The present system of decentralized planning needs to be perfected by giving adequate emphasis to district planning which in turn is the constitutionally envisaged function of the District Planning Committees.

The pilot project of preparation of Integrated District Development Plan and Local Development Plans for each Local Government, taken up by the District Planning Committee, Kollam with the Department of Town and Country Planning as nodal agency is highly noteworthy in this respect. This has to be viewed as a natural progression of decentralized planning. The viable methodology of preparation of local plans and district plans with the involvement of people, elected leaders and experts, piloted and validated at Kollam has gained nationwide acceptance.

Kollam District of Kerala now owns the pride of having a total Plan for its development and the District Planning Committee of Kollam has become the pioneer in fulfilling the constitutionally mandated responsibility of being the planning authority of the district. The success of any plan lies in its implementation. I am sure that District Planning Committee of Kollam will succeed in this regard too.

Thiruvananthapuram

Paloli Mohamed Kutty
Minister for Local Self Government
Government of Kerala

FOREWORD

The 74th Amendment Act of the Constitution of India, mandated District Planning Committee to prepare a draft development plan for the district. As per Article 243 ZD of the Constitution, the District Planning Committee shall consolidate Panchayat / Municipality Plans in the district and prepare a draft development plan for the district as a whole. The Article specifies that while preparing draft development plan, due regard shall be given to matters of common interest between panchayats and municipalities including spatial planning, sharing of water and other physical and natural resources, the integrated development of infrastructure and environmental conservation. The Constitution stipulates to consult such institutions and organizations decided by the State while preparing the District Development Plan. The District Planning Committee, Kollam, wanted to fulfil its Constitutional obligation and to have comprehensive development of the District with the participation of local governments in the district. This led to the important initiation towards preparation of an Integrated District Development Plan (IDDP) for Kollam along with Local Development Plans (LDP) for each and every local governments in the district in an integrated manner. The entire process was implemented with the involvement of people, local governments, line departments, NGOs etc. The Department of Town and Country Planning gave technical support for Plan preparation besides coordinating the entire process.

It is of no doubt that this methodology of plan preparation qualitatively strengthens the Decentralized Planning Process. The planning process is 'top-down'- 'grass root-up' wherein data collection and preliminary analysis of the collected data is performed at local level and integrated regional development vision (development concept) is formulated at the district level. Thus multilevel integration between Plans (between different Local Plans, Local Plans and District Plan and between sectors) is achieved avoiding duplication of development proposals formulated at different levels of administration namely at Village(*Grama*) Panchayat/Municipality, Block (intermediate) Panchayat, District Panchayat levels and even State or National level. Over and above the process succeeded in blending technical dimension and local wisdom in the preparation of Development Plans.

Integrated District Development Plan, Kollam tries to achieve planned development of the district through optimum utilization of resources, both natural and man made, ensuring conservation of environment. This is a plan for and by all development partners of the district and it specifies the role of each local government in the integrated development of the district. The Plan provides objective and direction to all development sectors meanwhile identifying their linkages.

The IDDP, Kollam envisages a population of 29.36 lakhs for the district by 2021- an addition of 3.50 lakhs to the present population. Development needs of the future population in each sector - be it physical, economical or social - are addressed in the Plan. The Plan identifies agriculture, animal husbandry, fisheries and mining & geology as the potential development sectors of the district. Six development zones namely Bio reserve zone, Agro development zone, Agro allied development zone, Special development zone, Multi functional zone and Aqua bio reserve zone are demarcated with most suitable activities in each zone. The midland area of the district is earmarked as the Agro development zone and the environmentally sensitive regions in and around Ashtamudi kayal and Paravur-Nadayara kayal are designated as Bio reserve zone of the District. A rational distribution of facilities is proposed to be achieved in the district through a well established hierarchy of settlements. A connectivity plan ensuring proper connectivity between settlements also form part of the Plan. Based on this development structure of the district sectoral details were worked out giving due respect to inter sectoral linkages. Thus the IDDP, Kollam is a comprehensive plan for the development of the district. The Plan encompasses all features of a district plan envisaged by the Constitution.

The District Planning Committee of Kollam is proud to be the pioneer in preparing such a Development Plan. The consistent efforts of members of DPC, Kollam, local governments, District Collectors, members of the Special Technical Advisory Group for IDDP and the Department of Town and Country Planning, in particular their Kollam District Office, in making the endeavor a success need to be appreciated.

Here is a Plan, not only 'for the people' but 'by the people and of the people'. The success of the Plan depends on how far people own the Plan and co-operate in implementation of the Plan. I seek united efforts of central, state and local governments as well as the private and corporate sector for realizing the development vision of IDDP Kollam. I submit this comprehensive plan before the people of Kollam as their means for achieving optimum development of the district.

Adv. K. Somaprasad
Chairman

District Planning Committee, Kollam
Kerala State

PREFACE

As part of People's Plan, Kerala succeeded in developing and operationalising a viable methodology of decentralized participatory planning. This path-breaking innovation has now been adopted nationally and the Planning Commission recommended an analogous methodology to be followed by all States in the preparation of the XIth Five Year Plan.

In spite of the pioneering nature of decentralized planning, it must be admitted, the development priorities were set and development options chosen on the basis of perceptions and negotiations among the stakeholders under the leadership of elected local governments and not on the basis of analysis. To start with it was good enough.

Now that decentralization in Kerala has entered the institutionalization phase, time is ripe for upgrading the quality of planning, moving on to analysis of development data and trends, with people and their representatives in the centre stage, assisted by officials and experts, leading to a vision emerging from a deep understanding of the developmental situation and potential.

In this respect, Kollam has conducted an important experiment, crafted patiently and meticulously by a team of top quality professionals from the Town and Country Planning Department, in partnership with enlightened political leadership of Local Governments. Under the leadership of the District Planning Committee (DPC) and with the involvement of all the Local Governments in the district, officials from the Development Departments, co-ordinated by the District Collector in his capacity as the Member Secretary of the DPC, pooled in all available data, filled up gaps through primary collection and analyzed them to study spatial development patterns. Utilizing the techniques of spatial planning and the tools of information technology detailed analysis of the current situation both sectoral and cross-sectoral was carried out and mapped and the trends were projected into the future.

The collective spatial patterns of different sectors of development at the district level, shows the gaps as well as the potential. Analysis was enriched by the involvement of elected leaders and local resource persons which gave the all important people-dimension to the whole process. Through a cross fertilization of expert opinions and people's ideas, policies and strategies for the immediate future emerged. Based on further consultations, plans and projects began to take shape springing organically from the understanding of the development past and the prospects of development future. Priorities were dictated by people's preferences of course limited by availability of resources, resulting in the detailed execution plan.

The whole process took a long time being a path-breaking venture. Intense discussions and debates and even doubts and criticisms informed each stage, often delaying the process but resulting in greater understanding and stronger ownership at the end. Thus only after a series of trials and errors the IDDP emerged. The most important features can be summed up as follows:-

- A deep shared understanding of development patterns of the past and potential for the future based on objective analysis of all available data.
- The understanding cut across development sectors and departmental domains and resulted in a holistic development concept or vision and this perspective guided the choice of strategies for the future and plans to realize them.

IDDP is made robust by the strong organic linkages connecting each step to the previous and next one. The commitment and enthusiasm of officials and elected leaders of Kollam has resulted in the development of a viable methodology of participatory spatial planning, theoretically sound and practically valid. Now that the core features of the methodology are revealed in the document, it is easy to upgrade or modify or adapt them for different geographical, developmental and political regions.

Thiruvananthapuram

S.M. Vijayanand
Principal Secretary
Local Self Government Department
Government of Kerala

ACKNOWLEDGEMENTS

The Integrated District Development Plan, Kollam is a long range comprehensive plan for the development of the district. Through preparation of IDDP, the District Planning Committee of Kollam has become the first ever DPC in the Country to own a District Development Plan prepared as envisioned by the Constitution. This path-breaking venture has become a model in participatory district planning in a spatial platform. The methodology adopted has proven to be theoretically sound and practically valid for the preparation of district and local plans in line with 73rd and 74th Constitutional Amendments and is easily replicable elsewhere in the country.

The Department of Town and Country Planning is deeply thankful to people's representatives, officials, experts and above all the people of Kollam who worked for materializing the Plan. The District Planning Committee, Kollam need to be specially acknowledged for the sustained efforts to fulfil their constitutionally mandated responsibility of having a development plan for the district. The support given by Sri. Paloli Mohamed Kutty, Minister for Local Self Government Department, throughout the period was invaluable. Sri. S.M. Vijayanand IAS, Principal Secretary, Local Self Government Department was always ready to help and advice. We are deeply indebted to him for his inspiring and invaluable support in materializing this Plan. Adv. K. Somaprasad, Chairman District Planning Committee, Kollam was the driving force behind the capacious task. The Plan preparation gained momentum on the initiative of Adv. P. Aisha Potti MLA, former Chairperson, DPC Kollam, who took keen interest at all stages. Smt. K. Devaki, former Chairperson of DPC also extended all supports. All members of the DPC actively took part in the planning process as Chairpersons of 'Sub committees of Special Technical Advisory Committee of DPC for preparation of IDDP'. Sri. B. Ajayakumar and Sri. George Mathew who played anchor roles as Chairmen of 'Spatial planning sub committee' during their respective tenures need to be specially acknowledged. The District Collectors of Kollam, during the period, in their capacity as the Member Secretary of the DPC, played crucial role in co-ordinating the entire task. Special acknowledgements are due to Sri.B.Srinivas, IAS former District Collector of Kollam for immense support rendered in putting the task in track and to Sri.A. Shajahan IAS, present District Collector of Kollam for the support extended during the completion period. The whole hearted cooperation extended by all the line departments was a determined in the event. The efforts of both official and non official members of the Special Technical Advisory Committee for IDDP need to be reckoned with gratitude at this juncture without which integration of sectors would have been out of question.

The untiring efforts of Sri. Jacob Easow as District Town Planner, Kollam and presently in his capacity as Senior Town Planner of the State Project Cell for the project was really an inspiration. Sri. K.Devarajan, Sri. S. Ajayakumar, Sri.J.Jayakumar, Sri. C.J. Poulose and Sri. P.Anilkumar as District Town Planners of Kollam during the period also contributed in this endeavor. Smt. P.R. Ushakumari, Town Planner, Sri. S. Ajay Kumar and Sri. K. Baiju, Deputy Town Planners exerted sustained efforts during the entire period. Members of the Spatial Analysis Team for IDDP and officials of Kollam District Office of the Department are also to be acknowledged. The officials of the IDDP-LDP Project Office took consistent efforts for the plan preparation among whom Smt. M.V. Shari and Smt. Jinumole Varghese, Assistant Town Planners need special mention. The Department also acknowledges the support and guidance rendered by the members of the State Level Steering Committee and Department Level Technical Implementation Committee.

The project of preparation of IDDP-LDP is a joint project of DPC, Kollam and the local governments in the district. All the local governments of Kollam district need to be specially acknowledged for being part and parcel of the project. It is hoped that they will exert continued effort and complete their local development plans in a time bound manner.

Eapen Varughese

Chief Town Planner

Department of Town and Country Planning

Government of Kerala

Thiruvananthapuram

PROLOGUE

The report of the Integrated District Development Plan for Kollam is presented in two volumes viz. Volume I and Volume II. The report has two sections: 'Section 1 - Methodology of Preparation of Local Development Plans and Integrated District Development Plan' and 'Section 2 - The Integrated District Development Plan for Kollam'.

Volume I comprises of

- Section 1: Methodology of Preparation of Local Development Plans and Integrated District Development Plan
- Part of Section 2 : Perspective Plan.

Volume II comprises of

- The remaining part of Section 2: Execution Plan.

Perspective Plan include

- Settlement analysis comprising analysis of population, occupational structure, land use, functional character of settlements, hierarchy of settlements, hierarchy of nodes and urban profile.
- Sectoral analysis comprising detailed analysis of various development sectors including production, service, social and economic sectors.
- Spatial analysis which analyses the spatial patterns evolved based on settlement studies, study of resources, study of social aspects and from environmental studies.
- Goals and objectives and the District Development Concept.
- General and sectoral development policies and strategies.

The above are detailed in Chapters 2 to 33 of Volume I.

Execution Plan include

- Development proposals with priorities, phasing and agencies involved with costing.

The above are detailed in Chapters 34 to 50 of Volume II.

A Concise Report of the Integrated District Development Plan for Kollam is also given as Volume III.

THE TEAM

1. Apex body- District Planning Committee, Kollam
 - I Adv. K. Somaprasad (Chairman)
 - I Sri. A. Shajahan, IAS, District Collector, (Member Secretary)
 - I Sri. N.S.Prasannakumar
 - I Sri. S.Subash
 - I Sri. Kollayil Sudevan
 - I Smt. J.Chinchu Rani
 - I Sri. P.B.Sathyadevan
 - I Sri. K.Sethumadhavan
 - I Adv. C.P.Sudeesh Kumar
 - I Adv. George Mathew
 - I Adv. Sabitha Beegum
 - I Sri. A.Manmadhan Nair
 - I Adv. S.Venugopal
 - I Smt. Jayadevi Mohan
2. Nodal Agency
 - I Department of Town and Country Planning
3. Special Technical Advisory Committee
(Details – Appendix 27 A)
 - I Agriculture
 - I Irrigation
 - I Watershed Development & Land Use
 - I Animal Husbandry and Dairy Development
 - I Fisheries
 - I Industries, Co-operation, Trade & Commerce
 - I Health
 - I Drinking Water & Sanitation
 - I Infrastructure, (Roads, Bridges, Housing)
 - I Forest, Environment, Mining & Geology
 - I Education
 - I Social Welfare and Women & Child Development
 - I Poverty Alleviation & Rural Development
 - I Power & Tele Communication
 - I Scheduled Caste / Scheduled Tribe Development
 - I Tourism, Culture Sports & Youth Affairs
 - I Human Resource Development
 - I Finance
4. Spatial Analysis Team
(Details – Appendix 27 B)
5. Other Officials involved in the preparation of IDDP
(Details - Appendix 27 C)
6. Supporting Staff of Office of the Town Planner, Kollam
(Details - Appendix 27 D)
7. Supporting Staff from other offices of Town and Country Planning Department
(Details - Appendix 27 E)

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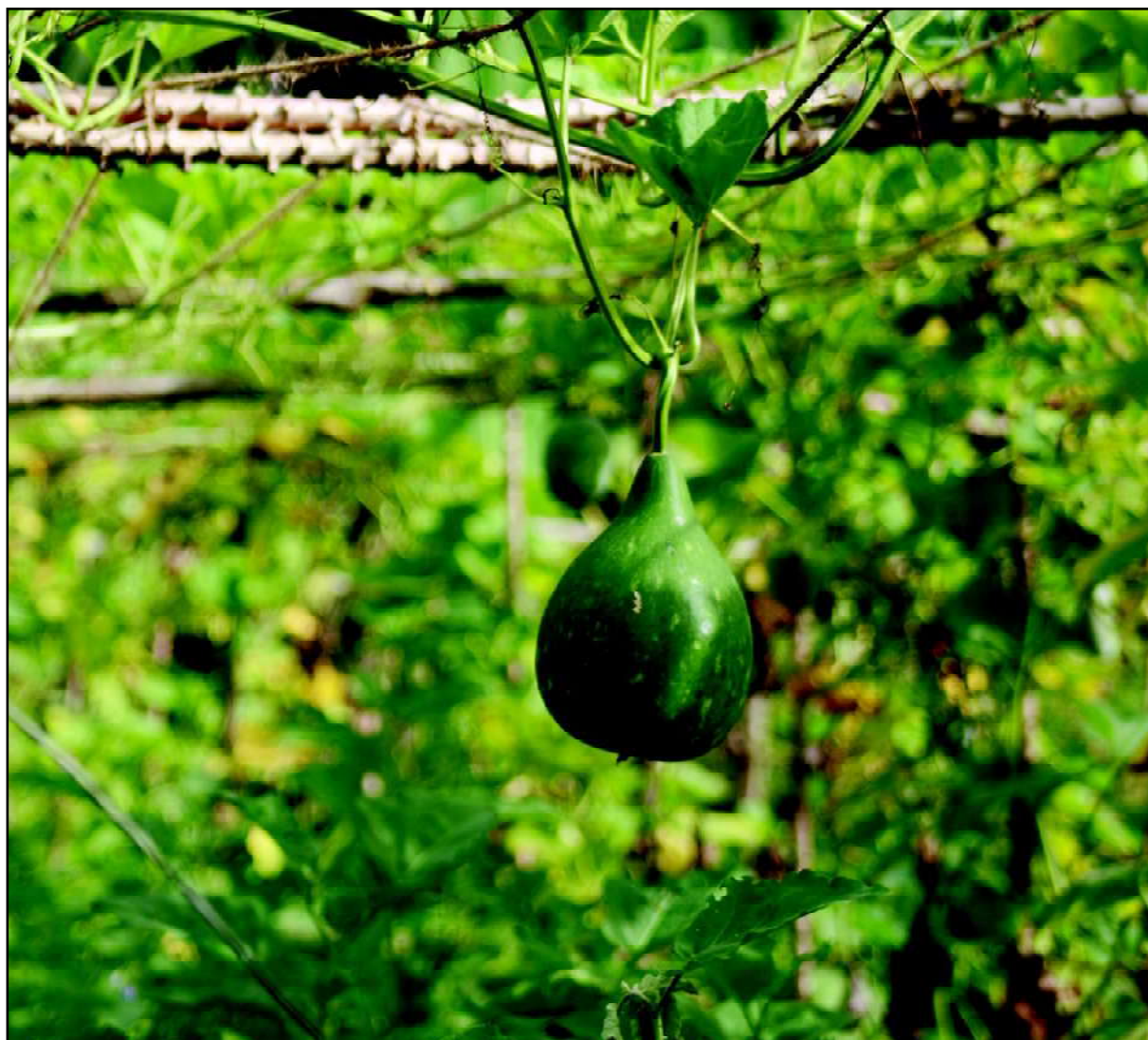
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ABBREVIATIONS

| | | |
|--------|---|--|
| ADAK | - | Agency for Development of Aquaculture Kerala |
| AIDS | - | Acquired Immune Deficiency Syndrome |
| ANERT | - | Agency for Non-conventional Energy and Rural Technology |
| ARP | - | Accelerated Rural Programme |
| ARs | - | Artificial Reefs |
| ARWSP | - | Accelerated Rural Water Supply Programme |
| ARWSS | - | Accelerated Rural Water Supply Scheme |
| ASHA | - | Accredited Social Health Activists |
| BAWSS | - | Bilateral Assistance Water Supply Scheme |
| BFFDA | - | Brackish water Fish Farmer's Development Agency |
| BOT | - | Build, Operate and Transfer |
| BP | - | Block Panchayat |
| CAP | - | Controlled Atmosphere Packing |
| CFSC | - | Common Facility Service Centre |
| CHC | - | Community Health Centre |
| CIBA | - | Central Institute of Fisheries Technology |
| CIFNET | - | Central Institute of Fisheries Nautical and Engineering Training |
| CIFT | - | Central Institute of Fisheries Technology |
| CMFRI | - | Central Marine Fisheries Research Institute |
| CMRL | - | Cochin Minerals and Rutile Limited |
| CPC | - | Cluster Production Centres |
| CTCRI | - | Central Tuber Crop Research Institute |
| DFI | - | Development Financial Institutions |
| DIET | - | District Institute of Education and Training |
| DTPC | - | District Tourism Promotion Council |
| DWCRA | - | Development of Women and Children in Rural Areas |
| EAS | - | Employment Assurance Scheme |
| EEG | - | Electro encephalography |
| EIA | - | Environment Impact Assessment |
| EMS | - | Emergency Medical Service System |
| FAD | - | Fish Aggregating Devices |
| FFDA | - | Fish Farmer's Development Agency |
| FIRMA | - | Fisheries Resource Management Society |
| GDP | - | Gross Domestic Product |
| GOI | - | Government of India |
| GOK | - | Government of Kerala |
| GP | - | Grama Panchayat |
| Ha | - | Hectare |
| HED | - | Harbour Engineering Department |
| HIV | - | Human Immunodeficiency Virus |
| HS | - | High school |
| HSS | - | Higher Secondary School |
| ICDS | - | Integrated Child Development Services |
| IDBI | - | Industrial Development Bank of India |
| IDDP | - | Integrated District Development Plan |
| IEC | - | Information, Education and Communication |
| IFP | - | Integrated Fisheries Project |
| ILCS | - | Integrated Low Cost Sanitation |
| IMG | - | Institute of Management in Government |
| INP | - | Indo Norwegian Proposal |
| IPHS | - | Indian Public Health Standard |
| IRDPA | - | Integrated Rural Development Programme |
| ISM | - | Indian systems of Medicine |
| IT | - | Information Technology |

| | |
|----------|--|
| ITC | - Industrial Training Centre |
| ITI | - Industrial Training Institute |
| JBIC | - Japan Bank of International Cooperation |
| JP | - Jilla Panchayat |
| JPHN | - Junior Public Health Nurse |
| JRY | - Jawahar Rozgar Yojana |
| KELSA | - Kerala State Legal Services Authority |
| KIED | - Kerala Institute of Entrepreneurship Development |
| KILA | - Kerala Institute of Local Administration |
| KIP | - Kallada Irrigation Project |
| KMFRAAct | - Kerala Marine Fisheries Regulation Act |
| KMML | - Kerala Minerals and Metals Limited |
| KSEB | - Kerala State Electricity Board |
| KSUDP | - Kerala Sustainable Urban Development Project |
| KTDC | - Kerala Tourism Development Corporation |
| KURDFC | - Kerala Urban and Rural Development Finance Corporation |
| KV | - Kilo Volt |
| KVA | - Kilo Volt Ampere |
| KWA | - Kerala Water Authority |
| L.I | - Lift Irrigation |
| LDP | - Local Development Plan |
| LIC | - Life Insurance Corporation |
| LIPCOS | - Livestock Products Co-operative Societies |
| LP | - Lower Primary |
| LPG | - Liquefied Petroleum Gas |
| LSGD | - Local Self Government Department |
| LSGI | - Local Self Government Institution |
| LSGIs | - Local Self Government Institutions |
| M.I | - Minor Irrigation |
| ME | - Marine Enforcement |
| MLA | - Member of Legislative Assembly |
| MP | - Member of Parliament |
| MPC | - Marine Plywood Canoe |
| MPEDA | - Marine Products Export Development Agency |
| MRI | - Magnetic Resonance Imaging |
| MSY | - Maximum Sustainable Yield |
| MT | - Metric Tonne |
| NABARD | - National Bank of Agriculture and Rural Development |
| NCC | - National Cadet Corps |
| NCERT | - National Council of Educational Research and Training |
| NGO | - Non Governmental Organisation |
| NH | - National Highway |
| NHED | - Nutritional and Health Education |
| NMPB | - National Medicinal Plant Board |
| NREGA | - National Rural Employment Guarantee Act |
| NREGP | - National Rural Employment Guarantee Programme |
| NRHM | - National Rural Health Mission |
| NSS | - National Service Scheme |
| OBM | - Out Board Engine |
| OHSR | - Overhead storage reservoir |
| OP | - Out Patient |
| PFDF | - Pooled Finance Development Fund |
| PHED | - Public Health Engineering Department |
| PMRY | - Prime Minister's Rozgar Yojana |
| PR | - Primary Roads |
| PSU | - Public Sector undertaking |

| | |
|--------|---|
| PVC | - Polyvinyl Chloride |
| PWD | - Public Works Department |
| RCH | - Reproductive Child Health |
| RMK | - Rashtriya Mahila Kosh |
| RSBY | - Rastriya Swasth Bheema Yojana |
| RWH | - Rainwater harvesting |
| RWSS | - Rural Water Supply Scheme |
| SAF | - Society for Assistance to Fisher women |
| SEBI | - Securities and Exchange Board of India |
| SFC | - Standing Finance Committee |
| SH | - State Highway |
| SHG | - Self Help Group |
| SIDBI | - Small Industries Development Bank of India |
| SR | - Secondary Roads |
| SSA | - Sarva Shiksha Abhiyan |
| SSLC | - Secondary School Leaving Certificate |
| STD | - Sexually Transmitted Disease |
| TB | - Tuberculosis |
| TEAP | - Tsunami Emergency Assistance Programme |
| TFCI | - Tourism Finance Corporation of India |
| TMV | - Tobacco Mosaic Virus |
| TR | - Tertiary Roads |
| TRP | - Tsunami Rehabilitation Programme |
| TRYSEM | - Training of Rural Youth for Self-Employment |
| TTC | - Teacher Training Course |
| UGC | - University Grants Commission |
| UP | - Upper Primary |
| UWSS | - Urban Water Supply Scheme |
| VHSC | - Vocational Higher Secondary Course |



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Chapter 34

Agriculture

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This chapter includes the development proposals of Agricultural sector based on the development policies and strategies of the District derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district agricultural policy Kollam has to attain a certain level of self sufficiency in food crops while improving production of commercial crops, and value addition and even export of crops are promoted. Thus the proposals of agricultural sector are classified into crop wise proposals for self sufficiency, economy generation, infrastructure proposals such as market development and trading and special proposals such as high tech cultivation.

2. Proposals for Development of Crops for Self Sufficiency

The crops which are targeted for development and productivity improvement are rice, vegetables (bitter gourd, amaranthus, snakegourd, bhindi, brinjal, green chillies, cowpea, cucumber, bottle gourd, ash gourd, pumpkin, moringa, coccinia etc.), tapioca and sesamum (as mentioned in Article 3.1 of Chapter 11). Rice, vegetables and tapioca constitute a major portion in the day to day diet of Keralites. However, their production is far below the requirement and we are depending on other states to meet our needs. Hence the first and foremost objective should be to attain self sufficiency in these crops. Measures like enacting suitable legislation for rice, promoting high

tech cultivation for vegetables and intensive cultivation for tapioca are required in this regard. In the case of sesamum, self sufficiency can be achieved by compulsorily raising the crop in third crop rice fallows of the traditional onttukara tract comprising of Ochira, Karunagapally, Chavara, and Sasthamcotta Block Panchayat areas. According to the district development concept thrust for agriculture is given in the agro development zone and agro allied development zone. So majority of the crop development proposals are concentrated in these zones. Various proposals for development of crops for self sufficiency are detailed location specifically.

2.1 Integrated Rice Cultivation

As evident from the sectoral studies, the district suffers heavy dependency of

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rice, the major food crop. So it is essential that maximum possible level of self sufficiency is attained in paddy cultivation. This has to be done in an integrated manner as shown in Figure.34.1.

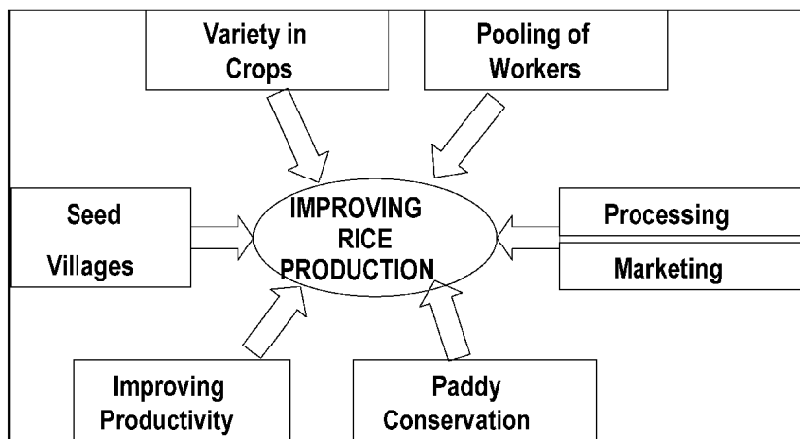


Fig.34.1: Integrated rice cultivation – A schematic diagram

In the present scenario total rice production is 20646 T. As per the requirement analysis, 21000 T of rice by 2011 and 35000 T of rice by 2021 would be required. It is expected that by implementing various proposals listed below, food security to a certain level can be met by 2021.

2.1.1 Paddy Seed Villages

Seed requirement for the district will be met through this programme. Suitable varieties will be selected and multiplied in the seed villages at Mylom, Neduvathur, Thalavoor and Sooranad North. One seed processing centre will also be established at Kottarakkara. Period of implementation is 2008-2012.

A seed to seed plan should be prepared and followed for production of registered seed by strictly adhering to seed laws. 500 Tons of seed is needed annually to cultivate 50% of the area. Total area requirement for the scheme is 235 ha. Farmers training, skilled labour, infrastructure for agricultural operations, harvesting, processing, storage, marketing and certification are the other major requirements. Employment generated after completion will be 30000 man days/year. Total cost of the scheme would be Rs.75 lakhs /yr.

Irrigation, Soil Conservation, Co-operative, Finance are the sectors to be linked. Phasing of the proposal is given in Appendix 34-2.

2.1.2 Improving Rice Production and Productivity through Paddy conservation

Even though land is a scarce resource, as mentioned in Article 3.1 of Chapter 11,

at present there is a tendency towards keeping the paddy land fallow. Considering its environmental sensitiveness paddy fields to be conserved for production and productivity improvement are specifically identified according to the spatial zones of Development Concept.

Paddy fields in the entire Agro Development Zone are to be retained and productivity to be increased. In case of Agro allied Development Zone the proposal is to retain the existing area and to increase productivity. Also proper collection, storage marketing and processing systems has to be ensured in this zone. Special attention is to be given to Chittumala chira and Polachira ela. In the case of Special Development and Multi Functional Zones, though the thrust is for development of secondary and tertiary activities, there are certain paddy areas to be retained. The Sub Zone 4 of Special Development Zone comes under Kayamkulam to Chavara coastal sandy tract of Onattukara region. Here existing paddy lands are proposed to be retained and productivity to be increased. The list of paddy areas to be conserved in various zones as per the Development Concept is given in Appendix 34-1. In all other areas, the paddy fields are to be retained in general ie in all the panchayats except Munroe Island, Alappad, Aryankavu, Thekkumbhagom and Neendakara where fish culture for the purpose of production enhancement for self sufficiency can be promoted as per Article

3 of Chapter 38. The proposal in Article 3.1.8 (Renovation of Grama Panchayat Ponds for Fish Culture) and 4.1.9 (Aqua Culture Estate) of Chapter 38; Fisheries can also be linked here.

The proposal aims at conservation of existing rice paddies through community effort. Special attention has to be given to Chittumalachira and Polachira elas. Steps to support paddy cultivators to retain paddy including supply of inputs and necessary mechanization schemes will be taken, to support cultivation in 10,000 ha of wet lands. Period of implementation is 2008-2012.

Enactment of legislation for conservation of wetland and paddy cultivation, labour banks, common yards, mechanization free of cost, seed plan and seed procurement system, micro enterprises for rice products are the major components. Employment generated after completion will be 1000000 man days/year. Total Cost for all components would be Rs.280 lakhs /yr.

Irrigation, power, co-operation, marketing, animal husbandry, industries are the sectors to be linked. Phasing of the proposal is given in Appendix 34-2.

2.1.3 Aromatic and Medicinal paddy cultivation

The proposal intends to propagate the cultivation of special rice like, Njavara, Basmati, and Jeerakasala etc. which are now high in demand. Traditional areas of cultivation like, West Kallada, Sooranad North and Mynagappally will be brought under the scheme. Initially 50 ha each of land in two Panchayats will be brought under the after assessing the requirement for Ayurveda sector. Period of implementation is 2008-2012. Employment generated after completion will be 700 man days/year. Total cost of the scheme would be Rs.20 lakhs /yr.

Seed production, training for cultivators, procurement and marketing are the major requirements. Irrigation, Watershed, Health, Certification agencies, Tourism (for enhancing the awareness) are the sectors to be linked. Phasing of the proposal is given in Appendix 34-2.

2.1.4 Paddy Processing Centres

Timely procurement and processing of rice will help to maintain assured price for cultivators. It will also encourage employment generation. Flour and valued

added products can be manufactured and made available at lesser costs. The processing centres are intended at Kadakkal, Sasthamcotta and Kottarakkara which are nearer to major paddy areas. The capacity of flour mill proposed is 2000 T / Processing Centre/Year. Period of implementation is 2008-2012. Employment generated after completion will be 12000 man days/year. Total cost for all units would be Rs.150 lakhs /yr.

Infrastructure, power and transportation are the basic requirements. Industry, Power, Environment, Co-operative sectors and LSGIs are to be linked. Phasing of the proposal is given in Appendix 34-2.

2.2 Vegetable cultivation

As evident from the sectoral studies, the district suffers heavy dependency of vegetables from other States. Bitter gourd, Amaranthus, Bhindi Snake gourd, Brinjal, Green chilly, other vegetables including Cowpea, Bottle gourd, Ash gourd, Pumpkin, Cucumber, Moringa and Coccinea etc. are the vegetables having potential for cultivation in the district. So it is essential that intensive cultivation can be under taken to reduce the dependency on vegetables from other States. This has to be done in an integrated manner as shown in Figure.34.2.

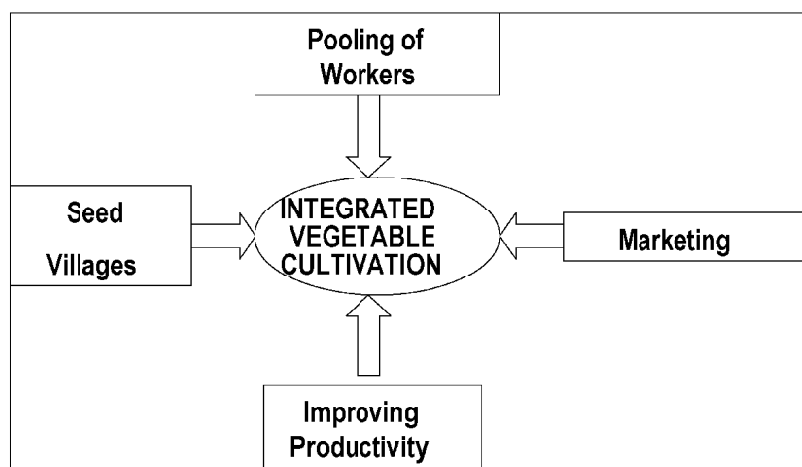


Fig.34.2: Integrated vegetable cultivation-A schematic diagram

In the present scenario vegetable production is very meager in the district. At present area under cultivation in the district is only in 1200 ha. 73212 T vegetables would be required by 2021 and it is expected that by implementing the proposals given below self sufficiency can be achieved in most of the vegetables by 2021.

2.2.1 Vegetable Seed villages

Vegetable seeds specifically suited for the agro – climatic conditions of Kollam are not sufficiently available and hence to meet the requirement of farmers in the district, certain LSGIs, where vegetable crops are intensively cultivated are selected and farmers will be trained in commercial vegetable seed production. The LSGIs selected are Edamulakkal, Yeroor and Anchal. The seeds will be marketed with the participation of Kerala State Seed Authority. The proposal of vegetable seed production phase I in 20 Ha (2008-2012) and phase II in 50 Ha (2012-2017) will cost Rs 20 lakhs /yr and 50 lakhs /yr respectively. Employment generated after completion will be 40000 and 100000 man days/year in each phase.

A common facility for seed processing is proposed at Anchal. Agriculture Dept., Kerala State Seed Authority and LSGIs are

Table.34.1: Vegetable cultivation - LSGIs in agro development zone

| Proposals | LSGIs included |
|--|---|
| Intensive cultivation of traditional vegetables in homesteads and 3 rd crop paddy fallows | Alayamon, Anchal, Neduvathoor, Edamulakkal, Karavallur, Pathanapuram, Pattazhy, Pattazhy Vadakkekkara, Pooyappally, Yeroor, Nilamel, Melila, Mylom, Ummannur, Vettikkavala, Velinalloor, Kadakkal |

Vegetable cultivation is proposed to be maintained in all the three seasons in at least 1000 ha. Vegetable cultivation will be encouraged in home stead cultivation also. Higher productivity can be achieved through integrated pest management and nutrition management. Schemes will be proposed for enhancing irrigation efficiency. High tech cultivation in green houses can increase the production substantially. The proposal for intensive cultivation in 1000 Ha is being implemented in almost all panchayats. Total cost would be Rs.750 lakhs /yr. Employment generated after completion will be 200000 man days/year. Period of implementation is 2008-2012.

Table 34.1 gives the list of LSGIs where intensive cultivation of traditional vegetables to be promoted in homesteads and 3rd crop paddy follows in the Agro Development Zone.

Table 34.2 gives list of the LSGIs where intensive cultivation of traditional vegetables to be promoted in homesteads and 3rd crop paddy fallows in the Agro allied Development Zone.

Table 34.3 gives the list of LSGIs where existing area to be retained and productivity to be increased and inter cropping of Vegetables and Tuber crops in coconut gardens for to be intensified in Sub Zone IV of the Special Development Zone.

Table 34.4 gives the list of LSGIs in Sub zone I of Special Development Zone where existing area to be retained and productivity to be increased.

Table 34.5 gives the list of LSGIs where existing area to be retained and productivity to be increased for Vegetables and Tuber crops in the Sub Zone 2 of Multi Functional Zone.

Seed supply and input assistance, irrigation facilities, marketing are the major requirements. Agriculture Dept., Co-operative societies, HortiCorp and LSGIs

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Table.34.2: Vegetable cultivation - LSGIs in agro allied development zone

| Proposals | LSGIs included |
|--|--|
| Intensive cultivation of traditional vegetables in homesteads and 3 rd crop paddy fallows | Kunnathoor, Poruvazhy, Sasthamcotta, Sooranad north, Sooranad south, Kulakkada, Elampalloor, Nedumpana, Pavithreswaram, Mynagappally, Ezhukone, Kareepra |

Table.34.3: Vegetable cultivation - LSGIs in Sub Zone – IV of Special development zone

| Proposals | LSGIs included |
|--|--|
| <ul style="list-style-type: none"> - Existing area to be retained and productivity to be increased - Inter cropping in coconut gardens to be intensified | Alappad, Karunagappally, Panmana, Chavara, Neendakara, Thevalakkara, Clappana, Kulasekharapuram, OachiraMynagappally, Sasthamkotta |

Table.34.4: Vegetable cultivation - LSGIs in Sub zone I of Special development zone

| Proposals | LSGIs included |
|---|---|
| Existing area to be retained and productivity to be increased | Bhoothakkulam, Kalluvathukkal, Paravoor Mlt |

Table.34.5: Vegetable cultivation - LSGIs in Sub zone II of Multi functional zone

| Proposals | LSGIs included |
|--|----------------------|
| <ul style="list-style-type: none"> * Existing area to be retained and productivity to be increased * Inter cropping in coconut gardens to be intensified | Kottarakkara, Anchal |

are to be linked. Phasing of the proposal is given in Appendix 34-2.

2.3 Tapioca cultivation

Intensive cultivation of tapioca as inter crop in coconut gardens to be taken up in traditional areas with special thrust in Kadakkal, Kulathupuzha, Kalluvathukkal, Anchal and Poothakulam. In Agro Development Zone, existing area to be retained and productivity to be increased in the Grama Panchayats of Alayamon, Anchal, Neduvathoor, Kottarakkara, Veliyam, Pooyappally, Yeroor, Chadayamangalam, Chithara, Ittiva, Kadakkal, Thalavoor, Vilakkudy, Nilamel, Melila, Mylom, Ummannur, Vettikkavala and Velinalloor. In Agro-allied Development Zone, existing areas to be retained and productivity to be increased in the Grama Panchayats of Thazhava, Chathannoor, Kunnathur, Poruvazhy, Sasthamcotta, Sooranad north, Sooranad south, Kulakkada, Kalluvathukkal, Elampalloor,

Nedumpana, Pavithreswaram, Mynagappally, Thodiyoor, Ezhukone and Kareepra. In the Multi Functional Zone existing area to be retained and productivity to be increased in Chathannoor Grama Panchayat.

The production of tapioca is not suggested in industrial scale as there is limited scope for area expansion. However small scale industrial units may be promoted for production of processed tapioca including starch, chips etc. Average productivity at present is 12 tones/ha. By popularising new generation high yielding varieties resistant to Tobacco Mosaic Virus, (TMV) the productivity can be increased to 18 tones/ha. Tapioca cultivation in steep slope areas shall be avoided as it promotes soil erosion. The productivity improvement proposal has 3 phases during the period of implementation of 2008-2012.

In phase I (2000Ha) total cost and employment generated would be Rs 1500

lakhs/yr and 2 lakh man days/year respectively. In phase II (4000Ha) total cost and employment generated would be Rs.3000 lakhs/yr and 4 lakhs man days/year respectively. In phase III (4000Ha) total cost and employment generated would be Rs.3000 lakhs/yr and 4 lakhs mandays/yr respectively.

Supply of quality planting material and other inputs are required. Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree and LSGIs are to be linked.

Phasing of the proposal is given in Appendix 34-2.

2.4. Rural homestead farming

The proposal intends to provide self sufficiency of common households to their basis needs to some extent. The proposal is to select 25,000 households of average plot area 10 to 30 cents to develop model homestead farms with vermi composting as an integral part and is suggested in almost all LSGIs. Flexi credit model of NABARD can be accepted as a benchmark. Period of implementation is 2008-2021. Employment generated after completion will be 100 lakhs man days/year. Total cost of the scheme would be Rs.4250 lakhs /yr.

Credit linking, Planting materials, training to farmers, organization of activities etc are the major components. Banks, Civic bodies, LSGIs, Fisheries, Animal Husbandry, Diary Development Departments etc are the agencies to be linked. Phasing of the proposal is given in Appendix 34-2.

2.5 Sesamum Cultivation

The proposal envisages cultivation of Sesamum in summer rice fallows of Onattukara region viz. Clappana, Oachira, Kulasekharapuram, Thazhava, Mynagappally, Thodiyur, Thevalakkara, Chavara, Panmana, Sooranad South, Sooranad North, West Kallada, Sasthamcotta, Kunnathur and Poruvazhy Grama Panchayats. The total paddy area in these Panchayats is more than 1700 Ha. However, Sesamum crop is raised only in about 270 Ha in rice fallows at present. It is proposed to bring additional area of 500 Ha under the crop. Anticipated production @ 350 kg / Ha will be 175 MT. Value addition units are proposed to be set up at Thazhava and Mynagappally. Period of implementation is 2008-2012.

This scheme will create employment of

10,000 man days per year. Good quality seeds are to be arranged. Buildings and machinery for oil extraction unit, and organic manure units for utilization of gingili cake is necessary. Total cost for all units would be Rs 50 lakhs /yr.

Industries and Co-operation, Grama Panchayat/ Block Panchayat are the agencies to be linked. Phasing of the proposal is given in Appendix 34-2.

3. Proposals for Development of Crops for Economy generation

The crops which are targeted for growth to attain economic development are identified as Rubber (48087 Ha), Coconut (50320 Ha), Pepper (13565 Ha), Banana (9584 Ha), Cashew (4404 ha) and Pineapple (5000 Ha).

According to the district development concept the major thrust for agriculture is given in the Agro development zone. Therefore the agriculture developments are by and large made intensive in the LSGIs in this Zone (Refer Table 32.1). It is proposed that by 2021 the entire Agro Development Zone shall be transformed into Organic Farming Zone (Figure 34.3).

3.1. Integrated Rubber Cultivation

Rubber at present is the highest economy generating commercial crop in the district. However in the long run the promotion of rubber cultivation in the district may prove to be grave as far as sustainability is considered because rubber is a mono crop. So even in the Agro Development Zone area expansion for Rubber is suggested only in few LSGIs (See Table 34.6). Period of implementation is from 2008-2015 and 2021. Employment generated after completion would be 13

where restricted rubber cultivation is proposed in the Agro-allied Development Zone.

Table 34.8 gives the list of LSGIs where restricted rubber cultivation is proposed in the Bio Reserve Zone.

The Table 34.9 gives the LSGIs where restricted rubber cultivation is proposed in Sub Zone of Multi Functional Zone.

Rubber cultivation is not generally proposed in other LSGIs in these Zones as well as in the LSGIs in Aqua Bio reserve zone, Sub Zone 1 of Multi Functional Zone

Table.34.6: Rubber cultivation - LSGIs in Agro development zone

| Sl.No | Proposals | LSGIs included |
|-------|---|--|
| 1 | Area Expansion proposed | Pathanapuram, Pattazhy, Pattazhy Vadakkekara, Chadayamangalam, Chithara, Kadakkal |
| 2 | * Existing area to be retained and productivity to be increased * Apiculture | Alayamon, Anchal, Neduvathoor, Edamulakkal, Karavalur, Kottarakkara, Veliyam, Pooyappally, Yeroor, Elamadu, Ittiva, Thalavoor, Vilakkudy, Nilamel, Melila, Mylom, Ummannur, Vettikkavala, Vellinallor, Punaloor Municipality |

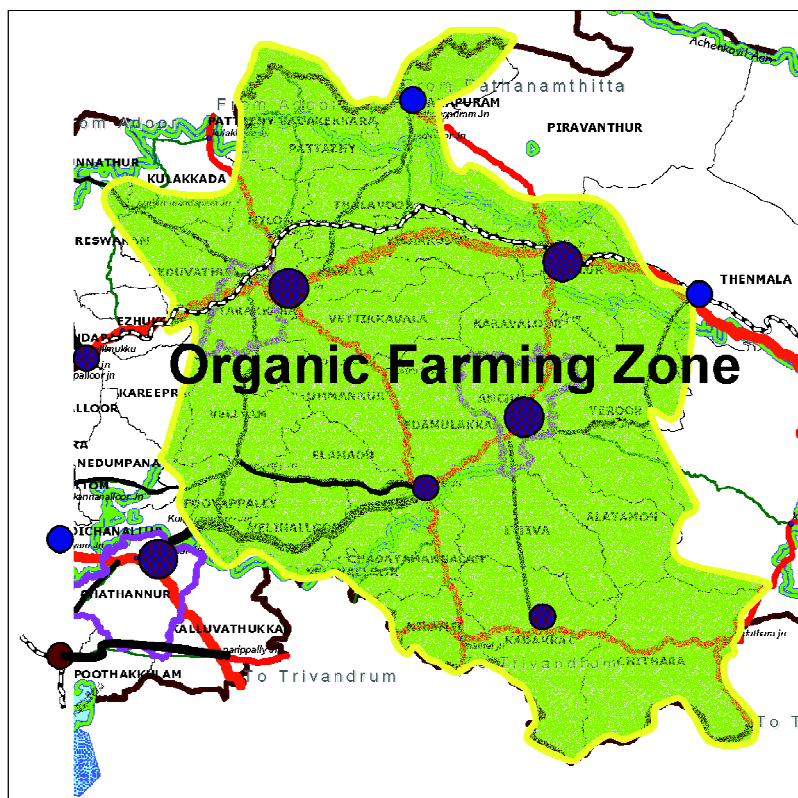


Fig.34.3: Organic farming zone

This area is also suggested as an organic farming zone by the Animal husbandry sector as per Article 2.1 of Chapter 37.

lakhs man days/yr. Total cost for all units would be Rs.10500 lakhs/yr.

The Table 34.7 gives the list of LSGIs

and Special Development Zone which are more or less in the coastal belt. The major proposals for Rubber cultivation are detailed as follows.

3.1.1. Rubber area expansion

Rubber area expansion needs to be approached with social concern and the expansion programme needs to be confined to selected areas of Kulathupuzha, Aryankavu, Thenmala and Piravanthur Grama Panchayats.

An area of 400 ha is to be brought under the proposal which accounts for an annual increase of 10% in area. Quality planting materials @ 500 budded plants/ Ha will be used for the scheme. In the initial 4 years, Banana can be cultivated as an intercrop. The scheme can create a labour of 60,000 man days/year in the initial 4 years. Rubber Plant Propagation units are required which are suggested at Punalur and Karavaloor. Employment generated after completion will be 2 lakhs man days/ year. Total cost of implementation of the scheme would be Rs.480 lakhs /yr.

By 2021 all the plantations would be replaced by high yielding varieties. As per Article 8.10 of Chapter 39, the woods will be utilised for rubber based industries.

Table.34.7: Rubber cultivation - LSGIs in Agro allied development zone

| Proposals | LSGIs included |
|--|---|
| * Productivity to be increased and area to be gradually reduced to 50% by 2021 | Kunnathur, Poruvazhy, Sooranad North, Kulakkada |
| * Apiculture | Ezhukone, Kareepra |

Table.34.8: Rubber cultivation - LSGIs in Bio reserve zone

| Proposals | LSGIs included |
|---|---|
| Existing area to be retained and productivity to be increased | Piravanthoor, Kulathupuzha, Thenmala, Aryankavu |
| Apiculture | |

Table.34.9: Rubber cultivation - LSGIs in Sub Zone of Multi Functional Zone

| Proposals | LSGIs included |
|---|-------------------------------|
| Existing area to be retained and productivity to be increased | Kottarakkara, Punalur, Anchal |
| Apiculture | |

Industries department (for establishment of processing centres), Soil and Water conservation, Trade and Commerce sectors, Rubber Board and Local bodies are to be linked. Phasing of the proposal is given in Appendix 34-2.

3.1.2 Productivity improvement of Rubber

The scheme is intended for LSGIs where contiguous area is cultivated with rubber. Replanting of senile plantations and crop management forms part of the scheme. Around 20,000 ha of existing plantations will be brought under the scheme by 2011. Remaining 20,000 ha will be replanted during 2011-2021 period depending on senility. 39 LSGIs of Zone A, B and C will be benefited.

Infrastructure for production of quality planting material needs to be created. Marketing co-operative societies to be established for collection and marketing of rubber sheets produced under both area expansion (400 Ha) and productivity improvement (40000 Ha) schemes. The scheme can create skilled labour of 100 lakhs man days/year for 40,000 ha. The number of farmers covered would be 20,000. Rubber Plant Propagation units are suggested at Punalur and Karavalloor.

Soil and Water conservation/ Industries/Trade and Commerce Sectors, Rubber board and Local bodies are to be linked. Phasing of the proposal is given in Appendix 34-2.

3.1.3 Apiculture in Rubber Plantation

Honey bee rearing is a good source of supplementary income for marginal

farmers and labours. New planters can also be engaged. Apiculture is to be implemented in 39 Panchayats of Zone A, B and C (Refer 3.1). 4 lakhs hives in about 40000 Ha is intended to be established. Average expected production is 5 kg/yr/ hive. It will generate an income of Rs 10 crores at the rate of Rs 50/kg of honey.

Collection and processing centres for honey, marketing facilities and training centres including measures for quality control are the major requirements. Trade and Commerce sector, Khadi and Village Industries, Social welfare Dept, Horti crop and LSGIs are to be linked. Phasing of the proposal is given in Appendix 34-2.

3.2 Coconut Cultivation

Coconut is another major crop identified in the District. Generally the coastal belt enjoys its concentration. The existing area under coconut is proposed to be retained with productivity increase through rehabilitation. Under area expansion of the Grama Panchayats in Sub Zone 4 of Special Development Zone including Panmana, Chavara, Neendakara, Thevalakkara, Clappana, Kulasekharapuram, Oachira, Mynagappally and Sasthamkotta are included. Due to its proximity to the sea, in Alappad Grama Panchayat the existing area under coconut cultivation towards eastern side of Kollam thodu has to be retained and productivity to be increased. In Sub Zone 1 of Special Development Zone including the LSGIs of Poothakkulam, Kalluvathukkal and Paravoor Municipality also the same

strategy is adopted. In all other zones existing area is proposed to be retained and productivity to be increased. The proposal for area expansion is for 200 Ha.

The other major proposals are detailed as follows.

3.2.1 Rehabilitation of coconut

Productivity of coconut is poor in the district mainly because of senility and closer planting. 50% of the existing palms need to be replanted. Farms of suitable sizes will be selected and palms will be planted scientifically with quality seedlings so as to enable inter cropping also. 10,000 ha of area will be brought under the scheme initially. The area will be selected from Zones B and C. The proposal is implemented in all LSGIs. Period of Implementation is 2008-2017. Seedling production, input supply and irrigation facilities are the major requirements. Soil conservation department, LSGIs and Co-operatives are to be linked. Phasing of the proposal is given in Appendix 34-2. Employment generated after completion will be 2.5 lakhs man days/year. Total cost of the scheme would be Rs.320 lakhs /yr.

3.2.2 Coir pith composting and other products

Scientific methods of coir pith removal and its composting or processing is needed to reduce pollution and to enhance the utility of coir pith. Coir pith can be made into blocks and processed for use in horticulture industry. 10 centres around Aqua Bio-Reserve Zone are to be established on an experimental basis each with a capacity of 500 Tons. Period of implementation is 2008-2012.

Training for participants, collection and transportation, processing infrastructure etc. are the major requirements. Co-ordination of coir co-operatives, Pollution Control Board and industries Dept. is essential. Employment generated after completion will be 0.01 lakhs man days/year. Total cost for all units would be Rs.10 lakhs /yr. Phasing of the proposal is given in Appendix 34-2.

3.2.3 Value addition of Coconut

Value addition of coconut by production of Coconut oil and other products is targeted here. 60% of the proposed production of coconut is expected to be used as industrial raw material. By 2011, an estimated no. of 54 million nuts will be available for industrial use and by 2021, the number

of nuts available will be 91 million. Expeller unit of Kerafed at Karunagappally existing now have an input capacity of 200 MT/ day, with 65% oil production. However, this unit can cater only 1/3rd of the requirement with 300 working days/year. Therefore 2 more expeller units at Kalluvathukkal and Kottarakkara are proposed. Further, value added products such as virgin coconut oil, coconut milk powder, aromatized coconut oil, coconut oil lubricant for Auto mobiles etc can be developed. Coconut oil based cottage industries can be developed nearer to major extraction units. Further, cluster based enterprises can be promoted at Karunagappally, Kalluvathukkal and Kottarakkara. Training for entrepreneurs, land, building, machinery and power supply are required. Period of implementation is 2011-2021.

Industry and Health sectors, LSGIs, Co-operatives and Civic societies are to be coordinated. Employment generated after completion will be 1.25 lakhs man days/year. Total cost for all units would be Rs.200 lakhs /yr. Phasing of the proposal is given in Appendix 34-2.

3.3 Pepper Cultivation

3.3.1 Productivity improvement in Pepper

The pepper area in the district is approximately 11035 Ha with productivity only 292 Kg/Ha as against the potential of 1300 Kg/Ha. As evident from the Sectoral studies, this is mainly because of poor management practices and lack of quality planting materials. As such a massive rehabilitation programme has to be implemented in 10000 Ha. Average size of pepper holdings is taken as 25 cents. Thus the number of cultivators benefited is anticipated as 1,00,000. The scheme will be implemented in 47 local bodies in zones A (4 nos.), B (26nos.) and C (17nos.). Plant population is 1100 standards /Ha and the no. of vines required is 3300 @ 3/ standard for pure crop. For inter crop, plant population is taken as 1100/Ha i.e. 1 plant/ standard. Every year, from 2008 onwards, 2000 Ha will be covered under the programme. Period of implementation is 2008-2021.

Table 34.10 gives the list of LSGIs where existing area under pepper to be retained and productivity to be increased

in the Agro Development Zone.

Table 34.11 gives list of LSGIs where existing area to be retained and productivity to be increased, in the Agro allied Development Zone.

Table 34.12 gives the list of LSGIs where existing area to be retained with productivity increase along with area expansion in the Bio Reserve Zone.

Table 34.13 gives the list of LSGIs where area expansion is required in Sub Zone 2 of Multi Functional Zone.

On an average 10% of vines have to

/yr. Total cost for all components would be Rs.3000 Lakhs/yr. Phasing of the proposal is given in Appendix 34-2.

3.4 Banana Cultivation

Banana is a remunerative crop suitable for the District. 1500 Ha is proposed to be brought under banana crop mainly in Agro allied Development Zone. About 2.25 lakhs man days of direct labour can be created besides production of 4500T of fruits. Period of implementation is 2008-2021.

Table 34.14 gives the list of LSGIs

Table.34.10: Pepper cultivation - LSGIs in Agro development zone

| Proposals | LSGIs included |
|---|---|
| Existing area to be retained and productivity to be increased | Grama Panchayats of Alayamon, Anchal, Neduvathoor, Edamulakkal, Karavallur, Kottarakkara, Veliyam, Pathanapuram, Pattazhy, PattazhyVadakkekkara, Pooyappally, Yeroor, Chadayamangalam, Chithara, Elamadu, Ittira, Kadakkal, Thalavoor, Vilakkudy, Nilamel, Melila, Mylom, Ummannur, Vettikkavala, Velinalloor and Punaloor Municipality |

Table.34.11: Pepper cultivation - LSGIs in Agro allied development zone

| Proposals | LSGIs included |
|---|---|
| Existing area to be retained and productivity to be increased | Grama panchayats Chathanthoor, Kunnathoor, Poruvazhy, Sasthamcotta, Sooranad north, Sooranad south, Kulakkada, Pavithreswaram, Ezhukone, Kareepra |

Table.34.12: Pepper cultivation - LSGIs in Bio reserve zone

| Proposals | LSGIs included |
|---|--|
| * Existing area to be retained and productivity to be increased | Grama Panchayats of Piravanthoor, Kulathupuzha, Thennimala , |
| * Area Expansion required | Aryankavu |

Table.34.13: Pepper cultivation - LSGIs in Sub zone 2 of Multi functional zone

| Proposals | LSGIs included |
|---------------------------|---|
| * Area Expansion required | Chathanthoor Grama Panchayat , Punalur Municipality |

be replanted every year, so that 110 vines / Ha will be required each year. 2000x110=2,20,000 vines would be required in the year 2008. Planting material production will be taken up by Department farm and approved nurseries.

Quality Pepper rooted cutting production would require joint actions of Dept. of Agriculture and Kerala Agri. University. Rehabilitation programme will have to be arranged jointly by LSGIs and Krishi Bhavans. Employment generated after completion will be 20 lakhs man days

where existing intensive cultivation as inter crop is proposed in the Agro Development Zone.

Table 34.15 gives the list of LSGIs where intensive cultivation of banana as intercrop and establishing of value addition units are proposed in the Agro allied Development Zone.

Table 34.16 gives the list of LSGIs where existing area to be retained and productivity to be increased in the Special Development Zone.

Table 34.17 gives the list of LSGIs

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Table.34.14: Banana cultivation - LSGIs in Agro development zone

| Proposals | LSGIs included |
|-------------------------------------|---|
| Intensive cultivation as inter crop | Alayamon, Anchal, Neduvathoor, Kottarakkara, Veliyam |
| | Pathanapuram, Yeroor, Nilamel, Melila, Mylom, Ummannur, Vettikkavala and Edamulakkal Grama Panchayats |

Table.34.15: Banana cultivation - LSGIs in Agro allied development zone

| Proposals | LSGIs included |
|---|--|
| Intensive cultivation as intercrop and establishing of value addition units | Thazhava, Chathannoor, Kunnathoor, Poruvazhy, Sasthamcotta |
| | Sooranad North, Sooranad South, Kulakkada, Nedumpana, |
| | Mynagappally, Ezhukone and Kareepra Grama Panchayats |

Table.34.16: Banana cultivation - LSGIs in Special development zone

| Proposals | LSGIs included |
|---|---|
| * Existing area to be retained and productivity to be increased | Grama Panchayats of Dhoothakkulam and Kalluvathukkal, Paravoor Mlty |

Table.34.17: Banana cultivation - LSGIs in Sub zone 2 of Multi functional zone

| Proposals | LSGIs included |
|--------------------------------------|-------------------------------|
| Intensive cultivation as inter crop. | Kottarakkara, Punalur, Anchal |

where area expansion is proposed in Sub Zone 2 of Multi Functional Zone.

Input supply, Marketing and Transportation facilities and processing centres are required. LSGIs, Agri. Dept. and Small Scale Industries sector are to be linked. Employment generated after completion will be 2.25 lakhs mandays/yr. Total cost for all units would be Rs.2200 lakhs/yr. Phasing of the proposal is given in Appendix 34-2.

3.4.1 Value Addition of Banana

Banana is being cultivated in 10,000 Ha in the district. Banana is the base product for many health preparations and baking industry. Banana powder, Banana wafer, chips etc are some of the preferred products. Units of average production capacity 500 ton/ year can be established to produce export quality products. 10 such units in major banana cultivating areas are intended with Anchal and Kottarakkara having 5 units each. Period of implementation is 2008-2021.

Infrastructures for processing and training in quality assurance are required. 500 Tons of raw banana/ unit / yr are required. Thus a total of 5000 Tons of raw banana is required. Industry, Certification, Power, Water, Trade and Commerce are

to be linked. Employment generated after completion will be 0.1 lakhs man days /yr.

Table.34.18: Cashew cultivation - LSGIs in Agro-development zone

| Proposals | LSGIs included |
|---|--|
| Existing area to be retained and productivity to be increased | Neduvathoor, Kottarakkara, Pathanapuram, Pattazhy |
| | Pattazhy Vadakkekara, Pooyappally, Chadayamangalam, Ittiva, Thalavoor, Vilakkudy, Melila, Mylom, Ummannur, Vettikkavala and Velinalloor Grama Panchayats |
| Area Expansion required | Alayamon, Karavaloor, Veliyam |

Table.34.19: Cashew cultivation - LSGIs in Agro allied development zone

| Proposals | LSGIs included |
|---|---|
| Existing area to be retained and productivity to be increased | Thazhava, Mynagappally, Thodiyoor and Ezhukone Grama Panchayats |

Table.34.20: Cashew cultivation - LSGIs in Special development zone-Sub zone 2

| Proposals | LSGIs included |
|--|--|
| To be cultivated in revenue purampoks, land available in public sector undertakings, Govt. office compounds etc. | Elampalloor, East Kallada, Kundara and West Kallada Grama Panchayats |

Table.34.21: Cashew cultivation - LSGIs in Multi functional zone- sub zone 2

| Proposals | LSGI included |
|--|-----------------------------|
| Existing area to be retained with HYV grafts | Chathannoor Grama Panchayat |

The estimated cost is Rs.10 lakhs /unit. Phasing of the proposal is given in Appendix 34-2.

3.5 Cashew Cultivation

Cashew sector development is of immense importance in the district. As pointed out in Article 1.3 of Chapter 28; Finance in the District, the Non Farm Sector shows maximum credit delivery due to high credit off take by cashew exporters.

Table 34.18 gives the list of LSGIs where existing area under cashew are to be retained and productivity to be increased in the Agro Development Zone.

Table 34.19 lists the LSGIs where existing area to be retained and productivity to be increased in the Agro allied Development Zone.

Table 34.20 gives the list of LSGIs where cashew is to be cultivated in revenue purampoks / land available in public sector undertakings/ Govt. office compound etc. in Sub Zone 2 of Special Development Zone.

Table 34.21 gives the list of LSGIs in the Sub Zone 2 of Multi Functional Zone where existing area to be retained with HYV grafts.

3.5.1 Cashew Development Programme (Area expansion and re-planting)

Presently, cashew is being cultivated in 4400 ha in the district. At least 75% of the area needs to be replanted with high yield varieties. The programme aims at rehabilitation of 3000 ha of cashew plantations. Period of implementation is 2008-2014.

Planting materials, other inputs, collection and marketing infrastructure etc are required. Industries, Co-operation, Labour Dept. are to be linked. Employment generated after completion will be 0.70 lakhs man days /yr. Estimated cost of the programme would be Rs.175 lakhs /yr. Phasing of the proposal is given in Appendix 34-2.

3.5.2. Cashew Planting in Theeravanam area

In the entire area of coverage of Theeravanam Project along the coastal line being implemented by Forest and Fisheries Dept., cashew cultivation is proposed as a second line of casurina cultivation (See Article 5.1.1 of Chapter 38; Fisheries.) The area would cover parts of Multi Functional Zone (Kollam Corporation and Karunagappally Grama Panchayat), Special Development Zone and Aqua Bio Reserve Zone (Paravur Municipality). Period of implementation is 2008-2012. Employment generated after completion will be 0.70 lakhs man days /yr. Total cost of the scheme would be Rs.150 Lakhs.

3.6 Pineapple cultivation

New planting in 5000 Ha (20000 plants/ Ha) as inter crop in 2008, followed by ratoon in 2009 and 2010, again new planting in 5000 Ha in 2011 and continued as above. Anticipated yield is 25 T/ Ha i.e. 1.25 lakh tons/ yr. The proposal is suggested in all LSGIs. Period of Implementation is from 2008-2012.

Planting materials and transportation / procurement and marketing facilities are essential. Marketing and industry/ transportation / irrigation / power sectors, Local bodies and Co-operatives are to be linked. Employment generated after completion will be 12 lakhs man days / tri year. Total cost would be Rs.6250 lakhs / tri yr. Phasing of the proposal is given in Appendix 34-2.

3.7 Jatropa Cultivation

Jatropa is an emerging crop, cultivated for bio diesel production. It is

proposed to cultivate Jatropa in an area of 50 Ha mainly in the waste lands and excavated (mixed) region of Chavara, Neendakara, Panmana, Kundara and Nedumpana Grama Panchayats. After excavation, the soil available will not be fertile and congenial for any other crop cultivation. Such areas can be utilized for jatropa cultivation which will help to improve soil texture and fertility.

Yearly consumption of diesel alone is approximately 40 million tones in India. Bio diesel can provide power similar to conventional diesel and is non-toxic also. The proposal aims at cultivation of non – fertile lands and waste lands with Jatropa plant. Farmers and automobile industry will be benefited from this proposal.

50 ha of land has to be identified in the above Panchayats. Intercropping of Jatropa with lemongrass, turmeric etc has been found to be economic. Fence farming is also an attractive option. 2500 plants can be cultivated / ha. For better growth plants require irrigation in the initial two years. Plants require pruning after they grow over 1.0 m ht. Plants bear fruits from 11 yr onwards and which will stabilize in the 4th year, with average effective yielding period of 50 years. This scheme can be started with procurement of seed for seedlings during 2014-15. The scheme require establishment an extraction unit also. The initial planting can be completed during 2015-16. Period of implementation is 2014-2021.

Industries, Pollution Control Board, Food and Civil Supplies Corporation etc are to be linked. Employment generated after completion will be 0.17 lakhs man days/yr. Total cost of implementation of the scheme would be Rs.16 lakhs. Phasing of the proposal is given in Appendix 34-2.

3.8 Maintenance of Native Crops

As mentioned in Article 3.1 of Chapter 11; apart from the commercial crops and food crops, the district is the habitat of many minor crops and flora which are of use to the people. Fruit trees like Jack, Tamarind, Garcinia, etc are some among them. Minor tubers, millets and pulses are important as they contribute to the food security. Such crops are to be encouraged on selective basis to meet the requirement of the population. Efforts for their promotion are required in all LSGIs. Period of Implementation is from 2008-2012.

Employment generated after completion will be 3 lakhs man days/yr. Total Cost for all units would be Rs.50 lakhs.

3.9 Floriculture

From the sectoral studies it is seen that Agro climatic zonation of Kollam district is very well suited for floriculture activities. As floriculture requires lesser land area it is suited for Multi Functional Zone in the point of view of both production and marketing as well as in Perinadu Grama Panchayat the proposed tourism hub. Production strategy is through the establishment of flori clubs. A collection and marketing facility centre will be established as part of the Ashramam destination development proposal by tourism sector. Period of implementation is 2008-2012.

Formation of 100 units per year would be required. Supply and production of planting materials and marketing facilities are the major requirements. Employment generated after completion will be 4 lakhs man days/yr. Cost of implementation would be Rs.75 lakhs /yr.

Agriculture Dept. and HORTICORP are to be linked. Phasing of the proposal is given in Appendix 34-2.

3.10 Aracanut Cultivation

From the sectoral studies it is seen that Aracanut cultivation is being drastically reduced in the district mainly due to high price fluctuation. Alternative measures such as promoting the use of 'leaf petiole' (making plates from palm leaves) etc. Araca palms can be raised as boundary crop in homesteads. The proposal is suggested in all LSGIs during the entire plan period.

Drought resistant planting varieties, training to Kudumbasree units for making plates and other novelties are required. Agriculture Dept., Kudumbasree and Small Industries are to be linked. Employment generated after completion will be 5000 man days/yr. Total cost of the scheme would be Rs.20 Lakhs/yr. Phasing of the proposal is given in Appendix 34-2.

3.11 Medicinal Plants

From the sectoral studies it is seen that Kollam district is rich in Bio diversity and all the commercially important medicinal plants including cultivable plants recommended by National Medicinal Plant Board (NMPB) can be cultivated in selected LSGIs of the district. Training is proposed to be given in conservation, scientific harvesting and primary

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processing of medicinal plants. Marketing network linking producers groups, co-operative societies, SC/ST dept. and Ayurveda industry will be formed.

Table 34.22 gives the list of LSGIs in the Agro Development Zone where area expansion and conservation for medicinal plants are proposed.

Table.34.22: Medicinal plants cultivation - LSGIs in Agro-development zone

| Proposals | LSGIs included |
|---------------------------|---|
| * Area Expansion required | Grama Panchayats of Alayamon, Anchal, Edamulakkal, Karavallur, Pathanapuram, Pattazhy, Pattazhy Vadakkekara, Yeroor, Chadayamangalam, Chithara, Ittiva, Kadakkal, Thalavoor, Nilamel, Mylom and Punaloor Municipality |
| * Conservation | |

Table 34.23 gives the list of LSGIs in the Bio Reserve Zone where existing area to be retained productivity to be increased and area expansion is required for medicinal plants are proposed.

Table.34.23: Medicinal plants cultivation - LSGIs in Bio reserve zone

| Proposals | LSGIs included |
|---------------------------|---|
| * Area Expansion required | Piravanthoor, Kulathupuzha, Thenmala and Aryankavu Grama Panchayats |
| * Conservation | |

Table 34.24 gives the list of LSGIs in the Sub Zone 2 and 3 of Special Development Zone where additional area as intercropping in garden land for medicinal plants are proposed.

Table.34.24: Medicinal plants cultivation - LSGIs in Sub zone 2 and 3 of Special development zone

| Proposals | LSGIs included |
|---|---|
| Additional area as intercropping in garden land | Elampalloor, East Kallada, Kundara, Perayam, West Kallada, Perinadu |

Planting material production, training and marketing are the major requirements. Concerted efforts of Agriculture Dept., SC/ST Development Dept., Co-operative Dept., Kudumbasree and Small Industries sector is required. The tourism department also in article 2.4.1 has mentioned about raising medicinal garden in Perinad Panchayat. Similar proposal is also put forth by the Forest dept. (See Article 4.4 of Chapter 43A).

Phasing of the proposal is given in Appendix 34-2. Employment generated after completion will be 0.1 lakhs man days/

yr. Total Cost for all units would be Rs.270 Lakhs/yr.

4 Proposals for Market Development and Trading

4.1 Primary Agricultural Markets

Necessary facilities linked with adequate communication network are essential for marketing of agricultural

produce. It will act as a transparent system to enable farmers to get a fair price for their produce. Primary markets including collection centre is intended for the direct sale of agriculture produce by farmers to

traders. In such proposed markets, facilities like space for lodging of items, sales area, weighing, transportation etc will be provided. Centers for direct sale to consumers also will be arranged. A

marketing committee in which representatives of farmers have majority and representatives of traders and elected members of LSGIs are members will have to be formed. Administrative support will be provided by Department of Agriculture. Primary Market will collect and hold farmers produce in commercial scales. Primary markets are proposed at Karunagapally, Chathannoor, Punalur, Anchal, Kadakkal and Kottarakkara. The scheme will be implemented during 2008-2012 period.

Warehousing facilities, Telecommunication, Banking and Waste management

facilities are required. Power requirement of 50 KVA is expected for each market.

Agri. Dept., Marketing agencies, Co-operative/Transportation/Animal Husbandry/Dairy/Fisheries sectors, LSGIs, Pollution Control Board, Telecommunication and Quality Control Institutions etc are to be linked. Employment generated after completion will be 0.6 lakhs man days/yr and the scheme would cost Rs.150 Lakhs. These proposals are to be linked with the proposals for Modernisation of Fish Markets (Article 6.2.1) and Establishment of Cold Storage and Cold Chain (Article 6.2.2) both of Chapter 38; and also the proposal of Fisheries and Marketing outlets (LIPCOS) as per Article 3.4 of Chapter 37; Animal Husbandry Sector.

4.2 Secondary Agricultural Markets

Warehousing facility, Grading facilities, Quality control facilities, Cold storages, Banking and Communication facilities will be arranged with secondary wholesale market. Auction centres, packing area and packaging facilities are necessary in secondary markets. It will receive supply from primary market and will act as a conduit point for movement of items to tertiary terminal markets and processing centres. Considering the road, rail connectivity and land availability, the secondary market is proposed at Kottamkara.

25 acres of land will be required for the scheme. Organizational support will be provided by Agriculture Department. Period of implementation proposed is 2008-2012.

Marketing agencies, Co-operatives, Transportation and Telecommunication systems, the departments of Animal Husbandry / Dairy and Fisheries, LSGIs, Pollution Control Board, Financial Institutions, AGMARK etc are to be linked. Power requirement of 250 KVA is expected for the market.

Employment generated after completion will be 1.5 lakhs man days/yr. Total cost for the scheme would be Rs.250 Lakhs.

4.3 Service Centers

Service Centers are proposed in association with primary markets where from farmers can avail various services. Banking services and input services will be provided at the center. Maintenance and hiring of agricultural machineries and implements will be undertaken at the centre.

Technology transfer will be a major activity of the service center. They are proposed basically at Multi Functional Zones including Kollam Corporation and other LSGIs like Karunagapally, Chathannur, Kottarakkara, Punalur and Anchal. A service centre is proposed at Kadakkal also as it is a major regional market serving not just LSGIs of Kollam District but also the neighboring LSGIs in Thiruvananthapuram District. Service centres will be established during the period 2008-2012. Cost for developing these centres would be Rs.150 Lakhs. Phasing of the proposal is given in Appendix 34-2.

5 Proposals for Technology based Crop Cultivation

5.1 Model Bio Technology Centre (Including Microbial Technology Centre)

Microbial technology is having wide application in routine agricultural production programmes to boost productivity. Production of bio fertilizers, bio control agents etc are directly linked with crop management. Many bio chemical products, helpful for agriculture and allied activities are being produced using suitable micro organisms.

All these require fully equipped production labs with facilities for research and quality control. Present production in the State is insufficient and of poor quality. A lab complex with facilities for production of any agriculturally important micro biological product is envisaged under this proposal. It can serve the entire farming community in the district. The proposal aims at commercial production of micro-organisms beneficial for farming (agriculture, fisheries, dairying etc.) and production of microbial products like enzymes and other secondary metabolites. The centres proposed are at Kulathupuzha and Anchal Grama Panchayats due to low temperature and water availability.

The centre consist entities which produce mainly bio control agents and bio fertilizers. Facilities will also be provided for secondary metabolites production and bioreactors in later stages. Private entrepreneurs will be encouraged to start ventures in the centre.

Expected production of bio control agents

- 50 tons

Production of bio fertilizers

- 50 tons

Production of bio fertilizers, bio control agents, effective microorganism and fermentation products for various purposes like dairying, industrial purposes etc are envisaged. Entire farming community of the district would be the beneficiaries. District level requirement of bio pesticides and bio fertilizer is given in Table 34.25.

Table.34.25: Requirement of bio pesticides and bio fertilizer in the district

| District Requirement | |
|----------------------|------|
| Bio pesticides | 40 T |
| Bio Fertilizer | 40 T |

Infrastructural facilities like building, power supply, water, roads, etc to be provided. The centre may be initially established in an area of 25 ha.

The centre will be developed on public-private participation mode. Interested firms will be allowed to develop their establishments in the area.

Two units may be started initially in public sector with an estimated cost of Rs 50 lakhs. Similar ventures at Kinfra, Kakkanadu and BFL, Pattambi may be taken as a model to establish the centre. Necessary human resources and distribution systems have to be developed. The centre can be developed to suit the need of other sectors.

Many biologically active ingredients are now being produced through bio reactors from cell cultures of medicinal plants. Such ventures will be started in the centre.

Power, Water, Health and Animal Husbandry, Industries, Environment, Forest (for collection of herbs) etc are the sectors are to be linked. A power requirement of 50 KVA would be required for the park. The centres have to be established during the period 2008-2012.

The Table.34.26 gives the production target.

Employment generated after completion will be 1500 man days/yr. Phasing of the proposal is given in Appendix 34-2.

5.2 Poly House Cultivation

Poly house cultivation is emerging as a new generation agro technology.

Table.34.26: Expected production of bio pesticides and bio fertilizers

| Year | Production | |
|------|----------------|-----------------|
| | Bio pesticides | Bio Fertilizers |
| 2009 | 5 ton | |
| 2010 | 10 ton | 10 ton |
| 2011 | 10 ton | 20 ton |

Cultivation of vegetables and other specific crops can be successfully done during entire year. It is being used for production of plantlets and flowers. Estimated cost of construction of poly house per m2 is Rs.200/- . Poly houses are proposed in Sub zone 2 of Special Development Zone. Yield of vegetable can go up to 150 ton/ha of poly house. 10 ha area is proposed to be taken for venture in the initial phase. The LSGIs selected are Elampalloor, East Kallada, Kundara and Perayam grama Panchayats. Thus by 2021, Sub Zone 2 of the Special Development Zone shall be transformed in to High Tech Agro Zone. High-tech agriculture is to be adopted for production of season independent crops especially vegetables, flowers and other specialized crops. Construction of green house/poly house is a basic need for this protected cultivation. The yield for vegetable can be increased to around 100 times. It is widely being practiced in Arab countries, Israel etc. Since the cost of initial infrastructure is high (Rs.400/sqm) financing and credit facilities also to be extended to the entrepreneurs. Technology transfer is an important aspect to be cared with 10 ha of area brought under poly house cultivation by 2021 in 100 units. Period of implementation is 2012-2017.

Infrastructure and Planting materials are required. Agriculture Department, Input and Marketing agencies, KSEB etc are to be linked. Power requirement of 150 KVA each would be required for the poly houses.

Employment generated after completion will be 3.5 lakhs man days/yr. Estimated cost of the scheme would be Rs.200 lakhs.

Phasing of the proposal is given in Appendix 34-2.

5.3 Bio Technology and Genetic Engineering Park

Biotechnology industry is a fast emerging commercial activity. High investment in research and development is already brought in for production of novel products including medicines.

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Microbial manipulation of biologically active compounds is a major research field. Establishment of a Biotechnology and Genetic Engineering park is proposed to meet the research and production requirements in this field. A suitable site will be developed with necessary common facilities for research work in biotechnology. Production of improved varieties of crop plants will be a major activity proposed. Genetic modification, clone propagation, secondary metabolize production etc. are also proposed. Entrepreneurs are encouraged to start their establishments in the park. Single window system of clearance for life science ventures is proposed. Testing and quality control services and human resources development institutions will become an integral part of the park. Elampalloor, East Kallada, Kundara and West Kallada are the LSGIs ideal for locating the Park. The Park will be established during 2012-2017 period.

250 acres of land with road and communication connectivity is required. Science and Technology Dept., Agriculture Dept., Pollution Control Board, KSEB, KWA etc are the agencies to be linked. Power requirement of 50 KVA would be required for the park. Employment generated after completion will be 15 lakhs man days/yr. Cost of establishing the Park is estimated as Rs.500 crores. Phasing of the proposal is given in Appendix 34-2.

6 Proposals for Agro-ecology Conservation

6.1 Water conservation programmes

Water conservation is the base activity to be undertaken for any farming activity. Agro development zone and Agro allied zone will be entirely brought under intensive water conservation programme. Flood and early draught in downward areas can also be regulated by this programme. 43 Grama Panchayats are selected and the scheme will be implemented in sessions.

The scheme can be integrated with national employment guarantee programme. Contour bunds, rain pits, rain harvesting ponds, agroecology, basin opening etc. will have to be implemented depending on the area are required.

Period of implementation of the programme is 2008-2021.

Irrigation, Watershed and Soil Conservation, Finance, Poverty alleviation are the sectors to be linked and involvement of LSGIs and Civic Society Groups are essential. Employment generated after completion will be 500 lakhs man days/yr. Total cost of implementation would be Rs.250 lakhs. Phasing of the proposal is given in Appendix 34-2.

6.2 Controlling usage of Chemical fertilizers and pesticides

In the Aqua Bio Reserve Zone ie in the LSGIs of Trikkadavoor, Thrikkaruva, Thekkumbagam, Munroe Island, Panayam and Perayam, use of Chemical fertilizers and pesticides is to be restricted. In the LSGIs of East kallada, Sasthamkotta, Chavara, Neendakara, Thevalakkara, West kallada, Kollam corporation, Paravoor Municipality, Mayyanad, Poothakkulam and Perinad use of chemical fertilizers and pesticides in the areas closer to water bodies is proposed to be restricted and crops not using chemical fertilizers and pesticides should be promoted for the areas closer to water bodies including Medicinal plants, Pineapple, Tree crops (Mango, Jack fruit etc.), Tubers etc.

6.3 Solar Fencing

The proposal aims to protect crops and livelihood of farmers in the peripheral areas of forests in eastern parts of the district. All the farmers in Kulathupuzha, Aryankavu, Thenmala and Piravanthur Grama Panchayats are the beneficiaries. Fencing will be provided wherever there are man-animal conflicts.

The length of fencing to be provided has to be worked out by conducting survey involving Agriculture and Forest Departments, Civic society groups (NGOs) and LSGIs. ANERT shall be entrusted with the task of fencing.

Cost has to be worked out in consultation with ANERT after assessing the length of fencing, number of solar panels and accessories required etc.

Phasing of the proposal is given in Appendix 34-2.

7 Other Proposals

7.1 Agri-based Cottage industries

Coconut handicrafts, Mats like "Thazhappai" are economically important to supplement the income of marginal

farmers and labourers. Traditional areas of such activity will be selected and promoted. Advanced technologies can be incorporated to suit international demand. Tourism can also be associated with the proposal. Making of bags, kits etc. using straw, pandanus, rattan etc. will be promoted.

Karunagappally, Thazhava, Thenmala, Aryankavu, Kulathupuzha, Thodiyur are the areas selected. Technology upgradation, infrastructure, marketing and training are the major components. Industries Dept, Training centres and Social Welfare Dept are to be linked. Estimated cost is Rs.60 lakhs. Phasing of the proposal is given in Appendix 34-2.

7.2 Recycling Facilities

Recycling facilities comprising microbial and mechanical treatment of biological wastes is proposed. The plants will be located in proximity to I order and II order settlements and Primary markets. The LSGIs selected are Kollam Corporation, Grama Panchayats of Karunagapally, Kottarakkara, Anchal and Chathanoor and Punalur Municipality. In other areas vermin wastes in homestead composting etc will be promoted. Period of implementation is 2008-2012. The waste generated from the marketing outlets suggested in Article 3.4 of Chapter 37, will also be disposed in these plants.

Land acquisition, transportation, power, waste treatment facilities etc are the components. Agri. Dept, LSGI, Pollution Control Board are to be linked. Employment generated after completion will be 0.2lakhs man days/yr. Total cost of developing these plants and supporting facilities is estimated as Rs.90 lakhs. Phasing of the proposal is given in Appendix 34-2.

7.3 Agriculture Labourer and Farmer welfare

Cultivators and Agricultural labourers constitute 17% of the total main workers in the District. Fragmented land pattern, higher proportion of women labourers etc necessitates development and popularization of ergonomically suitable light machineries. Labour bank system to be developed as an institution in practice enabling an assurance programme for the livelihood. Micro credit for the benefit of farmers is to be made available at the

reach of the farmers through proper organizational setup. Labour insurance scheme may be implemented. Agro technology must be included in the curriculum of High schools.

7.4 Research and Training Centre

At present the district has no established training centers for farmers and officials in the field of agriculture and allied areas. The district farm functioning at Kottukal in Ittiva Grama Panchayat has the basic facilities for training and demonstration. It has established modern methods of cultivation practices including micro propagation and organic farming. The centre is proposed to be developed to cater the training needs of the district and to do the basic research in the development of agriculture technology.

In-house training facilities including lodging and training hall, training equipments and multi media are required. Activities of ATMA can be smoothly integrated with the centre.

Agri. Dept., Kudumbasree, Poverty alleviation unit, LSGI, Entrepreneurship

Training Institutes (Banks etc.), KILA, State Agri. University are to be linked. Total estimated cost of developing the training centre would be Rs.50 lakhs. Phasing of the proposal is given in Appendix 34-2.

7.5 Mechanization of Agricultural Operations

As evident from the sectoral analysis, rice and coconut are the two major base systems of cultivation in the district. But paddy area is fast dwindling offering no further scope for mechanization. Possibility of designing smaller machines for use in isolated fields is to be explored. Research institutions and Kerala Agriculture University have to take sincere efforts to design and develop these equipments. As far as coconut is concerned, there are no labourers for plant protection. Convenient and ergonomically designed equipments for plant protection and tillage operations are to be developed and popularized. Harvesting and primary processing of coconut also require mechanization. It is proposed to earmark an amount of Rs 100 lakhs for promoting mechanization of

agricultural operation. Necessary infrastructures under RKVY can be created for the benefits of farmers.

8. Conclusion

In the Execution Plan of Agricultural Sector, the proposals for the development of various aspects of agriculture are incorporated taking into account the spatial distribution, labour distribution, agro-climatic characteristics and socio-cultural scenario of the district. Each LSGI has to take up activities based on proposals integrating various agencies for optimum utilization of resources. Surplus production and price fluctuations can be controlled to a greater extent by adopting planned schemes in agriculture.

Technology interventions require urgent attention. No significant development suitable for local needs is developed during last few decades in farm sector. Necessary refinement, precision techniques are to be developed through research institutions. Policy changes and social consensus are to be evolved with the participation of stakeholders to have a prosperous farming community in the district.

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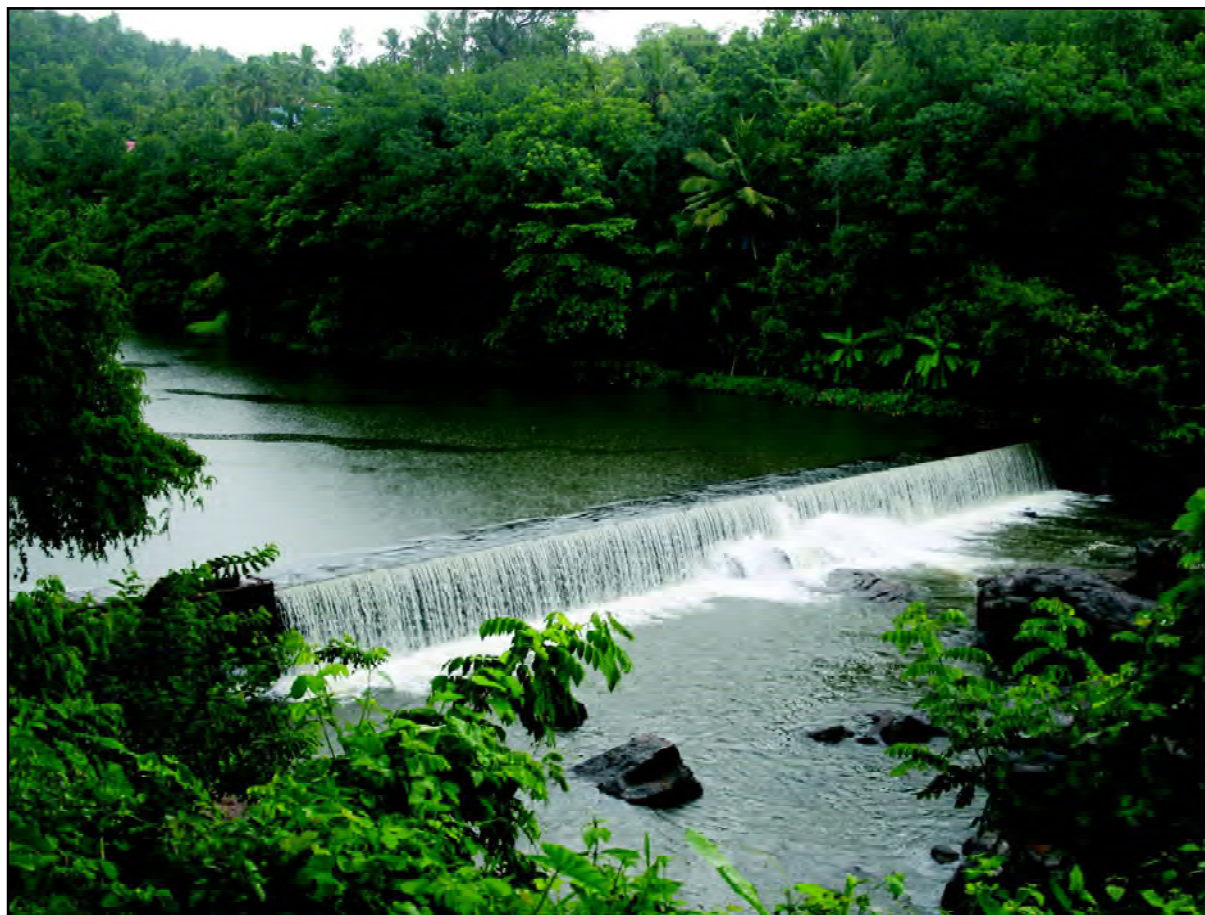
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Chapter 35

Irrigation

This chapter includes the Development Proposals of Irrigation sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

Irrigation sector as such has no individual existence in the absence of agriculture and is the most important supporting factor for agriculture. The District agricultural policy Kollam – 2021 aims to attain a certain level of self sufficiency in food crops while improving production of commercial crops and value addition and even export of crops are promoted. According to the district development concept the thrust for agriculture is given to two zones viz. the agro development zone and agro allied development zone. Hence the proposals of irrigation sector for 2021 are framed to support the agricultural sector to attain the goal in these zones. Thus optimum utilization of available

water for sustainable agricultural development to facilitate maximum production of food crops is the irrigation policy by 2021.

The major crops which require irrigation are paddy, banana and vegetables. As per the critical evaluation under sectoral analysis, problems in non-utilisation of created potential and problems of existing schemes were analysed. Irrigation development proposals are framed considering the major problems identified, viz.

1. Water available for agriculture is not under the control of the farmer.
2. Agricultural area and the desire to engage in agricultural activities are declining day by day.
3. The present water tight compartment system of various departments having linkage to agriculture is one of the main hurdles for cultivation.

What we need first is to bring water

under the control of the farmer. The farmer should have the assurance that their crops will not be failed on shortage of water. Such a situation will certainly persuade farmers, inclined to put an end to cultivation, to continue cultivation in their land and also to cultivate the existing bare land.

Even though it is expected that the agriculturist should have a say on the spot where water is needed, the quantity of water and the time of requirement, both in M.I and KIP the control of water is still vested in the hands of the departmental officers. The main aspect that prevents the departmental officers to hold on the true spirit of irrigation may be the diversity of crops, agricultural activities and concerns of the people. In KIP, water is let out through canals in turn and the proposed turn is always overturned creating an uncertainty in the availability of water in time. Another factor is that the structure from which water is let out to the crops is not under the ownership of the farmer. Considering these

factors the development proposals are framed to address the problems. Ferro-cement storage tanks of the type we use for the rain water harvesting is to be constructed at suitable spots from where water can be taken to the agricultural lands by gravity flow. The ownership of the storage tank is vested fully on the farmer's organizations. The rough cost of such structure comes to Rs.1.5 per litre of storage water. The advantages of such a system are

1. The ownership of the storage device and water stored in it are vested on the farmer only.
2. Various available sources of water can be utilised for filling the storage device. (a) Water from any available sources of Irrigation Department such as Minor Irrigation, Lift Irrigation or Kallada Irrigation Project is the main source. Since water is let out mostly in turn basis in the department canals, water will be available in the canals only for a short period during a month according to the turn fixed. When water is available in the canals, instead of supplying water direct to the field, the storage device is filled so that water needed upto the next turn is supplied to the tank. The farmers can utilize it as and when required without any tensions of uncertainty. From the department side it is easy to fill all such tanks with in the fixed turn which also reduces losage. (b) Rain water from the nearby roof tops and water lifted from the nearby wells, ponds etc, is one of the water sources which is locally available and collected by the farmers itself. This acts as reserve storage in case of emergency. (c) In case of emergency to save a crop, conveying water from a source which is not local or existing departmental source and filling the tank may also be considered.
3. Water is under the control of the farmer. He can decide the right place, the right time and right quantity of water to be utilised. This will help in optimising the quantity of water.
4. Water is assured. The farmer is always having a storage which can

be utilised as per need. It is easy for him to collect a full tank of rain water during the rainy season. Hence at the starting of an irrigation season he is having the tank full. Also water from the intermittent rains can be utilised. The capacity of the tank is designed considering the turn of opening of the irrigation canal and the total requirement of water for such a period. If any sign of shortage from any source is envisaged, he can go for alternate sources, since he is not dependent on a single source.

Irrigation sector activities, based on the above system planned for the elucidation of the problems observed, are classified into utilization of the existing potential and creation of new potential.

2. Proposals for Utilisation of the Existing Potential

The existing potential to be utilised is dispersed in Minor irrigation and KIP. The proposals for utilisation of potential for M.I and KIP are separately given below.

2.1 Utilisation of potential in Minor Irrigation

In Minor Irrigation, utilisation of potential is to be mainly dealt with regarding the Lift Irrigation Schemes. There are 8 L.I.Schemes in the district-Ariyankavu, Chathannoor, Adichannelloor, Kulakkada, East Kallada, Thodiyoor, Thazhava and Sooranad North. The table.35.1 gives the details of the existing L.I. Schemes.

Possibility of new Lift Irrigation Schemes may be investigated while preparing LDPs in Sooranadu South,

Karunagappally, Mynagappally and Panmana from Pallikkal River and in Mayyand, Kalluvathukkal, Pooyappally, Velinalloor, Chadayamangalam, Elamadu, Edamulakkal and Ittira from Ithikkara River.

As per the District Development Policies and Strategies agricultural thrust zones are Zone B and Zone C i.e. the Agro Development Zone and Agro -allied Development Zone. Also agricultural activities in the Multi-functional Zone require irrigation. There is no L.I.Schemes in the Agro Development Zone. The L.I.Schemes in Adichannelloor, Chathannoor, Thazhava, Thodiyoor, Kulakkada and eight L.I.Schemes in Sooranad North Grama Panchayat are in the Agro Allied Development Zone. The L.I.Scheme in East Kallada is in Special Development Zone and L.I.Scheme in Ariyankavu is in the Bio Reserve Zone. The potential created by the L.I.Schemes in Ariyankavu can be utilised for irrigation of medicinal plants if considered in the zone.

The utilisation of potential created in Zone C is to be given prime importance. The main activities needed for the utilisation of potential are (i) Identification of area where farmers are enthusiastic to take up agriculture. (ii) Replacement of the very old damaged pump sets in the schemes (iii) Maintenance or modification of the water conveyance system to convey water to the Ferro-cement tanks constructed considering the area where farmers are dedicated to agriculture. The suggested locations for the proposals like replacement of pumpsets, maintenance of conveyance system, new conveyance system to storage

Table.35.1. Details of the L.I.Schemes in the district

| No: | Name & Location of L.I.Scheme | Ayacut Area (Ha) |
|-----|---|------------------|
| 1 | LI Station at Ariyapadam in Thodiyoor Pt. | 171,22 |
| 2 | LI Station at Pavumba in Thazhava Pt. | 41,72 |
| 3 | LI Station at Kurungal in Chathannoor Pt | 28,1 |
| 4 | LI Station at Adhichanalloor in Adhichanalloor Pt. | 39,1 |
| 5 | LI Station at Uppucode in East Kallada Pt. | 215 |
| 6 | LI Station at Achankovil in Ariyankavu Pt. | 36 |
| 7 | LI Station at Kulakkada in Kulakkada Pt. | 40 |
| 8 | LI Station No.1 in Sooranad North Pt. | 25 |
| 9 | LI Station No.2 in Sooranad North Pt. | 20 |
| 10 | LI Station No.3 in Sooranad North Pt. | 15 |
| 11 | LI Station No.4 in Sooranad North Pt. | 10 |
| 12 | LI Station No.5 in Sooranad North Pt. | 12 |
| 13 | LI Station No.6 in Sooranad North Pt. | 12 |
| 14 | LI Station No.7 in Sooranad North Pt. | 15 |
| 15 | LI Station at Kanjirathum Kadavu in Sooranad North Pt | 24 |

tanks from L.I.Schemes are at Thodiyoor, Thazhava, Chathannoor, Adichanalloor, East Kallada, Aryankavu, Kulakkada and Sooranad North Grama Panchayats. Period of implementation of the proposals is from 2007 to 2012. Estimated cost for each component is Rs 25 Lakhs, Rs 5 lakhs and Rs 3 lakhs respectively. Table 35.2 gives the specific locations of the L.I. Schemes in zone C where the created potential can be utilised.

Table.35.2. Specific locations of the L.I. Schemes in Agro Allied Development Zone (Zone C)

| Sl: No: | Location of L.I.Scheme | Name of Padasekharam | Ayacut(Ha) |
|---------|-----------------------------|----------------------|------------|
| 1 | Ariyanpadam in Thodiyoor | Ariyanpadam West | 171,22 |
| | | Ariyanpadam East | |
| 2 | Pavumba in Thazhava Pt. | Thazhavayal North | 41,72 |
| | | Thazhavayal South | |
| 3 | Kurungal in Chathannoor Pt. | | 28,1 |
| 4 | In Adhichanalloor Pt. | Adhichanalloor Ela | 39,1 |
| 5 | Kulakkada in Kulakkada Pt. | Poovattoor East | 40 |
| | | Poovattoor West | |
| 6 | No.1 in Sooranad North Pt. | Kizhakkida | 25 |
| 7 | No.2 in Sooranad North Pt. | Kurikkuzhi | 20 |
| 8 | No.3 in Sooranad North Pt. | Anayadi | 15 |
| 9 | No.4 in Sooranad North Pt. | Onampally | 10 |
| 10 | No.5 in Sooranad North Pt. | Kochu Punja | 12 |
| 11 | No.6 in Sooranad North Pt. | Mannumpuram | 12 |
| 12 | No.7 in Sooranad North Pt. | Virippoyil | 15 |
| 13 | Kanjirathum Kadavu in | Thazhemendakan | 24 |

2.2 Utilisation of potential in Kallada Irrigation Project

The details of potential created in KIP in Zone B and Zone C, the prominent agricultural zones, are given in Table 35.3.

As per Article 1 of Chapter 12; Irrigation, out of the total ayacut area of 32272 Ha in Kollam district, irrigation potential is created in 30427 Ha. Potential yet to be created are that of Paravoor distributory (1212 Ha), Poovattoor distributory (514 Ha) and Pulamon distributory (119 Ha). The balance potential of 1845 Ha will also be created while the bottleneck works are completed.

Since KIP is envisaged to irrigate both wet and dry lands, the ayacut area shown is inclusive of the dry ayacut area in spite of the area of the padasekharams. Following activities are to be taken up in KIP for utilizing the created potential.

1. Identification of the Padasekharams for first phase intervention. The criteria to be adopted for the selection are (i) positive attitude of

farmers towards taking up agriculture (ii) present status of agriculture in the padasekharam (iii) optimum chance of availability of sufficient quantity of water from all sources of water such as irrigation water (KIP or MI), perennial wells, roof water harvesting etc. (iv) existing or future possibility of co operative farming (v) possibility of co-ordination among various

2. Conducting meetings and discussions of farmers to identify their problems and their proposals to solve them. Farmers Association for each spout is to be formed to ensure co operation among farmers. A distributory level association of farmers to deal with problems common to all is also to be formed from the representatives of all spout level associations. All official representatives of the departments related to agriculture should also form part of the distributory level associations.

3. Rectification of the distribution system of the created potential to suit the requirements of the ayacut area. This includes rectification of the distribution system to facilitate supplying water to the whole area comprising of a number of padasekharams and dry lands as well as making arrangements to supply water to the Ferro cement storage facility of each padasekharam. Farmer's opinion should be considered and their participation should be ensured in the whole rectification process.

Appendix 35-1 gives the phasing of the activities to be taken up in Kallada Irrigation Project and Minor Irrigation of Irrigation Department. In the first 5 phases 20 padasekharams are taken up and in the next 4 phases 25 padasekharams each. In the 10th phase there are 27 padasekharams. A single phase is only taken up in a year. In padasekharams identified in the next 5 phases, the proposals of Construction of Ferro - Cement storage tanks and new conveyance system to storage tanks from KIP are to be implemented during the period 2012-2017 with an estimated cost of Rs 134 lakhs.

3. Inter-linkages with other sectoral proposals

Proposals of Agricultural Sector

Support of irrigation is seen essential in the proposals of Agricultural Sector in Paddy seed villages (2.1.1), Improving rice production and productivity through paddy conservation (2.1.2), Aromatic and Medicinal paddy cultivation (2.1.3), Vegetable seed villages (2.2.1), Intensive vegetable cultivation and improving productivity (2.2.2), Rehabilitation of coconut (3.2 and 3.2.1), Banana cultivation (3.5) and Bio-technology and Genetic Engineering Park (5.3). The specific location where irrigation input is needed for these proposals and whether irrigation potential is available or not at present in these locations is given in Table 35.4.

In the various proposals of Agricultural sector, Panchayats where there is no irrigation potential at present can be classified into three categories. The first category is a set of Panchayats viz. Mayyanadu, Chadayamangalam, Ittiva, Elamadu and Edamulakkal where

Table.35.3. Potential created in KIP in Agro Development and Agro Allied Development Zones (Zone B and Zone C)

| No: | Panchayat | Canal | Padasekharam | Ayacut(Ha) |
|--|-----------------------|--|---|------------|
| Zone B – Agro Development Zone | | | | |
| 1 | Anchal | LBMC | Agasthikodu | 4 |
| 2 | Karavaloor | LBMC, Karavaloor, Chakkiyara & Punalur | Perumathuchira, Thachancode, Erichikkal, Panangattu, Narikkuzhi, Theriyottu, Kattupara, Karottu, Adukkalamoola, Puthuveettichira, Vallattu, Madathil & | 857 |
| 3 | Kottarakkara | LBMC & Poovattoor | Thrikkannamangal, Pandivayal, Neeleswaram & Ampalappuram | 242 |
| 4 | Mylom | Pulamon & Poovattoor | Pallichal, Karichal, Parambil, Methamon & Mechailil | 525 |
| 5 | Neduvathoor | Kulakkada Br, Kottiyam Br, Poovattoor & Cherumanad | Thevalappuram, Thevalappuram-B, Pullamala, Vallom, Annoor & Anakkottur | 634 |
| 6 | Paravoor Municipality | Paravoor | Nil | 288 |
| 7 | Pathanapuram | RBMC, Edathara & Pathanapuram | Pathirikkal, Nadumurippu, Edathara, Nadukkunnu, Manchalloor, Chithalvetty | 574 |
| 8 | Pooyappally | OBC, Veliyam, Padinjatinkara, Miyyannoor, & Adichanalloor | Kottara, Chekkodu, Chembakassei, Elavankonam, Kozhikodu, Nelliparambu, Cheekulam, Kallikonam, Madavana, Maruthamonpally, Punnakodu, Mathiyodu & Parangodu | 1328 |
| 9 | Thalavoor | Melila West | Kodumon Velipra, Chemmanavenkulam, Elangamon, Nilamel, Uppuzhu, Ambalamthekke Pandithitta. | 480 |
| 10 | Ummannoor | LBMC, OBC, Vilangara & Nellikkunnam | Mannathamara, Pera, Kattattu, Vayanamoola, Vayakkal, Plappally, Marangotukonam, Patteri, Kattiyamcodu, Perumba. | 397 |
| 11 | Velinalloor | OBC | Chenkur, Kalavayal, Orkkode | 39 |
| 12 | Veliyam | LBMC, OBC, Kattayil, Padinjatinkara, Veliyam & Kudavattoor | Maroor, Kudavattoor, Neduvana, Thamarasserri, Karingola kannannur, Muttara, Pullanjikkadu, Paruthiyara melayil | 871 |
| 13 | Vettikkavala | LBMC, OBC, Melila East, Melila West, Talachira & Pulamon | Panaveli, Thettiyodu, Nedumir, Kamukinkodu, Kaduvappa, Thalachira, Chakkuvarakkal, Kottavattom. | 757 |
| Zone C – Agro-allied Development Zone | | | | |
| 15 | Chathannoor | Paravoor | Meenad, Edanad, Varinjam, Chathannoor, Kurungal | 1976 |
| 16 | Elampalloor | LBMC, KBC, Perumpuzha & Punukanoor | Kallupalakkada, Njettayil, Thazhepunukkannoor, Pattupurakal, Kallingal, Thalaparambu, Mevanam, Panamkutti, Elampalloor, Punukkannoor. | 817 |
| 17 | Ezhukone | LBMC, Maravoor & Kulakkada Br, | Edakkodu, Karippuram, Chittakodu, Thrippilazhikom, Kakkakottur, Ezukone, Irumpanangad | 540 |

| | | | | |
|----|----------------|--|--|------|
| 18 | Kalluvathukkal | Paravoor | Kadampattukonam, Mevanakonam, Varjam, Ezhipuram, Kizhakkanel, Kavadiakonam kulamada, Aduthala, Elamkulam, Karimpaloor, Nadakkal, Kottakkeram, Chirakkara, Velamonnoor, Vilavoorkonam | 325 |
| 19 | Kareepra | LBMC & Pallimon | Ullakodu, Thrippilazhikom, Vakkanad, Thettikunnil, Kunnumvattom, Mundur, Thalavoorkonam, Karikkal chirakadavu, Plakkodu, Madanthakodu, Kadakod, Etuvaikodu, Mannurkavur, Chovalloor, | 899 |
| 20 | Kulakkada | Kulakkada Br, Poovattoor, Cherumanadu, Mylamkulam, Attuvasseri, Thenguvila & Thazhathukul-akkada | Poovattoor East, Poovattoor West, Sasthamangalam, Kundanthodu thuruthikkadu, Vendar, Attuvasseri, Mylamkulam, Puthur, Thotteketu | 1468 |
| 21 | Kunnathur | SBC, Iverkala, Thuruthikara | Tholikal, Manampuzha, Perumkulanji, Iypadom, Thamuzhamkulam, Vallikulam, Ambikkunnu, Manikyamangalam, Karinbinpuzha, Kannimelchalu | 1076 |
| 22 | Mynagappally | Chavara | N.Mynagappally, Chempinal, Chirakkuthazhe, Claisrakunnummel, Vettikkattu kizhakke, Aalikkattu vadakke, Koonnanchanal, Chalayimundakan | 1343 |
| 23 | Nedumpana | Adichanalloor, Pallimon & Muttakkavu | Kulappadom, Puliyila, Elavoor, Chilavoorkonam, Nallila, Pazhangalam, Miyyannoor, Nedumpana, Parakkottukonam, Kundumon | 1885 |
| 24 | Pavittreswaram | Kulakkada Br & Maravoor | Karikkal, Kaithakod, Maranad, Allasseri, Edavattom, Thazhom | 909 |
| 25 | Poruvazhy | SBC, | Venkulam, Veesjal, Kurumpukara, Kuduvankul, Kanjirakkad, Kaniyakuzhi | 933 |
| | | Edathara-1, Edathara -2, TrikunapuzhaN NediypadomS NediypadomN Sasthakulam | Thodiyoor vattakkayal | |

possibility of irrigation from L.I.Scheme from Ithikkara River may be investigated while preparing LDPs.

Second category is Karunagappally and Panmana where investigation may be done to ascertain the possibility of L.I.Scheme from Pallikal River while preparing LDPs.

Rest of the Panchayats namely East Kallada, Kundara, West Kallada, Anchal, Yeroor, Nilamel, Bhoothakkulam, Melila, Chavara, Neendakara, Thevalakkara, Clappana, Oachira, Kulasekharapuram, Pattazhy Vadakkekkara, Pattazhy, Kadakkal, Alappad, Aryankavu, Kulathupuzha, Thenmala, Thrikkadavur, Thrikkaruva, Chithara, Thekkumbhagam, Mandrothuruth, Panayam, Perayam, Perinadu, Kottamkara, Thrikkovilvattom, Piravanthoor and the Kollam Corporation and Punalur Municipality are the third

category. No other source of irrigation except irrigation from ponds or wells is possible in these LSGIs. Hence these LSGIs are the first priority area for implementation of water conservation measures on watershed basis. Also water available in the major water bodies like Chittumalachira, Polachira, Cheloorkayal, Vattakkayal etc may be considered. The water from these water bodies can be utilized only with effective salt-exclusion activities.

It may be noted that, the provision of irrigation facilities shall be in accordance with the phasing of agriculture proposals.

Proposals of Fisheries Sector

A carp seed hatchery is proposed in Adichanalloor chira (Article 2.1) by the fisheries sector. The renovation of Velichikkala thodu which is essential for supply of water to the chira can be taken up by the Minor Irrigation wing under

LSGD. Also water flowing through the KIP canal on the northern side of the chira can be utilised to maintain the required level of water in the chira.

The renovation of Grama Panchayat ponds for fish culture as per Article 3.1.8 of the proposal can also be taken up by the Minor Irrigation wing under LSGD.

Regarding the proposal for Production Enhancement through Reservoir fishes (3.2.2) since the ownership of the water spread of Kallada Dam at Parappur is vested with Forest Department problem is to be sorted out with that department.

Proposals of Mining and Geology Sector

The proposal for mining ordinary sand from Kallada Reservoir at Parappur (Article 4.0) can be materialized.

Proposals of Environment Sector

As per the proposal of Environment

Table.35.4. Specific locations where irrigation potential is required

| Proposal of Agri: Sector | Ref: to Article of Agri: Proposal | Location | Availability of Irrigation Potential |
|---------------------------------|-----------------------------------|--|--------------------------------------|
| Paddy Seed Villages | 2.1.1 | Mylom, Neduvathur, Thalavoor, Sooranad North. | Yes |
| Paddy Conservation | 2.1.2 | Alayamon, Karavaloor, Velinalloor, Veliyam, Adichanaloar, Chathanloor, Kalluvathukkal, Nedumpana, Mynagappally, Thodiyoor, Ezhukone, Kareepra, Kottarakkara, Neduvathoor, Pooyappally, Elampallur, Thazhava, Pathanapuram, Thalavoor, Vilakkudy, Kunnathur, Poruvazhy, Mylom, Sasthamcotta, Sooranad N, Sooranad S, Kulakkada, Pavithreswaram, Ummannur, Vettikkavala & Paravoor Municipality. | Yes |
| Aromatic and Medicinal Paddy | 2.1.3 | Mynagappally | Yes |
| | | West Kallada | No |
| Vegetable Seed Villages | 2.2.1 | Edamulakkal, Yeroor, Anchal | No |
| Intensive Vegetable cultivation | 2.2.2 | Alayamon, Neduvathoor, Karavaloor | Yes |
| | | Nedumpana, Pavithreswaram, Ezhukone, Mynagappally, Kalluvathukkal, Kottarakkara, Paravoor Municipality. | |
| | | Anchal, Edamulakkal, Pattazhy, Pattazhy Vadakkekara, Yeroor, Nilamel, Melila, Kadakkal, Alappad, Karunagappally, Panmana, Chavara, Neendakara, Thevalakkara, Clappana, Oachira, Kulasekharapuram, Bhoothakkulam. | No |
| Rehabilitation of coconut | 3.2 | Mynagappally, Sasthamcotta, Kalluvathukkal, Paravoor | Yes |
| | 3.2.1 | Panmana, Chavara, Neendakara, Thevalakkara, Clappana, Oachira, Kulasekharapuram, Bhoothakkulam. | No |
| Banana | 3.5 | Alayamon, Neduvathoor, Kottarakkara, Veliyam, Pathanapuram, Mylom, Ummannur, Vettikkavala, Thazhava, Chathanloor, Kunnathoor, Poruvazhy, Sasthamcotta, Sooranad north, Kulakkada, Sooranad south, Nedumpana, Ezhukone, | Yes |
| | | Mynagappally, Kareepra, Kalluvathukkal, Paravoor Mity. | |
| | | Anchal, Yeroor, Nilamel, Edamulakkal, Bhoothakkulam, Melila, Punalur Mity. | No |
| BT & GE Park | 5.3 | Elampalloor. | Yes |
| | | East Kallada, Kundara, West Kallada. | No |

Sector a buffer zone of 20m is provided on both banks of all rivers (Article 2.6 of chapter 43B). The sides of the rivers are to be protected and this activity will be taken up by Major Irrigation.

4. Conclusion

An innovative strategy is adopted for the irrigation of agricultural lands of the District. The salient features of the programme are

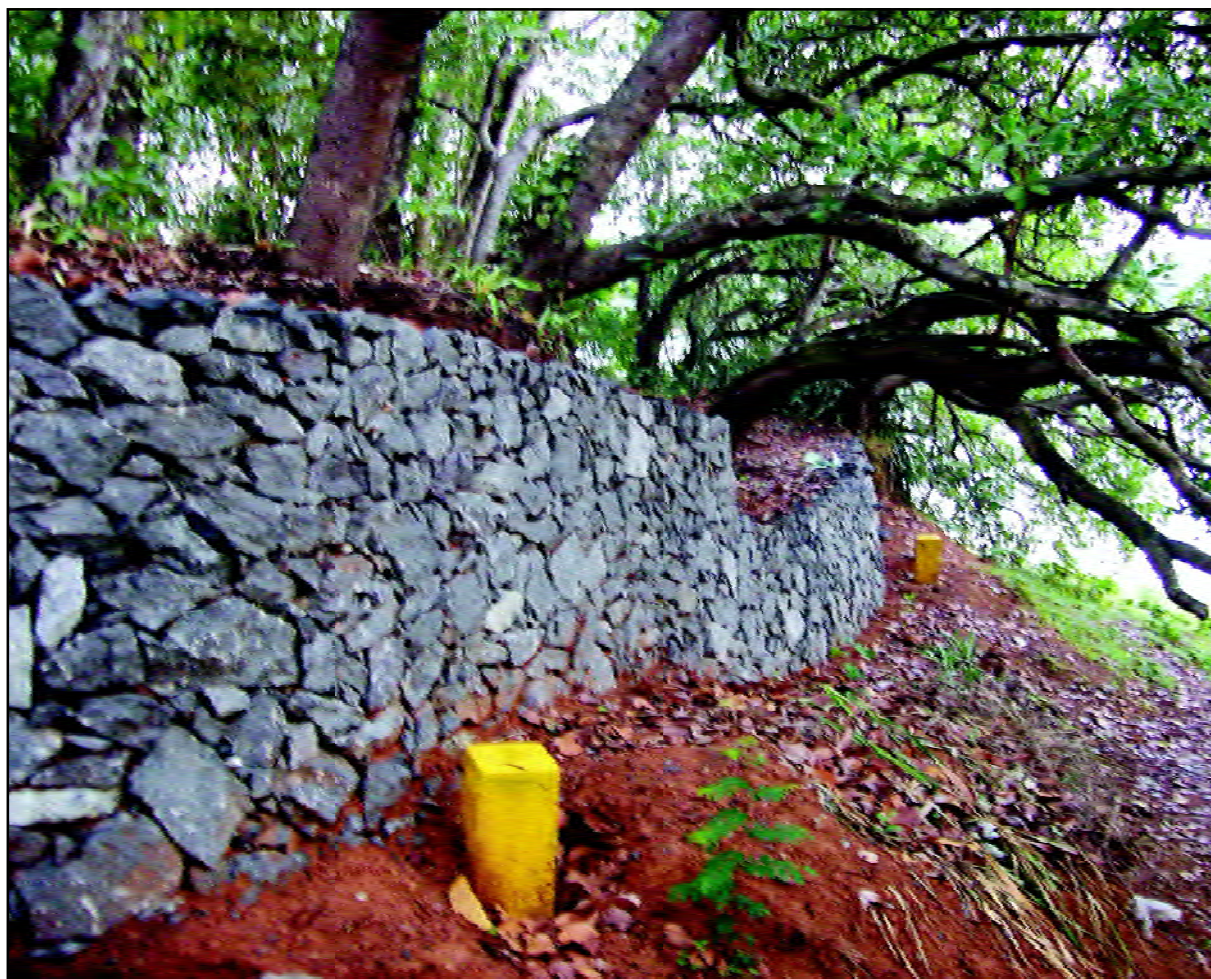
- 1) Irrigation water is under the control of the farmer.
- 2) All sources of water is utilised
- 3) Most needy areas are identified and phased to target them first.
- 4) Since sufficient storage of water is

within the custody of the farmer no need of over irrigation and no chance of under irrigation.

In the rainy season the agricultural area is rain fed as usual. Rain water harvesting structures, having capacity to irrigate the agricultural area for two weeks, is constructed at the elevated area of each agricultural plot or plots. As soon as the rainy season is over a tank full of rain water is ready in the rain water harvesting structure constructed and can be utilised. Before consuming the rain water storage fully the farmer can switch over to irrigation water either from canals of KIP, L.I. Schemes or M.I. Schemes. Irrigation

Department should supply water to the full capacity of the tank once in two weeks. Any shortage at any time is compensated by lifting and storing water from nearby ponds, wells etc. The Local Self Governments should take initiative for the construction of Ferro cement storage tanks, the Agricultural Department should propagate the need for such a farmer friendly strategy and Irrigation Department should initiate to supply water to the Ferro cement storage tanks instead of simply letting out water to the agricultural land.

Hopefully the co-ordination of the Departments and agriculturists should pave the way for a better agricultural output.



Chapter 36

Watershed

This chapter includes the Development Proposals of Watershed Development and Land Use Sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to Watershed Development Policy of the District, Kollam has to develop the natural resources including land, water and bio mass through integrated watershed management. The proposals are classified zone wise as the conservation activities vary for each zone as per the District Development Concept.

Watershed development is directly linked to four basic sectors of development viz. Agriculture, Irrigation, Drinking water and Environment. So the proposals suggested in watershed sector are prioritized according to the proposals of

these sectors for phasing the proposals up to 2021. Priority areas suggested by linked sectors are given in Appendix 36 – 1A.

From Appendix 36 – 1A, it is seen that top priority has to be given to the major environmentally sensitive water bodies in the district viz. Ashtamudi Back water, Sasthamcotta lake, Paravur Kayal and Edava – Nadayara kayal. In the case of LSGIs where soil conservation measures are prioritised, Ist priority goes to Yeroor and Anchal Grama Panchayats as they are included in all the three sectoral suggestions.

IInd priority goes to the Grama Panchayats of Edamulakkal, Elampalloor, East Kallada, Perayam, Kundara, Poothakkulam, Chavara, Thevalakkara, Clappana, Oachira, Kulasekharapuram, Pattazhy Thekkekkara, Alappad, Aryan-kavu, Kulathupuzha, Thrikkadavur, Thrikk-aruva, Thekkumbhagam, Mandrothuruth, Panayam, Perinadu, and Thrikkovilvatom

as they are common in at least two sectoral suggestions.

IIIrd priority goes to the LSGIs of West Kallada, Nilamel, Melila, Punalur Mlty, Neendakara, Pattazhy Vadakkekara, Kadakkal, Thenmala, Chithara, Kottamkara, Piravanthoor, Kollam Corporation, Alayamon, Mylom, Kulakkada, Paravoor Municipality, Kottamkara, Mayyanad, Chathanoor, Adichanalloor, Nedumpna, Panmana, Karunagappally, Thazhava, Kalluvathukkal, Thalavoor, Thodiyoor, Karavaloor and Ezhukone.

Considering the priority areas suggested by linked sectors, final priority area for Watershed Development for each spatial development zone is compiled and given in Appendix 36 – 1B. The phasing given in Appendix 36-3 based on this. However the treatment measures in each zone are fixed based on soil conservation priority maps as per Article 6 of Chapter 13.

2. Proposals for Bio-Reserve Zone (Zone A)

Treating the LSGIs Piravanthur, Kulathupuzha, Thenmala and Aryankavu on watershed basis is the main aim. Portions of the above LSGIs being susceptible to landslips and landslides are included in the soil conservation priority area. The proposals recommended for the area are vegetative measures like agro forestry, live fencing and border planting, safe disposal of runoff measures like brush wood checks and graded bunding and drainage course management like gabion structures. In the down stream side, vertical drop structures for water harvesting, ring ponds and development of springs are recommended. The measures are detailed in Appendix 36-2.

Approximately 12150 ha of land under Piravanthoor, 41896 ha of land under Kulathoopuzha, 16169 ha of land under Thenmala and 19604 ha of land under Aryankavu Grama Panchayats are to be treated. Approximately 85 lakh man days of skilled labour and 35 lakh man days of unskilled labour are required for execution of works. An amount of Rs.24,30,00,000/- for treatments in Piravanthoor, Rs. 83,79,20,000/- for treatments in Kulathoopuzha, Rs.32,33,80,000/- for treatments in Thenmala and Rs.39,20,80,000/-for treatments in Aryankavu is anticipated as expenditure for the works. The period of implementation of the proposal is from 2008 to 2011 in Aryankavu, from 2012 to 2014 in Kulathupuzha, from 2014 to 2017 in Thenmala, from 2017 to 2021 in Piravanthur. Aryankavu is taken first being the most critical LSGI as per Article 2.2.3 of Chapter 41; Drinking Water.

A project period of 3 to 4 years is required for completion of each watershed development project in the bio reserve zone. Infrastructure requirement includes office space within the watershed area for keeping the instruments for contour alignment, measurement, for receiving and sorting applications etc. Infrastructure for imparting training to the beneficiaries in the area is also needed. Total station is required for taking all readings. Agriculture sector, Minor Irrigation and fisheries sectors are the agencies to be linked. The employment generated after completion will be 3591086 mandays in Kulathupuzha,

1680343 in Aryankavu, 1385914 in Thenmala, 1041429 in Piravanthur.

The phasing details are given in Appendix 36-3.

3. Proposals for Agro Development Zone (Zone B)

Treating the LSGIs Alayamon, Anchal, Neduvathoor, Edamulackal, Karavaloor, Kottarakara, Veliyam, Pathanapuram, Pattazhy, Pattazhy Vadakkekara, Pooyappally, Yeroor, Chadayamangalam, Chithara, Elamadu, Ittiva, Kadakkal, Thalavoor, Vilakudy, Nilamel, Melila, Mylom, Ummannoor, Vettikavala, Velamanoor and Paravoor municipality on watershed basis is the main aim. Portions of the above LSGIs come under midland to upland areas and are having moderate erosion status. Therefore regular watershed development programmes are proposed in this zone. The proposals recommended for the area are vegetative measures like agroforestry, live fencing, cover cropping, contour strip cropping, contour vegetative hedges and mulching. Mechanical conservation measures include contour stone pitched and earthen bunds and contour trenches. Drainage course management like gabion structures, Check dams, water harvesting systems, diversion drains, ramps, supporting walls and bank stabilization structures are recommended. In the down stream side, vertical drop structures for water harvesting, ring ponds and development of springs are recommended. The measures are detailed in Appendix 36-2.

Approximately 3546 ha of land under Alayamon, 1924 ha of land under Anchal, 1669 ha of land under Neduvathoor, 3846 ha of land under Edamulakkal, 2133 ha of land under Karavaloor, 1324 ha of land under Kottarakara, 1907 ha of land under Veliyam, 2613 ha of land under Pathanapuram, 1292 ha of land under Pattazhy, 1157 ha of land under Pattazhy Vadakkekara, 1618 ha of land under Pooyappally, 2759 ha of land under Yeroor, 1184 ha of land under Chadayamangalam, 5152 ha of land under Chithara, 2914 ha of land under Elamadu, 4190 ha of land under Ittiva, 1464 ha of land under Kadakkal, 2850 ha of land under Thalavoor, 2100 ha of land under Vilakudy, 2116 ha of land under Nilamel, 1252 ha of land under Melila, 2084 ha of

land under Mylom, 3067 ha of land under Ummannoor, 3213 ha of land under Vettikkavala, 2317 ha of land under Kalluvathukkal, and 3550 ha of land under Punalur to be treated.

Approximately 25 lakhs man days of skilled labour and 10 lakhs man days of unskilled labour are required for execution of works.

An amount of Rs.53190000/- in Alayamon, Rs. 28860000/- in Anchal, Rs. 25035000/- in Neduvathoor, 57690000/- in Edamulakkal, Rs.31995000/- in Karavaloor, Rs. 19860000/- in Kottarakara, Rs. 28605000/- in Veliyam, Rs. 39195000/- in Pathanapuram, Rs. 19380000/- in Pattazhy, Rs. 17355000/- in Pattazhy Vadakkekara, Rs. 24270000/- in Pooyappally, Rs. 41385000/- in Yeroor, Rs. 17760000/- in Chadayamangalam, Rs. 77280000/- in Chithara, 43710000/- in Elamadu, Rs. 62850000/- in Ittiva, Rs. 21960000/- in Kadakkal, Rs. 42750000/- in Thalavoor, Rs. 31500000/- in Vilakudy, Rs. 31740000/- in Nilamel, Rs. 18780000/- in Melila, Rs. 31260000/- in Mylom, Rs. 46005000/- in Ummannoor, Rs. 48195000/- in Vettikkavala, Rs. 34755000/- in Kalluvathukkal, and Rs. 53250000/- in Punalur is anticipated as expenditure for the works.

A project period of 3 to 4 years is required for completion of each watershed development project in the Agro development zone.

Office space within the watershed area for keeping the instruments for contour alignment, measurement, for receiving and sorting applications etc. and Infrastructure for imparting training to the beneficiaries in the area would be required. Total station is required for taking all readings. Agriculture sector, fisheries sector and Minor Irrigation are to be linked. The employment generated after completion will be 227957 in Alayamon, 123686 in Anchal, 107293 in Neduvathoor, 241243 in Edamulakkal, 137121 in Karavaloor, 85114 in Kottarakara, 122593 in Veliyam, 167978 in Pathanapuram, 83057 in Pattazhy, 74378 in Pattazhy Vadakkekara, 104014 in Pooyappally, 177364 in Yeroor, 76114 in Chadayamangalam, 331200 in Chithara, 187328 in Elamadu, 295071 in Ittiva, 94114 in Kadakkal, 183214 in Thalavoor, 135000 in Vilakudy, 136028 in Nilamel, 80486 in Melila, 133971 in

Mylom, 197164 in Ummannoor, 206550 Vettikkavala, 228214 in Punalur.

The phasing details are given in Appendix 36-3.

4. Proposals for Agro Allied Development Zone (Zone C)

Treating the LSGIs, Thazhava, Chathanoor, Kunnathur, Poruvazhy, Sasthamcotta, Sooranad North, Sooranad south, Kulakkada, Kalluvathukkal, Elampalloor, Nedumpna, Pavithreswaram, Mynagappally, Thodiyoor, Ezhukone and Kareepa on watershed basis is the main aim. Portions of the above LSGIs come under midland to upland areas and are having moderate erosion status. Therefore regular watershed development programmes are proposed in this zone and special attention is to be given to prevent the siltation of Sasthamcotta Lake. The proposals recommended for the area are vegetative measures like live fencing, cover cropping, contour strip cropping, contour vegetative hedges and mulching. The suggested locations are at Thazhava, Chathanoor, Kunnathur, Poruvazhy, Sasthamkotta, Sooranad North, Sooranad South, Kulakkada, Kalluvathukkal, Elampalloor, Nedumpna, Pavithreswaram, Mynagappally, Thodiyoor, Ezhukone and Kareepa Grama Panchayats. Mechanical conservation measures include contour stone pitched and earthen bunds and contour trenches. Drainage course management like Check dams, water harvesting systems, ramps, supporting walls and bank stabilization structures are recommended. For protection of the catchment area of Sasthamcotta Lake, contour stone pitched bunding, retaining walls, gabion structures, silt trap pits, live fencing and bamboo planting can be adopted. The measures are detailed in Appendix 36-2.

Approximately 1946 ha of land under Thazhava, 776 ha of land under Chathanoor, 1544 ha of land under Kunnathur, 1712 ha of land under Poruvazhy, 2042 ha of land under Sasthamcotta, 1812 ha of land under Sooranad North, 1513 ha of land under Sooranad South, 2798 ha of land under Kulakkada, 1442 ha of land under Elampalloor, 2458 ha of land under Nedumpna, 2297 ha of land under

Pavithreswaram, 668 ha of land under Mynagappally, 2011 ha of land under Thodiyoor, 1673 ha of land under Ezhukone and 1287 ha of Kareepa are to be treated.

Approximately 2000000 man days of skilled labour and 500000 man days of unskilled labour are required for execution of works.

An amount of Rs.29190000/- in Thazhava, Rs.11640000/- in Chathanoor, Rs.23160000/- in Kunnathur, Rs.25680000/- in Poruvazhy, Rs.30630000/- in Sasthamcotta, Rs.27180000/- in Sooranad North, Rs.22695000/- in Sooranad South, Rs.41970000/- in Kulakkada, Rs.21630000/- in Elampalloor, Rs.36870000/- in Nedumpna, Rs.34455000/- in Pavithreswaram, Rs.10020000/- in Mynagappally, Rs.30165000/- in Thodiyoor, Rs.25095000/- in Ezhukone and Rs.19305000/- in Kareepa is anticipated as expenditure for the works.

A project period of 3 to 4 years is required for completion of each watershed development project in the Agro allied development zone.

Office space within the watershed area for keeping the instruments for contour alignment, measurement, for receiving and sorting applications etc. and Infrastructure for imparting training to the beneficiaries in the area would be required. Total station is required for taking all readings. Agriculture sector, Fisheries sector and Minor Irrigation are to be linked. The employment generated after completion will be 125100 in Thazhava, 49886 in Chathanoor, 99257 in Kunnathur, 110057 in Poruvazhy, 131271 in Sasthamkotta, 116486 in Sooranad North, 97264 in Sooranad South, 179871 in Kulakkada, 92700 in Elampalloor, 156728 in Nedumpna, 147664 in Pavithreswaram, 42943 in Mynagappally, 131850 in Thodiyoor, 107550 in Ezhukone and 82736 in Kareepa.

The phasing details are given in Appendix 36-3.

5. Proposals for Special Development Zone (Zone D)

Treating the LSGIs Alappad, Karunagapally, Panmana, Chavara, Neendakara, Thevalakkara, Clappana, Kulasekharapuram, Oachira, Mynaga-

ppally and Sasthamcotta for solving the water logging and saline water intrusion is the main aim. Portions of the above LSGIs comes under low land to midland areas and are having slight to moderate erosion status. The proposals recommended for the area are agroforestry measures like mangrove and bamboo cultivation. For reclamation of waterlogged areas, retaining walls, side protection walls, diversion drains etc are proposed. The measures are detailed in Appendix 36-2.

Approximately 758 ha of land under Alappad, 1683 ha of land under Karunagapally, 1685 ha of land under Panmana, 1135 ha of land under Chavara, 971 ha of land under Neendakara, 1291 ha of land under Thevalakkara, 1749 ha of land under Clappana, 1609 ha of land under Kulasekharapuram, 1286 ha of land under Oachira and Sasthamcotta are to be treated.

Approximately 1300000 man days of skilled labour and 300000 man days of unskilled labour are required for execution of works.

An amount of Rs.15160000/- in Alappad, Rs.33660000/- in Karunagapally, Rs.33700000/- in Panmana, Rs.22700000/- in Chavara, Rs.19420000/- in Neendakara, Rs.25820000/- in Thevalakkara, Rs.34980000/- in Clappana, Rs.32180000/- in Kulasekharapuram, Rs.25720000/- in Oachira is anticipated as expenditure for the works.

A project period of 3 to 4 years is required for completion of each watershed development project in the Special development zone.

Office space within the watershed area for keeping the instruments for contour alignment, measurement, for receiving and sorting applications etc. Infrastructure for imparting training to the beneficiaries in the area. Total station required for taking all readings. The employment generated after completion will be 64971 in Alappad, 144257 in Karunagapally, 144429 in Panmana, 97286 in Chavara, 83229 in Neendakara, 110657 in Thevalakkara, 149914 in Clappana, 137914 in Kulasekharapuram, 110229 in Oachira and 57257 in Mynagappally.

Agriculture sector, Fisheries sector and Minor Irrigation are to be linked.

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The phasing details are given in Appendix 36-3.

6. Proposals for Aqua Bio reserve Zone (Zone E)

Treating the LSGIs Thrikkadavoor, Thrikkaruva, East Kallada, Sasthamcotta, Chavara, Neendakara, Thekkumbhagam, Thevalakkara, West Kallada, Munroe Island, Panayam, Perayam, Perinad, Mayyanad, Poothakkulam, Kollam corporation and Paravoor municipality for solving the water logging is the main aim. Portions of the above LSGIs comes under low land to midland areas and are having slight to moderate erosion status. Catchment of Ashtamudi lake to be protected to avoid siltation. The proposals recommended for the area are agroforestry measures like mangrove and bamboo cultivation. For reclamation of waterlogged areas, retaining walls, side protection walls, diversion drains etc are proposed. The measures are detailed in Appendix 36-2.

Approximately 1140 ha of land under Thrikkadavoor, 1821 ha of land under Thrikkaruva, 1220 ha of land under East Kallada, 2042 ha of land under Sasthamcotta, 1135 ha of land under Chavara, 971 ha of land under Neendakara, 1996 ha of land under Thekkumbhagam, 1291 ha of land under Thevalakkara, 1336 ha of land under West Kallada, 1326 ha of land under Munroe Island 1094 ha of land under Panayam, 1467 ha of land under Perayam, 846 ha of land under Perinad, 1745 ha of land under Mayyanad, 1656 ha of land under Perinad, 1745 ha of land under Mayyanad, 1656 ha of land under Poothakkulam, 7512 ha of land under Kollam Corporation, 1919 ha of land under Paravoor Municipality are to be treated. Approximately 1300000 mandays of skilled labour and 300000 man days of unskilled labour are required for execution of works.

An amount of Rs.22800000/- in Thrikkadavoor, Rs.36420000/- in Thrikkaruva, Rs.24400000/- in East Kallada, Rs.40840000/- in Sasthamcotta, Rs.22700000/- in Chavara, Rs.19420000/- in Neendakara, Rs.39920000/- in Thekkumbhagam, Rs.25820000/- in Thevalakkara, Rs.26720000/- in West Kallada, Rs. 26520000/- in Munroe Island,

Rs.21880000/- in Panayam, Rs. 29340000/- in Perayam, Rs.16920000/- in Perinad, Rs. 34900000/- in Mayyanad, Rs.33120000/- in Poothakkulam, Rs.150240000/- in Kollam Corporation, Rs.38380000/- in Paravoor Municipality is anticipated as expenditure for the works.

A project period of 3 to 4 years is required for completion of each watershed development project in the Aqua Bio reserve zone.

Office space within the watershed area for keeping the instruments for contour alignment, measurement, for receiving and sorting applications etc. Infrastructure for imparting training to the beneficiaries in the area. Total station is required for taking all readings. Agriculture sector, Fisheries sector and Minor Irrigation are to be linked. The employment generated after completion will be 97714 in Thrikkadavur, 156086 in Kulakkada, 104571 in East Kallada, 175029 in Sasthamkotta, 97286 in Chavara, 83229 in Neendakara, 171086 in Thekkumbhagam, 110657 in Thevalakkara, 114514 in West Kallada, 113657 in Munroe Island, 93771 in Panayam, 125743 in Perayam, 72514 in Perinad, 149571 in Mayyanad, 141943 in Poothakkulam, 643886 in Kollam Corporation and 164486 in Paravur Municipality.

The phasing details are given in Appendix 36-3.

7. Proposals for Multi Functional Zone (Zone F)

Treating the LSGIs Thrikkovilvattom, Kottamkara, Mayyanad, Panayam, Neendakara and Kollam Corporation for reclamation from water logging is the main aim. Portions of the above LSGIs comes under low land to midland areas and are having slight to moderate erosion status. The proposals recommended for the area are agroforestry measures like mangrove and bamboo cultivation. For reclamation of waterlogged areas, retaining walls, side protection walls, diversion drains etc are proposed. The measures are detailed in Appendix 36-2.

Approximately 771 ha of land under Thrikkovilvattom, 143 ha of land under Kottamkara, 1725 ha of land under Mayyanad, 1094 ha of land under

Panayam, 971 ha of land under Neendakara, 7500 ha under Kollam Corporation are to be treated.

Approximately 1500000 man days of skilled labour and 400000 mandays of unskilled labour are required for execution of works.

An amount of Rs.15420000/- in Thrikkovilvattom, Rs.2860000/- in Kottamkara, Rs.34500000/- in Mayyanad, Rs.21880000/- in Panayam, Rs.19420000/- in Neendakara and Rs.150000000/- in Kollam Corporation is anticipated as expenditure for the works.

A project period of 3 to 4 years is required for completion of each watershed development project in the Multifunctional zone.

Office space within the watershed area for keeping the instruments for contour alignment, measurement, for receiving and sorting applications etc. Infrastructure for imparting training to the beneficiaries in the area. Total station is required for taking all readings. The employment generated after completion will be 66086 in Thrikkovilvattom, 12257 in Kottamkara, 147857 in Mayyanad, 93771 in Panayam, 83229 in Neendakara and 642857 in Kollam Corporation.

Agriculture sector, Fisheries sector and Minor Irrigation are to be linked.

The phasing details are given in Appendix 36-3.

8. Conclusion

The proposals suggested for each zone will solve the problems like soil erosion, surface run off, improve infiltration rate, improve agricultural production of main crops, generate better employment opportunities and will improve the rural infrastructure.

The proposals in bio reserve zone will mainly reduce the land slips and land slide problem. Also various proposals for Ashtamudi and Sasthamcotta area will improve the water quality and make more water available for irrigation and drinking purposes.

For the drainage and water logged areas, better drainage facilities are suggested which will solve the problem to a greater extent. On the whole, the proposals suggested will lead to sustainable development of agriculture and allied sectors



Chapter 37

Animal Husbandry

This Chapter includes the Development Proposals of Animal Husbandry sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

Animal Husbandry Sector has a vital role in providing food to the human population. It also exerts heavy influence in the ecological balance. Even though the direct and indirect impact of the sector is innumerable, adequate thrust is not given to the sector. According to the district sectoral policy, by 2021 Kollam has to attain self sufficiency in milk, egg and meat by creating farmer attractive environment thereby improving the economic status of the rural poor and achieving new standards in animal welfare.

The Strategies for this include

a. Proposals for development of live stock

and poultry products for self sufficiency, which include;

- i. Enhancement of milk production through provision of large scale dairy farms, medium scale dairy farms, implementing Ksheerasamrudhy dairy scheme, increasing productivity in existing dairy farms, provision of fodder production units, feed production / mixing unit, silage production units, mobile milking units, chilling plants, quality control of milk and milk products and implementing Dhenuraksha scheme.
- ii. Enhancement of egg production through provision of Hi-tech parent stock and poultry farms with cage system and hatchery, large scale duck parent stock, quail hatchery, nurseries, large scale poultry/ quail farms, backyard poultry units / duck units and quail rearing units.
- iii. Enhancement of meat production

through implementing male calf fattening scheme, provision of Malabari goat parent stock farm, Malabari goat rearing satellite units, goat rearing units, goat nurseries, piggery units, rabbit nursery, rabbit units, high tech broiler farm, broiler farms, turkey farm including hatchery, homestead turkey units, slaughter houses, abattoir, meat production and tanning unit, meat processing units and also through meat export.

- b. Providing Other Infrastructure facilities including
 - i. Veterinary specialty hospitals
 - ii. Artificial insemination centres
 - iii. Semen holding bank and
 - iv. Common marketing outlets in all the Grama Panchayats of the district for milk, meat, egg and agricultural products.
- c. Providing Animal welfare through

- i. Prevention of cruelty against animals and
- ii. Population control programme for dogs
- d. Other Proposals including
 - i. Elephant rides and
 - ii. Ornamental poultry rearing

2. Proposals for Development of Live stock and Poultry Products for Self Sufficiency

2.1. Milk Production

As per Article 3 of Chapter 34, the entire Agro Development Zone is proposed to be transformed into an organic faming zone by 2021. Supplementing to that this zone is also proposed to be transformed as organic dairy farming zone by 2021.

2.1.1. Large scale dairy farms

It is proposed to establish 4 large scale dairy farms each in selected LSGIs. Each unit will be having 50 milk animals. Kunnathoor, Poruvazhy, Sasthamcotta, Kulakkada, Kalluvathukkal, Nedumpana, Pavithreswaram, Mynagappally, Ezhukone, Kareepra and Adichanallur Grama Panchayats of Agro-allied Development Zone are selected for the purpose. These are the areas where thrust for live stock and poultry activities are suggested as per the District Development Concept.

The activities for implementing the proposal include selection of beneficiaries and training, land acquisition, construction of infrastructure and purchase of cattle from reliable sources (purchased locally or from out side the district). The proposal is to house animals having production potential more than 15-20 liter per day. The farms will act as model units for profitable dairying in the region.

Selected LSGIs shall earmark necessary funds for the implementation of the proposal. 30% of the cost shall be met by the respective LSGIs, 20% by Animal Husbandry Department and 50% by beneficiary contributions. Beneficiary contribution can be bank loan linked. The Animal Husbandry Dept. shall coordinate. Other agencies involved are LSGIs, Kudumbasree, SHGs, and Banks.

The proposal has three phases of implementation. In the first phase (2007-2012) the total cost would be 1400 lakhs and will generate employment of 1.15 Lakh Mandays/Year. In the second phase

(2012-2017) the total cost would be 1500 lakhs and will generate employment of 1.23 Lakh Mandays/Year. In the third phase of implementation (2017-2021) the total cost for the proposal would be Rs.1100 lakhs and will generate employment of 0.9 Lakh Mandays/Year.

It is suggested that 4 units shall be started in each LSGI and activities shall start from 2008 and by 2021 the farms will be established in all the selected LSGIs. The details of the Phasing of activities are given in Appendix 37- I. The establishment cost per unit is around Rs.25 lakhs. It is expected to produce an additional 15 Lakh litres of Milk by 2021 and an employment of 1.23 Lakh man-days per year by 2021. As per Article 3 of Chapter 34, the entire Agro Development Zone is proposed to be transformed to organic faming zone by 2021. Supplementing to that this zone is also proposed to be transformed as organic dairy farming zone by 2021.

2.1.2. Medium scale dairy farms

It is proposed to establish dairy units with 10 milk animals in each unit in selected LSGIs of the district viz. Thazhava, Sooranad north, Sooranad south, Elampalloor and Thodiyoor Grama Panchayats of Agro-allied Development Zone.

Activities for implementation of the proposal include selection of beneficiaries and training, Land acquisition, construction of infrastructure, purchase of cattle from reliable sources (purchased locally or from out side district) and establishing the farm.

Selected LSGIs shall earmark necessary fund for the implementation of the Proposal. 30% of the Proposal cost should be met by the respective LSGIs, 20% shall be met by Animal Husbandry Department and 50% shall be met by beneficiary contributions. Beneficiary contribution can be bank loan linked. The Animal Husbandry Dept. shall coordinate the project. Other agencies involved are LSGIs, Kudumbasree, SHGs, Banks etc.

The proposal has three phase of implementation. In the first phase (2007-2012) and in the second phase (2012-2017) the total cost and employment generated after completion would be Rs.360 Lakhs and 50000 Mandays/Year respectively. In the third phase of implementation ie, 2017-2021, the total cost for the proposal would be Rs.300 lakhs

and the employment generated after completion would be 40000 man days/ year.

It is suggested that 20 units shall be started in each LSGI and activities shall start from 2008 and by 2013 the farms will be established in all the selected LSGIs. The units are expected to act as model units promoting profitable dairying.

The Phasing of activities is given in Appendix 37- I.

The establishment cost is around Rupees 3 Lakh per unit. It is expected to produce 60 Lakh litres of Milk by 2021 and generate employment of 50000 man-days per year by 2021.

2.1.3. Ksheera Samrudhy Dairy scheme

The scheme aims to increase the number of breeding stock of cattle by establishing 2 cow/ buffalo units in selected LSGIs. Beneficiaries will be farmers interested to rear cattle. Cows with production potential 10-15 liters of milk only will be included in the scheme. The Proposal include cost of animal, feed for one month, insurance, shed, transportation charge, fodder cultivation expenses etc.

It is suggested that 200 units shall be started in each LSGI and activities shall start from 2008 and by 2013 the farms will be established in all the selected LSGIs. The proposal has two phases. In the first phase (2007-2012) the total cost and the employment generated would be 5400 lakhs and 40 lakh man days/ year respectively. In the second phase (2012-2017) the total cost and employment generated would be Rs.3000 lakhs and 30 lakh man days/ year respectively.

The Zone wise list of LSGIs selected and the year by which the scheme implementation starts is as shown in Table 37.1.

The Phasing of activities is given in Appendix 37- I. The proposal is to establish 9400 units of 2 cows/buffaloes each. Unit cost is estimated to be Rs. 50000 per unit. It is expected to produce 900 Lakh litres of Milk and generate an employment of 10000 man days/year by 2021.

2.1.4. Existing dairy farms with increased productivity

It is proposed to improve the productivity of the existing dairy animals. The farmers who are engaged in large scale dairy farming practices will get the benefit of the proposal. Based on the District

Table.37.1. Phasing of Zone wise proposals for Ksheera Samrudhy diary scheme

| Agro allied development zone :- | | | |
|---------------------------------|-------------------------|-------------|--------------|
| 2008 | 2009 | 2010 | 2011 |
| Nilamel | Pooyappally | Pooyappally | Ummannoor |
| Pathanapuram | Melila | Melila | Edamulackal |
| Pattazhi | Punalur | Punalur | Kottarakkara |
| Kaduvathode | Velinallor | Velinallor | Ittiva |
| Karavaloor | Veliyum | Veliyum | Kadakkal |
| Chadayamangalam | Alayamon | Alayamon | Chithara |
| Vilakudy | | | Yeroor |
| Special development zone:- | | | |
| 2008 | 2009 | 2010 | |
| Sub zone 4 | Sub zone 2 & 3 | Sub zone 1 | |
| (3 LSGIs) | (3 LSGIs) | (3 LSGIs) | |
| Aqua bio reserve zone:- | | | |
| 2008 | 2009 | | |
| Thrikkaruva | Panayam | | |
| Thrikkadavur | Perayam | | |
| Thekkumbhagom | Munroe island | | |
| Multifunctional zone | | | |
| 2008 | 2009 | | |
| Multi functional zone 1 | Multi functional zone 2 | | |
| (3 LSGIs) | (3 LSGIs) | | |

Development Concept Thazhava, Sooranad north, Sooranad south, Elampalloor and Thodiyoora Grama Panchayats of Agro-allied Development Zone are selected. Animals having production potential of 15-20 liters of milk will be selected and given assistance for increasing the productivity by means of super bull semen, embryo transfer, by pass protein feeding and climatic control measures. The activities include selection and registration of elite cows, special training to selected farmers, making available facilities for super bull semen, embryo transfer, by pass protein feeding through societies. As per this scheme it will be possible to enroll 150 elite cows in each LSGI. In phase I (2007-2012) the total cost for all units will be Rs.150 lakhs. The total cost for all units in the next two phases i.e. 2012-2017 and 2017-2021 would be Rs.50 lakhs respectively.

It is suggested to cover one LSGI each year from 2008 onwards and by 2011 the farms will be established in all the selected LSGIs (Table 37.2).

The proposal would cost around Rs.50 lakh/ LSGI. The proposal is expected to produce 900 Metric Tonnes of Milk by 2008 and 4500 Metric Tonnes of Milk by 2021. The project is expected to employ 105

Table.37.2. Phasing of selected LSGIs to increase productivity of dairy farms

| 2008 | 2009 | 2010 | 2011 |
|----------|----------------|----------------|-------------|
| Thazhava | Sooranad north | Sooranad South | Elampalloor |
| | | | Thodiyoora |

labourers through out the year by 2011. ie. The proposal is expected to generate an employment of 40000 man days by 2021. The Phasing of activities is given in Appendix 37- I.

2.1.5. Fodder production units

It is proposed to increase the availability of fodder to farmers there by reducing the cost of production. Beneficiaries will be the farmers interested in agriculture with required land. High yielding fodder varieties from reputed sources are to be grown by the farmers. Since the animal husbandry activities are concentrated in the Agro – allied Development Zone, Fodder production units are also suggested in this zone. Minimum 15 no. of units will have to be started in each LSGI.

The activities involved are strengthening of fodder production units at Govt, farms, selection of beneficiaries based on availability of land and water, training to selected beneficiaries,

procurement of seedlings, fodder slips, manure etc., and marketing of fodder to the beneficiaries at their door step.

It is expected that the proposal would increase Fodder production in the following LSGIs (Table.37.3).

The Phasing of activities is given in Appendix 37- I.

It is proposed to establish 270 units of fodder production. The proposal would be at a cost of Rs.27 Lakhs. The proposal is expected to produce 50000 Metric tone of fodder every year once the units are established. In addition to the benefits in the dairy industry, the units will provide direct employment to 2 Lakh Mandays/ Year.

2.1.6. Feed production/Mixing unit and Feed analytical lab

Proposal includes establishment of feed mixing unit with capacity to produce 1000 tonnes of feed per day. The ingredients for feed mixing will be purchased by

Table.37.3. Phasing of selected LSGIs for fodder production

| 2008 | 2012 | |
|-------------------|------------------|--------------------|
| 1. Thazhava | 1. Chathannoor | 7. Adichanalloor |
| 2. Sooranad north | 2. Mynagapally | 8. Pavithreswaram |
| 3. Sooranad south | 3. Ezhukone | 9. Kunnathoor |
| 4. Elampalloor | 4. Nedumbana | 10. Kalluvathukkal |
| 5. Thodiyoor | 5. Pavithreswara | 11. Poruvazhy |
| | 6. Kareepira | 12. Sasthamcotta |
| | | 13. Kulakkada |

inviting tenders from competent organizations. By establishing this unit, a portion of feed requirement of the district can be met. A Feed Analytical Lab is set for ensuring the quality of raw materials and the feed manufactured. It is proposed to establish the feed production/mixing unit at Karunagapally by 2012.

The activities include selection of site considering chances for expansion, water and road facility, uninterrupted procuring of feed ingredients (minimum 3 to 4 years) through tender, selection of skilled employees and staff. Period of Implementation is 2007-2012. The Phasing of activities is given in Appendix 37- I.

Proposal would cost around Rs.50 lakhs. The proposal is expected to produce 1000 tones of feed per day and to generate an employment of 73000 mandays/Year by 2012.

2.1.7 Silage production units

It is proposed to establish silage production units in selected LSGIs in order to make available preserved fodder in the lean season during which heavy shortage of fodder is encountered.

The proposal will be implemented by the dairy extension officer of the selected block. Trench silos, which are highly conducive to the climatic conditions of the region, are suggested. Silos with 20 tonne capacity are suggested. This will ensure

Table.37.4. Phasing of selected LSGIs for silage production units

| 2010 |
|----------------|
| Thazhava |
| Sooranad north |
| Sooranad south |
| Elampalloor |
| Thodiyoor |

uninterrupted supply of green fodder to the cattle through out the year.

The activities include identification of area at respective LSGI, construction of silo, training to personnel, monitoring and ensuring quality of products.

The Table.37.4 gives the phasing of selected LSGIs for silage production units.

The Phasing of activities is given in Appendix 37- I. Period of implementation is 2007-2012.

Proposal would cost around Rs.5 lakhs per unit. An additional running cost of Rs.50,000/LSGI/Year will also be required. The proposal is expected to produce 100 Metric Tonnes of silage by 2021 and to generate an employment of 3650 man days/year by 2012 in addition to ensuring an uninterrupted supply of fodder in the region. Total Cost for all units would be Rs.25 Lakhs.

2.1.8 Mobile milking units

It is proposed to establish mobile milking units in selected panchyats. Proposal will be implemented through self helping groups. The selected group will be provided with one milking machine, vehicle for transportation, disinfectants etc. The proposal has three phases. In phase I (2007-2012) the total cost and employment generated will be Rs.320 lakhs and Rs.1.2 lakh mandays /year respectively. In phase II (2012-2017) the total cost and employment

Table.37.5. Phasing of selected LSGIs for mobile milking units

| 2008 | 2009 | 2010 |
|-------------------|-------------------|-------------------|
| 1. Chathannoor | 1. Thodiyoor | 1. Sasthamcottah |
| 2. Thazhava | 2. Kalluvathukkal | 2. Kunnathur |
| 3. Sooranad north | 3. Sooranad south | 3. Kulakkada |
| 4. Nedumpana | 4. Poruvazhy | 4. Mynagapally |
| | | 5. Elampalloor |
| | | 6. Pavithreswaram |
| | | 7. Kareepira |
| | | 8. Ezhukone |

generated will be Rs.280 lakhs and 1 lakh mandays /year respectively. In phase I (2017-2021) the total cost and employment generated will be Rs.240 lakhs and Rs.0.9 lakh mandays /year respectively.

The Table.37.5 gives the phasing of selected LSGIs for mobile milking units.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.1,00,000/- per unit.

2.1.9 Chilling plant

It is proposed to establish chilling units Table.37.6. Phasing of selected LSGIs for chilling plants

| 2008 | 2011 |
|---------------|---------|
| Karunagapally | Kundara |

with a capacity of 10000 Litre per Day at Karunagapally and Kundara so as to facilitate easy marketability of the milk produced in the district. Period of implementation is 2007-2012.

The Table.37.6 gives the phasing of selected LSGIs for chilling plants.

The Phasing of activities is given in Appendix 37- I.

Estimated cost is Rs.30 Lakh per unit. The proposal on its completion will provide direct employment to 200 persons. Employment generated after completion will be 70000 man days/ year.

2.1.10 Quality control of milk and milk products

The proposal's aim is to ensure quality control of milk and milk products that are marketed in the field.

Quality control labs will be set up with the facilities to check the quality of milk and Table.37.7. Phasing of selected LSGIs for quality control of milk and milk products

| 2011 | 2021 |
|-------------------------|-------------------------|
| Multi functional zone 1 | Multi functional zone 2 |

milk products. Certification from this institution should be made mandatory for marketing of any products under this category by enforcing laws.

The Table.37.7 gives the phasing of selected LSGIs for quality control of milk and milk products.

In the multifunctional zone-1, labs will be established at Kollam corporation, Neendakara, Thrikkadavur, Kottankara, Elampalloor, Thrikkovilavattom and Mayyanad Grama Panchayats. Period of implementation is 2007-2012. Employment generated after completion will be 11000 mandays /year. Total Cost for all units would be Rs.35 Lakhs.

In the multifunctional zone-2, labs will be established at Punalur Municipality, Kottarakkara, Anchal, Chathannur and Karunagappally Grama Panchayats. Period of implementation is 2017-2021. Employment generated after completion will be 7000 mandays /year. Total Cost for all units would be Rs.25Lakhs.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.5,00,000/- per lab established. This will generate employment opportunity for 50 personnel by the end of 2021.

2.1.11 Establishment of a milk processing cum products factory

The plant is proposed to be established at Anchal. The major objective is to ensure steady supply of quality milk and milk products in the region. In addition it will provide ample employment opportunities at Anchal. It is proposed to establish a dairy processing unit handling 30000 liters of milk per day. Period of implementation is 2007-2012.

The Phasing of activities is given in Appendix 37- I. On completion of the project the plant is supposed to market 30000 Litres of milk per day. It will provide full time employment to 200 persons. Estimated project cost is Rs.100 lakh. Employment generated after completion will be 75000 mandays /year.

2.1.12 Dhenuraksha scheme

Aim is to protect the breeding stock of cattle from premature slaughter

Beneficiaries will be the farmers with cattle having extended infertility problem.

The scheme will be implemented in selected LSGIs of the district in groups. The selected groups can be Kudumbasree's or self help groups. They will be purchasing the animals at meat rate. Feed and medicines will be provided in subsidized rate. 2 units of housing with 10 animals each will be established in the selected

Grama Panchayats. The units will be functioning under the strict technical control of the veterinary institutions in the Grama Panchayats. Once the infertility problems are solved the animals will be handed over to needy farmers. Period of Implementation is 2007-2012.

The Table.37.8 gives the phasing of selected LSGIs for Dhanuraksha scheme.

The Phasing of activities is given in Appendix 37- I. The cost (per animal) is estimated as Rs. 10000/- for purchase of

Table.37.8. Phasing of selected LSGIs for Dhanuraksha scheme

| 2008 | 2009 | 2010 | 2011 |
|-------------------|-------------------|------------------|-------------------|
| 1. Nedumpana | 1. Sasthamcottah | 1. Kareepra | 1. Adichanallor |
| 2. Nilamel | 2. Poruvazhy | 2. Kulakkada | 2. Ezhukone |
| 3. Pathanapuram | 3. Kalluvathukkal | 3. Kunnathoor | 3. Pavithreswaram |
| 4. Pattazhi | 4. Pooyappally | 4. Mynagappally | 4. Ummannoor |
| 5. Kaduvathode | 5. Melila | 5. Thalavoor | 5. Edamulackal |
| 6. Karavallor | 6. Punalur | 6. Naduvathoor | 6. Kottarakkara |
| 7. Chadayamangala | 7. Velinalor | 7. Anchal | 7. Ittira |
| 8. Vilakudy | 8. Veliyum | 8. Mylom | 8. Kadakkal |
| 9. Piravanthoor | 9. Alayamon | 9. Elamad | 9. Chithara |
| 10. Kulathupuzha | 10. Thenmala | 10. Vettikkavala | 10. Yeroor |
| | 11. Aryankavu | | |

animals and Rs.3000/- for treatment. In addition to that basic infrastructure for accommodating the animals is also required. Estimated cost is 2 Lakh per unit. Employment generated after completion will be 30000 mandays /year. Total Cost for all units would be Rs.164 Lakhs.

2.1.13 Comprehensive Baby Calf Health Scheme

All the calves born in the district will be covered under the scheme. All the female calves born will be enrolled to the nearest veterinary dispensary from where a health card will be provided to each calf. Up to 6 months of age, they will be under the coverage of the scheme. They will be provided with calf starter feed, feed supplements and medicine including dewormers at subsidized rates. It is intended to cover around 20000 calves every year. An estimated expenditure of Rs.500 is expected per calf. The proposal has three phases. In phase I (2007-2012), phase II (2012-2017) and in phase III (2017-2021) the total cost for each phase would be Rs.500 lakhs. This proposal covers all the LSGIs. The Phasing of activities is given in Appendix 37- I. The scheme will act as a check against the declining trend of animal population in the district.

2.1.14 Calf Feed Subsidy Scheme

Calf feed subsidy scheme covering the entire healthy calves born in the district are proposed as a part of the development programme. About 10000 calves from those covered under the baby calf health scheme will be enrolled in the calf feed subsidy scheme. The healthy calves with high production potential under the coverage of the scheme will act as the replacement stock of the high potential stock in the district. In addition the scheme will

definitely help to bring about a steady increase in the number of cattle in the district. Cross-bred female calves of six months age group, enrolled under the scheme will be given feed and insurance coverage at subsidized rate till calving or till 32 months whichever is earlier. Scientific feeding, management, fodder production, disease control and awareness programmes will help to achieve the goals of reducing age at first calving and enhancing productivity. The proposal has three phases. In phase I (2007-2012), phase II (2012-2017) and in phase III (2017-2021) the total cost for each phase would be Rs.3250 lakhs. This proposal covers all the LSGIs.

The Phasing of activities is given in Appendix 37- I. An estimated expenditure of rupees Rs 6500 is needed to enroll one animal under the calf feed subsidy scheme. An expenditure of Rs.6.5 crore is demanded to enroll 10000 female calves in the programme.

2.2 Egg Production

2.2.1 Hi-tech Parent stock and Poultry farm rearing high producing cross bred layer birds and hatchery

The aim is to set up poultry farm rearing about 10000 birds. Proposal envisages

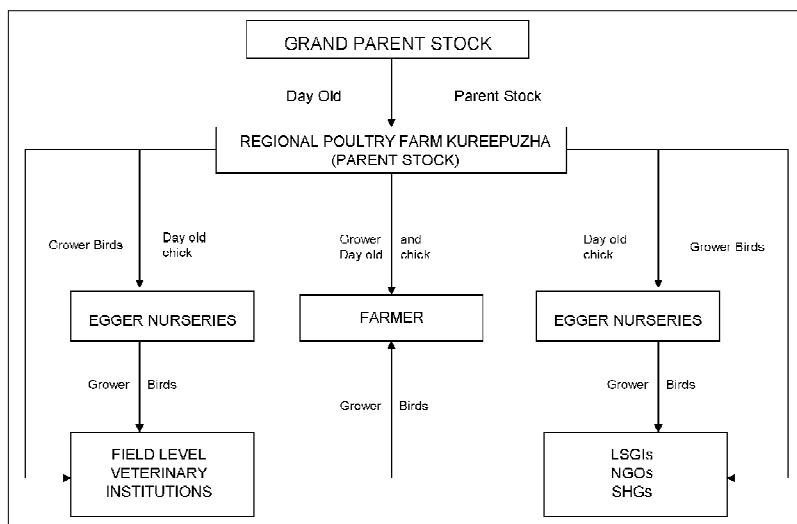


Fig. 37.1. Flow chart showing the movement of poultry from the Regional poultry farm

setting up of a modern poultry farm at regional poultry farm, Kureeppuzha, Kollam Corporation. The farm will rear the birds in fully automated system. The farm will be established in its full potential by the year 2009. A hatchery will also be established in the farm. On its full potential 33000 eggs will be set for hatching per week and 12,000-15,000 female chicks will be hatched out every week. This is supposed to meet partly the demand of quality day old chicks in the region.

The flow chart (Figure.37.1) given demonstrates the movement of chicks from Regional Poultry Farm, Kureeppuzha. Period of Implementation is 2007-2012.

The Phasing of activities is given in Appendix 37- I. The farm is going to be functional by 2008 and will be functional in full swing by 2009. This unit can act as a check against the influx of low quality chicks to the district from neighboring states. The farm is supposed to deliver direct employment to at least 100 persons. Estimated cost is Rs.100 lakh rupees. Employment generated after completion will be 365000 mandays/year.

2.2.2 Large scale Duck parent stock

The proposal aim is to establish a duck parent stock unit in order to increase the availability of good quality eggs for hatching out. The farms are supposed to be established at Paravur and Munroe Island. 1500 birds each will be reared in the farms.

Table.37.9. Phasing of selected LSGIs for large scale duck parent stock

| 2008 | 2009 |
|---------|---------------|
| Paravur | Munroe island |

Incubators with setting capacity of 4500 eggs per week will be set up. The period of implementation is 2007-2012.

The table 37.9. gives the phasing of selected LSGIs for large scale duck parent stock.

The Phasing of activities is given in Appendix 37- I. The total project cost is estimated to be Rs.50 Lakh. On its completion the unit will produce around

Table.37.10. Phasing of selected LSGIs for poultry nurseries

| 2008 | 2009 | 2010 |
|---------------|-----------------|------------------|
| 1. Chathanoor | 1. Anchal | 1. Sasthamcottah |
| 2. Veliyum | 2. Pathanapuram | |

4000 ducklings per week. It will generate direct full time employment to 50 persons. Employment generated after completion will be 20000 man days/ year.

2.2.3 Quail Parent Stock Farm and Hatchery

It is proposed to establish a quail parent stock farm rearing 1000 birds and a hatchery with setting capacity of 4500 eggs per week. Two units each will be set at Veliyum and Sasthamcottah Grama Panchayats by 2008. Period of implementation is 2007-2012.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.4,00,000/- per unit. Each unit will market

Table.37.11. Phasing of selected LSGIs for large scale poultry farms

| 2008 | 2009 | 2010 |
|-----------------|-------------|-------------------|
| 1. Chathanoor | 1. Anchal | 1. Elampalloor |
| 2. Kottarakkara | 2. Mayyanad | 2Thrikkovilvattom |
| | | 3. Karunagappally |

12500 quail chicks per month. This will be sufficient to meet the requirement of quail eggs and meat in the district. The units will provide direct employment to 16 persons on a full time basis. Employment generated after completion will be 6000 mandays/ year.

2.2.4 Nurseries

It is proposed to establish poultry nurseries in selected LSGIs. Purchased from the hatcheries on the day old stage, the birds are reared in the nurseries and they are marketed at 45-60 days of age to the grass root level farmers. The birds are reared under strict scientific management practices during the initial phase of growth. This will ensure the availability of quality chicks in the district. The proposal includes setting up of poultry nurseries, in 5 selected LSGIs so as to ensure steady supply of quality chicks. It is proposed to establish units for marketing 2000 grower birds per month. Period of implementation is 2007-2012.

The table 37.10. gives the phasing of selected LSGIs for poultry nurseries.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.1,00,000/- per unit. The cost includes

cost incurred towards the construction of farm building, purchase of day old birds, purchase of medicines and biological, purchase of litter material etc. The scheme will provide direct employment to 50 persons. Employment generated after completion will be 20000 mandays/year. Total costs for all units would be Rs.25 lakhs.

2.2.5 Large scale poultry/ quail farms

It is proposed to set up large scale poultry or quail farms in selected LSGIs. The proposal cost includes the cost of purchase of birds, cost of shed, equipments, feed, insurance, and miscellaneous expenses. Five units each

rearing poultry and quail, 1000 in numbers is to be established in each LSGI. Period of implementation is 2007-2012.

The Table.37.11 gives the phasing of selected LSGIs for large scale poultry farms.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.2,50,000/- for the poultry farm and Rs.50000/- per quail farm. This will generate employment to 500 persons. Employment generated after completion will be 2 lakh mandays/year. Total costs for all units would be Rs.105 lakhs.

2.2.6 Backyard poultry units

The aim is to set up 1000 numbers of small scale poultry units of 10 hens per unit. The units will be established in selected LSGIs with individual beneficiaries

Table.37.12. Phasing of selected LSGIs for backyard poultry units

| 2008 | 2009 | 2010 | 2011 |
|-------------------|----------------|-------------------|-------------------|
| 1. Sasthamcottah | 1. Mynagapally | 1. Thodiyoor | 1. Kareepra |
| 2. Pavithreswaram | 2. Thazhava | 2. Sooranad north | 2. Chathannoor |
| 3. Sooranad south | 3. Kunnathoor | 3. Kulakkada | 3. Kalluvathukkal |
| 4. Ummannoor | 4. Ezhukone | 4. Elampalloor | |
| 5. Edamulackal | 5. Poruvazhy | 5. Nedumbana | |

as subsidiary source of income. The proposal has three phases. Periods of implementation of phase I, phase II, phase III are 2007-2012, 2012-2017 and 2017-2021 respectively.

The Table.37.12 gives the phasing of selected LSGIs for backyard poultry units.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.1000 per unit. This will generate part time employment and subsidiary income to 18000 families in the district. Total cost for each phase would be 180 lakhs.

2.2.7 Duck Rearing Units

It is proposed to set up duck nurseries in selected LSGIs to increase the availability of healthy ducks for egg purpose or meat purpose. The duck nursery will be rearing the ducklings up to 60 days of age and will be made available to other interested farmers. Four units per Grama Panchayat are envisaged marketing 500 grower ducks per month. The proposal has three phases. Period of implementation of phase I, phase II, phase III is 2007-2012, 2012-2017 and 2017-2021 respectively.

Table.37.13. Phasing of selected LSGIs for Duck rearing units

| 2008 | 2009 | 2010 |
|---------|---------------|-------------------------|
| Paravur | Munroe Island | Punalur, Sooranad South |

The Table 37.13. gives the phasing of selected LSGIs for duck rearing units.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.75,000/- per unit. This will generate full time employment to 50 persons, once established completely. Total costs for each phase would be Rs.12 lakhs. Employment generated on each phase will be 18000 mandays/ year.

2.2.8 Backyard duck rearing units

The aim is to set up 200 numbers of small scale backyard duck rearing units of 12 birds per unit. The units will be established in selected LSGIs. The proposal has three phases. Periods of implementation of phase I, phase II, phase III are 2007-2012, 2012-2017 and 2017-

Table.37.14. Phasing of selected LSGIs for backyard duck rearing units

| 2008 | 2009 | 2010 | 2011 |
|-----------------------|-----------------|-------------------------|-------------------|
| 1. Adichanallor | 1. Kunnathur | 1. Paravur Municipality | 1. Sastamcottah |
| 2. Bhoothakkulam | 2. Kundara | 2. Pattazhy | 2. Sooranad North |
| 3. Chathannoor | 3. Mayyanad | 3. Pattazhy Vadakkekara | 3. Sooranad South |
| 4. Karavalloor | 4. Mynagappally | 4. Perayam | 4. Thenmala |
| 5. Kollam Corporation | 5. Nedunpana | 5. Perinadu | 5. Velinalloor |
| 6. Kulathupuzha | 6. Panayam | 6. Punalur Municipality | 6. Vilakkudy |

Table.37.15. Phasing of selected LSGIs for homestead quail units

| 2008 | 2009 | 2010 | 2011 |
|----------------|-------------------|-------------------|-----------------|
| 1. Thazhava | 1. Sasthamcottah | 1. kalluvathukkal | 1. Mynagappally |
| 2. Chathannoor | 2. Sooranad North | 2. Elampalloor | 2. Thodiyur |
| 3. Kunnathoor | 3. Sooranad South | 3. Nedumpana | 3. Ezhukone |
| 4. Poruvazhy | 4. Kulakkada | 4. Pavithreswaram | 4. Kareepra |

2021 respectively.

The Table.37.14 gives the phasing of selected LSGIs for backyard duck rearing units.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.1200/- per unit. This will provide part time employment and subsidiary income to 4800 families. Total cost for each phase would be Rs.58 lakhs.

2.2.9 Homestead Quail units

The aim is to set up small scale

homestead quail rearing units of 100 birds per unit. 25 units per Grama Panchayat are envisaged. The units will be established in selected LSGIs. The proposal has three phases. Periods of implementation of phase I, phase II, phase III are 2007-2012, 2012-2017 and 2017-2021 respectively.

The Table 37.15. gives the phasing of selected LSGIs for homestead quail units.

The Phasing of activities is given in Appendix 37- I. A total expenditure of Rs 7500 is expected per unit. The scheme is supposed to generate subsidiary income source to 400 families once completely implemented. Total cost for each phase would be Rs.30 lakhs.

2.3 Meat Production

2.3.1 Male Calf fattening Scheme

It is proposed to implement schemes to provide assistance to rear male calves in order to increase the meat production. The scheme will provide feed and feed supplements for the selected male calves.

Table.37.16. Phasing of Zones for male calf fattening scheme

| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|------------------------------|-----------------------|------------------|-----------------------|----------------------|--------------------------|
| Agro allied development zone | Agro development zone | Bio reserve zone | Aqua bio-reserve zone | Multifunctional zone | Special development zone |

The Development Zones covered in year are as shown in Table.37.16.

The Phasing of activities is given in Appendix 37- I. Each selected male calf will be provided with subsidy of Rs.3500/. The scheme will provide subsidiary income source to 3000 families. Total cost for phase I and phase II would be Rs.87 and Rs.18 lakhs respectively.

2.3.2 Malabari Goat Parent Stock Farm

It is proposed to set a malabari goat parent stock farm at Kuriyottumala in Piravanthur. The parent stock established will supply kids of 3 months of age to the goat nurseries on prior booking. This ensures the availability of good quality kids to the farmers. Farm with 200 goats will be set up. The farm is supposed to market 500 lambs per year so as to solve the shortage of quality kids in the district. Period of implementation is 2007-2012.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.30, 00,000/-. It will provide full time engagement to 6 persons. This will generate employment of 2500 mandays/ year.

2.3.3 Malabari Goat rearing Satellite Unit

It is proposed to set up small scale goat farms rearing 25 goats in order to increase the meat production in the district. The satellite units will also serve the functions of goat nurseries also. Four units each will

Table.37.17. Phasing of selected LSGIs for malabari goat rearing satellite units

| 2008 | 2009 | 2010 | 2011 |
|----------------|--------------------|----------------|-----------------|
| 1. Chithara | 1. Iittiva | 1. Thalavoor | 1. Anchal |
| 2. Kadkkal | 2. Elamad | 2. Veliyam | 2. Karavaloar |
| 3. Ummannoor | 3. Edmulackal | 3. Vettikavala | 3. Kottarakkara |
| 4. Velinalloor | 4. Yeroor | 4. Punalur | 4. Pooyapally |
| | 5. Pathanapuram | 5. Alayamon | 5. Mylom |
| | 6. Chadayamangalam | | 6. Vilakudy |

be established per LSGI. The proposal has two phases. Periods of implementation of phase I and phase II are 2007-2012 and 2012-2017 respectively.

The Table.37.17 gives the phasing of selected LSGIs for malabari goat rearing satellite units.

The Phasing of activities is given in Appendix 37- I. Cost per unit is estimated to be Rs.1,00,000/-. This will offer employment opportunity for 2 persons per unit. Total cost would be Rs.35 lakh in

phase I and Rs.25 lakh in phase II. This will generate employment of 25000 mandays/ year in phase I and 18000 Mandays / Year in phase-II.

2.3.4. Goat rearing Units

It is proposed to set up goat rearing units consisting of 5 goats in each unit. It is proposed to establish 50 units each in the selected LSGIs. The cost includes

Table.37.18. Phasing of selected LSGIs for goat rearing units

| 2008 | 2009 | 2010 |
|----------------|------------------|----------------------|
| Kunnathur | Sooranad South | Sooranad North |
| Kulakkada | Mynagapally | Chathannor |
| Thazhava | Thodiyoar | Nedumpana |
| Poruvazhy | Ezhukone | Kalluvathukkal |
| Kareepra | Elampalloor | East kallada |
| Pavithreswaram | West kallada | Kundara |
| Sasthamcottah | Thrikkadavor | Paravur Municipality |
| Panayam | Neendakara | Alappad |
| Perayam | Thevalakkara | Karunagappally |
| Munroe Island | Clappana | Panmana |
| Perinad | Kulasekharapuram | Chavara |
| Bhoothakkulam | Ochira | |
| Chathannoor | | |

purchase of goats, construction of shed, insurance, feed, medicines and other miscellaneous expenses. Period of implementation is 2007-2012.

The Table.37.18 gives the phasing of

Table.37.19. Phasing of selected LSGIs for goat nurseries

| 2008 | 2009 | 2010 |
|-------|-------------|----------------|
| Mylom | Edamulackal | Sooranad South |
| | | Kareepra |

completely. Total cost for all units would be Rs.270 lakhs.

2.3.5. Goat Nurseries

It is proposed to ensure the availability at good quality parent stock for rearing. The kids purchased from recognized source will be reared up to 6 months of age and distributed among farmers. One unit per selected LSGI rearing 50 kids at a time is envisaged. Period of implementation is 2007-2012.

The Table 37.19. gives the phasing of selected LSGIs for goat nurseries.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.2.5 Lakh per unit. Each unit will provide direct employment to 2 persons each. Total cost for all units would be Rs.10 lakhs. This will generate employment of 3000 Mandays/ Year.

2.3.6 Parent Stock Piggery Farm

It is proposed to establish a parent stock farm of pig at Buffalo Breeding Farm, Kuriyottumala in Piravanthur. It is proposed to ensure the availability of quality piglets in the district. 75 breeding animals will be reared in the farm. They are supposed to produce 1300-1500 piglets per year. They will be reared up to weaning age in the farm after which the piglets will be supplied to needy farmers so as to rear them up to marketable age. Period of implementation is 2007-2012.

The Phasing of activities is given in Appendix 37- I. The proposal cost comes to Rs.20 Lakh. This includes setting up of pig styes, purchase of animals etc. The scheme will provide direct employment to 10 persons. This will generate employment of 3650 Mandays/Year.

2.3.7 Piggery Units

It is proposed to set up piggery units with 10 piglets of 3 months old per unit. These piglets will be reared up to

Table.37.20. Phasing of selected LSGs for piggery units

| 2008 | 2009 |
|--------------|--------------|
| Piravanthoor | Thenmala |
| Kottarakkara | Pooyappally |
| Edamulackal | Pathanapuram |

marketable age. Cost includes cost for shed, purchase of piglets, feed, insurance and other miscellaneous expenses. Facility for waste disposal is mandatory. Period of implementation is 2007-2012.

The Table.37.20 gives the phasing of selected LSGs for piggery units.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.40,000/- per unit. This will generate employment of 15000 Mandays/Year. Total cost for all units would be Rs.24 lakhs.

2.3.8 Rabbit Parent Stock Unit

It is proposed to establish a parent stock farm of rabbits at Buffalo Breeding Farm, Kuriyottumala, Piravanthur. To ensure the availability of quality kits in the district 200 breeding animals will be reared in the farm. They are supposed to produce about 500 kits per month which will be supplied to needy farmers to rear them up to marketable age. Period of implementation is 2007-2012.

The Phasing of activities is given in Appendix 37- I. The establishment cost comes to Rs.2.5 Lakh. This includes setting up of sheds and cages, purchase of animals etc. The scheme will provide direct employment to 10 persons. This will generate employment of 3650 Mandays/Year.

2.3.9 Rabbit Nursery

It is proposed to establish units marketing breedable rabbit kits of 1 month Table.37.21. Phasing of selected LSGs for Rabbit nursery

| 2008 | 2009 |
|-------------|--------------------|
| Pooyappally | Pavithreswaram |
| | Kollam Corporation |

age. One unit each per selected Grama Panchayat rearing 50 rabbits is proposed to ensure the availability of kits. Period of implementation is 2007-2012.

The Table 37.21. gives the phasing of selected LSGs for Rabbit nursery.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.50,000/- per unit. This will generate employment of 1000 Mandays/Year. Total cost for all units would be Rs.1.5 lakhs.

2.3.10 Rabbit Units

It is proposed to set up rabbit units as a new source of meat to the people. One unit will contain 10 female and 2 male breeder rabbits. The cost includes cost of rabbits cage, feed, insurance, veterinary aid etc. Period of implementation is 2007-2012.

By 2008 and 2009 the units will be set up in border areas of bio reserve zone. ie. 50 units each will be established in Thenmala, Aryankavu, Kulathupuzha and Piravanthur in two phases.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.10000/- per unit. Total cost for all units would be Rs.20 lakhs. The scheme will provide subsidiary income source to 200 families.

2.3.11 High Tech Broiler Farm

It is proposed to increase the meat production of our district. The broiler farm will be provided with modern rearing facilities. The birds will be reared in cage system in 2 or 3 tiers in order to reduce the space for rearing. Period of implementation is 2007-2012.

The feeding and watering will be fully Table.37.22. Phasing of selected LSGs for High tech broiler farms

| 2008 | 2009 |
|------------------------|-------------------------|
| Multifunctional Zone I | Multifunctional Zone II |
| 1. Kottankara | 1. Punalur |
| 2. Thirikkovilattam | 2. Kottarakkara |
| 3. Mayyanad | 3. Chathanoor |
| | 4. Anchal |
| | 5. Karunagappally |

automatic. Other modern facilities including temperature controlled houses will be provided. Farms marketing 1000 birds per

Table.37.23. Phasing of selected LSGs for broiler farms

| 2008 | 2009 | 2010 | 2011 |
|----------------|--------------|----------------|----------------|
| Sooranad South | Mynagappally | Thodiyoor | Kareepra |
| Pavithreswaram | Thazhava | Sooranad North | Chathanoor |
| Sasthamcottah | Kunnathoor | Kulakkada | Kalluvathukkal |
| | Ezhukone | Elampalloor | |
| | Poruvazhy | Nedumpana | |

week are envisaged per unit. High tech broiler farms will be established in the Multi Functional Zone 1 and 2 as shown in Table.37.22.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.10 Lakh per unit. This will provide direct employment to 10 persons per unit. Total cost for all units would be Rs.80 lakhs. The scheme will provide employment of 30000 man days/ year.

2.3.12 Broiler Farms

It is proposed to set small broiler farms in order to increase the meat produced in the district. The units shall be allotted to groups like Kudumbasree or self help groups. Facilities for waste disposal by means of biogas plant/pit waste disposal/ any other means is a must. Farms marketing 400 birds per month are proposed. Period of implementation is 2007-2012.

The Table.37.23 gives the phasing of selected LSGs for broiler farms.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.75000/- per unit. 2 persons will be employed on a full time basis per unit. Total cost for all units would be Rs.120 lakhs. The scheme will provide employment of 1 lakh mandays/ year.

2.3.13 Turkey farm including hatchery

It is proposed to strengthen the already functioning regional poultry farm at Kureepuzha by increasing the number of parent stock and also by increasing the capacity of the hatchery etc. Proposal includes construction of rearing sheds and hatchery building, purchase of machinery for hatchery and other recurring expenses associated with implementation. The existing strength of 1000 birds will be enhanced to 5000. A turkey meat processing unit and product manufacturing unit is also envisaged in association with the farm. Period of implementation is 2007-2012.

Proposal Location is at Regional Poultry Farm, Kureepuzha in Kollam

Corporation by 2009. The Phasing is given in Appendix 37- I.

Estimated cost is Rs.75,00,000/-. On its completion the farm will provide direct employment to 25 persons. The scheme will provide employment of 9000 mandays/year.

2.3.14 Homestead Turkey Units

It is proposed to establish household turkey units in selected LSGIs. Proposal requires construction of shed, purchase of

Rs.1crore per unit. Establishment of organized slaughter units in all the Panchayats will enhance the health status of a majority of non-vegetarian population of Kerala. Each unit is supposed to provide employment opportunity to 25 persons. Total cost for all units would be Rs.740 lakhs. The scheme will provide employment of 7 lakh mandays/year. As suggested in Article 9.3 of Chapter 43B; Environment, inbuilt treatment facilities shall be provided

unit in Chavara in order to export the surplus meat that is produced in the district. It is expected that the district will be attaining self sufficiency in meat production and by 2021 it is proposed to establish the unit with all the facilities to export quality meat to other skater/countries. Period of implementation is 2007-2012. Total cost for the units would be Rs.75 lakhs. The scheme will provide employment of 1.5 lakh mandays/ year.

Table.37.24. Phasing of selected LSGIs for homestead turkey units

| 2008 | 2009 | 2010 | 2011 |
|----------------|-------------|----------------|----------------|
| Soomad South | Mynagapally | Thodiyoor | Kareepra |
| Pavithreswaram | Thazhava | Sooranad North | Chathannur |
| Sasthamcottah | Kunnathur | Kulakkada | Kalluvathukkal |
| Ummannoor | Ezhukone | Elampalloor | |
| Edamulackal | Poruvazhy | Nedumpana | |

turkey, cost of feed, equipments and other miscellaneous expenses. It is envisaged to establish 20 units of turkey with 10 birds each in the selected LSGIs. Period of implementation is 2007-2012.

The Table.37.24 gives the phasing of selected LSGIs for homestead turkey units.

The Phasing of activities is given in Appendix 37- I. Estimated project cost is Rs.12000 per unit. The scheme will provide subsidiary income to 360 families once it is implemented. Total cost for all units would be Rs.43 lakhs.

2.3.15 Slaughter houses

It is proposed to establish slaughter house in all the block head quarters and urban LSGIs by 2011. Organised slaughter houses are necessary for safe and hygienic meat production. The concerned LSGIs should identify the site to setup the slaughter house. All other recurring expenditure like wages for those working in the slaughter house, maintenance of machineries, electricity and water charge etc should be met by the respective LSGIs. One veterinarian should be appointed permanently for carrying out meat inspection such that the meat produced from the slaughter houses will be clean and free from zoonotic diseases. Slaughter houses to process 50-100 animals a day is proposed in each LSGI. Period of implementation is 2007-2012. As suggested in Article 9.3 of Chapter 43B; Environment, inbuilt treatment facilities shall be provided for the waste generated here.

The Phasing is given in Appendix 37- I. Proposed project cost is around

for the waste generated here.

2.3.16 Abattoir and Meat Production

It is proposed to establish a modern abattoir for humane and hygienic slaughter and meat processing. The Proposal includes setting up of an abattoir for humane slaughter, facilities for chilling and

Table.37.25. Phasing of selected LSGIs for veterinary specialty hospital

| 2009 | 2011 | 2013 | 2015 | 2017 |
|---------|--------------|--------------|--------------|----------------|
| Punalur | Pathanapuram | Kottarakkara | Adichanallur | Karunagappally |

processing of meat. A rendering plant will also be attached along with the abattoir. Period of implementation is 2007-2012.

The Proposal will be implemented in Chavara by 2011. Estimated cost is Rs.75,00,000/-.This proposal will provide employment of 9000 mandays/year.

2.3.17 Meat processing units

It is proposed to establish a well equipped meat processing unit with facility to carryout all those processes from slaughter of animal to packing of meat and production of value added meat products. Activities of the proposal include land acquisition, building construction, purchase of machineries, appointment of personal, training to the personals in modern techniques in the field routine maintenance of machineries etc. The suggested location is at Aryankavu. Period of implementation is 2007-2012.

Estimated cost is Rs.50,00,000/-.This will provide employment of 3 lakh mandays/ year.

2.3.18 Meat export

It is proposed to establish a meat export

generated will be Rs.150 lakh and 11000 mandays/year respectively.

The Table.37.25 gives the phasing of selected LSGIs for veterinary specialty hospital.

The Phasing of activities is given in Appendix 37- I. Estimated cost is Rs.50,00,000/- per unit.

3.2 Artificial insemination centre

The proposal is to establish more number of artificial insemination centers. More number of centers is to be located by considering the requirement of one center for every 500 breedable cattle. Total cost for the proposal in phase I and phase II would be Rs.32 lakhs and Rs.30 lakhs respectively. This will provide employment of 15000 mandays/year in each phase.

The Table 37.26. gives the phasing of selected LSGIs for artificial insemination centres.

3.3 Semen holding bank

It is proposed to set up holding units for high quality semen purchased from sources other than the present ones. These units will be purchasing semen

Table.37.26. Phasing of selected LSGs for artificial insemination centres

| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-------------|----------------|----------------|--------------|---------------|-----------------------|--------------|--------------|
| Thazhava | Sasthamcotta | Kalluvathukkal | Mynagappally | Mandro Island | Thekumbhagom | Elampalloor | Thenmala |
| Chathanloor | Sooranad North | Elampalloor | Thodiyoor | Karavalloor | Yeroor | Chithara | Kulathupuzha |
| Kunnathoor | Sooranad South | Nedumpana | Ezhukone | Kadakkal | Perinad | Poooyappally | Aryankavu |
| Poruvazhy | Kulakkada | Pavithreswaram | Kareepra | East Kallada | Paravoor Municipality | Piravanthoor | |

doses from competent authorities and will be distributing the same to the interested farmers. Period of implementation is 2007-2012.

By 2010 the bank is proposed to be established at Kottarakkara. Estimated cost is Rs.2,50,000/-. This will provide employment of 10000 mandays / year.

3.4 Marketing outlets (LIPCOS)

The marketing of livestock and poultry products has been a long time problem. With the introduction of the milk societies there has been a system in marketing of milk. But the farmers are facing many problems like low price, high overheads of marketing agencies and lack of timely revision of price depending on the increase in cost of production. This has resulted in many farmers quitting the dairy sector. For farmers in poultry sector private marketing are to be approached for selling their products. Even though most of the Keralites are non vegetarians there is no civilized system for meat processing and marketing. As a solution to this, a comprehensive marketing system is designed for the district. This has got another aim of increasing the internal consumption and promotes niche marketing. The system offers quality assured nature fresh products for the rural as well as urban people.

LIPCOS a new marketing system is suggested. "Livestock Products Co-operative societies" is to be set up in five places of every Grama Panchayats in Kollam district. More outlets will be set up in municipalities and corporation. These will be located geographically in equidistant manner. The venture in local area will be run by self help groups in the area participating in the venture. An apex body in district level will be set up. This will be governed by Jilla Panchayat comprising of a team with officials and representatives of self help groups. This body should develop operating protocols and organize marketing with common brand name, advertising etc.

The society will be procuring milk, egg

and agricultural products initially and selling farm fresh. Later on processed meat will also be included. Initially this will be located in public buildings / attached to veterinary or other institutions. Period of implementation is 2007-2012. These marketing outlets can be interlinked to the Primary agriculture markets proposed in Article 4.1 of Chapter 34 with priority to the locations proposed therein. Sufficient recycling facilities as mentioned in the Article 7.2 of Chapter 34 are also interlinked here.

An amount of Rs.5 lakhs is to be spent every year initially. After 6 years the society should realize the operating costs from trade surplus.

The activities of the project includes selection of site, Registration of the unit, purchase of machineries and equipments for storing the products and appointing of one or two labourers for carrying out the activities of the outlets. Total cost for the proposal would be Rs.20 lakhs and will provide employment of 1 lakh mandays/ year.

4. Animal welfare

4.1 Prevention of cruelty against animals

It is proposed to prevent cruelty against animals. A way side shelter is proposed at Vilakkudy to give rest to animals on the way of their long journey by road. Feeding and watering shelter is proposed at Aryankavu. This proposal will cover all the LSGs. Period of implementation is 2007-2012.

In order to create awareness in the growing children, kindness clubs are proposed in schools and colleges. Mobile squads of society for prevention of cruelty to animals are proposed in all the block head quarters. Total cost for the proposal would be 10 lakhs and will provide employment of 1000 mandays/ year.

4.2 Population control programme for dogs

It is proposed to control the population of dogs by conducting birth control surgeries to animals as mentioned in

Sectoral studies. Dogs are transmitting many zoonotic diseases. One example is rabies. So population control of dogs is a must in public health aspect also. Period of implementation is 2007-2012.

The activities of the proposal includes equipping of Grama Panchayat level veterinary institutions for conducting the surgery, awareness among dog owners

Table.37.27. Phasing of selected LSGs for population control programs for dogs

| 2008 | 2009 | 2010 |
|----------------|-------------|--------------|
| Kulathupuzha | Kulakkada | Karavalloor |
| Ezhukone | Kundara | Alayamon |
| Ummannoor | Poothukulam | East Kallada |
| Elampalloor | Elamad | Aryankavu |
| Kareepra | | |
| Perayam | | |
| Pavithreswaram | | |

regarding the importance of the proposal appointing well experienced personals should be appointed by the LSGs for catching the stray dogs etc.

The Table.37.27 gives the phasing of selected LSGs for population control programs for dogs.

Project cost is estimated to be around Rs.500 per animal. Total cost for the proposal would be 10 lakhs and will provide employment of 1000 mandays/ year.

5. Other Proposals

5.1 Elephant rides

It is proposed to link Animal Husbandry Department and Tourism Department. Elephants are very much attracted by Tourists. Keeping this in mind an elephant ride is proposed at Perinad in order to attract tourists to this place and at Poothakkulam considering its present potential. Period of implementation is 2007-2012.

Activities of the proposal include setting up of shelter to elephants, feeding and watering facilities, regular veterinary care by experienced veterinarian. Tourism department will be having a prime role in this proposal. Total cost for the proposal would be Rs.5 lakhs and will provide employment of 1000 mandays / year.

5.2 Ornamental poultry rearing

Ornamental poultry rearing is a new

source of income generation. It is proposed to establish ornamental poultry rearing units at Perinad Grama Panchayat. The activities of the project include selection of a suitable site for starting the unit; the project will be implemented through the animal husbandry department in linkage with the tourism department. This unit can be linked with the proposed elephant ride unit at Perinad Grama Panchayat. Both of these units, along with other proposals of Tourism Department at Perinad can attract tourist to this Grama Panchayat. This unit will be working as a model unit and interested persons can get the birds from this unit for rearing. Period of implementation is 2007-2012.

Project cost is Rs.5,00,000/-. This will provide employment of 3000 man days / year.

6. Zoonotic Disease Control Programmes

Analysis reveal that many of the emerging diseases of human are animal diseases. Hence a disease free healthy livestock and poultry population is a must for achieving healthy human population. This proposal will cover all the LSGIs and has three phases. Period of implementation of phase I, phase II and phase III are 2007-2012, 2012-2017 and 2017-2021 respectively. In each phase the total cost

and employment generated will be Rs.40 lakhs and 3000 mandays / year.

6.1 Comprehensive Rabies Control Programme

The programme aims at eradicating dreadful rabies by vaccinating susceptible population and controlling the stray animal population. This proposal will cover all the LSGIs and has three phases. Period of implementation of phase I, phase II and phase III is 2007-2012, 2012-2017 and 2017-2021. In each phase the total cost and employment generated will be Rs.40 lakhs and 3000 mandays / year.

6.2 Avian influenza control programme

The programme aims at controlling the bird flue disease. This proposal will cover all the LSGIs and has three phases. Period of implementation of phase I, phase II and phase III is 2007-2012, 2012-2017 and 2017-2021. In each phase the total cost and employment generated will be Rs.40 lakhs and 3000 mandays/year.

6.3 Zoonotic disease surveillance Cell

This is a comprehensive mechanism to have surveillance on the disease patterns of the animal and poultry population and have strict vigil on emerging zoonotic diseases. The cell should take proactive steps to avert such threats. This

proposal is suggested at Kollam Corporation. Period of implementation is 2007-2012. The total cost and employment generated will be Rs.10 lakhs and 2000 mandays / year.

7. Conclusion

The Animal husbandry sector is facing serious challenges due to the changing socio economic pattern of the district. The fragmentation of land and limited availability of fodder has resulted in considerable decrease in the number of livestock and poultry. But the consumption pattern shows a sharp increase in the consumption milk, meat and egg. The rising demand is met by import of these items from neighbouring states. This has resulted in the wide fluctuation of the market price of these items. In order to have stability in the supply of these products the internal production is to be increased. This should be given special attention as a measure of achieving food security.

The projects are designed taking into consideration, various aspects such as land availability, current livestock population and other infrastructure prospects as per integrated approach of different sectors. These proposals designed with utmost care and with location specific suggestions will definitely help in attaining self sufficiency in milk, meat and egg production in Kollam district.



Chapter 38

Fisheries

This chapter includes the Development Proposals of Fisheries sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district fisheries policy, by 2021 Kollam has to become a major Marine Export Zone considering its potentials for Inland and Deep sea fishing and aqua culture and also proximity to Port while giving emphasis to Aqua Resource Conservation and Fisher Folk Welfare.

The Strategies include

I Development of Seed Production Centres

According to the sectoral studies, except for shrimps there is no hatchery for fish and shell fish seed production. Hence seed production centres have to be developed in accordance with production requirements by fish type suggested in

other proposals.

I Enhancement of Production for Self Sufficiency

As per the requirement analysis it is seen that nearly 0.6288 lakh tonne fish would be required. Present level of production is not in tune with this. As per the general policy, there has to be self sufficiency in at least few key sectors of development. Being one of the key development sectors in the district, self sufficiency has to be targeted mainly through aqua culture.

I Enhancement of Production for Economy Generation

As per the district fisheries policy, Kollam has to become a major Export Zone. As per the sectoral studies there is immense potential for the sector in marine fish export which however is presently showing a declining trend. This has to be revived through the production of fish and shell fish having demand in foreign exchange. This

is to be done through aqua culture, capture fisheries and tourism fisheries.

I Resource Conservation

As per the sectoral analysis, the bio diversity in the fisheries sector in Kollam is showing a grave situation. As per the studies of the environment sector, the major water bodies in the district including the two Ramsar sites viz. Ashtamudi Back water and Sasthamcotta fresh water lake are suffering from problems like pollution, soil erosion etc. As per the fisheries sectoral analysis there is over exploitation of fisher resources. As per the district fisheries policy, Kollam has to have its fish resource conserved. So conservation measures for both marine and inland fishing has to be considered.

I Infrastructure Development

As per the sectoral analysis, it is seen that Kollam district is lacking a number of supportive infrastructure facilities for the development of this sector. There for the

infrastructure for Marine Export Zone, Marketing and for Research, Extension and Training are to be targeted.

I Fisher Folk Welfare

As per the sectoral studies the fisher folks are one of the most deprived sections of the society even though they contribute to a major share of the GDP of the district. So, while targeting the overall development of the sector, the welfare of the fisher folks cannot be ignored. The strategy would be to provide them with basic amenities.

Proposals on each of the above are detailed below. The phasing of activities and requirement of fund are given in Appendix 38 -1.

2. Proposals for Seed Production Centres

The proposals for seed production centres include Carp Seed Hatchery, Carp Seed Rearing Units, Shrimp Hatchery, Scampi (Fresh Water Prawn) Hatchery, Mud Crab Hatchery, Marine and Brackish Water Fin Fish Hatchery, Marine Ornamental Hatchery, Larvivorous Fish Seed Production Centre and All Male Tilapia Seed production Centres.

2.1 Carp Seed Hatchery

The district has tremendous potential for the development of fresh water fish culture. But the non availability of quality seed at right time is a serious problem for its development. At present the seed requirement was met from the Government seed farms of the neighbouring districts. The district has no carp seed hatchery in private as well as in public sector. Under these circumstances it was proposed to set up a district seed farm at Adichanalloor chira, Adichanalloor which is in the Agro allied Development Zone. The chira is now under the administrative control of Adichanalloor Grama Panchayat. For setting up of the hatchery it should be handed over to Fisheries Department. The total out lay of the proposal is estimated as Rs. 60 lakh. This cost will be shared by Government of India and the State. As mentioned in Article 3 of Chapter 35, Irrigation, water from KIP canal has to be utilised for ensuring supply of water to the pond. Also the irrigation feeder canal (Velichikala Thodu) has to be regenerated by the LSGI.

The components of the proposal include deepening of the chira, reclamation

of land in the chira for the construction of hatchery building, vertical nursery ponds and larval rearing ponds, setting up of induced breeding facilities, setting up of brood stock and grow out ponds, water circulation system, electricity and aeration facilities etc.

The proposal starts by the year 2008 and the construction will be completed by 2010. The production starts by 2010 onwards.

The proposal is implemented by fisheries Department through ADAK/ FFDA Kollam in connection with LSGI's.

By the implementation of this scheme seed production at the rate of 20 lakh seeds/ year will be made possible. This will generate direct employment for 10 persons.

2.2 Carp Seed Rearing Units

Rearing of fresh water fish seeds in small ponds is a profitable venture which can be promoted through the involvement of marginal farmers. Small water holds and domestic ponds can be utilized for the rearing of carp fish seeds through the involvement of local farmers. Seasonal ponds and small water bodies can be surveyed and selected for the purpose. The entire seed produced through this programme can be procured by FFDA's and distributed among the beneficiaries engaged in fish farming activities. The present proposal is to establish 150 such carp seed rearing units at the rate of 10 units per year. A single unit has an area of about 5-10 cent. The unit cost estimated as 20,000/- Rupees.

The suggested locations are Grama Panchayats of Oachira, Thazhava, Karunagapally, Thodiyoor, Chavara, Thevalakkara of Sub Zone 4 of Special Development Zone and the Grama Panchayats of Edamulakkal and Yeroor of Agro Development Zone.

Components include the development of infrastructure facilities, development of seed rearing and training and extension support, development of infrastructure includes construction / renovation of bunds, construction of sluices, setting up of feed ramps and trays etc, development of seed rearing includes water culture (pond preparation), eradication of insects including larva, stocking, feeding, water quality management etc. The farmers will be trained on various aspects of seed rearing. Beneficiaries of the proposal will

be the owners of small / marginal ponds. A subsidy at the rate of 25% will be provided and the assistance will be available only once to a farmer. The implementation starts by the year 2008. The implementing agency is Fisheries Department through ADAK/ FFDA Kollam. The fund requirement for the proposal is given in Appendix 38-1.

By the implementation of this scheme, carp seeds at the rate of 2.5 lakh seeds/ year, will be produced. This scheme will generate direct employment for 150 persons by the year 2021. Total cost for all units would be Rs. 30 Lakhs.

2.3 Shrimp Hatchery

Shrimp Culture was considered as a golden mine in the field of Aquaculture and it had shown a positive graph in its annual growth rate up to 1995. During 96-99 period due to the widespread out breaks of white spot viral disease, the rate of growth declined sharply. No field level treatment is available to cure shrimp diseases. Viral infection starts right from brood stock to hatchery's rearing and production system. Only virus negative seeds should be stocked for farming in order to avoid viral diseases.

The hatcheries in Kerala are facing severe competition from inside and cheap imported seeds from neighbouring states. In many occasions the seeds are sold below the production cost. To meet the situation private sector hatcheries import large quantity of nauplius at cheaper rate from the neighbouring states which occasionally carry the virus. The procurement of such seeds causes heavy loss to the farmers. So quality shrimp seed is a critical input required for successful shrimp aquaculture. In order to ensure availability of quality shrimp seeds, a commercial level shrimp hatchery is proposed in the District. The total out lay of the proposal is estimated as Rs.50 lakh. The suggested locations are at Neendakara or Chavara Grama Panchayats.

The shrimp hatchery will be set up near the sea shore and for the establishment of a shrimp hatchery 50 cent land is required. The barren land used by the Indian Rare Earths may be negotiated for this purpose. Road transportation facility, electric connectivity, water supply facilities, etc. should also be provided. The components include construction of hatchery buildings,

setting up of tanks for mother shrimp and brood shrimp maintenance, hatching, larval rearing, PL rearing, Algal culture, Artemia culture etc. The proposal will be implemented by Fisheries Department through ADAK/ BFFDA Kollam. The proposal cost is shared by Govt of India and the State. The year wise details of the fund requirement are given in Appendix 38 -1.

By the implementation of this scheme production of shrimp seeds at the rate of 50 lakh seeds/year, will be made possible. This scheme will provide direct employment to 10 persons.

2.4 Fresh Water Prawn Hatchery

During the last couple of years there has been renewed interest in scampi (fresh water prawn) aqua culture as an economic activity generating income and employment to the farmers. There is a growing demand in the export market for cultured scampi. The limiting factor for the popularisation of these culture practices is the lack of adequate and timely supply of seeds. No hatchery is functioning in the district especially for the production of scampi seeds. Seeds produced presently are only from the shrimp hatchery that is also as an off-seasonal activity.

Considering the export potential of scampi and the growing demand for the seeds for aquaculture it is proposed to set up a scampi hatchery in public sector. The total outlay of the proposal is estimated as Rs.50 lakh. The suggested locations are at Neendakara or Chavara Grama Panchayat.

The hatchery will be set up near the sea shore and for the establishment of which 50 cents of land is required. The barren land used by the Indian Rare Earths may be negotiated for this purpose. Road transportation facility, electric connectivity, water supply facilities etc. should also be provided. The Components include construction of hatchery building, setting up of brood stock maintenance tank, hatchery tanks, larval rearing tanks, PL rearing tanks, Artemia naupli production tanks, suspended feed making facilities, laboratory, hatchery machineries etc.

The proposal will be implemented by fisheries Department through ADAK/FFDA/ BFFDA Kollam. The proposal cost is shared by Government and the State. The year wise details of the fund requirements

are given in Appendix 38 -1.

The hatchery will be set up during the period 2009-2014. By the implementation of this scheme, seeds at the rate of 30 lakh / year will be produced. This will provide direct employment to 10 persons.

2.5 Mud Crab Hatchery

At present considerable interest has been evinced in crab culture due its high demand, in live condition, from foreign countries. Mud crab culture depends to a large extent on wild seed supply and which becomes a limiting factor for the expansion of farming in coastal zones. CIBA has developed a viable technology for captive brood stock development and induced maturation. The survival rate from the 1st Zoea to first crab in star is up to 15%.

Considering the export potential of crabs and the growing demand for crablets one crab hatchery is proposed to be set up in public sector. The total outlay of the proposal is estimated as Rs.50 lakh. The suggested locations are at Neendakara or Chavara Grama Panchayats.

The hatchery will be set up near the sea shore and for the establishment of Mud crab hatchery 50 cent land is required. The barren land used by the Indian Rare Earths may be negotiated for this purpose also. Road transportation, electricity, water supply facilities, etc. should also be provided. The components include construction of hatchery building, setting up of tanks for brood stock maintenance, spawning, hatching, larval rearing, nursing etc, water and air circulation facilities, suspended feed making unit, laboratory, hatchery machineries etc.

The proposal will be implemented with the technical support of CIBA. The cost will be met both by the Government of India and the State. The proposal is implemented by Fisheries Department through ADAK/ BFFDA, Kollam. The year wise requirements of funds are given in Appendix 38 -1.

Period of implementation is from 2008 to 2011. By the implementation of this scheme, production of seed at the rate of 10 lakh / year will be made possible This will generate direct employment for 10 persons.

2.6 Marine and Brackish Water Fin Fish Hatchery

Coastal aquaculture has remained synonymous with shrimp culture. Farming

of other species through diversification of aquaculture is an area that has been ignored till recently. But the outbreak of viral diseases in shrimp farms of various parts of the country opened the eye of planners and entrepreneurs.

The technology for breeding and culture of many of the commercially important marine and brackish water fin fishes were standardized by central institutes like CMFRI, CIBA etc. Yet the development of marine and brackish water fin fish culture is not flourished because of the shortage and delay in timely supply of the seeds of these fin fisheries. In order to overcome this it is proposed to set up a fin fish hatchery in Public sector. The total outlay expected is Rs.50 lakh.

The suggested locations are at Neendakara or Chavara Grama Panchayats. The hatchery will be set up near the sea shore and for the establishment of the hatchery 50 cent land is required. The barren land used by the Indian Rare Earths may be negotiated for this purpose also. Road transportation, electricity, water supply facilities etc. should be provided. The components include construction of hatchery buildings setting up of tanks for brood stock maintenance, spawning, hatching, larval rearing, nursing etc, water and air circulation facilities, Algal culture facilities, Artemia naupli production facilities, suspended feed making unit, laboratory, hatchery machineries etc.

The proposal will be implemented with the technical support of CMFRI, CIBA, CIFE etc. The cost will be met both by the Government of India and State. The proposal is implemented by Fisheries Department through ADAK/ BFFDA. The year wise requirement of fund is given in Appendix 38 -1.

Period of implementation is 2009-2014. By the implementation of this scheme, production of seed at the rate of 10 lakh / year, will be made possible and direct employment to 10 persons will be generated.

2.7 Marine Ornamental Fish Hatchery

The marine ornamentals have very good export market. The ornamental fishery as of now entirely depends upon wild collection. The collection of ornamentals on large scale is likely to result

in depletion of such fish stock. Sustainable development of ornamental fisheries can be ensured only through the development of hatchery technology for the commercial production of major varieties of marine ornamentals which has already been developed and standardized by CMFRI. Considering the growing demand for marine ornamental fishes in the international market it is desired to set up a marine ornamental fish seed producing centre in public sector. The total outlay is estimated as Rs.50 lakh.

The suggested locations are at Neendakara or Chavara Grama Panchayats. The hatchery will also be set up near the sea shore and for the establishment of the hatchery 50 cent land is required. The barren land used by the Indian Rare Earths may be negotiated for this purpose. Road transportation, electricity, water supply etc should also be provided. The components include construction of hatchery buildings, setting up of tanks for brood stock maintenance, spawning, hatchery, larval rearing, nursing etc, water and air circulation facilities, Algal culture facilities, Artemia naupli production facilities, suspended feed making unit, laboratory, hatchery machineries etc.

The scheme will be implemented with the technical support of CMFRI and cost will be met both by the Government of India and State. The proposal is to be implemented by Fisheries Department through ADAK/ BFFDA during 2009-14 period.

By the implementation of this scheme, seed production at the rate of 10 lakh / year will be made possible.

2.8 Larvivorous Fish Seed Production Centre

A number of fishes have little food value are of immense utility to public health because of their larvivorous feeding habit. These fishes prefer insect larvae over other food. It is this larvicidal function of these fishes which has brought them to prominence. Man has learned to use them as one of his several measures to combat a number of serious diseases like malaria, yellow fever, filariasis, dengue fever, chikun gunea etc. which are spread through the agency of insects. Man's war against these dreaded diseases in fact turned to be a war against their vector

insects in an attempt to curtain and eradicate there diseases.

Mosquitoes are the most important in the spread of these diseases. A number of larvicidal fishes directly feed upon mosquito larvae, the group include guppies, gambusia, Rasbora, puntius, esomus etc. At present there is no facilities available for the production of such larvicidal fishes and hence the proposal. It is proposed to start up a larvivorous fish breeding and production centre at Punukkannoor chira of Elampalloor grama panchayat. The total out lay of the project is estimated as Rs.10 lakh and the cost is to be equally shared by the Fisheries department and the Jilla Panchayat.

The components include the reclamation of land in the chira area, construction of Tanks, cisterns and a shed with transparent roofing, setting up of water, air and electric connectivity facilities etc. The year wise requirements of the funds are given in Appendix 38 -1.

Period of implementation is 2008-2009. By the implementation of this scheme, seed production at the rate of 10 lakh /year, will be made possible. Direct employment generated will be 6.

2.9 All Male Tilapia Seed production Centres

Tilapia, though originally a native of Africa, is distributed all over the world because of certain distinctive characteristics of this fish which are favourable for its farming. It is an easy growing fish having remarkable capacity to adapt to different climatic conditions, salinities, food and ecosystems. It is highly resistant to diseases and reproduces prolifically under natural habits; they have been extensively used for hybridization, hormonal sex reversal, induction of polyploidy etc.

In culture practices this prolific breeding nature causes over crowding and resulting in stunted growth. To avoid such causality, mono sex (all male) culturing of tilapia is resorted to. Production of all male population of tilapia can achieved either by hormonal sex reversal or by hybridization.

Artificial sex reversal of tilapia fry can be achieved by feeding sexually undifferentiated fish about 10 days of age for 3 weeks in the hatchery unit with a synthetic male hormone (17- alpha methyl testosterone) in the diet. This will produce

95 – 100 % all male tilapia population. Use of this sex reversed fingerlings for grow out in fresh water ponds and cages has been found to increase production by more than 50 % compared to mixed sex populations.

Starting up such an 'all male tilapia seed production centre' in the district will considerably increase the fresh water fish production. Hence it is envisaged to start up an all male Tilapia seed production centre in the Maruthady vattakkayal area in Kollam Corporation. The total cost estimated is about 10 lakh rupees and that will be equally shared by Fisheries department and the District panchayat. The proposal will be implemented through FFDA/ADAK with technical support of CIBA. The components include development of infrastructure facilities, development of all male tilapia seed production and marketing. The year wise requirements of funds are given in Appendix 38 -1. Period of implementation is 2008-2009. Seed production, at the rate of 20 lakh seeds/year, is targeted. This will generate direct employment for 6 persons.

3. Proposals for Production Enhancement for Self Sufficiency

The proposals for achieving self sufficiency include production enhancement mainly through aquaculture and stock enhancement programme.

3.1 Aquaculture

Proposals in aquaculture include Fresh Water Fish Culture, Paddy cum Fish Culture, Integrated Pig Cum Fish Culture, Integrated Duck Cum Fish Culture, Integrated Poultry Cum Fish Culture, Pen Culture and Running Water Fish Culture, All Male Tilapia Culture and Renovation of Grama Panchayat Ponds for Fish Culture.

3.1.1 Fresh Water Fish Culture

Due to over fishing and various other factors such as aquatic pollution fish production from inland capture fisheries depicts a stagnant trend over the years. Aquaculture is the only alternative to tide over the situation. The proposal is to bring 3000 ha of fresh water bodies of the District under the fold of fresh water fish culture over a period of 15 years at the rate of 200 ha per year. The estimated cost is Rs.3 lakh/ha. A subsidy will be provided at the rate of 20% and these will be met by Govt. of India and state in the ratio 75:25. The

total outlay of the proposal is calculated as 9000 Lakh Rupees. The additional production anticipated is 9000 tones over the next 15 years.

The components include development of infrastructure facilities, development of fish farming and extension and training support. Development of infrastructure includes construction / renovation of bund, construction of sluices, construction of watchman shed, setting up of feed ramp, feed tray etc, development of fish farming includes pond preparation, stocking of seeds; supplementary feeding, water quality management etc. Farmers will be trained at frequent intervals on various aspects such as pond construction, pond preparation and stocking, management measures for preventing diseases, optimum feed supply etc. Since the district is endowed with fresh water ponds, this proposal can be implemented in all the LSGIs.

Beneficiaries of the proposal will be the owners of the fresh water bodies, lessees of Grama Panchayat ponds, fishermen society, SHG's, private entrepreneurs, etc. The programme will be credit linked and subsidy will be released to banks. The assistance under the programme will be available only once to a beneficiary with or without institutional finance.

The proposal will be implemented by Fisheries Department through Agency for Development of Aqua culture, Kerala (ADAK) and FFDA, Kollam. The year wise requirement of fund is given in Appendix 38 -1.

By the implementation of this scheme, fish production at the rate of 500 ton /year, will be made possible. The scheme will generate a total of 3000 direct employment and 3000 indirect employment by the year 2021.

3.1.2 Paddy cum Fish Culture

Paddy farming becomes a no gain business and farmers show a tendency to keep their farms idle. Rotation of crop with fish culture proved to be a prosperous integrated system of farming in which both the culture practices are benefited. The present proposal is to bring 750 ha of low lying paddy field in the district under the fold of integrated paddy cum fish/ prawn culture over a period of 15 years at the rate of 50 ha per year. The unit cost per ha is about Rs. 2 lakh. The total outlay of

the proposal is 1500 lakh rupees.

The component includes development of infrastructure facilities, development of integrated paddy cum fish/ prawn culture and extension and training support, development of infrastructure includes strengthening of bunds/ construction of bunds, constructions of sluices, construction of watchman shed, installation of axial flow pump, installation of centrifugal pump, setting up of feeding tramps and trays etc. Development of integrated farming includes farm preparation, manuring paddy cultivation, harvesting, water culture, fish seed stocking and scientific fish culture practices, harvesting and marketing. Farmers will be trained at frequent intervals.

The programme will be initiated on a group farming practices and the group / society organized among the owners of the farm are the beneficiaries. The programme will be credit linked and a subsidy will be provided at the rate of 20% of the capital investment. The assistance under this programme will be available only to farmers group with or without institutional finance. The suggested locations are at K.S.Puram, Thodiyoor, Oachira, Thazhava, Sooranad, Mynagappally, W. Kallada, Chavara, Kulakkada, Nedumpana, Adichanalloor, Chirakkara, Chathanoor, Elamadu, Edamulakkal, Anchal, Kulathupuzha, Chithara, Alayamon, Paravoor, Ezhukone and Kareepra Grama Panchayats. The proposal is linked to the proposal for improving rice production and productivity through paddy conservation as per Article 2.1.2 of Agriculture sector.

The proposal will be implemented by Fisheries Department in association with the Agriculture Department and Local Self Government, through ADAK and FFDA Kollam. The year wise requirements of the funds are given in Appendix 38 -1. Period of implementation is 2008-2022. Fish production at the rate of 125 ton fish/ year, will be made possible. The total production by the year 2021 is proposed to touch 1875 ton fish worth Rs.750 lakhs. This will generate a total of 7500 direct employment and 750 indirect employments by the year 2021.

3.1.3 Integrated Pig Cum Fish Culture

Fresh water fish culture has become popular on these days due to its high

profitability. By adopting scientific farming practices and modern techniques fish production can be increased considerably. Integrated farming system aims at the productive utilization of the waste generated in one crop for raising another one. This system increases the efficiency of resource use, reduce investment risk through crop diversification and ensure sustainable production of various crops with increased annual income.

Central Inland Fisheries Institute had developed technology for the successful integration of piggery with fish culture practices. In this system pigs are housed in cement sheds constructed on the embankment of the ponds and pig dung and urine are allowed to be discharged into the fish ponds every day. This will increase the productivity of the pond and help to reduce considerably the supplementary feed supply to the fishes.

The suggested locations are at Piravanthoor, Edamulackal in 2008 except Kottarakara where there is less scope and at Thenmala, Pooyapally and Pathanapuram in 2009 as suggested in Article 2.3.7 of Chapter 37 Animal Husbandry.

The unit cost for setting up of a 1 ha area is estimated as Rs. 2.8 lakh. A subsidy at the rate of 20 % per ha will be provided which will come around Rs. 56000/-. It is proposed to bring 15 ha areas under the fold of integrated fish cum pig culture system at the rate of 1 ha per year, over a period of 15 years.

The components include development of infrastructure, development of integrated fish farming and extension and training. Development of infrastructure includes bund construction, sluice erecting, setting up of feeding ramp and tray, construction of pig shed and drainage facilities, etc. Development of integrated fish farming includes pig culture, manuring, and stocking of fish seeds, fish culture, feeding, harvesting and marketing. The farmers will be periodically trained on various aspects of pig culture, fish culture, scientific management practices, harvesting, handling and marketing. The year wise requirement of the funds is given in Appendix 38 -1.

Period of implementation is 2008-2022. By the implementation of this scheme, production at the rate of 2.5 ton fish/ ha/

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year is made possible.

3.1.4 Integrated Duck Cum Fish Culture

The purpose of fresh water fish culture is to obtain maximum fish production in most economic way. Various inputs are applied into ponds for fish production such as fish seed, feed, manure, fishing equipments, technical and managerial know how, labour etc. It is estimated that about 60 % of the operational cost in fish culture is to meet the cost of supplementary feed. In integrated farming system, the waste generated through one farming system is utilized for the raising up of other crops. Thus the recurring expenditure can be reduced to a great extent, which will be reflected on the net profit. There are many packages of integrated fish and livestock farming. One among them is the Duck cum fish farming.

In this system the ducks are housed in thatched or netted house on the embankment of the pond or above the water area using bamboo or coconut stumps. The duck droppings are allowed to be discharged in to the ponds and that will increase the productivity of the pond which in turn induces the production of food organisms for fishes. The unit cost, area requirement, agencies and financing pattern are same as that of item 3.1.3. The suggested locations are at Paravur, Munroe Island, Punalur and Sooranadu South as suggested in Article 2.2.7 of Chapter 37 Animal Husbandry.

The components include development of infrastructure, development of integrated fish farming and extension and training. Development of infrastructure includes bund construction, sluice erecting, setting up of feeding ramp and tray, construction of duck house and drainage facilities, etc. Development of integrated fish farming includes duck culture, manuring, stocking of fish seeds, fish culture, feeding, harvesting and marketing. The farmers will be periodically trained on various aspects of duck culture, fish culture, scientific management practices, harvesting, handling and marketing.

The year wise requirement of the funds is given in Appendix 38 -1.

Period of implementation is 2008-2022. By the implementation of this scheme production at the rate of 2.5 ton / ha /year, will be made possible.

3.1.5 Integrated Poultry Cum Fish Culture

Aquaculture is becoming an important development sectors in Kerala, as it provides cheap protein to the rural poor and also generate employment opportunities in rural areas. Fish farming require long term investment. So proper planning should be essential before establishing a fish farm. The organizational set up of the fish farm should be planned well. Then the method of cultural operation should be decided. In India, the established and widely adopted farming practice is the composite fish culture of Indian Major Carps like Catla, Rohu and Mrigala. This culture system is comparatively less capital oriented and does not need sophisticated technology or requirements. However a major share should be expended for meeting the cost of supplementary feeds, which will come around 60 % of the operational cost. If we adopt managerial or technical measures to reduce these costs the fish culture system can be made more profitable. The importance of integrated farming system is worth while in this context.

For past few decades many model integrated farming system are introduced through out the world, of which the most economical activity is the fish culture integrated with animal husbandry. One of the main packages of integrated fish and livestock farming is Poultry cum Fish Culture. In this system the chickens are housed in thatched or netted houses on the embankment of the pond or above the water area using bamboo or coconut stumps. The chickens droppings are allowed to be discharged into the ponds and that will increase the productivity of the pond which in turn induces the production of food organisms for fishes. The unit cost, area requirement, agencies and financing pattern are same as that of item 3.1.3. The suggested locations are at W.Kallada Kunnathur Panmana Thevalakkara Myna-gappally Kalluvathukkal Ezhukone, Adichanalloor, Nedumpana, Anchal, Edamulakkal, Ittiva and Chadayamangalam.

The components include development of infrastructure, development of integrated fish farming and extension and training. Development of infrastructure includes bund construction, sluice erecting, setting up of feeding ramp and tray, construction

of chicken shed and drainage facilities, etc. Development of integrated fish farming includes poultry farming, manuring, stocking of fish seeds, fish culture, feeding, harvesting and marketing. The farmers will be periodically trained on various aspects of poultry farming, fish culture, scientific management practices, harvesting, handling and marketing. The year wise requirement of the funds is given in Appendix 38 -1.

Period of Implementation is 2008-2022. By the implementation of this scheme, production at the rate of 2.5 ton fish/ ha/ year, will be made possible.

3.1.6 All Male Tilapia Culture

The proposal is to bring 300 ha of fresh water bodies of the District under the fold of all male tilapia culture over a period of 15 years at the rate of 20 ha per year. The estimated unit cost is Rs.3 lakh/ha. A subsidy will be provided at the rate of 20% and these will be met by Govt. of India and state in the ratio 75:25. The total outlay of the proposal is calculated to 900 lakh Rupees. The additional production anticipated is 900 tones over the next 15 years.

The component include development of infrastructure facilities, development of fish farming and extension and training support. Development of infrastructure includes construction / renovation of bund, construction of sluices, construction of watchman shed, setting up of feed ramp, feed tray etc. Development of fish farming includes pond preparation, stocking of seeds; supplementary feeding, water quality management, etc. Farmers will be trained at frequent intervals on various aspects of the proposal such as pond construction, pond preparation, stocking, management measures for preventing diseases, optimum feed supply etc. Since the district is endowed with fresh water ponds, this proposal can be implemented in all the LSGIs.

Beneficiaries of the proposal will be the owners of the fresh water bodies, lessees of Grama Panchayat ponds, fishermen society, SHG's, private entrepreneurs, etc. The programme will be credit linked and subsidy will be released to banks. The assistance under the programme will be available only once to a beneficiary with or without institutional finance. The proposal will be implemented by Fisheries

Department through Agency for development of Aqua culture, Kerala (ADAK) and FFDA, Kollam. The year wise requirement of fund is given in Appendix 38-1.

By the implementation of this scheme, production at the rate of 50 ton fish / year will made possible.

3.1.7 Pen Culture and Running Water Fish Culture

Pen / running water fish culture is considered as a low cost aqua culture practice. Suitable stretches of rivers, reservoirs and back waters could be used for pen culture by erecting pens in shallow areas for stocking preferably the prawn and high value fishes like Sea bas, Pearl spot, mullet etc. The district has great potential for the development of pen/running water fish culture system in Ashtamudi, Paravur and Kayamkulam Kayals and rivers and reservoirs. So, the suggested locations are at Adichanalloor, Nedumpana, Kalluvathukkal, Chirakkara, Mayyanad, Panayam, Karunagapally, Panmana, Perayam, E.Kallada and Munro Island.

It is proposed to set up 300 units of pen/running water farms at a unit cost of Rs. 0.50 lakh per 100 m² area, over a period of 15 years at the rate of 20 units per year. The programme will be implemented with the participation of local fishermen community. The total outlay of the proposal estimated is about Rs. 150 lakhs.

The components include development of infrastructure facilities, development of pen culture and extension and training support. Development of infrastructure includes construction of pens, setting up of pen etc. Development of fish farming includes stocking of desired species, supplementary feeding growth monitoring, harvesting, marketing etc. Farmers will be trained at frequent intervals on various aspects of fish culture like, seed collection, stocking, good management practices etc.

Beneficiaries of this proposal will be the SHG's of fishermen. The programme will be credit linked and the subsidy will be available only once to a beneficiary with or without institutional finance. The proposal will be implemented by Fisheries Department through ADAK, FFDA and BFFDA. The year wise requirement of fund is given in Appendix 38 -1.

By the implementation of this scheme, fish at the rate of 40 ton / year, 160 tone fish worth Rs.64 lakhs will be produced by the year 2011. The total production by the year 2021 is expected to touch 600 ton fish worth Rs.240 lakhs. This will generate a total of 300 direct and 300 indirect employments by the year 2021.

3.1.8 Renovation of Grama Panchayat Ponds For Fish Culture

At present the fresh water aquaculture production in Kerala is mainly based on private ponds. There are about 63 of ha Grama panchayat ponds, 151 ha of irrigation tanks and 440 ha of public water bodies. Many of the Grama Panchayat ponds which are protected by granite pitching by utilizing the funds of JRY scheme are presently of dilapidated conditions. If such Grama panchayat ponds and irrigation tanks are repaired and leased out to those who are interested in fish culture, employment generation and per capita availability of fish can be ensured. This proposal can be implemented in all the LSGIs.

Often the water spread areas have been used for aquaculture by the people based on adhoc lease. Generally one year lease is given either by the Grama Panchayat / revenue department / other departments which is not providing enough security to the farmers to approach financial institutions for availing credit. In the absence of sufficient credit absorption to fisheries, development has not taken the required pace. It is envisaged to renovate 60 ha of Grama Panchayat ponds and other public sector water bodies at the rate of 4 ha per year over a period of 15 years.

Aquaculture will be taken up in that renovated ponds by organizing private farmers or SHGs who reside in its surroundings by leasing out the ponds to them for a period of 5 years. The unit cost estimated for the renovation of 1 ha is 3 lakh rupees. As such the total out lay becomes Rs. 180 lakhs. The entire cost will be met by the LSGI. The expenditure incurred towards the culture practice will be met by the leasee by himself or mobilizing fund through financial institutions. For aquaculture technical support will be provided by Fisheries department through FFDDA.

By the implementation of this scheme, fish at the rate of 10 ton /year, totalling to

40 ton fish worth Rs.16 lakhs will be produced by the year 2011. The total production by the year 2021 is expected to touch 150 ton fish worth Rs.60 lakhs. This will generate a total of 60 direct and 300 indirect employment by the year 2021. The proposal can be linked to the proposal given in Article 2.1.2 of Chapter 34; Agriculture.

3.2 Other Proposals

Other proposals for self sufficiency include Production Enhancement through Social Fisheries, Reservoir Fisheries, Open Water Ranching and Sea Ranching.

3.2.1 Production Enhancement through Social Fisheries

Rivers and open fresh water bodies support a good fishing and provide substance to the fisher folk. But recently due to over fishing and increased rate of aquatic pollution, the fishery wealth of these water resources have depleted to a great extent. A programme for stocking the seeds of commercially important carp seeds in these water bodies will be undertaken as 'social fishery activity' involving the participation of Local Self Government and local fisher folk. River and open water ranching will be carried out in selected points at a cost of Rs. 5 lakh per year. The total outlay of the proposal is Rs. 75 lakhs.

Good quality, hatchery reared, commercially important and fast growing varieties of Indian major carps, Exotic carps, fresh water prawn, etc procured from public sector fish farms and hatcheries will be transported in a scientific manner and stocked in the selected sites of rivers and open water bodies with the active participation of the local fisher folk and other public. Local Self Government has a crucial role in this regards. The suggested locations are at Thenmala, Punalur, Pavithreswaram, Pathanapuram, Poruvazhy, Kunnathur, Poruvazhy, Sasthamkotta, Chadayamangalam, Velinalloor, Sooranad, E.Kallada and Kulakkada Grama panchayats.

The fisher folk who depends these water bodies for subsistence are the direct beneficiaries of this proposal and local community as a whole are the indirect beneficiaries. The year wise detailing of the proposal is as shown in Appendix 38 -1.

By the implementation of this scheme, fish, at the rate of 150 ton /year, can be produced totalling to 600 ton fish worth

Rs.240 lakhs by the year 2011. The total production by the year 2021 is expected to touch 2250 ton fish worth Rs.900 lakhs. This will generate a total of 3000 indirect employments by the year 2021.

3.2.2 Production Enhancement through Reservoir Fisheries

The Thenmala reservoir with a water spread area of 2560 ha, belonging to Forest Department is not currently put to fish culture. A production of 250 Kg/ ha could be obtained from small reservoirs and a total of 640 ton can be produced from Thenmala reservoir per year. The proposal is to bring the 2560 ha area of the Thenmala reservoir under the fold of fish/prawn culture. For this the consent of Forest Department is needed. Culture can be done through SHG's / Co-operatives of Scheduled Tribes. Stocking is carried out @ 5000 fish seed / ha. The total outlay expected over a period of 15 year is 7.5 crore rupees at the rate of 0.5 crore per year. Thus the suggested locations are Thenmala and Kulathupuzha Grama panchayats.

The components include development of reservoir fisheries and extension and training support. Development of reservoir fisheries include construction and preparation of nursery pond, pond preparation, stocking of seeds, supplementary feeding for 1-2 months, harvesting and stocking into the reservoir controlled fishing etc.

The members of the SHG's will be trained at regular intervals on good management practices, reservoir fishing methods, post harvest handling, marketing etc. The proposal will be implemented by Fisheries Department in association with Forest Department, Scheduled Tribe Department, etc and through ADAK and FFDA, Kollam. The unit cost calculated is Rs.2000/ ha.

By the implementation of this scheme, production of fish at the rate of 250 ton / year will be made possible and 1000 ton fish worth Rs.400 lakhs will be produced by the year 2011. The total production by the year 2021 is expected to touch 3750 ton fish worth Rs.1500 lakhs. This will generate a total of 100 direct and 300 indirect employments every year.

3.2.3 Open Water Ranching

Now a days the Inland fisheries sector of the district, especially the back waters

are facing severe threat. Fish diversity of these back waters is alarmingly reduced. The Astamudi estuary is now registered in the Ramsar site and identified as biologically hot spot. The dwindling of backwater areas, destruction of fish habitats, reduction in depth of back waters, pollution hazards, over and destructive fishing practices, use of banned gears etc, can be attributed to this situation. Depletion of fishery wealth in turn affects the very subsistence of the dependent community.

All these emphasized the need for stock enhancement programme. Ranching of hatchery reared seeds of commercially important fish and shell fish species into these water bodies can change the situation to a certain extent and hence the proposal. During the next 15 years it is proposed to ranch 300 lakh of shrimp/ prawn/brackish water fish seeds in Paravur, Ashtamudi, Kayamkulam back waters and Karunagapally vattakayal. Specifically the suggested locations are at Kollam Corporation, Thekkumbhagom, Chavara, Neendakara, Trikkadavoor Thrikkaruva Panayam Paravoor, Mayyanad Alappadu, Karunagapally Grama panchayats.

The proposal will be implemented by the fisheries department with the active participation of the local fishermen community. The components include the collection of prawn / shrimp / brackish water fish seeds from the public sector hatcheries, transportation of the same to the releasing spots, releasing the seeds, monitoring, data collection etc. The proposal will be implemented by the fisheries department in association with LSG's and FIRMA. The cost of this proposal will be met by the Government of India and the State. The year wise requirements of the funds are given in Appendix 38 -1.

By the implementation of this scheme production at the rate of 150 ton fish/year will be made possible. The total out lay of the proposal is estimated as Rs.75 lakhs. This will generate a total of 3000 indirect employment by the year 2021.

3.2.4 Sea Ranching

In recent years sea-ranching has become an accepted technology for stock enhancement. The harvest of certain fishery resources has crossed the maximum sustainable yield (MSY) levels. This has emphasized the need for stock

enhancement programme with hatchery produced seed to augment natural fish production capacities of wild populations.

Harvest type ranching will be promoted where the seeds produced in the hatcheries are released in the sea and re-capture of a satisfactory percentage of released fish is ensured through harvest every year. During the next 15 years it is proposed to ranch 300 lakh of shrimp/ fish seeds in marine waters of Kollam stretch.

The suggested locations are at Neendakara, Kollam Corporation, Paravoor and Alappadu Grama panchayats. The proposal will be implemented with the active participation of local fishermen community. The components include the collection of shrimp / fish seeds from public sector hatcheries, transportation to the releasing spot in the sea and release of the seeds, monitoring and data collection etc. The proposal will be implemented by Fisheries Department in association with LSG's and FIRMA. The cost of this proposal will be met by the Government of India and the State. The year wise requirement of the proposal is given in Appendix 38 -1.

By the implementation of this scheme, production increase at the rate of 150 ton fish/year is expected. The total outlay estimated is Rs.75 lakhs at the rate of Rs. 5 lakhs per year. This will generate a total of 3000 indirect employments by the year 2021.

4. Proposals for Economy Generation

Proposals for Economy Generation include production enhancement through Aqua Culture, Capture Fisheries and Tourism Fisheries.

4.1 Export Oriented Aquaculture

In Article 3.1 the aquaculture for self sufficiency i.e. for domestic consumption is discussed. Proposals for Aquaculture for export include Ornamental Fish Culture, Shrimp Farming, Mussel Farming, Oyster Farming, Prawn Farming, Cage Culture, Mud Crab Farming, Marine Pearl Culture, Aqua Culture Estate, Fresh Water Pearl Culture, Seaweed Farming, Clam Culture, Spirulina Culture, Mussel and Oyster Spat Collection Units, Marine Ornamental Fish Collection and Trade Units and Aqua Pet Trade Units.

4.1.1 Ornamental Fish Culture

Ornamental fish keeping hobby is

gradually picking up in the District. At present the aquarium fishes are imported from neighbouring states to meet the requirements. Production or rearing of these fishes are virtually nil in the district. The proposal envisage to start up 1500 ornamental fish breeding units in the District over a period of 15 years at the rate of 100 units per year. The components include development of infrastructure facilities, development of ornamental fish culture and extension and training support. Development of infrastructure facilities include construction of grow out pond, nursery pond, spawning tanks, larval rearing tanks, Brood stock maintenance ponds, glass aquarium, glass aerations etc. Development of ornamental fish culture includes, Brood stock maintenance, pond preparation, feeding, breeders selection, spawning, larval rearing, nursing, harvesting, marketing etc. Farmers will be trained at frequent intervals on various aspects of the programme such as brood stock maintenance, pond preparation, hatchery and larval rearing, nursery, feeding, fabrication of aquarium tanks, setting up of home aquarium etc. The proposal can be implemented in all LSGIs with special focus for Kollam Corporation.

The programme will be credit linked to banks. The assistance under the programme will be available only once to a beneficiary with or without institutional finance. The proposal will be implemented by Fisheries Department through ADAK, FFDA in coordination with MPEDA LSGIs etc. Women SHG's, private enterprises and marginal fresh water pond holders are the beneficiaries. The unit cost is calculated in Rs.25,000/- of this about 50% will be provided as subsidy. The year wise requirement of funds is given in Appendix 38 -1.

By the implementation of this scheme, production at the rate of 20 lakh fish seed/ year will be made possible. The total outlay of the proposal is 240 lakh rupees.

4.1.2 Shrimp Farming

Shrimp farming has attracted considerable attention over the years because of its high potential as a foreign exchange earner. The district has extensive brackish water resource suitable for shrimp farming. In the light of the restrictions imposed by the Honourable Supreme Court, it is proposed to undertake

improved traditional/ extensive type of shrimp farming with low input technology as advocated by Aqua Culture Authority of India.

The proposal is to extend brackish water shrimp culture in 1500 ha in the district at a rate of 100 ha per year over a period of 15 years. The total outlay of the project is estimated as Rs. 4500 Lakhs. The additional production anticipated is 7500 tons over the next 15 years.

The project components include development of infrastructure facilities, development of shrimp aqua culture and extension and training support. Development of infrastructure includes construction/renovation of ponds, construction of watchman shed, installation of axial flow pump, setting up of feed ramp and tray etc. Development of shrimp aqua culture includes pond preparation, stocking of seeds, supplementary feeding, water quality management etc. Farmers will be trained at frequent intervals on various aspects of the project such as good management measures for preventing diseases, harmful effects of indiscriminate use of antibiotics, drugs, chemicals etc.

Beneficiaries of this project will be the owners of low saline water bodies. The license issued by National Aqua Culture Authority is a mandating for getting assistance. The programme will be credit linked and subsidy will be released to banks. The assistance under the programme will be available only once to a beneficiary with or without institutional finance. The suggested locations are at the Grama Panchayats of Clappana, K.S.Puram, Karunagapally, Munro Island, Adichanalloor and Mayyanad.

The project will be implemented by Fisheries Department through Agency for Development of Aqua culture, Kerala (ADAK) and BFFDA, Kollam. The unit cost of shrimp farming per ha area is estimated as Rs. 3 lakhs. The year wise requirement of fund is given in Appendix 38 -1.

The project will generate a total of 1500 direct and 1500 indirect employment every year and will continue till the year 2021.

4.1.3 Mussel Farming

The green mussel (*Perna viridis*) and the brown mussel (*Perna indica*) are suitable for farming in the backwaters of Kerala. Both these species are widely

distributed along the inter-tidal cost of Kollam. Rack method of farming is suitable for estuaries and shallow bays. The racks can be fabricated by placing bamboo/ casuarinas poles vertically and horizontally tying and lashing with nylon ropes. Bamboo poles can be driven into the bottom and spaced at a distance of 1-2 m. These stakes are connected horizontally with poles. The horizontal poles should be above the level of water at high tide and seeded ropes are suspended from the same. Duration of the mussel farming is 5-6 month. Average production from 1 m rope is 10-12.5 Kg of mussels of marketable size.

The proposal is to bring 1500 units with 50 m² each under the fold of mussel culture at the rate of 100 units per year over a period of 15 years to make optimum utilization of backwater areas of the district. The suggested locations are at Kollam Corporation and the Grama Panchayats of Alappadu, Neendakara Chavara, Thekkumbhagom Paravoor, Mayyanad, and Trikkadavoor.

The components include development of infrastructure facilities, development of mussel culture and extension and training support. Development of infrastructure facilities includes construction of racks, installation of racks in the back water etc. Development of mussel culture includes spat collection, removal of fouling organisms and derbies, seeding in the ropes, setting seeded ropes in the platforms, scientific mussel culture practices, harvesting and marketing. The farmers will be trained periodically on various aspects of the proposal such as spat collection, seeding, good management practices etc.

The programme will be credit linked and subsidy at the rate of 50% will be released to banks. The assistance under this programme can be made available for fishermen, fisherwomen SHG's and co-operatives. Assistance will be provided only once to the beneficiary groups with or without institutional finance.

The proposal will be implemented by Fisheries Department through ADAK and BFFDA, Kollam with the support from LSGI's. The unit cost is estimated for 50 m² raft culture is about 20000 rupees and the total outlay over a period of 15 years is estimated as Rs. 300 lakhs at the rate of Rs. 20 lakhs per year. The year wise

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requirements of funds are given in Appendix 38 -1.

By the implementation of this scheme, production at the rate of 20 ton mussel/ year will be made possible. The total production by the year 2021 is proposed to touch 300 ton fish worth Rs.36 lakhs. This will generate a total of 1500 direct employment and 300 indirect employments every year and will continue till the year 2021.

4.1.4 Oyster Farming

Like mussel culture, Oyster farming is a highly productive economic activity which can be implemented through SHG's Co-operatives of fishermen, fisher women, other peoples, private entrepreneurs etc. Oyster (*Crossostrea madrasensis*) is abundantly rich in Ashtamudi, Kayamkulam and Paravoor kayals. The oyster meat in value added form is highly demanded in the export and local markets. The suggested locations are at Kollam Corporation, Alappadu, Neendakara, Chavara, Thekkumbhagom, Thevalakkara, Thrikkaruva, Panayam, Munro Island, Paravoor, Mayyanad and Thrikkadavoor.

The proposal is to start 1500 Numbers of mussel culture units at the rate of 100 units per year over a period of 15 years to make optimum utilization of backwater areas distributed in the district.

The components include development of infrastructure facilities, development of mussel culture and extension and training support. Development of infrastructure facilities includes construction of racks, installation of racks in the backwater etc. Development of Oyster farming includes collection of oyster shells, beading of this shell in nylon ropes, setting of these ropes in the plat form for spat attachment, scientific oyster farming, harvesting, marketing etc. The farmers will be periodically trained on various aspects of the proposal such as spat collection, seeding, good management practices etc.

The programme will be credit linked and subsidy at the rate of 50% will be released to banks. The consistence under this programme will be provided only once to the beneficiary groups with or without institutional finance.

The proposal is implemented by Fisheries Department through ADAK and BFFDA, Kollam with the support from

LSG's. The unit cost estimated for 50m2 platform is about Rs.15,000/- and the total outlay over a period of 15 years is estimated as Rs. 2.25 crores. The year wise requirements of funds are given in Appendix 38 -1.

By the implementation of this scheme, production at the rate of 20 ton oyster / year will be made possible. The total production by the year 2021 is proposed to touch 300 tone fish worth Rs.36 lakhs. This will generate a total of 1500 direct and 300 indirect employment every year.

4.1.5 Prawn Farming

The fresh water Prawn (*Macrobrachium rosenbergii*) is a native of the rivers of central Kerala and is one of the most suitable species for culture in fresh water and low saline waters, either in mono culture or poly culture along with carps, milk fish, grey mullet etc. It is envisaged to cover an area of 750 ha under mono culture of scampi at the rate of 50 ha per year. The proposal aims at an additional production of 100 tones of prawns during the first year. The cumulative increase in prawn production over the period of 15 years is about 11200 tones.

The estimated unit cost is, Rs.3 lakh / hector. A subsidy will be provided at the rate of 20% and that will be met by Government of India and State in the ratio 75:25. The total outlay of the proposal is calculated is 22.5 crore rupee.

The components include development of infrastructure facilities, development of prawn aquaculture and extension and training support. Development of infrastructure includes construction/ renovation of bunds, construction of sluices, construction of watchmen shed, setting up of centrifugal pump, setting up of feed ramp and feed tray, etc. Development of prawn farming includes pond preparation, setting up of hideouts, water culture, stocking, supplementary feeding, water quality management etc. Farmers will be trained at frequent intervals on various aspects of the proposal such as good management measure for preventing diseases, optimum feed supply etc. The suggested locations are at Oachira, Clappana, K.S.Puram, Karunagapally, Thazhava, Thodiyoor, Thevalakkara, Mynagappally, W.Kallada, Kunnathur, Poruvazhy, SooranaduNandS, Sasthamkotta, Panmana, Chavara, Pavithreswaram, Thekkumbhagom,

Pavithreswaram, Kulakkada, Panayam, Perinadu, Kollam, Elampalloor, Nedumpna, Adichanalloor, Chathannoor, Chirakkara, Mayyanad, Thrikkovilvattom, Kalluvathukkal, Kareepra, Veliyam, Elamadu, Edamulakkal, Chithara, Ittiva, Anchal, Kulathupuzha Grama Panchayats.

The programme will be credit linked and subsidy will be released to banks. The assistance under the programme will be available only once to a beneficiary with or without institutional finance. The proposal will be implemented by Fisheries Department through Agency for development of Aquaculture, Kerala (ADAK) and FFDA Kollam. The year wise requirements of funds are given in Appendix 38 -1.

By the implementation of this scheme, at the rate of 50 tone prawn/year, 200 tone prawn worth Rs.600 lakh will be produced by the year 2011. The total production by the year 2021 is proposed to touch 750 tone fish worth Rs.2250 lakhs. This will generate a total of 750 direct and 100 indirect employment every year.

4.1.6 Cage Culture

Cage culture is the raising of fish in containers enclosed on all sides and bottom with mesh materials that secure the fish inside, while allowing relatively free exchange of water with the surrounding environment. Cage culture does not affect the indigenous flora and fauna of any water bodies where it is installed, and it also doesn't hinder the water flow characteristics. Therefore it is ecologically safe. Apart from offering direct employment to the rural population, it would also create a new line of rural entrepreneurs, who could be trained to achieve maximum output from limited resources available without harming the environment.

The proposal is to setting up of 1500 units of cages preferably for pearl spot, sea bass, Tilapias etc. A single cage has a dimension of 2.5 m x 1.5 m x 1.5 m. 10 such cages are included under a single unit. The unit cost proposed is Rs.25,000/ - A total of 1500 units will set up over a period of 15 years at the rate of 100 units per year. The programme will be implemented through fishermen SHG's / Co-operatives. The total outlay of the proposal will be estimated on 3.75 crore rupees. The suggested locations are at Kollam Corporation, Alappadu,

Neendakara, Chavara, Thekkumbhagom, Thevalakkara, Thrikkaruva, Panayam, Munro Island, Paravoor, Mayyanad, Thrikkadavoor, Chathanoor, Adichanalloor, Nedumpana, Kunnathur, Sasthamkotta, Panayam, Padappakkara and Poothakkulam.

The components include development of infrastructure facilities, development of cage culture and extension and training support. Development of infrastructure facilities includes construction of cages, installation of the cages in open water, etc. Development of cage culture includes collection of seeds, stocking, supplementary feeding, periodic maintenance of the cages, etc. The members of the farmers will be trained at regular intervals on various aspects of cage culture such as cage maintenance, Growth monitoring, feeding and other good management procedures etc.

The programme will be credit linked to banks. The assistance under the programme will be available only once to the beneficiary with or without institutional finance. The proposal will be implemented by Fisheries Department through ADAK and BFFDA, Kollam. Fishermen groups / SHG's/ Co-operative are the beneficiaries. The unit cost calculated is Rs. 25000 per unit of 10 cages. 50% of this amount will be provided as subsidy. The year wise requirement of the funds is given in Appendix 38 -1.

By the implementation of this scheme, production at the rate of 200 ton fish / year, will be made possible. The total production by the year 2021 is expected to touch 3000 ton fish worth Rs.1500 lakhs. This will generate a total of 6000 direct and 10000 indirect employment by the year 2021.

4.1.7 Mud Crab Farming

Considerable interest has been evinced in crab culture since crab finds place as an export commodity among sea food items. The species of crab available in the backwater of the district are *Scylla serrata* and *Scylla tranquebarica*. The production of mud crab is taken up either by fattening the adult ones or by farming the young once in the grow-out systems.

There are three types of farming practices.

1. Crab farming: Rearing of crab lets for a period of 5.6 months until they attain market size (over 200 g in

weight) either in earthen pond or in cages put in ponds/ back waters.

2. Crab Fattening: Growing wild caught mud crab of larger size (8-12 cm) for a short period of 20-30 days and harvesting when they are full of meat.
3. Female crab fattening: Similar to the fattening, but only mature females are stocked and grown to the stage where ovary is fully developed before harvesting for sale.

It is proposed is to initiate 150 units of crab farms in various parts of the district where saline water are available by organising SHG's of fisher women and fishermen as well as private entrepreneurs at the rate of 10 units per year over a period of 15 years. Total outlay of the proposal is Rs. 630 lakhs at the rate of Rs. 4.2 lakhs per year.

The components include development of infrastructure facilities, development of crab aqua culture and extension and training support. Development of infrastructure includes, construction of bunds, construction of sluices establishment of fence, setting up of feeding ramp and trays, setting up of centrifugal pump, setting up of watchman shed etc. Development of crab farming includes pond preparation setting up of hide outs, water culture, stocking of crab lets, supplementary feeding, water quality management etc. Farmers will be trained at frequent intervals on various aspects of the proposal such as good management measures, optimum feeding etc. The suggested locations are at Kollam Corporation, Mayyanad, Munroe Island, W.Kallada, Adichanalloor, Chathanoor, Paravoor, Thekkumbhagom, Chavara, Karunagapally, Alappadu, Clappana and K.S.Puram.

The programme will be credit linked and subsidy will be released to banks. The assistance under this programme will be made available only once to a beneficiary with or without institutional finance. The proposal will be implemented by fisheries Department through Agency for development of Aquaculture Kerala (ADAK) and BFFDA, Kollam. The year wise requirements of funds are given in Appendix 38 -1.

Production increase of 5 ton crab / year is targeted. The scheme will generate a

total of 150 direct and 200 indirect employment by the year 2021.

4.1.8 Marine Pearl Culture

Formation of natural pearl takes place inside the pearl oyster. The most important pearl oyster suitable for good quality pearl is *Pinctada fucata*, which is available in our coastal waters. The formation of cultural pearl involves the same biological process as in the case of natural pearl. The technology for pearl culture has been developed by Central Marine Fisheries Research Institute (CMFRI).

The proposal is to start up 150 units of pearl culturing unit in the inter-tidal rocky shore of Kollam coast extended from Thankasserry to Sakthikulangara, through the fishermen SHG'S. The unit cost estimated is Rs. 20000/- per unit and the total out lay is Rs. 35 Lakhs, in which Rs. 5 lakhs is for training and extension services. The proposal is implemented at the rate of 10 units per year.

The components include development of infrastructure facilities, development of pearl farming and extension and training. The fishermen SHG'S will be selected on priority basis and well trained. The proposal will be credit linked. A subsidy at the rate of 50% is provided to each group. The subsidy amount is shared both by Government of India and the State. The cost for training and extension will be met by the State. The proposal is implemented by Fisheries Department through ADAK/ BFFDA, Kollam with technical support from CMFRI. The year wise requirement of the funds is given in Appendix 38 -1.

By the implementation of this scheme, pearls worth Rs.120 lakh will be produced by the year 2011. This will generate a total of 100 direct employments by the year 2021.

4.1.9 Aqua Culture Estate

The large water holds like Polachira at Chathanoor, Thazhava vattakkayal, Chakkuvally chira at Sooranadu north, Cheloor kayal at Kunnathoor, Sathamkottah kayal at Sathamkottah and Chittumalachira at East Kallada offer great potentials and opportunities for area based community development and employment generation programme such as Aquaculture Estate. Aquaculture Estate is an organized integrated programme aimed at productive development of area based activities ultimately meant for the socio

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economic upliftment of the dependent beneficiary society or community dwelling around these chiras. The suggested locations are at Thazhava, Thodiyoor, Sooranadu, Chirakkara, Adichanalloor, Nedumpana, E.Kallda, Kunnathoor, Sasthamkottah and Poruvazhy Grama Panchayats.

Programme for enhancing productivity, rearing and farming of the desired fish and shell fish species, establishment of fish feed mills, cold storages, fish and shell fish processing and value addition facilities, waste utilization facilities, integration with other crops etc. are envisaged in a fishery / aquaculture estate. The unit cost estimated is Rs. 30 lakhs. The total outlay is Rs. 180 lakhs which will be shared by fisheries department and the concerned LSGIs.

Period of implementation is 2009-2010. The fisheries department is the implementing agency and technical support will be provided by ADAK, FFDA, Kollam and BFFDA, Kollam. The proposal will be implemented in association with the concerned LSGIs. The components include the development of seed production, cold storage, fish processing and marketing facilities, development of aquaculture and extension and training facilities. A beneficiary group / society will be organized from the dwellers around the chira and will be frequently trained on various aspects of seed production, rearing, culturing, harvesting post harvest handlings, processing, value addition and marketing strategies. The year wise requirement of the fund is given in Appendix 38 - 1.

By the implementation of this scheme, at the rate of 5 ton crab / year, 20 ton crab worth Rs.120 lakhs will be produced by the year 2011. The total production by the year 2021 is expected to touch 75 ton fish worth Rs.450 lakhs. This will generate a total of 180 direct and 200 indirect employments by the year 2021.

4.1.10 Fresh Water Pearl Culture

Several species of fresh water mussels are found in the waters of Kerala. Of these, species belongs to the genus *lamellidens* offers the production of pearl. *laellidens marginalise* is an excellent spices for the commercial production of fresh water pearl and it inhibit stagnant and slow flowing water of ponds, tanks, lakes reservoir and

river.

The suggested location is at Sasthamkotta Grama Panchayat.

The proposal is for the establishment of 300 fresh water pearls production unit at the rate of 20 units per year over a period of 15 years. The unit cost estimated is as Rs.100000/-. The programme will be implemented by fisheries department in association with ADAK/FFDA, Kollam through fisher and other women SHGs. The total layout of the proposal is estimated as Rs.35 lakhs.

The components include development of infrastructure facilities, development of fresh water pearl rearing and pearl production and extension and training support. The members of the SHGs were trained at frequent intervals on various aspects of the proposal such as culturing of the mussel, preparation of nucleus beads, insertion of beads in the mantle cavity of the pearl etc. The year wise details of the financial requirements are given in Appendix 38 - 1.

By the implementation of this scheme, pearls worth Rs.120 lakhs will be produced by the year 2011. This will generate a total of 50 direct employments.

4.1.11 Seaweed Farming

The central marine Fisheries Research Institute has successfully developed the culture techniques for agar and agar yielding seaweed in coastal lagoons and bays. The technology for production of seaweeds through vegetative and spore culture methods was developed. A total of nearly 700 species of marine algae have been recorded from Indian coast and of these about 60 species are commercially important.

It is proposed to under take seaweed farming in an area of 3 ha in selected location in the sea and back waters. The estimated unit cost of investment is Rs.4.5 lakhs. The total outlay is about 67.5 lakhs rupees. The suggested locations are at Kollam Corporation, Paravoor, Alappadu and Neendakara Grama Panchayats.

The components include development of infrastructure facilities, development of seaweed culture, extension and training support etc. Development of infrastructure facilities includes construction of floating rafts, Installation of rafts in the bays or backwaters etc. Development of seaweed culture includes collection of seedlings,

seeding in mono filaments, setting up this monoclone in the rafts, setting up of nets for protection, periodical maintenance of rafts and culture organism, periodical harvesting, drying of harvested seaweeds, marketing etc. The programme can be implemented through Fishermen SHG's / Co-operative. The selected group members are provided with adequate training on various aspects of the proposal such as raft construction, installation, seeding, Setting up of raft in sea/ backwaters, scientific culture, production, harvesting and marketing.

The programme will be credit linked and subsidy at the rate of 50% is provided to the Groups. The assistance under this programme will be available only once to a beneficiary with or without financial support. The proposal will be implemented by Fisheries Department through Agency for Development of Aquaculture Kerala (ADAK) and BFFDA, Kollam with the technical support from CMFRI. The year wise requirements of funds are given in Appendix 38 - 1.

4.1.12 Clam Culture

Clam fishing plays an important role in the coastal fishing villages. Clam meat is nutritious and is a cheap source of protein rich sea food. Clam culture is practiced in several countries. But in India it is yet to take off on commercial lines. The species belongs to the family *Veneridae* have immense potential for culture. The important species are *Phaphia malabarica*, *Meretrix casta*, *Meretrix meretrix* and *Katelysia opima*. In clam culture seed collected from the natural grounds and also produced in the hatcheries are used. Clams are cultured on the bottom.

Clam farms can be constructed in the backwater areas close to the shore having about 1-2 hrs exposure at each low tide. Such areas are available in Thrikkadavoor, Thrikkaruvu, Munroethuruth, West Kallada, Thevalakkara, Thekkumbhagam, Chavara, Neendakara, Alappuzha, Clappana, Karunagapally, Panmana, Mayyanad, Adichanalloor and Chathanoor Grama Panchayats, Kollam corporation and Paravoor Municipality area. Culture period is 3 months. The culture is initiated through the fisher women SHG's. Unit cost is calculated as 20 lakh rupees per ha. A subsidy @ 50% will be provided to each group having a culture

area of one ha. Average production from 1 ha is about 70 tones shell on weight.

The proposal is to bring 150 units with 1 ha each under the fold of clam culture at the rate of 10 units per year over a period of 15 years to make optimum utilization of backwater areas of the District. The technology is available with CMFRI. The suggested locations are at Kollam Corporation, Neendakara, Chavara, Mayyanad and Thekkumbhagom Grama Panchayats.

The components include development of infrastructure facilities, development of clam culture and extension and training support. Developments of infrastructure facilities include procurement of small dinkies, Preparation of backwater area and protecting the area from predator organisms etc. The farmers group will be trained periodically on various aspects of the proposal such as spat collection, seeding, good management practices etc.

The proposal will be credit linked Fisheries Dept. will implement the proposal through BFFDA Kollam/ ADAK with the concerned LSGI. The total out lay over a period of 15 years is estimated as Rs. 300 lakhs. The year wise requirements of funds are given in Appendix 38-1.

4.1.13 Spirullina Culture

Spirullina is considered as the 'wonder food' of the century. These unicellular algae contain almost all the essential amino acids required for human beings and other live stock. So there is immense scope for the culture of these unicellular algae, which have wide applications in human aquatic and live stock feed industry, Pharmaceutical Industries, etc. Hence it is proposed to start up 150 units @ 10units per year over a period of 15 years. Unit cost is estimated as Rs. 10000/-. The suggested locations are at Elampalloor, Kottamkara, Paravoor, Sasthamkotta Chavara, Neendakara and Chadayamangalam Grama Panchayats

The components include development of infrastructure facilities, development of Spirulina culture and extension and training. Development of infrastructure facilities includes construction of tanks, pure line Algal cultural facilities, culture media etc. Development of Spirulina culture includes its culture, harvest, processing, packing and marketing. The farmers group will be trained periodically in various

aspects of the proposal such as keeping of pure line algal culture, Spirullina mass culture, processing and marketing strategies.

The proposal will be implemented by Fisheries Department through FFDA Kollam / ADAK and with the support of LSGI'S. The year wise requirement of the funds is given in Appendix 38 -1.

4.1.14 Mussel and Oyster Spat Collection Units

In the light of frequent out break of viral diseases in shrimp aquaculture, emphasis is now given to shell fish farming which is practiced in an eco-friendly manner. More over Mussel and Oyster farming is accepted as an attractive income generating and provides employment to fishermen group in Kerala. The seeds for Mussel is collected from the submerged (sub tidal) areas from Kollam to Kasarcode. In the case of oyster, semi cylindrical tiles, bamboo poles, bearing branches, shells of various marine mollusc etc are spread over the bottom over shallow bays or back waters for oyster spat settlement. All of them are Librium and need shell.

The proposal is to set up 5 Mussell oyster spat selection units in the District. Each unit can be organized by the grouping of 5 or more fishermen. These units are provided with dinkies and under water diving apparatus and spat collection equipments. The unit cost is calculated as Rs20000/-. The total out lay of the proposal is Rs. 1 lakh. A subsidy @ 50% will be provided to each group.

The suggested locations are at Kollam Corporation and Neendakara Grama Panchayat. The proposal will be implemented by Fisheries Dept. through BFFDA Kollam / ADAK. The components include the development of infrastructure facilities, spat collection and supply and extension and training. Development of infrastructure facilities includes construction/ procurement of dinkies, under water diving facilities and spat collection equipment etc. Spat collection and supply will be done by the group themselves. A detailed training would be imparted to each group on all aspects of this venture. The year wise details of the funds are given in Appendix 38-1.

4.1.15 Marine Ornamental Fish Collection and Trade Units

Kerala with its highly conducive climate

conditions provides scope for the development of ornamental fisheries. We are making a gradual but remarkable achievement in the field of freshwater ornamental fish culture. But in the case of marine ornamental fisheries it is restricted only to the field of wild collection of topical ornamental fishes from shallow rock coastal belts. Collection and tracking of these marine ornamental fishes to the international destinations will definitely give good earnings to the dependants. Thus the marine ornamental fisheries offer a variety of avenues for generation of employment in various avocations.

The present proposal is to start up 10 marine ornamental fish collection and trade units all along the 37 km of the costal stretch of Kollam Corporation in the next 10 years @ 1 unit per year. A single unit comprising five young fishermen has a unit cost of Rs. 10lakhs. Thus total out lay of the proposal is Rs. 100 lakhs.

The components include sensitization, identification of beneficiaries and development of units, development of infrastructure facilities and development of Marine, Aquarium ornamental fisheries. Skilled young fishermen are selected and organized in to groups in the pattern of Activity groups/ SHG's. They are well trained in various aspects like subduing collection of ornamental fishes, spices identification, nursery keeping and raring, trap and cage formation, aquarium setting and aquarium keeping etc.

Development of infrastructure facilities include the setting up of marine aquarium tanks, nursery tanks\ ponds, aeration and water circulation facilities, setting up of biological and other type of filters, quality checking labs, feed preparation units, live feed maintenance unit, packing facilities, construction of hatchery shed, procurement of small dinkies and SCUBA facilities etc. Development of marine ornamental fisheries include fixation of cages and traps at the bottom sea near the rocky shore, collection and grading of fishes, rearing, nursing, feeding, packing, trading etc.

The proposal is credit linked and subsidy at the rate of 20% with a maximum of Rs. 2 lakhs will be provided to each group. Fisheries Department will implement the proposal through BFFDA/ADAK with technical support of CMFRI, MDEDA etc and in association with LSGI, Financial

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institutions, Matsyafed etc. The year wise details of the funds are given in Appendix 38 -1.

4.1.16 Aqua Pet Trade Units

In Kerala, the hobby of maintaining home aquaria has become popular these days. Aqua pets are much easier in maintenance than any other animal pet. The keeping of aquarium has the qualities of being educative (as an artificial eco-system), interesting, stress relieving, scientific, intellectual, creative, satisfying and offering a sense of peace with one self and nature. The hobby is not restricted to keeping of aquaria alone but involves a series of activities such as breeding of aquarium fishes, cultivation of aquatic plants, manufacturing of aquarium accessories, preparation of aquarium feeds and fabrication of different types of aquarium tanks.

If all these activities are organized within the umbrella of an "Aqua Pet Trade Unit" it will definitely cater the needs of aquarium hobbyist on one side and ornamental fish breeders on the other side, besides generating employment opportunities for the unemployed youths in the rural and urban areas. The proposal is to set up 150 Aqua Pet Trade Units, two each in a local self government area at the rate of 10 units per year, over a period of 15 years. The unit cost for setting up of a unit is estimated as Rs. 2 lakhs. Thus the total out lay of the proposal is Rs. 300 lakhs.

The components include development of infrastructure, development of Aqua Pet Trade units and extension and training. Development of Infrastructure includes lending up of a shop at proper place, setting up of the trade units, procuring of ornamental fishes, aerators and other aquarium accessories, aquarium feeds, aquarium plants, Setting up of water, air and electrical connectivity etc. The beneficiaries will be periodically trained on various aspects of Ornamental fish keeping, feeding, water quality management, disease control, aquarium setting, aquarium tank fabrication, etc.

The proposal will be credit linked. Fisheries Department will implement the proposal through FFDA, Kollam/ADAK and in association with LSGIs and financial institutions. The proposal targets SHG's as it beneficiary. A subsidy at the rate of 20 %

will be released to each group. The year wise requirement of the funds is given in Appendix 38 -1.

4.2 Capture Fisheries

Proposals for Capture Fisheries include Deep Sea Fishing by Diversification of Excess Number of Mechanised Fishing Fleet and Popularisation of Eco-friendly Gears for the Sustainable Fisheries by Providing Suitable Subsidy to Fishing Implements.

4.2.1 Deep Sea Fishing by Diversification of Excess Number of Mechanised Fishing Fleet

The inshore fisheries in the District have already exceeded the optimum levels of exploitation. In this context, there is an imperative need to reduce the fishing pressure in the inshore fishing grounds by diversification of excess number of fishing fleet to deep sea areas for catching commercially important fishes such as oceanic tunas and cephalopods.

The proposal aims at increasing fish production from untapped deep sea areas by diversification of excess number of mechanized fishing fleet in the traditional fishing grounds. A total of about 1200 mechanised boats are operated from Kollam base. This proposal is to restructure 150 such boats over a period of 15 years at the rate of 10 boats per year with a total outlay of Rs. 15 crores.

The proposal is implemented through Fisheries Department in association with Departments like Industries, Power, PWD/HED and financial institutions. The locations include Thangassery, Neendakara and Azheekal fishing harbour in Kollam Corporation, Neendakara and Chavara Grama Panchayats. The vessels are proposed for diversification by incorporating necessary modifications and structural changes suited for tuna fishing and expansion of other facilities needed for processing and storage. Employment generated after completion will be 150.

4.2.2 Popularisation of Eco-friendly Gears for the Sustainable Fisheries by Providing Suitable Subsidy to Fishing Implements

The estuaries and back waters of the district support a lucrative fishery of fin fish, shrimps, crabs and molluscs. Fishing has been the traditional occupation of the inhabitants of the area in and around the back waters since time immemorial. The

general shallowness and well protected nature of these water bodies when compared to the hazards of the sea, permits fishermen to operate traditional techniques during most of the seasons. Stake net, China net, Cast net, Scoop net etc, are the main gears employed by the fishermen.

About 10000 fishermen are eking out their daily earnings from these water bodies. But most of these fishermen are not financially sound enough to procure crafts gears. So they work in association with other fishermen who possess such fishing facilities. They are provided only the share of each day's catch which is not to the tune of the efforts in fishing. If such fishermen were arranged in groups and provided with fishing implements at a subsidized rate they can also be benefited in an enhanced manner.

The proposal is to provide fishing implements in a subsidized rate to the registered fishermen who do not possess such facilities through local self governments plan fund. Only cast net and gill nets will be provided by this proposal. The unit cost for the cast net is Rs. 2000/- and gill net is Rs. 6000/-. Cast nets will be provided to individuals and gill nets will be provided to a group of 2 or 3 fishermen. 50 % of the cost of each gear is provided as subsidy and remaining portion shall be beneficiary contribution. There should also a provision for providing subsidy to small country canoe or dinkies under this proposal. The unit cost of dinky is around Rs. 10000/-. The selected locations are Kollam Corporation and the Grama Panchayats of Alappadu, Neendakara, Chavara, Thekkumbhagam, Thevalakkara, Thrikkaruva, Panayam, Munro Island, Paravoor, Mayyanad, Thrikkadavoor, W.Kallada, Perayam, Karunagapally, Clappana, K.S.Puram, E.Kallada, Kundara, Poothakkulam, Adichanalloor, Panmana and Perinadu.

It is proposed to issue 1000 cast net, 1000 gill net and 100 dinky at the rate of 100 cast net and gill net and 10 dinky per year over a period of 10 years. As such total out lay of the proposal is rs. 90 lakhs and the share of LSGI is Rs. 45 lakhs which will be provided as subsidy. The year wise requirements of the funds are given in Appendix 38 -1. Employment generated after completion will be 2100.

4.3 Tourism Fisheries

Proposals for Tourism Fisheries include Game Fisheries, Aqua Techno Park, Oceanarium, Deep Sea Fishing Tour, Fisheries Museum and Ornamental Fish Shows.

4.3.1 Game Fisheries

Ashtamudi backwater, Paravur Backwater and Thenmala reservoir area are major popular tourism centers in the district. Game fisheries like angling, payavo fishing etc are of the favorites of foreign tourists. The proposal is to start up game fisheries centers where cultured game fishes could be allowed to catch by anglers from permitted areas. In hill stations, mahaseer or trout could be used while in other areas species like Asian sea bass, Lates calcarifer and the pearl spot *Etroplus suratensis* are the better candidates. This can also be included as a part of the proposal 'Beautification of Kollam Canal' included in Article 2.1.2 and 2.1.3 of Chapter 49; Tourism.

The proposal envisages to start 4 such units at the Ashtamudi Kayal, one each at Ashramam, Thekkumbhagam, Ashtamudi and Vellimon. Also 1 unit at Paravur backwater and 1 unit at Thenmala - Ottackal check dam are proposed. Thus the LSGIs covered are Kollam Corporation, Paravoor Municipality and the Grama Panchayats of Alappadu, Neendakara, Chavara, Thekkumbhagam, Thevalakkara, Thrikkaruva, Panayam, Munro Island, Paravoor, Mayyanad, Thrikkadavoor, Karunagapally, Thenmala and Kulathupuzha.

The unit cost estimated is as Rs.5 lakhs. The total outlay of the proposal is Rs. 30 lakhs.

The components include the development of infrastructural facilities, development of fish culture and the development of game fishing. Development of infrastructure facilities includes the construction and erection of pens and cages, erecting of angling platform, construction of small canoe, procurement of angling facilities etc. Development of fish culture includes the procurement of the seeds of desired fish species and its rearing in the cage\ pens through scientific culture practices.

Period of Implementation is from 2009-2010. The proposal is taken up as a private entrepreneurship. The proposal is

implemented under the control of Fisheries department in association with LSGI's, KTDC, and Financial institutions. The proposal is credit linked. The year wise details of the fund requirement are given in Appendix 38 -1.

4.3.2 Aqua Techno Park

Ornamental fishes offers immense export potential in the world markets. In order to tap these opportunities it is proposed to set up an aqua park at Kollam Corporation. The Park provides basic infrastructure facilities free of cost and support for commercial breeding and culture of selected ornamental fishes through SHG of fisher women.

The proposal is to establish an aqua park with marine aquarium, fresh water aquarium, ornamental fisheries training centre with hostels, aquarium shops, ornamental fish breeding facilities, labs etc. The land for the proposal is given by the Kollam Corporation.

Period of implementation is 2010-2013. The scheme will be implemented by the fisheries department with the support of LSGs, HED/PWD, KSEB, Water Authority etc in association with FIRMA and MPEDA. The estimated total outlay for the Scheme is Rs. 100 lakhs. The year wise details of the financial requirement are given in Appendix 38 -1.

4.3.3 Oceanarium

In order to attract tourists, it is proposed to set up an Oceanarium at Kollam beach with needed infrastructure facilities on par with international standards by fisheries department in association with Kollam corporation, KTDC, KSEB, water authority etc, and with the technical support from CMFRI and foreign consultancy. The total out lay of the proposal is estimated as 15 crore rupees to be equally shared by state and Central Government and the Kollam Corporation. The Oceanarium will be maintained by fisheries department and will function under the administration of Kollam Corporation. The land for the same has to be made available by Corporation. Period of implementation is 2015-2018.

The components include identification and acquisition of land at Kollam beach area, construction of building and other infrastructure facilities, setting up of under water glass aquarium with imported glass, collection, transportation and setting up of ornamental fishes and other aquatic

organisms, etc. The year wise details of financial requirements are given in Appendix 38 -1. Employment generated after completion will be 10. The proposal can be linked to the under water marine aquarium proposals of Tourism sector as given in Article 2.2.4 of Chapter 49.

4.3.4 Deep Sea Fishing Tour

The bounteous nature has endowed our State with such physical and geographical features, which enthuse the emotion of every body. It is quite natural that tourists at home and from abroad rush to this place, having picturesque beauty. Kerala is always in the forefront in introducing new ideas to attract tourist. Marine fishing offers a new lucrative area for tourism development.

The proposal is to remold existing 60 feet fishing boats for safe accommodation of tourist with all facilities to stay in the mid sea for a couple of days and watching or even take part in the fishing operation on one side and enjoy the hidden beauty of the sea on the other hand. It is proposed to rebuild 10 such 60 feet iron hauled fishing boats to host the tourist at the rate of two boats per year over a period of five years. The unit cost estimated is Rs.5 lakh and a total out lay of the proposal come around 50 lakh rupees.

Tourism and Fisheries departments will jointly implement the proposal with the technical support of CIFT, CIFNET etc and with financial support from banking sector. The deep sea fishing cruise terminal complex at Neendakara proposed in Article 2.2.7 of Chapter 49; Tourism will be an added input to this proposal. The co operation of boat owners and fishermen are very much induced for the implementation of the scheme. Neendakara or Thangassery fishing harbour can be selected as the bone of operation of this deep sea fishing tour.

A subsidy component should be included in the scheme for attracting private enterprises. The tourism department will meet the subsidy cost. The components include development of infrastructure and development of deep sea fishing tour. The year wise requirements of the funds are given in Appendix 38 -1. Period of implementation is from 2016-2020.

4.3.5 Fisheries Museum

A museum is a building used for storing and exhibiting historical, scientific or cultural

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interests. Kerala is blessed with rich and unique biodiversity of flora and fauna. It is the homeland and natural habitat of many of the rare species of fishes. But recently the fish diversity of the State is facing a threat of extinction due to various reasons. Altogether 210 primary fresh water fishes are found in the inland water of the State, of which 53 species are endemic.

A very recent report shows that 98 species had fallen under the category of threatened and 15 species are on the verge of extinction. The specimens of all these fishes should be collected and stored. Similarly many of the fisher folk art and cultural heritage should be preserved and exhibited. The artisanal and traditional method of fishing and such type of fishing gears have tourist and scientific interest. The models of fishing craft of modern/traditional origins can also be exhibited.

All these can be performed by setting up a fishery museum. Hence it is proposed to set up a fishery museum in the land provided by the Fisheries Department at Thevally.

4.3.6 Ornamental Fish Shows

A recent trend that has emerged in almost all the states to promote ornamental fish trade by the organization and conduct of 'Aquarium Exhibitions' and 'ornamental fish shows'. Department of fisheries had already organized 5 such national and international level aquarium exhibitions / ornamental fish shows from 1998 onwards. These shows emerged as a major event in the realm of ornamental fisheries inviting the attention of large number of people including trodden from all over the country and helped to promote ornamental fish culture and trade in the state besides acting as a forum for exchanging the recent trends in technology and trade. Acquisition of the latest technology in this field is another advantage of this types of public programmes.

In order to augment the ornamental fish culture and trade in the District, it is proposed to conduct 'Ornamental fish exhibition' at Kollam Asramam Maithanam every alternate year. This exhibition can be organized by the active co-operation of research institution, college students, ornamental fish produces and traders, aquarium accessory manufactures and traders, environmentalists, LSGI's etc. The total cost expected for a show is estimated

as Rs. 30 lakhs. This can be recouped from gate collection, advertisement charges, stall installation charge, parking fee etc.

Fisheries Dept. will implement the proposal with the technical support of FFDA and BFFDA, Kollam, FIRMA, ADAK, Matsyafed, Ornamental fish producers and traders, CMFRI, Fisheries colleges and research institutes, MDEDA, etc and in association with LSGI's. The show can be conducted during December to Feb period every alternate year. A district level and Department level organizing committee should be formed for the effective implementation of the scheme. The year wise requirements of the funds are given in Appendix 38 -1.

5. Proposal for Resource Conservation

Proposal for Resource Conservation includes the specific proposals for Marine, Back Water and Other Inland areas.

5.1 Marine

Proposal for Resource Conservation in marine include proposals for Theera Vanam / Hariitha theeram, enforcement of KMFR Act and establishment of Artificial Reef.

5.1.1 Theera Vanam / Hariitha theeram

Compelled by the way of life, fishermen live very close to the sea in small closely built huts. Often these houses are prone to the threats of the vagaries of nature like heavy storm and rain, lashing of the monsoon sea waves, etc. State Govt. initiated a programme for erecting sea wall using very large granite stones to protect the coastal community from the monsoon vagaries of the sea, costing Rs. 300 lakhs per km. However sea walls are not enough to protect the coast.

The tsunami disaster struck the coast of India on 26th December 2004 forced the planners to rethink for an alternative method to protect the coastal community from such disasters and finally they reached the solution that to set up a bio-shield by planting mangrove, casuarinas, badham, thambakom, etc, and creepers of 50 m width all along the Kerala coast. Further as per Article 3.5.2 of Chapter 34; Agriculture, Cashew cultivation is proposed as a second line of casurina cultivation. The proposal is named as 'Theera vanam'. The length of Kollam coast is about 37 Km. For setting up of the

bio-shield only Rs. 8 lakh/Km is needed. The LSGIs included are Kollam Corporation, Paravoor Municipality and the Grama Panchayats of Mayyanad, Neendakara, Chavara, Panmana and Alappad. For the implementation of the Theera vanam proposal in the Kollam stretch a total of 300 lakh rupees is needed.

Period of implementation is 2008-2010. The components include the development of nurseries for each crop, organizing NGO's / Clubs / Volunteers etc, training them for rearing up of these plants, rehabilitating the present residents in the 50 m belt, planting and rearing of selected species, etc. Forest and Fisheries Departments together implement this proposal with the support of Revenue, LSGI's, etc. The year wise details of the fund requirements are given in Appendix 38 -1.

5.1.2 Enforcement of KMFR Act

In fisheries the core activity is fishing. Fish is a very important component in the eco-system of a water body and removal of fish at more than a desired level will upset the equilibrium of the eco-system resulting in the collapse. Use of explosive method or poison or other destructive methods of catching fish will result in mass mortality of fish juvenile or brood fishers as well as disturbing the natural environment causing depletion. The traditional and mechanized sectors have different interests in the field of fishing. The clash between them usually ends in law and order problems. Moreover fisheries has now been recognized as one of the major sector of economic activities in the state. Lakhs of the people are employed in this sector.

Fishery regulations are inevitable for envisaging any sustainable fishery development. The state has implemented the Marine Fisheries Regulation Act way back in 1981. This Act protects the interests of fishermen together with the sustenance of the fish wealth of the coastal waters of Kerala. The implementation of KMFR Act is executed through the fisheries stations. The Marine Enforcement Wing of the Fisheries department is in charge of implementing KMFR Act. In Kollam district the act is enforced through the Fisheries station, Neendakara. A total of 10lakh rupees is needed for this as an annual basics.

The entire crew of the ME wing is recruited from the police force on deputation basis. The ME wing is under the control of a superintendent of police. To maintain the law and order in the territorial waters off shore regular patrolling will be done with a turned patrolling boat. A control room will function under Assistant Director of Fisheries during trawl ban period. Impounding officers are posted for the effective implementation of the KMFRA.

5.1.3 Establishment of Artificial Reef

Artificial reefs are natural or man made external objects or stable structures placed in the sea to provide an artificial habitat and thereby to attract, aggregate and regenerate pelagic, demersal, migratory and residential fishes. Artificial reefs are considered to play an important role in revitalizing the aquatic environment which has been damaged by over fishing. The coastal fishery stocks can be restored to their original levels through artificial reef. Even the product of the poor artisanal fishermen who cannot afford a net can easily be offered a hook and line to earn his daily hood from these artificial reefs. The proposal is to establish 5 such artificial reefs at different locations of the inshore waters. The suggested locations are at Kollam Corporation, Neendakara and Alappad.

Period of implementation is 2009-2013. The fisheries department in association with LSGs, local fishermen community, NGOs etc. with the support of HED / PWD and CMFRI will implement the scheme. The unit cost estimated is Rs 20 Lakhs with a total out lay of Rs. 1 crore. The components include development of reef structures and collection of enrichment materials, transportation and installation of the same into the desired point and monitoring. The year wise requirement of the fund is as given in Appendix 38 -1.

5.2 Backwater

Conservation proposals for backwaters include Marine Bio Reserve, Enforcement of Inland Fisheries Act, Mangrove Afforestation, Fish Wealth Conservation through Removal of Stake Nets, Replacement of Kayal Latrines, Dredging of Backwater, Silvo-Fisheries at Ayiramthengu and Scheme for Controlling the Little Cormorants Population to Prevent the Reduction of Fishery Wealth.

5.2.1 Marine Bio Reserve

Conservation of natural stock of fish

and other aquatic life is the most important way to sustain the Ashtamudi estuary for present and future generation of dependent people. The Wild Life (protection) Act of India (1972) provides legal protection to many aquatic animals. Chapter 4 of this act, dealing with Sanctuaries, National parks, Game reserves and Closed areas is equally applicable to Marine reserve and Marine parks.

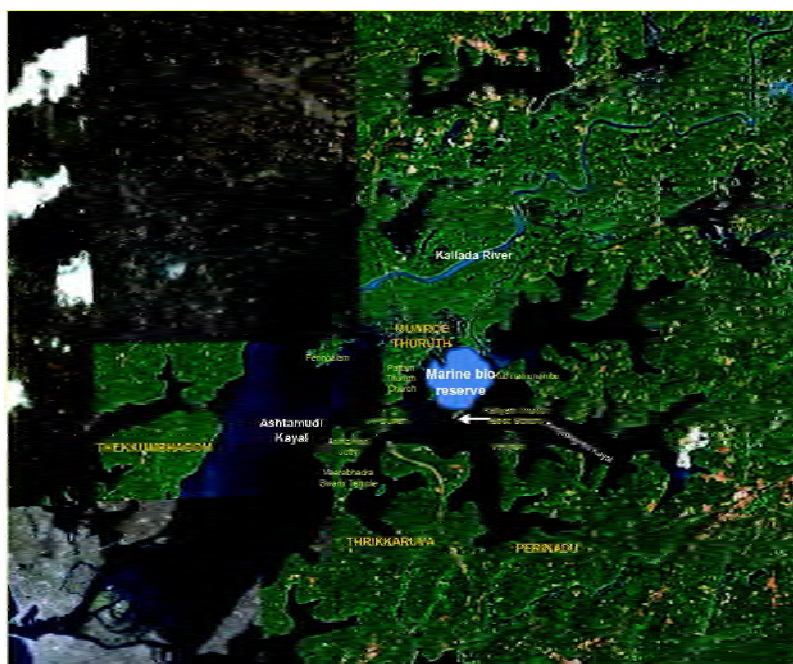
It is proposed to establish a marine bio reserve at the upper part of the Ashtamudi estuary which would be helpful for the lost habitats of true residential and migratory fishes such as *Eetroplus suratensis*, *Scatophagus argus*, *Ehirava fluvialis* and can serve as an undisturbed spawning area, where by the depleted stocks can be recovered in the estuary.

"Marine Bio Reserves" are zone where no fishing is allowed and fish stocks are maintained. They provide sustainable longevity of the inland fishing industry, renewable fish stocks and an important research focus". Total out lay of the proposal is 200 lakh rupees. The suggested locations are at Ashtamudi lake region of Munro Island, Panayam and Perayam as shown in Figure 38.1.

in the middle of Perumon Kayal from where mud is excavated for the construction of Railway Bridges. This thuruth will be the base station for the proposal with kayal patrolling facilities. The proposal will be implemented by Fisheries department in association with FIRMA, HED, LSG'S, Water Transport Dept. etc and with the support of Forest Department. The entire cost is met by Government of India. Period of implementation is 2009-2011.

As per Article 3 of Chapter 49, there is a proposal for Ashtamudi lake tourism circuit. This circuit shall by pass the marine bio reserve area since, boat traffic and fishing activities will be strictly prohibited here. The boundaries will be marked by fixing end posts and the area will be kept undisturbed using fish aggregating devices.

The components include survey and demarcation of the area to be declared as 'Marine bio reserve zone' installation of fish aggregating devices (FAD) and Artificial reefs (AR'S) structures, declaration of Marine bio reserve under the provision of Wild Life protection Act (1972) and maintenance of the bio reserve. The year wise requirements of funds are given in



Flg 38.1: Marine Bio-Reserve

The Marine bio reserve will be established in an area of about 2sq. km at the upper Kayal region of the Ashtamudi lake in and around the peeyamthuruth (palliyam thuruth) situated

Appendix 38 -1.

5.2.2 Enforcement of Inland Fisheries Act

In inland fisheries sector, the gears employed for fishing are classified in to fixed

engine and free nets. In addition, people often resort to usage of undesired destructive mode of catching fish like dynamiting, poisoning, electric fishing, deposition of thopum padalum etc. The law relating to inland fishing in Kerala is contained in the 'Indian Fisheries 'Madras Amendment Act-1927 and the Travancore-Cochin Fisheries Act-1950. Kollam district comes under the preview Travancore-Cochin Fisheries Act-1950. In order to exercise the powers of the Travancore-Cochin Fisheries Act-1950 and the Rules made there by the Department of Fisheries setup a backwater patrolling wing. Speed boats are provided with these wings. On annual basis a sum of Rs. 5 lakhs is needed for the backwater patrolling.

The patrolling wing is under the control of Inspector of Fisheries (Zonal) and two Sub-Inspectors of fisheries are available to assist him. M.E wing of the Department will assist the patrolling wing. The year wise requirement of funds is given in Appendix 38 -1.

5.2.3 Mangrove Afforestation

Kerala once had over 70,000 ha of mangroves, fringing its unique estuarine systems. Due to maximization of exploitation, indiscriminate land use, reclamation activities etc. it has now reduced to 1650 ha confined to some small pockets of the back waters. The situation demands a concerted effort not only to conserve/ preserve the existing mangroves but also to rehabilitate and afforest potential areas. Mangroves act as bio shield to storms, prevent floods and sustain a multitude of plant and animal lives. There is evidence that removals of mangroves lead to decline in finfish and shell fish recruitment and adversely affect bio diversity of fish resources.

Realizing the fact that destruction of mangroves is taking place at an alarming rate, it is necessary to implement programmes for afforestation of mangroves in selected locations or Grama Panchayats with a view to preserving bio diversity. Seedlings of selected species will be raised in nurseries at Ayiram thengu Govt. fish farm and will be planted in selected locations / Panchayats ensuring community participation at local level. The scheme will be implemented by Fisheries Department in association with Forest Department, LSG's and FIRMA. The LSGIs

covered are Kollam Corporation, Alappadu, Neendakara, Chavara, Thekkumbhagom, Thevalakkara, Thrikkaruva, Panayam, Munro Island, Paravoor, Mayyanad, Thrikkadavoor, W.Kallada, Perayam, Karunagapally, Clappana, K.S.Puram, E.Kallada, Poothakkulam, Adichanalloor and Panmana. This can be initiated as a social forestry programme. The proposal is to plant mangrove seedlings over a distance of 150 km at the rate of 10 km per year. The total outlay estimated is about 2 crore rupees. The year wise requirements of fund are given in Appendix 38 -1. The proposal can be linked to Article 3 and 4 of Chapter 43B; Environment and Article 2.4 of Chapter 43A; Forests.

5.2.4 Fish Wealth Conservation through Removal of Stake Nets

The Ashtamudi estuary is subjected to high fishing pressures exerted by the unusual increase in the number of fixed and wandering gears. There were 918 stake nets and 1283 Chinese dip nets in operation in the backwater. It is estimated that on an average annual basis about 2000 tons of juveniles of Penaeid prawns are indiscriminately filtered from the Ashtamudi Kayal. Stake nets are also operated during high tide period which is locally known " Ettam kettu". Indiscriminate intervention on this estuarine environment is disturbing the migration of juvenile prawns also hampering the eco balance of the natural resources.

Several expert committees appointed by the Govt. of Kerala have recommended to reduce the number of this fixed engines. Strict enforcement of inland fishery regulations is also not to the tune due to several reasons. Under these circumstances, it is proposed to remove all the stake nets operated near the bar mouth of Ashtamudi estuary by providing adequate compensation to stake owners. The total outlay for the scheme is estimated as Rs.4.5 crores which can be availed from the Central Environmental Ministry. Period of Implementation is 2009-2010.

The scheme components include identification of the present stake owners, sensitization of the programme, execution of agreements with the stake owners, removal of stakes, releasing of compensation etc. The year wise details

of fund requirement are given in Appendix 38 -1.

5.2.5 Replacement of Kayal Latrines

From the very ancient times estuaries and back waters have been the main centres of man's development because of the fertile waters and sheltered anchorage etc provided for a broad hinterland. For generation, it has been the practice to dump all kinds of waste directly into the estuaries and back waters. As population grew over the years sewage disposal became an increasingly serious problem. This results in the development of sewage system in which pipelines connecting domestic residence to some convenient disposal point, frequently a river, backwater or estuary. Taking advantages of its simplicity and successfulness the residents near the estuaries and back waters practiced to build their latrine either directly over the back water or latrines with pipelines discharged directly into the back waters.

The dominating deleterious effect resulting from the disposal of sewage to rivers and estuaries is that of O₂ depletion. This sometimes led to eutrophication and associated problems. In Kollam district there are over 10000 kayal latrines on the banks of Kayamkulam Lake, Karunagapally vattakayal, T.S. canal, Ashtamudi estuary, Kollam thodu, Paravur kayal and Edava Nadayara kayal. All these kayal latrines should be removed and replaced with pucca septic tanks. So a total sanitation scheme for the residents near the bank of these water bodies is proposed. The LSGIs included are Alappad, Neendakara, Chavara, Thekkumbhagom, Thevalakkara, Thrikkaruva, Panayam, Munro Island, Paravoor, Mayyanad, Trikkadavoor, Kollam, W.Kallada, Perayam, Karunagapally, Clappana, K.S.Puram, E.Kallada, Poothakkulam, Adichanalloor and Panmana.

Period of implementation is 2008-2015. The unit cost for establishing such a pucca latrine is estimated as Rs. 8000/- of which a subsidy at the rate of 50 % is provided by the concerned LSGI. The scheme envisages replacing all the 10000 kayal latrines- at the rate of 1000 latrine per year- over a period of 10 years. LSGI's will implement the scheme through PWD. For the implementation of the scheme the beneficiary contribution should be remitted

to the concerned LSGI. Total cost for all units would be Rs. 800 Lakhs.

5.2.6 Dredging of Backwater

The depth of the Ashtamudi estuary, shows a decreasing trend during the past decades. The reduction in depth is mostly brought about by the deforestation activities taking place at the catchment areas, siltation, sediment deposition due to change in water current and current velocity, dredging of the sub fossil deposits etc. Large scale obstruction of water from the rivers for the purpose of agriculture, irrigation, etc have resulted in the drying up of Kallada river during summer months whereby a steady elimination in the fish wealth have taken place due to the habitat loss.

In order to maintain proper depth in the backwaters dredging out of the already deposited sand/mud is essential. Immediately after that it is essential to dredge out about 100 cubic meters of sand / mud from the estuary. Estimated expenditure towards this is Rs. 500/- lakhs. This can be recouped by selling the sand to the construction industry which is facing a serious shortage of fine and coarse sand. The entire proposal cost can be met from central TRP share.

Period of implementation is 2008-2010. The proposal is implemented by the Fisheries department in association with TEAP / TRP cell and Harbour Engineering department. The components are global tendering of the work, land acquisition for storing the dredged sand near the discharge point, selling of the sand under departmental control, construction of retention wall wherever needed etc. Immediate dredging should be needed in the north and south channel, central Kayal region and Chavara Kayal region. The year wise requirement of funds is given in Appendix 38 -1.

5.2.7 Silvo-Fisheries at Ayiramthengu

The recent trend in aquaculture is towards sustainability. One of the main sustainable alternative to coastal/ aquaculture pond development associated with Mangroves is Silvo-Fisheries. It is a form of integrated Mangrove tree culture with brackish water aquaculture. Mangrove tourism will help to imbibe awareness on mangrove conservation. In Ayiramthengu we can explore the possibilities of mangrove and tourism. The harmonious

co-existence of tourism and nature will be balanced through man education and peoples' awareness. The present proposal is to bring the 39 ha area of Ayiramthengu Govt. fish farm under the fold of Silvo-Fisheries. The basic objective of this proposal is ecotourism. The expected production rate is 2 tons fish and 2 tones shrimp per year. The LSGIs covered is Alappad. Period of implementation is 2009-2010.

The components include the development of brackish water aquaculture, development of mangrove and development of tourism facilities. The proposal is implemented by the Department of fisheries through FIRMA. The entire cost of the proposal is met by the Department. The year wise details of the financial requirements are given in Appendix 38 -1. Employment generated after completion will be 6. Total cost of the scheme would be Rs. 50 Lakhs.

5.2.8 Scheme for controlling the Little Cormorants Population to Prevent the Reduction of Fishery Wealth

Little cormorant is a little black duck like water bird with a longish stiff tail and slender compressed bill sharply hooked at the tip. They are distributed through out the country and found on all inland waters, brackish lagoons and tidal creeks. They live exclusively on fish, which they chase and capture underwater being an expert diver and a submarine swimmer.

Recently the population of these birds increased very much. Being gregarious in nature and voracious fish eater, cries and hues arouse from the inland fisher men that, these birds are the major culprit of the fishery depletion in back waters and inland waters. Even though hardly any scientific study is made on this direction a carnival observer can always agree with the fishermen. It is a regular scene in the back water area that after satisfied with the heavy 'fish meals' these birds perches upright on a rock or stake near water, drying itself with out stretched wings.

It is a new feel that the time for controlling the population of these birds is already over and hence the proposal. The proposal aims to reduce 70% of the bird population from its present level of 1 lakh numbers. By this scheme an incentive is given @ Rs. 5 per bird for shooting down the bird with air gun. Thus the total out lay

of the proposal is estimated as 4 lakh rupees which include the cost of air gun, bullets and training. The LSGIs covered are Alappadu, Neendakara, Chavara, Thekkumbhagom, Thevalakkara, Thrikkaruva, Panayam, Munro Island, Paravoor, Mayyanad, Thrikkadavoor, Kollam, W.Kallada, Perayam, Karunagapally, Clappana, K.S.Puram, E.Kallada, Poothakkulam, Adichanalloor and Panmana.

Period of implementation is 2009-2010. Fisheries department will implement the proposal in co-ordination with forest department and the LSGI. A labour group formed among the traditional inland fishermen trained for air gun shooting and provided with air gun and bullets will be engaged. They hunt the birds during the evening time when the birds come for nesting. On the production of body of hunted birds, the authorized officer will release the incentive to the labour force. The year wise requirements of funds are given in Appendix 38 -1.

5.3 Other Inland Areas

Conservation proposals for other inland areas include Fish Sanctuary, Mahaseer Hatchery, Pisci- Clubs and Ranching of larvivorous fishes in drainage canals and other open waters for the biological control of mosquitoes.

5.3.1 Fish Sanctuary at Kulathupuzha

Kerala is blessed with rich biodiversity of fish fauna. But recently many of these fish species were categorized as critically endangered, facing serious risks of extinction in the wild. 31 species were listed as endangered, 18 species were assessed as vulnerable category and 13 species were recorded as threatened. Serious efforts to protect the fish biodiversity are needed in the case of these indigenous ornamental fishes and cold water fishes.

In order to protect the threatened species from extinction and to conserve the resources, fish sanctuaries need to be developed at appropriate places where, the existing stock is enriched by ranching and providing natural or artificial fish aggregating devices. The proposal is to establish a fish sanctuary at Kulathupuzha for protecting cold water fishes.

The components are identification and demarcation of the area to be declared 'fish sanctuary', collection or construction of fish aggregating devices, installation of fish

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aggregating devices at different spots, installation of notice boards at different points indicating various aspects of the sanctuary, declaration of the area as sanctuary, etc. Period of implementation is 2008-2010.

The total outlay of the proposal is estimated as Rs. 25 lakhs. The entire cost is proposed to be availed from Government of India. The Fisheries Department will implement the scheme through FIRMA, ADAK, FFDA, Kollam, etc. and in association with Forest Department. The year wise requirement of fund is given in Appendix 38 -1.

5.3.2 Mahaseer Hatchery at Kulathupuzha

There are many indigenous cold water fishes in the hill streams of Kerala, which have potential for culture. Indigenous species like Tor Mussallah are included in the category of endangered fishes. Measures to increase their resources need to be taken up by programmes like river ranching, culture, establishment of sanctuary etc.

At present there is only one hatchery for the cold water fish the one at Rajamala in Munnar maintained by TATA Group. The production of the seeds of trout only is carried out there. The present proposal envisages to setting up a Mahaseer hatchery under public sector, at Kulathupuzha for the mass production of its seeds. The total outlay expected is Rs. 80 lakhs which can be shared by the Government of India and the state.

The components include the construction of hatchery building, lab, rearing/Spawning/nursing/grow out tanks or ponds, brood stock maintenance ponds, installation of water and air circulation system, seasonal seed production activities etc. For this, suitable spot should be identified and the land for the same will be acquired in and around the Kulathupuzha River, where the natural stocks of this fishes are in plenty. The costs of land will be met by the state. 4 ha land is needed for the establishment of Mahaseer Hatchery.

Period of implementation is 2008-2010. The proposal will be implemented by Fisheries Department through FIRMA/ ADAK/ FFDA, Kollam with support from Forest, Environment and Revenue Departments. The year wise requirement of the fund is given in Appendix 38 -1.

5.3.3 Pisci- Clubs

Fishery resources are not inexhaustible. But in our country they are traded as common property resources. There is always a tendency to over exploit the premium fish species for domestic consumption as well as for industrial purpose. In the marine and brackish water sector the main problem arise due to pollution, over fishing and indiscriminate fishing. In inland sector the biodiversity is alarmingly declining due to a variety of reasons like obstruction of river courses, regulation and diversification of water flows, damming, sand mining and habitat destruction, loss of riparian canopy cover, deforestation leading to soil erosion, illicit fishing etc. Conservation of the natural fisheries resources is a dire necessity of the period.

Our State is a fore runner in the implementation of various conservation and management measures for the sustainable development of fisheries. But all these approaches can't bring full fruitiness. Lack of awareness regarding the necessity of conservation of fish stock among the new generation is a major hurdle in this context. These warrant a scheme for providing awareness to the younger generation on various aspects of fishery and water resource conservation. Hence a scheme is proposed to organize pisci-clubs in the manner of Science or Nature clubs in all high schools of the district. The scheme will be implemented by Jilla Panchayat through Fisheries Department in association with Education Department.

The charge of the pisci-club is entrusted with an eminent biology teacher with representatives from each division from 8th standard onwards being the members. Classes, seminars, camps, film shows, study tour etc on fisheries aspects would be conducted regularly. Experienced hands from the fisheries department will assist and monitor the activities of the club. A home aquarium with all its accessories including fish and stand would be provided to each unit for facilitating the activities of the club.

Period of implementation is 2008-2011. The unit cost for setting up a medium type home aquarium is estimated as Rs. 2500/-. There are about 200 high schools in the district and a sum of Rs. 5 lakhs will be needed for the implementation of the

proposal. 50 such unit will be organized in a year and the implementation will be completed in the 4th year.

5.3.4 Ranching of Larvivorous Fishes in drainage canals and other open waters for the biological control of mosquitoes

The dreaded diseases like malaria, yellow fever, dengue fever, chikun gunia etc are wide spreading in Kerala during recent years. The precautionary measures taken up by the government to control such diseases proved to be insufficient. These diseases are spread through the agency of insects especially mosquitoes. It shows that control or even eradication of such dreaded diseases needs urgent measures to eradicate the vector insect. But as the use of insecticides is virtually failing, the biological control is the only alternative left to keep check on the vector insect.

The importances of larvicidal fishes arise in this context. The introduction of larvicidal fishes in water bodies where mosquitoes breed should definitely result in a very effective control on the population of the mosquitoes. In selection of the larvicidal fishes for such a control, preference is given to fishes with small size, breed frequently, have little food value and hardy enough to withstand the difficult ecology of these swampy waters. The guppies, gambusia and several indigenous fishes like danio, rasbora, esomus, puntius etc have such qualities.

It is proposed to ranch 5 lakh such larvicidal fishes in to the drainage canals and other water bodies in the district to control the dreaded epidemics every year. The suggested locations are at Kollam Corporation, Karunagapally, Paravoor and Punalur. The total outlay of the proposal is estimated as 3 lakh rupees per year. The entire cost of this proposal will be shared by the Jilla panchayat and the Health Department. The proposal is linked to Article 2 of Chapter 40; Health.

The larvivorous fish seeds will be procured from the public hatchery under taken by the fisheries department. Total cost of the scheme would be Rs. 45 Lakhs.

6. Proposals on Infrastructure Development

Proposals for infrastructure development include infrastructure for Marine Export Zone, Marketing and for Research, Extension and Training.

6.1 Infrastructure for Marine Export Zone

Proposals for Marine Export Zone include infrastructure for Thangassery Port, Modernisation of Fishing Harbours, Modernisation of Fish Pre Processing Centers, Depuration Units and Value Added Fish Products Units.

6.1.1 Infrastructure for Thangassery Port

In the case of fisheries Kollam district is in the fore front with respect to fishing, processing etc. But at present the marine export commodities produced by the district are transported to other ports like , Cochin, Thoothukudy, Mangalapuram etc and the gains due to fisheries sector of Kollam are lost. It is glad to know that the Thangassery port will be commissioned shortly. By the commissioning onwards we can restart our trade from Kollam as our ancestors did.

For effective marine export business a lot of infrastructure facilities should be provided at the Thankassery port like wharfrage, cargo, container handling crain, customs clearance facilities etc on an immediate basis. So the proposal, with total out lay of Rs. 300 lakhs at Kollam Corporation. The proposal will be implemented by Port and Fisheries Departments in association with Habour Engineering Department or PWD, Power Department, Water Authority etc. Govt. of India will meet the entire cost. The proposal is linked to infrastructure sector as per Article 3.4.2 of Chapter 42. Period of implementation is 2008-2011.

The components include the development of warfrage, development of container handling facilities including crains, development of offices and godowns, development of electric and water connectivity, development of cold storage facilities, development of drainage facilities etc. The Year wise requirement of funds is given in Appendix 38 -1. Employment generated after completion will be 200.

6.1.2 Modernisation of Fishing Harbours

There are 3 fishing harbours in the district under various stages of construction. The construction of 2 fishing harbours viz. Thankassery and Neendakara has already been completed. The fishing harbour at Azheekal is yet to

be completed. All these fishing harbours are to be renovated and up graded to international standards. The proposal is to set up harbour management society with representatives of fishermen for the management of fishing harbours and modernization work can be entrusted to such societies ensuring community participation. The suggested locations are at Kollam Corporation, Neendakara and Alappadu.

The present proposal aims at extending additional facility in infrastructure so as to improve hygienic conditions and reduce post harvest losses and extend competitive market services leading to expansion of domestic and export supply. The cost of renovation of the 3 fishing harbours is estimated as Rs. 3 crores. The entire amount will made available from Government of India.

Period of implementation is 2008-2012. The proposal is implemented through Fisheries Department with the support of Harbour Engineering Department and in association with Power Department, Water Authority etc. Ice plant and cold storage facilities will be provided. Maintenance and operation cost of the facilities will be recovered from the various fees charged for services like warfrage fee, berthing, foot use, water supply, power etc. which will be collected from the users. The phasing of investment over a period of 4 years starting from year 2009 is given in the tables in Appendix 38 -1. Employment generated after completion will be 400.

6.1.3 Modernisation of Fish Pre Processing Centres

The advent of mechanization programme and the ever increasing demand for shrimp products in the international market led a well established fish processing industry in the coastal belt of the district. From the very beginning itself pre processing (Peeling) traditionally takes place in the independent centers (sheds). These centers supply the pre processed material to processing plants. These units employ quite a large number of workers in the coastal area. Many of these centers conform to the required quality standards.

These pre processing centers are liable to be stopped from functioning to avoid quality problems. The proposal is to upgrade the independent pre processing centers to the standards required. The total

out lay of the proposal is 1.5 crore rupees and by this proposal 15 such pre processing plants which engage up to 50 workers will be renovated at the rate of one unit per year over a period of 15 years. The total cost estimated for a single unit is about 10 lakh rupees. The pre processing centres at Kollam Corporation and Neendakara are included under this scheme.

The scheme will be implemented by fisheries department with the support of harbour engineering department, LSGIs, Marine Products Export Development Agency (MPEDA) Cochin and Central Ministry of Food Processing Industries. A subsidy at the rate of 50% will be provided to each unit which will be shared by Central Ministry, MPEDA and the state in the ratio 2:2:1.

The action plan include identification of pre processing centers, preparation of plan and estimate of each unit to be renovated, mobilizing credit facilities to the owner, construction/renovation of the shed and other facilities, establishing storage, drainage and waste disposal facilities etc. Employment generated after completion will be 2000.

6.1.4 Depuration Units

Mussels and oysters are filter feeders and hence the alimentary canals of these bivalves usually have presence of sands, debris, coli form bacteria etc. The presence of these particles and bacteria affects the quality of the products. The main constraint in marketing of cultured mussel particularly for export is the lack of proper depuration technique to ensure hygienic conditions and improve quality of products in depuration plants.

The proposal is to establish 15 such depuration units in selected locations where mussel/oyster farming and wild collection is carried out. The unit cost for setting up of a medium size depuration plant is estimated as Rs.1 lakh. At the rate of 1 unit per year, the units will be established over a period of 15 years. The suggested locations are at Neendakara, Chavara and Thekkumbhagam.

The components include construction and installation of depuration tanks, setting up of water and air circulation, effluent treatment etc. Extension and training support will also be provided as a part of this proposal. The beneficiaries of this

proposal will be the SHG's of fishermen, fisher women, and private entrepreneurs. The proposal will be credit linked and the subsidy will be released to banks. The assistance under this programme will be made available only once to a beneficiary with or without institutional finance.

The proposal will be implemented by Fisheries Department in association with LSG's and local fishermen community.

6.1.5 Value Added Fish Products Units

There is an increasing tendency among consumers to go for convenience foods particularly in the urban area. In this context the programme for utilization of low cost and seasonally abundant fish for conversion to value added fish products in important urban centers ensuring the support of fisher men community is proposed. There will be a provision for production cum training centre for value added products, establishments of retort pouch packing line and community pouch packing centers with pouch packing machinery and facilities for preparing fish curry of various tastes from seasonally abundant marine and fresh water fish for local as well as export markets. This scheme will be identified as a micro enterprise and implemented through SHGs of fisher folk. The total out lay of the proposal is estimated as Rs. 1.50 crores. The suggested locations are at Paravoor, Mayyanad, Kollam, Neendakara, Thekkumbhagom, Thrikkadavoor, Thrikkaruva, Panayam, Chavara, Alappadu and Karunagapally.

Components include development of infrastructure facilities, development facilities for conversion to value added fish products including marketing and extension and financial support. Development of infrastructure facilities include, identification of fisher women SHGs, construction of workers shed, establishment of fish handling, fish processing and value added fish products making facilities, packing, marketing etc. The SHG members shall be trained periodically for various aspects of microbial control, hygienic handling, waste disposal, value added product making and marketing methodologies. 60 small scale industrial units for the preparation of value added fish products will be set up with a unit cost of Rs. 2 lakhs at the rate of 4 units per year.

A provision for 30 lakh rupees is

demarcated for the centralized production cum training centre. The programme will be implemented by fisheries department through Society for Assistance to Fisher women (SAF) with the support of LSGIs and Industries Department. The technical support of central institutes like CIFT, IFP etc is also availed for the programme. The entire fund is met by the state.

Beneficiaries of this proposal will be SHGs of fisher men, fisher women, other SHGs, fishermen and other co-operatives, private enterprises, etc. The year wise details of financial requirements were given in the table in Appendix 38 -1. A subsidy will be provided to each unit at the rate of 50%. Employment generated after completion will be 60. Apart from this technical support for fish processing shall be given by the Fisheries Dept as per Article 2.2; Industries.

6.2 Infrastructure for Marketing

Proposals on infrastructure for marketing include Modernisation of Fish Markets, Establishment of Cold Storages and Cold Chain, Fish Booths, Economic Empowerment of Fisher Women SHG's through the development of micro enterprises, Providing Insulated Crates for Fish Vending, Vehicle for the Fish Vending Women Group, Controlled Atmosphere Packing (CAP) Units, Cluster Production Centres, Dried Fish Product Making Unit, Sea Food Restaurants, Fish Meal Production Unit, Fish Silage Production Unit, Ready to Cook / Ready to fish Product Making Unit, Aqua / Fishery Stores and Live Fish Markets.

6.2.1 Modernisation of Fish Markets

There are about 835 fish markets in the district, majority of which are owned by the local bodies. These markets are with out minimum facilities to maintain sanitary conditions for hygienic handling of fish. In order to ensure health and hygiene basic infrastructure facilities are to be provided in more markets with freezers, vending facilities, drainage, drinking water supply, parking, waste disposal etc. Priority will be given to primary markets at Karunagapally, Chathannoor, Punalur, Anchal, Kadakkal and Kottarakkara proposed as per Article 4.1 and the secondary market at Kottamkara proposed as per Article 4.2 of Chapter 34; Agriculture.

The proposal is to modernize 75 such fish markets owned by LSGs in 15 years

at the rate of 5 markets per year. The unit cost for the renovation of a single market is estimated as Rs. 10 lakhs and the total outlay of the proposal is Rs. 750 lakhs to be equally shared by the fisheries department and the LSGIs.

The components include buildings (fish handling halls and marketing stall), deep freezers, drainage and waste disposal, continuous power and water supply, pay and use toilets, parking space, motorable road etc. The proposal will be implemented by fisheries department with the support of HED, /PWD, KSEB, Water authority etc. The year wise details financial requirements are given in Appendix 38 -1. Employment generated after completion will be 500.

6.2.2 Establishment of Cold Storage and Cold Chain

Due to the lack of cold storage facilities and cold chains the fishermen are not in a position to take advantages of bumper catches and hence they are not getting fare prices for their produce and consumers are not getting quality fish. The proposal envisages supply of quality sea foods for the urban population and export houses. In order to cater the growing needs, provision for preservation of good quality fish is needed. The present proposal envisages for setting up of major chilled storage units by providing infrastructure in the fishing harbours and landing centers of the district and also by providing mini chilling units and model hygienic vending booths in major whole sale/retail markets. The suggested locations for providing mini chilling units and model vending booths are at the primary markets proposed at Karunagapally, Chathannoor, Punalur, Anchal, Kadakkal and Kottarakkara proposed as per Article 4.1 and the secondary market at Kottamkara as per Article 4.2 of Chapter 34; Agriculture.

Period of implementation is 2008-2014. The proposal components include the establishment of insulated chill rooms, insulated delivery vans, insulated boxes/ crates etc. in association with each fishing harbour of the district viz, Neendakara, Thangassery and Azheekal at the rate of 6 crore rupees and the establishment of mini chill room etc at 20 different locations of the districts at a cost of 1 crore rupees per unit and establishment of an array of cold vending booths at interior villages at a cost

of 4 crore rupees. The year wise requirement of the fund is given in Appendix 38 -1. Employment generated after completion will be 100.

6.2.3 Fish Booths

Fish is a highly perishable commodity. From the very time it is caught from the water it lives, it begins to decay. In order to prevent this, fish should be preserved as early as possible. Packing with crushed ice, keeping in chill rooms, transporting in refrigerated containers etc are the common practices. Unfortunately at present the interior markets are totally devoid of these facilities. So both the fish vendors and fish consumers find difficulty with this. Fresh fish fetch more price than the other.

In order to overcome this, it is proposed to establish 1500 fish booths over a period of 15 years at the rate of 100 units per year. The unit cost estimated is Rs. 3 lakhs of which 50% is provided as subsidy. A fish booth has facilities for dressing and cleaning the fish, value added product making etc. Soft drinks and milk can also be sold through these outlets in order to make this venture more profitable.

The scheme components include sensitization of the programme, identification of the group/ private entrepreneurs, setting up of the bunk, training to the beneficiaries and development of infrastructure facilities to the booths. The proposal will be implemented by fisheries department in association with LSGI, Matsyafed, financial institutions etc. The year wise requirement of the funds is given in Appendix 38 -1. Employment generated after completion will be 1500.

6.2.4 Economic Empowerment of Fisher Women SHG's through the Development of Micro enterprises

Unemployment and poverty are the two main problems being faced by fisher women in the District. Being destined to suffer proverbial poverty, economic and social backwardness, the plight of the fisherwomen is very pathetic. Some of them actively participate in the sustenance fisheries to eke out a living. They contribute many a service to the progress of fisheries viz. culture, harvesting, processing, carrying and marketing. But they are always kept marginalized without recognizing their service to any extent. They are subjected to exploitation by all

means. Vast majority of the fisher women remain unemployed/ under employed. In order to overcome such situations, it is suggested to organize fisher women folks in self help groups and identify their talents and knacks to chalk out appropriate empowerment programmes.

The present proposal envisages providing micro- credit to self help group to take up micro- enterprises. A subsidy of 50% of the total cost subjected to a maximum of Rs 25000/- will be given as grant and remaining will be availed as bank credit. The assistance will be made available to such SHG'S who have proved their credit worthiness by rising thrit through savings. A total of 50 women SHG's will be amounted in the next 5 years @ 10 SHG's per year. Total out lay of the proposal is Rs. 25lakhs at the rate of Rs. 2.5 lakhs per year. The suggested locations are at Paravoor, Mayyanad, Kollam, Neendakara, Thekkumbhagom, Thikkadavoor, Thrikkaruva, Panayam, Chavara, Alappadu and Karunagapally.

Period of implementation is 2008-2012. Fisheries Department will implement this proposal through SAF (Society for Assistance to Fisher women) in association with LSGI'S and financial institutions. The assistance will be given preferable in the following areas:

1. Value added fish product making units.
2. Fish drying units.
3. Shed fish processing units.
4. Ornamental fish farming units.
5. Net making units.
6. DTP units.
7. Lathering units.
8. Garment making units.
9. Feeding sheds.
10. Margin free shop.

The year wise requirement of the funds is given in Appendix 38 -1. Employment generated after completion will be 1000.

6.2.5 Scheme for Providing Insulated Crates for Fish Vending

There are 222 marine fishing villages in the State all along a distance of 590 km. Each of these fishing village is thickly populated by fishermen and during the past they went for fishing right from there own villages and landed at the same place as they start. As such there are 222 landing

centres in the State. From where fisher women collected the fish and go for sale to the nearest market by carrying fish on their head in 'kuttas' or aluminium containers. This was a continuous practice for a long time.

But the introduction of the mechanization scheme and development of fishing harbours and landing centres by the fisheries department had changed the whole scenario. There after the major chunk of landing is happened in fishing harbours which is far away from the fishing village and fish markets. This made the fisherwomen vendors to travel a long distance from fishing village to landing centres, landing centres to fish market and fish market to their homes.

Due to the lack of public conveyance from the landing centres, the poor women vendors were pushed back as they have to compete with the male vendors who use two wheelers or other kind of vehicles for fish vending. Many times they are late to come in the market for selling fish and they are forced to bring back the unsold fish to home where there is no storage facility. All these call for the need for providing more hygienic vending facilities to fisher women vendors. CIFT had developed the so called insulated crate for fish vending which extends the shell life of the fish keep in it.

The present proposal is for providing insulated crate to women fish vendors. The cost of one such crate is about 1000 rupees. A subsidy at the rate of 50 % will be provided by this scheme. The proposal is implemented by LSGIs. Only the registered fisher women can avail the assistance as per the guidelines of the scheme. A total of 10000 crates are to be provided by this scheme at the rate of 1000 crate per year over a period of 10 years. As such a total of 10 lakh rupees per year will be needed every year and the total out lay estimated is Rs. 100 lakhs. Employment generated after completion will be 10000.

6.2.6 Vehicle For the Fish Vending Women Group

The major share of the fish vending is done by the women members of fisher community. They face lot of problems while transporting and marketing the fish. The available facilities are inadequate to transport fish from landing centres to market and from market to their home. Public

conveyances do not allow them to travel with the fish. Pick-up van and other hired vehicles also are reluctant to carry fish, even if they do so, they charge more hire from fisher women. More over the peak landing takes place during the early morning and due to the absence of adequate public transportation in the early morning women vendors are forced to stay in the harbours during night where situation is unhealthy.

If they are provided with pickup van, they can overcome these troubles. Activity groups of 6 to 10 fisher women vendors are to be formed and the ownership of the vehicle can be vested to the activity groups. The vehicle can be hypothecated to the fisheries primary co-operative society. The LSGIs included are at Kollam Corporation, Neendakara, Alappadu and Karunagapally. The unit cost is estimated as Rs. 3.09 lakhs. It is proposed to provide vehicles to 10 such units through the assistance provided by the TEAP. Employment generated after completion will be 50. Total Cost for all units would be Rs. 30.9 Lakhs.

6.2.7 Controlled Atmosphere Packing (CAP) Units

The fish is a highly perishable commodity and it begins to lose its quality as and when it is removed from the media which it inhabits. In order to prevent the decay of fishes the techniques like icing, drying, refrigerating etc are employed by the fish vendors. Yet the consumer prefers fresh fish rather than the preserved fish and the fish vendors are usually forced to sell the fish for the price fixed by the buyer. To overcome such a situation, there should be the need to extend the shelf life of the fish without altering the quality as in icing, drying or freezing. For this controlled atmosphere packing unit can be started. From this unit, fish can be procured by the fish vendors for marketing, the produce can also be marketed through fish booth and other outlets. It is proposed to start up one such unit in the district under the assistance of TEAP. The unit cost estimated is Rs. 7.21 lakh and the entire cost will be met by TEAP. The suggested location is at Kollam Corporation.

The proposal will be implemented by fisheries department through Matsyafed in connection with CIFT, IFP, HED, LSGI, NGO's etc. An activity group with a minimum

of 10 members of the SHG's or cooperatives of Tsunami affected village will be selected and based for operating CPC. In CPC, the product is contained in a package made of a material having low oxygen permeability and is sealed air tight after evacuating the air. The CPC can extend the shelf life of fish for a period of 7 days at a storage temperature of 4° C. Consumer packs of 250 and 500 gms of fish fillets will be produced. The land for the CPC will be provided by the LSGI. A processing hall of 400 sq feet with marbled floor with provision for water, electricity and drainage is needed for the CPC. The year wise requirements of the funds are given in Appendix 38 -1.

6.2.8 Cluster Production Centres

State government with the financial support of the central government and the ADB, is taking meaningful steps to restore the livelihoods of the tsunami affected people under the Tsunami Emergency Assistance Proposal (TEAP). With the basic objective it provide sustainable means of livelihood by providing employment opportunities to the fisher folk and lead them to financial stability. TEAP plans to organize SHG's and other groups to set up small scale industries or micro enterprises. 60 such key activity areas were identified which need to have many common facilities. Providing such facilities to each group will be space and money consuming.

Under these circumstances, the need for constructing a Cluster Production Centres (CPC) to provide basic amenities for production of various products by different SHG's have evolved and hence the proposal. The TEAP plans to implement the proposal at Alappadu Grama Panchayat. The total out lay of the proposal is Rs. 39.5 lakhs which will be met by TEAP. The space for the community production centre will be provided by the Alappadu Grama Panchayat. The CPC will be setup during 2008-2009.

TEAP will implement the proposal through Harbour Engineering Department in association with Alappadu Grama Panchayat. The centre will be a two storied building with a total plinth area of 550 sq. m. It will have an eco friendly design and will be so designed to ensure adequate space for pre processing, processing, packing, waste treatment, etc. More than

sixty beneficiary groups selected for different sub proposals under TEAP will be the direct beneficiary of the Cluster Production Centre. The year wise requirements of the funds are given in Appendix 38 -1.

6.2.9 Dried Fish Product Making Unit

Drying of sea food was an age old traditional technique to save unsold fish catch. During the past years, dry fish produced was absolutely crude and unrefined. But today high quality dried sea food products coping to stand up to any sea food product prepared by modern technology are being prepared. Technology involved in dry fish is simply moisture reduction to the required level. Quality checks on dried sea food often confined to moisture level, salt content, acid insoluble ash and fungal count. However, dried sea foods face quality problems such as fragmentation, insect infestation etc also. Hence efforts at ensuring quality levels for the dried fish calls for close attention to factors that influence these quality parameters. Solar driers have proved their efficiency in tackling quality problems.

Solar drier can be designed in many forms, of which the most popular one is solar tent drier. The drier make use of a black rough surface heat absorption unit for harnessing and storing the sun's energy. Solar tent drier is capable of easily generating 10°C to 20°C higher temperatures than the atmospheric temperature. Solar tent can be fabricated using aluminium frame or wooden frame. A drying rack of 1 meter height provides an excellent drying platform for effective drying. It is possible to dry fish in this equipment in half the time required for conventional sun drying. The proposal is to start up 150 solar tent dried fish making units through fisher women SHG's, at the rate of 10 units per year, over a period of 15 years. The unit cost estimated is Rs. 20000/-. Hence the total out lay is Rs. 30 lakhs. A subsidy at the rate of 50 % will be provided to each group. The suggested locations are at Kollam Corporation, Paravoor, Mayyanad, Neendakara, Thekkumbhagom, Thrikkadavoor, Thrikkaruvu, Panayam, Chavara, Alappadu and Karunagapally.

The proposal will be implemented by LSGI in association with fisheries department with the technical support from

Kerala Agricultural University- Panagadu Fisheries Collage. The components include identification of beneficiaries, development of infra structures, development of Sun dried products and marketing. The proposal will be credit linked. The year wise requirements of the funds are given in Appendix 38 -1. Employment generated after completion will be 150.

6.2.10 Sea Food Restaurants

Fishes enjoys a very special consideration and place in human civilization from time immemorial. Its food value, gastronomic, culinary and nutritional, brings it for the category of "gourmet par excellence". several numbers of food fish species both fresh water and salt water are put in the category of excellent, very good, good and fair depending upon local, regional or national consideration of taste, preference and eating habits. Fish flesh provides an excellent source of protein for human diet. Fish protein comprises all the 10 essential amino acids, desirable for consumption for human being. Many of the traditional dishes made from fishes have special taste and nutritional value and attract tourists both from inside and outside the State.

Many of the hotels and restaurants in Kerala are known for many fish delicacies. If we start up sea food restaurants in major points in the cities and towns we have to mobilize the available fish and also have to generate employment to large sections of unemployed youth. Hence it is proposed to start up sea food restaurants in major centers like Oachira, Karunagapally, Sasthamkotta, Kottarakkara, Kundara, Adichanalloor, Kollam, Chavara, Neendakara, Chathanoor, Kalluvathukkal, Anchal, Punalur, Thenmala, Chadayamangalam, Kadakkal, Paravoor, Mayyanad Pathanapuram, Pariappally etc. through fishermen/fisher women/khudumbasree SHG's. Period of implementation is 2010-2014. Employment generated after completion will be 40. Total cost for setting up of all units would be Rs. 50 Lakhs.

6.2.11 Fish Meal Production Unit

Landed fish fetch maximum price when sold in fresh conditions. For several reasons, including non-availability of a ready market, lack of facilities for fast transportation or cold preservation, an

appreciable amount of fishes are lost due to wastage. More over an appreciable amount of trash fish which were brought as a by catch of trawlers were landed every day. The disposal of such waste fishes became a big problem in the landing centres and fishing harbours. These fish wastes can be utilized for the manufacturing of fish meal which is a highly nutritive product that makes an excellent poultry and animal feed.

Fish meal contains 55- 70% protein 2-15% oil / fat and 10-20% minerals. The protein of fish meal has high digestibility coefficient and contain practically all the essential amino acids. It is noted that eggs and milk production is sufficiently increased by the use of fish meal. It is proposed to start up 4 such fish meal production units one each at Thangassery, Sakthikulangara, Neendakara and Azheekal were the major fish landing is taking place. The proposal is to be implemented in 2009. The unit cost estimated is Rs. 2 lakhs. Employment generated after completion will be 4. Total Cost for all units would be Rs. 8 Lakhs.

6.2.12 Fish Silage Production Unit

The Sea food processing plant generates various kinds of waste during various stages. More than 10000 metric tons of cephalopod waste is generated annually in Kerala by the seafood processing industry. The disposal of these wastes is a severe problem faced by the sea food industry. Now the Central Institute of Fisheries Technology, Cochin has developed and perfected a new technology to produce fish silage from these cephalopod wastes.

Fish silage is a liquid product made from whole fish or parts of fish to which no other material has been added other than an acid and in which liquefaction of the fish mass is brought about by an enzyme already present in fish. The problem of handling this product was overcome by mixing rice bran and drying. The product has a protein content of 25-27 % with a pleasant smell and long storage life. The product can be used for poultry, quill, pig, cattle and fish feed formulation as a protein supplement in place of fish meal. The suggested locations for setting up of the units are Kollam Corporation and Neendakara. The unit cost is estimated as 2 lakh rupees and thus the total out lay is

Rs. 4 lakhs. 75 % of the unit cost is met by TEAP. The units will be established in 2008-09. Fisheries department will implement this proposal through SAF under the financial assistance of TEAP and with the technical support of CIFT. The selected women SHGs are beneficiaries. The components are; development of infrastructure, development of fish silage and training and extension. Detailed 5 day training will be imparted to the beneficiary group for skill up gradation, motivational marketing and managerial aspects. The year wise requirements of the funds are given in Appendix 38 -1.

6.2.13 Ready to Cook / Ready to Eat fish Product Making Unit

The importance of Women Employment has been widely discussed now a day. The marketing of fish and fish products is an avenue of immense employment potential for woman in general and fisher woman in particular. Fish vending, retail outlet for fresh and processed fish, processing groups, fish booth, ready to eat/ ready to cook fish product making units etc are some areas which can employ considerable woman labour. The instant food culture is now rampant in the state. Dressed small sized fishes, steaks, fillers, minced fish etc could be taken, added different spices and masala as per the recipes for different dishes and stored in frozen condition and could be sold as ready to cook products. Cutlets, pickles, fried fish, fish curries, canned fish products, etc are some of the ready to eat products that could be easily be marketed in urban and su-urban areas. The proposal envisages starting up ten such ready to cook / ready to eat fish product making units, one each at Karunagapally, Chavara, Neendakara, Sakthikulangara, Eravipuram, Mayyanad, and Paravoor and three units at Kollam Corporation.

The unit cost estimated is Rs. 3 Lakhs which includes the cost of a pick up vehicle for marketing and as such the total out lay is Rs. 50 lakhs. A subsidy at the rate of 50% will be provided by Fisheries Department/Matsyafed. The proposal will be credit linked. The beneficiaries will be selected among from the women SHGs with good performance. The suggested locations are at Karunagapally, Kollam Corporation, Paravoor, Thrikkadavoor, Neendakara, Alappadu and Mayyanad.

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Fisheries Department will implement this proposal either through Matsyafed or SAF in association with LSGI and with technical support of IFP / CIFT. The proposal will be implemented in 2009. The beneficiary groups will be trained well in the respective subjects (skill training, motivation, management training etc) with the help of CIFT, IFP, IHM and CT and Matsyafed. The year by requirement of the funds are given in Appendix 38 -1. Employment generated after completion will be 10.

6.2.14 Aqua / Fishery Stores

The district fisheries scenario takes a leap stride as an outcome of the Integrated District Fisheries Development Plan. Aquaculture, tourism fisheries, fish processing, fish marketing, fish value addition etc will be flourished in the recent years as envisaged in the Plan. As a result the demand for basic inputs and infrastructure facilities like fish seeds, medicines, manures, mahua oil cake, aquaculture equipments, nets, angling equipments, floats, sinkers, roaps, fish processing and marketing utensils, blowers, aerators, compressors, cold storage equipments, etc. will be at a high rate in the following years. At present there is no such facility provided in the district for the supply of all these inputs and facilities under a single umbrella. Such a facility, if set up will definitely cater all the needs of aquaculture, processing and marketing industry and the same will also be a highly remunerative / income generating venture for the entrepreneurs.

Under this circumstances it is proposed to start up Aqua / fishery store in places where key fisheries activities like aqua culture, fish processing, etc are performed, to provide all the required input/ infrastructure facilities under a 'single window'. The proposal envisages starting up 5 such units, one each at Karunagappally, Munrothuruthu, Kollam, Kottiyam and Neendakara. The unit cost estimated for such a centre is about Rs. 4 lakhs which includes a provision for a shop. Period of implementation is 2008-2010.

Fishermen/ fisher women SHG's or Co-operatives shall be as the beneficiaries. A subsidy at the rate of 50 % will be provided to the beneficiary group which will be met the concerned LSGI. The proposal will be credit linked. The components include development of

infrastructure facilities, procurement of inputs for sale and marketing. The year wise requirement of funds is given in Appendix 38 -1. Total cost for 5 units would be Rs. 20 Lakhs.

6.2.15 Live Fish Markets

The success of the fishing trade depends upon how efficient is the fish marketing system. It's utility and efficiency lies in safeguarding the interest not only of the trader but of the consumer as well. The trader must endeavour for maximum production, best quality of commodity and its timely supply at reasonable cost. Fish is a highly perishable commodity and traders often experience losses due to wastage.

'Live fish marketing' is a solution for this and it always satisfies the standards of the modern developed societies. If facilities for keeping fishes in live condition are provided to SHG's or Co-operatives this venture can create a new avocation in the field of employment generation. 'Live fish marketing' can be started at important cities/ town premises. It is proposed to start up 10 such live fish marketing centres one each at Karunagappally, Kollam, Kottarakkara, Punalur, Paravur, Sasthamkotta, Kundara, Kottiyam, Anchal and Parippally jn. The unit cost estimated is Rs. 5 lakhs. Total out lay is estimated as Rs. 50 lakhs.

Fisheries Department will implement the proposal through Fishermen\ Women SHG's, Fishermen Co-operatives, Private entrepreneurs etc. Beneficiary groups are selected and trained for keeping fish in live condition and quality assurance. The space required for the live fish marketing centres has to be provided by the concerned LSGIs in the public fish market they own. The technical support of FFDA, BFFDA, ADAK, Matsyafed etc should be ensured by Fisheries Department. Artificial pool facilities, Aeration and water circulation facilities, electric connectivity, drainage system, harvesting equipment etc should be provided to each centres. Fish for live marketing should be collected from the fish farmers. The proposal will be credit linked. Period of implementation is 2010-2014, @ 2 units per year. A subsidy @ 20% will be provided to each group. The year wise requirement of funds is given in Appendix 38 -1. Employment generated after completion will be 10.

6.3 Infrastructure for Research, Extension and Training

Proposals on infrastructure for Research, Extension and Training include Matsya Vikjana Kendram, establishment of new Matsyabhavans and infrastructure facilities for the exiting Matsyabhavans, Model Demonstration Fish Farm, establishment of Fisheries Research Laboratory, Fish Quarantine and Inspection Unit, Strengthening of Matsyabhavans as Knowledge Centres for Fishermen in Coastal Villages and Aqua Book Shelves.

6.3.1 Matsya Vikjana Kendram

Fishing is one of the most hazardous jobs in the world. Dangers in the sea often happen due to ignorance and carelessness. Given adequate precautions to such dangers the calamities can be controlled to a certain extent. In order to take adequate precautionary measures meaningful information and knowledge are required. Similarly over exploitation of the important fishery stocks, the introduction of unscientific gear and crafts, non eco-friendly fishing practices etc lead to deterioration of fishery wealth and to avoid them awareness programme should be take up to create awareness to the fisher folk in related subjects.

The ' Matsya vikjana kendram' proposal is envisaged to provide quick service to fishermen so that their safety in the sea is ensured, their income is increased, cost of fishing is reduced and conservation of the eco-system and fishery stocks is achieved. The Matsya vikjana kendram thus provide adequate support to fishermen for their over all development. The total out lay of the proposal is Rs. 30 lakhs.

The components include construction of a building, Satellite information like weather warning and remote sensing of fish shoal, wireless facilities, computer system with internet facilities, public addressing facilities, weather broad casting system, fisheries data resources, ham radio facilities, etc.

Period of implementation is 2008-2009. The proposal will be implemented by fisheries department in association with HED and with the technical support of NRSA, FSI, and Hydrological Survey Department. The center is proposed at

Neendakara. The land for the center is available with fisheries department. The entire cost of this proposal is met by this fisheries department. The year wise details of the fund requirement are given in Appendix 38 -1. Employment generated after completion will be 2.

6.3.2 Establishment of New Matsyabhavans and Infrastructure Facilities for the Existing Matsyabhavans

Decentralized planning launched by the State Government have brought about tremendous change in planning and development sector. In tune with department of fisheries also revamped its organizational structure and the root level machinery was strengthened. The proposal is to establish one Matsya bhavan in each panchayat (As per order No. 33/98/FandPD dated 31/7/1998 100 Matsyabhavans were established in each coastal Panchayat). Village level officers of the Matsyafed and Kerala Fishermen Welfare Fund Board are also associated with the Matsyabhavans.

The basic aim behind is to decentralize the administrative aspects and to establish a Single Window System' to assist the fisher folk and general public in all matters relating to fisheries. Accordingly in Kollam district 13 Matsyabhavans were established in the fisheries sector. Government also allotted Rs. 2.5 lakhs per Matsyabhavan to concerned local body to construct an office building to house the Matsyabhavan and buildings for 5 Matsyabhavans were constructed so far. The office buildings for the remaining 8 Matsyabhavans should be constructed on an urgent manner. It is also imperative to start new Matsyabhavans in the panchayats like Clappana, K.S. Puram, Sasthamkottah, Thekkumbhagam, East Kallada, Perinadu, Thrikkaruva, etc. The matter is before the Government for consideration. So there is a need for constructing 15 more office buildings to host Matsyabhavans.

The cost of constructing a Matsyabhavan building is estimated as Rs. 3 lakhs following the present rate. As such 45 lakh rupees will be needed to implement the proposal. The entire cost will be met by the Fisheries Department. The land shall be provided by the concerned LSGI. The suggested locations are at Kollam Corporation (Eravipuram, Sakthikulangara and Thangassery), Oachira, Alappadu,

Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagam, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad Chathanoor and Thodiyoor. Fisheries department will implement this proposal through LSGIs. The year wise requirements of the funds are given in Appendix 38 -1.

6.3.3 Model Demonstration Fish Farm

During the early sixties a major technological break through had been achieved in the field of Carp seed production and composite fish culture by Central Inland Fisheries Research Institute (CIFRI). But this has not reflected in the over all inland fish production. This led to the formation of FFDA in each district and the FFDA Kollam started in the year 1978. Since then, even though the agency had made remarkable efforts for popularizing the fresh water fish and shell fish farming by taking up various schemes under the assistance of Central and State governments, the final goal is still far away.

It was well recognized fact that expansion of aquaculture activity depends largely on the transfer of technology, exchange of information and provision of adequate extension support. At present the trainees of the agencies were brought to the neighboring districts to demonstrate various aquaculture practices because no such facility was available within the district.

To overcome this, it is proposed to set up a model demonstration fish farm under the ownership of FFDA, Kollam. The scheme is proposed to start up in Kovoora chira of Mayyanad Grama Panchayat. The total out lay of the proposal is estimated as 5 lakh rupees which will be shared by Fisheries Department and the LSGI. Fisheries Department will implement the scheme through FFDA/ADAK in association with Jilla Panchayat and Mayyanad Grama panchayat.

The components include reclamation of pond, weed eradication, silt removal, construction of watchman shed, installation of sluice, feed ramp, feed tray, drainage facility, etc. The year wise requirements of funds are given in Appendix 38 -1.

6.3.4 Establishment of Fisheries Research Laboratory

In order to ensure product quality there

is an imperative need to establish diagnostic laboratories in various locations with facilities to examine and monitor water quality parameters of farms. Attached to these labs, PCR test facilities will be provided for screening shrimp seeds free of viral infections and to stock quality seeds free from viral contamination.

The proposal is to create one such facility in public sector in the Kollam corporation area which may cater the entire demand of district. The service of these lab will be made available to farmers and others at reasonable rate. The total out lay of the proposal is Rs. 15 lakhs. The entire cost is met by Government of India. The land for this proposal is made available by the Fisheries department.

The lab will be set up during 2009-2011. Construction of labs building, procurement of lab equipments, setting up of the same and running of the lab are the components. The proposal is implemented by Fisheries department with the technical support of MPEDA, CMFRI, EIA, Pollution control board, etc. The year wise requirements of the funds are given in Appendix 38 -1. Employment generated after completion will be 5.

6.3.5 Fish Quarantine and Inspection Unit

Aquarium keeping has become a flourishing industry in the state. A great variety of ornamental fishes are imported from many countries to cater the demand. Introduction of exotic varieties of ornamentals should be based on strict quarantine measures in order to prevent disease spread and to conserve the bio diversity. Similarly many varieties of indigenous ornamental fishes were exported to foreign market. The quarantine check is needed for such lots, otherwise the lot may get rejected. In this context it is proposed to set up a fish quarantine and inspection unit under public sector in Kollam district to minimize the harmful effect of introducing exotic species and promotion of ornamental fish exports. The suggested location is at Kollam Corporation.

The unit shall be set up during 2010-2014, the land for the purpose shall be made available by the Fisheries department. The other components include building, water and aeration facilities, disease monitoring and pathological test facilities, disease treatment facilities, etc.

The total outlay of the proposal is Rs. 50 lakhs and it is shared by the Government of India and state Government in 4:1 ratio. The year wise details of the funds are given in Appendix 38 -1. Employment generated after completion will be 5.

6.3.6 Strengthening of Matsyabhavans as Knowledge Centres for Fishermen in Coastal Villages

Fishing is one of the most hazardous jobs in the world. Dangers in the sea often happen due to ignorance and carelessness. Given adequate precautions, such dangers and calamities can be controlled to certain extent. In order to take adequate precautionary measures meaningful information and knowledge are required. It is proposed to convert the Matsyabhavans in the district to knowledge centres to provide quick services to fishermen so that their safety in the sea is ensured, their income is increased and cost of fishing is reduced. Besides the centre will be provide information on the resume status of a particular fishery village of fishermen population, their socio-economic conditions, extent of indebtedness, etc.

Under this scheme each Matsyabhavan will be provided with computer with internet facility, wireless facilities, Ham radio facilities, etc. Connectivity with various Matsyabhavans as well as with various institutes like NRSA (National Remote Sensing Agency), Meteorological stations, Market information centres, Fisheries stations, Disaster management centres, Control Rooms etc can be established. The Matsyabhavan officer will be trained on all relevant aspects of functioning the knowledge centres. The total outlay for 20 Matsyabhavans is about Rs. 20 lakhs. The entire cost will be met by the department of fisheries.

Period of implementation is 2010-2011. Fisheries Department will implement the proposal. The assistance of reputed firm can be sought for establishing VHF radio system and computer system. The year wise details of the financial requirements are given in Appendix 38 -1.

6.3.7 Aqua Book Shelves

Government of Kerala has recently enunciated the State fisheries policy for responsible management and sustainable development of fisheries. For planning and implementation of fisheries schemes data and information are needed which include

the extent and quality of resource base, productivity efficiency of market system, social and institutional constraints, potential for supplementary economic activities etc. In the wake of decentralized planning and implementation at grass root level 40% of the total plan fund is transferred to the local bodies as untied funds.

In catering to the needs of the decentralized planning and implementation of fisheries sector schemes the organizational structure of the fisheries department was revamped by constituting Matsyabhavans as grass root level machinery of the department in the coastal panchayats. But fisheries sector by and large, had underperformed with poor planning and plan fund utilization. One of the main reasons attributed to this sad state of affairs was the poor performance of Matsyabhavans, due to lack of data, information and technical know how.

To overcome these difficulties it is proposed to strengthen each Matsyabhavan with basic data, information and other reliable technical information. The proposal envisages setting up an aqua book shelf in each matsyabhavan. Matsyabhavans at Oachira, Alappad, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagom, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Kollam Corporation (Eravipuram, Sakthikulangara, Thangassery), Chathanloor, Thodiyoor are to be covered during 2008-2011 period.

A total of Rs. 0.5 lakh is needed to implement one such unit. The entire cost of the proposal is met from the plan fund of the concerned local bodies.

6.4 Other Infrastructure

Proposals on 'Other Infrastructure' include Setting up of Feed Mills, Establishment of Inland Fish Landing Centers, Establishment of Boat Berthing Facilities, Net Mending Unit, Fisheries Roads and Establishment of Guide Lights.

6.4.1 Setting up of Feed Mills

Quality feed is one of the major inputs for the development of the aqua sector. Catering to the increasing demand for feed for various aquaculture systems, more number of feed mills will be established. At

present the district has no such facilities. The proposal is to establish a medium level feed mill at Neendakara/Thekkumbhagom Grama panchayat under private entrepreneurship. Financial assistance in the form of subsidy will be extended to the venture. If necessary, consultancy service will also be made available. The total outlay of the proposal is Rs 10 lakh and a subsidy of Rs 2 lakhs will be available to the entrepreneur. The technology is available with CMFRI, Kochi. The proposal will be credit linked. Period of implementation is 2009-2010.

The components include selection of beneficiaries, training of beneficiaries, construction of infrastructure facilities, procurement and installation of machineries, procurement of raw materials, production of feeds, etc. Such a programme is expected to increase the availability of feeds at reasonable price to farmers. The year wise requirement of the fund is given in Appendix 38 -1. Employment generated after completion will be 5.

6.4.2 Establishment of Inland Fish Landing Centres

The fishes caught by traditional fishermen of the inland sector is landed at certain locations (Kadavu), which have neither jetties nor any other facilities. The fishermen have to sail long distances to these points from the fishing operation ground. Lot of time and energy is exhausted for this. So, new fish landing centers should be established in the inland fisheries sector to facilitate safe landing of canoes and hygienic handling of fish. It is proposed to establish a total of 10 new inland fish landing centers viz. 1 at Karunagapally vattakayal area, 7 at various parts of Ashtamudi kayal and 2 at Paravur Kayal. The proposal is taken up as joint venture by the Fisheries department and concerned local body. The land will be provided by the local body where Fisheries department construct the facilities through the HED / PWD. The unit cost estimated is Rs. 5 lakhs with outlay Rs. 50 lakhs. The LSGIs covered are Kollam Corporation, Chavara, Neendakara, Paravoor, Thekkumbhagom, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Perayam, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad and Chathanloor.

Period of implementation is 2009-2013. The LSGI procures 5 cents land in the identified area where road facilities are available. The fisheries Dpt. construct the building which includes auction hall, gear repairing area, craft-gear store facilities, drainage, water and electric connectivity etc., with the technical support of Harbour Engineering Department or PWD. User fee can be collected from the fishermen. The cleaning and maintenance of the landing centers can be entrusted to fishermen society. The year wise details of the fund requirement are given in Appendix 38 -1.

6.4.3 Establishment of Boat Berthing Facilities

A total of 1200 mechanized fishing boats and 74 Thanguvallom fitted with in board engines are operated at Kollam base. Of this about 95% are operated from Neendakara port. At present these boats, after fishing operation are berthed in the jetties of the south channel from Neendakara Bridge to Thoppil kadava area. The south channel is very narrow compared to North Channel and the arrays of berthed boats often make hindrance to the water transport and fishing operations. Several confrontations arose because of this. In the north channel there is no such berthing facility available now. The proposal is to establish berthing facilities in the north channel from Neendakara Bridge to Dalavapuram and some other locations in the Chavara Kayal with an outlay of Rs. 20 lakhs. This proposal can be implemented along with the dredging proposal. The suggested locations are at Thrikkaruva, Thekkumbhagom, Chavara and Neendakara.

Period of implementation is 2010-2013. Fisheries Dpt. will be the implementing agency and the cost is met by the Govt. of India. The proposal will be implemented through HED. The components include detailed plan and estimate preparation, tendering the works, construction and other civil works, etc. The year wise details of the financial requirements are given in Appendix 38 -1.

6.4.4 Net Mending Unit

The coastal seas, extensive net work of brackish water area and the rivers and inland water bodies offer immense potential for capture fisheries in the District. At present there are about 1200 mechanized boats, 100 Thanguvallom fitted either with

OMB or IBM, 1000 MPCs propelled with OBM, 600 stake nets and 10000 free nets engaged in fishing in the District. No ready made gears are available in the market for any such operations. The gears should be fabricated by using webbings, nylon and coir ropes, floats and sinkers, etc. Similarly regular using of gears make them damage and this can be made for further use by repairing it. More over code end is an integral part of trawl nets. This also should be fabricated through hand making.

All these offer immense potential for a remunerative opportunity for those who are engaged. At present the net merchants bring webbing to the fishermen houses for fabricating code end, cast net, gill net, and recollect it by paying a nominal amount to them. Generally fisher women had taken this opportunity as a part time avocation. If facilities and financial assistance are provided to the fisher women SHGs, they can adopt this as an employment.

The proposal envisages providing a common facility centre (CFC) in fishing village for working, storing and marketing the code ends and other nets fabricated by fisher women SHGs. The individual SHGs were provided with financial support to procure raw materials for net mending and net making. The common facility centre (CFC) should have a plinth area of about 500 sq. m. and with adequate infrastructure facilities. The unit cost for CFC is estimated as Rs.1 lakh. At a time 5 SHGs can work in a CFC. The land for CFC should be provided by the concerned LSGI. The individual SHGs were provided with a working capital of Rs.4000/-. The suggested locations are at, Kollam Corporation, Alappad, Neendakara and Thekkumbhagom. Period of implementation is 2010-2014. It is proposed to start 20 such CFCs in Alappadu, Karunagapally, Chavara, Neendakara, Mayyanad panchayats, Kollam Corporation and Paravur municipality. Thus 100 SHGs will be benefited by this Scheme. As such the total outlay of Rs. 24 lakhs will be needed every year which include Rs. 20 lakhs for the CPC and Rs. 4 lakhs as working capital for SHGs. The entire cost will be met by the Fisheries department through SAF. Employment generated after completion will be 100.

6.4.5 Fisheries Roads

When compared to the urban areas coastal fishing villages do not have proper

access by roads. Roads form a vital link in the movements of fish and fishery products and establish connectivity with fishing harbours, landing centres and markets. On consideration of the importance of fisheries roads in the infrastructure development for marketing and transportation of fish, Department of fisheries have initiated to construct roads, which connect fishing landing centres, fish markets, fishermen colonies etc, to main roads or fishing harbours etc. in the name 'Fisheries roads'. The suggested locations are at Oachira, Alappadu, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkottah, Thekkumbhagom, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Kollam Corporation and Chathannoor.

Period of implementation is 2008-2022. The creation of these roads greatly facilitate hygienic handling and quick transport of fish. The present proposal is to construct 15 km roads in the next 15 years at the rate of 1km \ year. In the first years it is proposed to construct all the 15km of roads except final metaling and tarring at the rate of 3km per year and in the next 10 years the metaling and tarring will be completed. The unit cost of roads will be Rs.10lakhs / km.

The components include identification of the roads to be constructed, acquisition of land, clearness of site, development of roads etc. The fisheries Department will implement the proposal in association with the concerned LSGI / HED / PWD. The year wise requirement of the funds is given in Appendix 38 -1.

6.4.6 Establishment of Guide Lights

Guide lights are very useful to fishermen to return to their destination during night hours. Hence the State Government constructed 10 guide lights during 1960 through public works department. Many of them are now not functioning and the department planed to construct new guide lights in the premise of the new fishing harbours and landing centres. It is proposed to construct 8 medium type guide lights in the newly proposed inland fish landing centres and large type at Azheekal fishing

harbour. The total outlay of the proposal is estimated as Rs.50lakh and entire cost is to be met by the department of fisheries. The suggested locations are at Thrikkaruva, Thekkumbhagam, Chavara, Neendakara, Alappad and Paravoor Grama Panchayats.

Period of implementation is 2008-2014. The proposal will be implemented by Department of fisheries in association with LSGI's and with the technical support from Keltron and HED. The construction of the guide lights according to the new design will be done by HED and the electrification and lighting work will be executed by Keltron. The year wise details of the funds are given in Appendix 38 -1.

7. Proposals for Fisher Folk Welfare

Proposals for fisher folk welfare include Fishermen Housing Scheme, Providing Land to Landless Fishermen, Providing Assistance to Fishermen House Renovation, Providing Sanitation Facilities to Fishermen Houses, Fishermen House Electrification, Roof top Rain water Harvesting For Fisher House Holds, Saving Cum Relief Scheme, Sea Rescue Squad, Educational Concession to Fisher Folk, Maintenance of Karunagappally Regional Fisheries Technical High School, Free Ration to the Fishermen of Mechanized Boats and Allied Worker at the Fishing Harbours during trawl ban period, Kerosene Subsidy for Fishing, Fishermen Development Rebate on HSD Oil, Providing LPG Kit to OBM Based Marine Plywood Canoes, Providing Solar Lamps to MPC's, Providing GPS and Wireless Sets to the Small Mechanised Fishing Vessel, Providing Assistance to Fishermen for Treatment of Fatal Diseases, Fishermen Old Age Pension, Fishermen Group Insurance Scheme, Fishermen Personal Accident Insurance Scheme, Matsyafed Input Security Scheme, Providing Subsidy to Suitable Components of Fishing Gear, and Scheme for Motorisation of Country Craft.

7.1 Fishermen Housing Scheme

The fishermen are compelled to live close to the sea. This results in cluster settlements which often look like an urban slum. Owing to the general socio-economic backwardness, these people are able to build semi /fully thatched houses only. These houses are often prone to the

vagaries of rough sea, strong wind, heavy rain etc. It is estimated that, up to 20% of the houses are prone to sea erosion during monsoon season. In Kollam district, the total number of fishermen houses is about 24,000. Out of these 30% houses are in good condition, 48% in improvable condition and remaining 22% are in bad condition. All these warrants programmes to solve the acute housing problem prevalent among the fishermen.

The proposal is to provide a housing grant of Rs. 40,000/- to the fishermen not possessing a pucca house by availing assistance from National Fishermen Welfare Fund. A total of 3000 fishermen will be benefited by this scheme over a period of 15 years at the rate of 200 houses per year. A total of Rs. 120 lakhs will be needed for the implementation of the scheme. The total outlay of the proposal is 3600 lakh rupees. The LSGIs covered are; Oachira, Alappad, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagam, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Kollam Corporation, Chathannoor and Thodiyoor.

Scheme components include identification and selection of beneficiaries for each year, agreement execution with beneficiaries, availing the housing grant amount in 2 equal installment, stage verification and reporting etc. The year wise details of the fund required are given in Appendix 38 -1. Fisheries department is the implementing agency of this programme.

7.2 Proposal for Providing Land to Landless Fishermen

Compelled by the 'way of life' the fishermen always try to live very close to the sea and for that they unauthorisingly occupy the land beyond the cadastral survey and build small thatched houses there. A very recent survey made by the department of fisheries revealed that around 22% of total fisher-households do not possess their own plots. The assignment of title deeds to the fisher folk is yet to become a reality. This is a major constraint for extending the coverage of departmental assistance to these people and also become hurdles to availing institutional

finance.

To overcome this, a scheme is proposed for providing 3 cent land to each landless fishermen family. A total of 3000 fishermen family in the district will be benefited by this scheme at the rate of 200 family per year over a period of 15 years. The total outlay estimated for the proposal is Rs. 2250 lakhs. The entire cost is to be met by the state Govt. The LSGIs selected are Kollam Corporation, Oachira, Alappadu, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagam, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Chathannoor and Thodiyoor.

The scheme components include identification and selection of beneficiaries for each year, agreement execution with the beneficiaries, land acquisition through Revenue Department, handing over the land to the beneficiaries etc. The proposal will be implemented by the Fisheries department in association with LSGI's and Revenue Department. The year wise requirement of the funds is given in Appendix 38 -1.

7.3 Scheme for Providing Assistance to Fishermen for House Renovation

The socio-economic condition of the fisher folk is deplorably poor when compared to the general sector. Owing to the general socio-economic backwardness these people are able to build only low cost houses using cheap and low quality building materials and accessories. The result is that these houses become dilapidated at the faster rate. A recent survey revealed that, about 48% of the fishermen houses are in such a condition which can be improved, if proper repair work or maintenance are done. The proposal is to provide assistance to 3000 fishermen households for house renovation over a period of 15 years at the rate of 200 houses per year. The unit cost estimated is Rs. 4000/- per house of which 50% is provided as subsidy. The required total outlay is Rs. 1200 lakhs. The LSGIs included are; Kollam Corporation, Oachira, Alappad, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagam,

Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Chathanoor and Thodiyoor.

Department of fisheries will implement this proposal through Coastal area Development Agency (CDA) in association with LSGI's. The components include sensitization of the programme, identification and selection of beneficiaries, agreement execution with beneficiaries, conducting repair works by the beneficiary, stage verification, providing assistance in 2 equal instalments etc. The year wise requirement of the funds is given in Appendix 38 -1.

7.4 Scheme for Providing Sanitation Facilities to Fishermen Houses

Fishermen settlements generally lack latrine facilities. Lack of sanitation facilities is a serious problem causing health hazards in the coastal area. Apart from sanitation, fishermen especially women are denied privacy which is a basic human need. Therefore any coastal housing programme meant for fishermen should invariably include provisions for toilet with water supply arrangements.

A recent survey conducted by fisheries department revealed that 12 % of the fishermen households totally lack any kind of latrine facilities. The open sea shore where the fish landings take place is used by the marine fisher folk for their toilet purpose. This makes the entire coast unhygienic.

In order to overcome this it is proposed to provide latrine facilities in fishermen houses, which lack such facility. The unit cost estimated is Rs. 10,000/- of which 50 % shall be provided as subsidy by fisheries department. The LSGIs covered are; Kollam Corporation, Paravoor Municipality, Oachira, Alappad, Karunagappally, Panmana, Chavara, Neendakara, Thevalakkara, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagom, Thrikkaruva, Perinadu, Kundara, Panayam, Munro Island, E.Kallada, Kundara, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad and Thodiyoor

Period of implementation is 2008-2022. The components include identification and selection of beneficiaries, agreement execution with the beneficiaries, procurement of ISI standard materials

and construction of latrine, stage verification, providing subsidy in 2 equal instalments, etc. The construction part will be completed by the beneficiary himself. The fisheries department will implement the proposal in association with LSGI's. The year wise requirement of the fund needed is given in Appendix 38 -1.

7.5 Scheme for Fishermen House Electrification

The fishing villages are lagging behind with regard to electrification of houses. Only 77% of fishermen households are electrified. In the absence of electric connection fishermen use Kerosene for lighting and cooking. Their children are deprived of the minimum facility for reading.

In order to overcome this, it is proposed to provide financial assistance for electrifying the non electrified houses of the fishermen in the district. The unit cost estimated is Rs. 3000/- Fishermen households will be electrified under this scheme over a period of 15 years at the rate of 200 households per year. Total outlay proposed is Rs. 240 lakhs . The departmental share is Rs. 120 lakhs. The suggested locations are at Kollam Corporation, Oachira, Alappadu, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagom, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Chathanoor and Thodiyoor

Department of fisheries will implement this proposal (in association with LSGI and KSEB) through the Coastal Area Development Agency. The components include sensitization of the programme, identification and selection of beneficiaries, agreement execution with beneficiaries work by the beneficiary, stage verification, providing assistance in 2 equal instalments etc. The year wise requirement of the funds is given in Appendix 38 -1.

7.6 Roof top Rain Water Harvesting for Fisher Households

More than 50% of the fishermen households in the district do not have safe drinking water supply. The result is that the fishermen often become the victims of several fatal diseases like cholera, typhoid, dysentery etc. Clean drinking water is a basic requirement to

be essentially provided to fishermen. Roof top rain water harvesting is generally accepted as available and sustainable source of safe drinking water. A scheme for harvesting rain water from roof top of house is proposed. The cost of construction of 10,000 liters capacity unit is estimated to be Rs. 20,000/- . The materials for the construction will be selected according to ISI specifications.

It is proposed to provide rain water harvesting facilities to 6000 fishermen houses over a period of 15 years at the rate of 400 units per year. Total outlay of the proposal is Rs. 1200 lakhs. A subsidy will be provided at the rate of 75%. The entire cost of the proposal will be met the department of fisheries. The suggested locations are at Kollam Corporation, Oachira, Alappadu, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagom, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad and Thodiyoor

The components include identification and selection of beneficiaries, agreement execution with the beneficiaries, procurement of ISI standard materials and construction of rain water harvesting facilities etc. The fisheries department will implement the proposal in association with LSGI's, Jananidhi, HED \ PWD etc. The year wise requirement of the fund needed is given in Appendix 38 -1.

7.7 Savings Cum Relief Scheme

The socio-economic condition of the fisher folk in the district is pitiable when compared to the general sections of the population. Fisher folk communities are forced to surmount the vagaries of nature while earning their means of livelihood from the bounties of the sea and other water bodies. However they are satisfied with its blessing irrespective of realizing very meagre and fluctuating income. The right for first marketing is not vested with the fishermen. The commission agents are making undue advantages at the expense of the fishermen. Moreover alcoholism in fishermen community is very high compared to any other group. The major portions of men's earning are spent in liquor shops and bars. All these factors are testimonial to the general backwardness

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and indebtedness among the fishermen population.

With an intention to promote the savings habit of fisher folk, Department of Fisheries, has taken up a programme viz 'Saving-cum-Relief Scheme'. As per the scheme, during the seasons of about eight months a deposit of Rs.75/- per month is collected from each fisherman belongs to marine sector. In the inland sector, the collection is for 9 month at the rate of Rs.50/-. An equal amount is deposited both by the State and the Central Governments which will be shared in 25:25 ratio. During the lean fishing season, this amount will be distributed to each fishermen @ Rs.300/- minimum for 4 months in the marine sector and for 3 months in the inland sector. There are about 21000 marine fishermen and 1000 inland fishermen who enjoy this scheme on an annual basis. As such the total out lay of the proposal is Rs. 3900 lakhs.

The LSGIs covered are Kollam Corporation, Oachira, Alappadu, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagam, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Chathannoor and Thodiyoor.

Fisheries Department will implement the proposal through Matsyabhavan. Application for the scheme is received by the Matsyabhavan officer, who receives the share of qualified beneficiaries and deposit it in the bank account. The year wise requirements of the funds are given in Appendix 38 -1.

7.8 Sea Rescue Squad

Due to the peculiar oceanographic and climatic conditions prevailing in Kerala coast mishaps at sea particularly during monsoon season involving the lives and properties of fishermen are frequent. The weather warnings put out by the Department of Fisheries to dissuade the fishermen setting out to the turbulent sea often go unheeded. The incident of fishermen going estuary across the ocean, pulled away by strong currents and landing in neighboring coastal countries like Sri Lanka, Maldives are not rare. This emphasizes the need to implement programmes to ensure the safety of fishermen while fishing at sea with the

participation of local community and hence the proposal. The total out lay of the proposal is estimated as Rs.50 lakhs. The suggested location is at Neendakara Grama Panchayat. The scheme implemented by the Fisheries Department, in association with coast guard and Navy. The components include procurement of a boat with 70' OAL, installation of modern equipments like GPS, Radar and other sea safety and rescue equipments, scuba diving facilities etc, recruitment of young divers and boat staffs from the coastal fishermen community including training, rescue operation with the help of Navy etc. The entire cost for the proposal will be met by the Department of fisheries. The year wise details of the fund requirement are given in Appendix 38 -1. Employment generated after completion will be 10.

7.9 Educational Concession to Fisher Folk

Kerala's efforts in making basic education facilities accessible to large majority of the people are well known. Literacy movement in Kerala resulted in increase in literacy rate of the general population. The State has a unique position in the scenario of education in the country. However if we examine the status of fisheries sector, it is evident that the sector is always the 'outliers' of the well proclaimed "Kerala Model". The percentage of dropouts in this sector is relatively high.

Department of Fisheries is implementing a major scheme-"Educational concession to fisher folk" for providing education to their children. 'Educational concession includes school fee, library fee, examination fee, mess allowance, boarding charges etc. Educational concessions are being given to students from primary schools to post graduate levels. Studies for professional courses are also covered under this scheme. A sum of Rs. 90 lakhs is needed every year for the district to meet the demand. All coastal LSGIs viz Kollam Corporation Oachira, Alappadu, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagam, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Chathannoor and Thodiyoor are

covered.

Fisheries department is the implementing Agency. Application for availing the benefit of the scheme is raised through the head of the educational institutions where the children of the fishermen are studying. The application should contain a certificate obtained from the fishery officer of the Kerala Fishermen Welfare Fund Board indicating the authenticity of fishermen. The Deputy Director of fisheries scrutinizes the application for its merits and allots the amount to concerned educational institutions. The head of the institution disburse the amount to the incumbents. The year wise details of the funds are given in Appendix 38 -1.

7.10 Maintenance of Karunagappally Regional Fisheries Technical High School

The fishermen population is left behind in the process of attaining the general literacy levels in Kerala. The drop out of fishermen children from primary school level is very high. About 92% of the fishing villages have schools right in the village. However most of the village's fishermen children do not attend their classes regularly. They appear more regularly to assist their elders in fishing rather than in classroom. Having recognized the importance of education in emancipating fishermen from the clutches of poverty and exploration the State Govt. started "Fisheries Technical Schools" under the Department of Fisheries. These schools are provided with free boarding and lodging facilities. Boarders are given free tuition during the early morning and late evening hours. Fisheries science is taught as a special subject out and above the syllabus. TV and VCR facilities, Laboratory, Library, museums, Computer facilities are provided attached to these schools.

In Kollam District RFTHS is situated at Karunagappally Grama Panchayat. The administrative control is now handed over to Jilla Panchayat. A total of 8 lakh rupees is allotted from the fisheries department every year for the proper maintenance of the school and as mess allowance. The remaining requirements were met by the Jilla panchayat.

Agencies involved are Fisheries department, Jilla panchayat and education

department. The Fisheries department will allot and transfer the funds to Jilla Panchayat. Both the staff of Education and Fisheries Department should engage in curriculum activities. The year wise requirements of the funds are given in Appendix 38 -1.

7.11 Free Ration to The Fishermen of Mechanized Boats and Allied Workers at the Fishing Harbours During Trawl Ban Period

Kerala fisheries sector witnessed a sea change as mechanised bottom trawling was introduced as a part of the Indo Norwegian Project in early 50's. There were soon experienced a sudden spurt in the number of trawlers and it was noticed that there were an over all decline in the total marine fish landings. This was directly attributed to the unscientific and non eco friendly fishing practices by the trawlers. The clash between the traditional and mechanised sector became very serious which also create many law and order problems. State government at this stage ordered to ban bottom trawling during monsoon period according to the provision contained in the KMFR Act. Thus from 1987 onwards 'trawl ban' is practised in Kerala.

But soon hues and cries arose from different corners to provide welfare measures to those who unemployed due to the introduction of trawl ban. It is true that about 0.25 lakh active fishermen great many numbers of allied workers were unemployed for these ban periods. The matter is sympathetically considered by the government and decided to grant free ration to those who unemployed due to the introduction of bottom trawling. Accordingly Government issue orders for sanctioning free ration every year in lieu with the ban period and also issue detailed guide lines for the implementation of the scheme.

As per this, free ration will be distributed to the fish workers of mechanised boats and allied workers of the fishing harbours and all peeling sheds who have become unemployed during the ban period (Usually for 47 days). The eligibility for free ration will be limited to the fish workers of the fishing vessels fitted with above 10 Hp engines. The free ration consists of rice and wheat as per the existing norms adopted by Civil Supplies Department.

The application for free ration shall be

submitted in prescribed form and recommended by the owners of the mechanised boats / fishing vessels fitted with above 10 Hp engine to the deputy Director of Fisheries / Asst. Director of Fisheries / Matsyabhavan officers / Fund Board Officers / harbour Engineering Department Officers etc. The owner of mechanised boat can recommend a maximum of 8 workers per boat. The owners of the small fishing vessels fitted with above 10 HP Engine can receive a maximum of 6 workers and the owners of a large Thanguvallom can recommend 20 to 35 workers per vessels depending on the size of the vessels provided. Deputy Director of Fisheries scrutinizes the application and accord sanction for free ration. He prepares the list of beneficiaries and forwards it to the district supply officer with required funds. The district supply Officer distributes the free ration through the ration outlets of the beneficiaries concerned.

At present about 6000 numbers of fish workers and 8000 numbers of allied workers were enjoyed this scheme in the district and as such Rs. 10,00,000/- will be needed to meet the expenses of the scheme in the district. This amount was sanctioned from the State fisheries department. The year wise requirement of the fund was given annexure I.

7.12 Kerosene Subsidy for Fishing

The introduction of mechanized bottom trawling to exploit marine fishery resources beyond the traditional fishing grounds around early fifties was an important event in the Kerala's capture fisheries. The fishing technique meant primarily for harvesting shrimp gained wide popularity and resulted in a sudden spurt of mechanized trawlers in the State. But very soon there experienced an over all decline in total landings of fish. This is directly attributed to the intensive and indiscriminate fishing practices of the trawlers. Intra sectoral and inter sectoral conflicts arose. The increase in the number of mechanized crafts and the nature of fishing adversely affect the per capita income of the trawlers also. As a whole the fishing will become highly expensive.

The administrators and planners rethink at this juncture and the issue of registration and license was ceased and new schemes

introduced for popularizing new types fishing craft which have been found to be more efficient and cheap like Marine plywood Canoes (MPC). The MPC are propelled by out board motors below 10 Hp. The make of these OBM's are Mariner, Yamaha or Suzuki. All these motors used kerosene as the fuel.

As the fishermen belong to one of the weakest section, the State government implements many welfare schemes to provide assistance these sector. Kerosene subsidy to fishermen who use OBM for fishing purpose is such a kind. The kerosene permit for 125 litre/month is issued to each registered fishermen who possess OBM. Rs 13 per litre are provided as subsidy. A total of 1200 such permits were issued so far in the district. As such about 2.4 crore rupees will be needed every year for the implementation of this scheme in the district. The coastal LSGIs viz Kollam Corporation, Paravoor, Mayyanad, Neendakara, Chavara, Panmana, Alappadu, Karunagapally, K.S.Puram and Clappana are covered under this scheme.

This is totally a centrally sponsored scheme. The State Government had implemented this scheme through the Civil Supplies Department in association with Fisheries Department and Matsyafed. For the implementation of the scheme a combined physical verification was exercised on the performance of each motor on an annual basis by the authorized officers of Civil Supplies and Fisheries Department and Matsyafed. The qualifiers were provided with a green card and on the basis of this kerosene are allotted from the concerned retail depot. Total cost for the scheme would be Rs. 3600 Lakhs.

7.13 Fishermen Development Rebate on HSD Oil

Government of India have issued administrative sanction vide order No.33015- 5 / 2002 FY (H) dated. 20/02/ 04 for the scheme "Fishermen Development Rebate on HSD oil". The scheme envisages reimbursing the central excise duty on HSD @ Rs1.50 per litre, supplied to mechanized fishing vessel below 20 m OAL plying the coastal belt of Kerala.

A total of 1000 litres of diesels is

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required for 20 days fishing operation by a mechanized fishing vessel @ 50 litre/ day. As such the quantity of diesel required per boat for 10 months fishing operation will be 10,000 litres. Thus a total of Rs. 15,000/- will be reimbursed to each registered mechanized boat below 20 m OAL which is added to the fishing fleet on or before 1/04/2002 @ Rs1500/- month. No subsidy will be released during fishing ban period.

The rebate would be shared on 80:20 basis between the central and state Governments, where the tax is levied. About 500 mechanized fishing vessels will be benefited by this scheme in the District. Thus the total out lay of the proposal is estimated as Rs. 1125 lakhs.

Fisheries Department will implement the scheme through Matsyabhavan. Owners of the fishing boats below 20 m OAL having registration certificate from department of fisheries are eligible to apply for the benefit of the scheme. They should make their contribution to Kerala Fishermen Welfare Fund Board. Director of fisheries will approve the authorized diesel outlets recommended by the Deputy Director of Fisheries. The selected beneficiaries should open a bank account with the nationalized bank.

The Matsyabhavan officers shall verify the claims of the beneficiaries and forward to Deputy Director of Fisheries who shall reimburse the amount. The year wise requirements of the funds are given in Appendix 38 -1.

7.14 Providing LPG Kit to OBM Based Marine Plywood Canoes

Kerala fishing industry has undergone a sea change by the introduction of 'Marine Plywood Canoe' (MPC) under the assistance of 'Bay of Bengal programme' initiated by FAO, after the general mechanization scheme initiated by Indo Norwegian Proposal (INP). By this programme even a marginal fisherman who can't afford a mechanized boat can afford a MPC which can be propelled by using Out Board Engine (OBM). MPC's fitted with OBM are found to be more efficient, cheap and they became popular at a faster rate. The make of OBMs used by the fishermen are Suzuki, Yamaha or Mariner. The fuel for these OBM is Kerosene and petrol. In the beginning, these fuels were available at a cheaper

rate. The situation has now changed drastically. High price for petrol and kerosene and low Kerosene quota make the fishing operation less economic.

To overcome this, it is proposed to provide LPG Kit to such MPC fishing units. These are about 1000 number of MPCs are operated at Kollam base. For the installation of LPG Kit there need a slight modification with each MPC. The unit cost for remolding and providing LPG Kit to MPC is about Rs. 16000/-. A subsidy will be provided at the rate of 25%. The total out lay of the proposal is Rs. 160 lakhs. All the 1000 MPC will be provided with LPG Kit over a period of 5 years at the rate of 200 unit per year. All MPCs operated at Kollam base will be covered.

Fisheries Department will implement the proposal through MATSYAFED in association with IOC and Financial Institutions. The proposal will be credit linked. The components include sensitization of the programme, identification and selection of the beneficiaries, agreement execution with beneficiaries, availing loan from Financial Institution, remolding of MPCs, installation of LPG Kit, fishing operation etc. The year wise details of fund requirement is given in Appendix 38 -1.

7.15 Scheme for Providing Solar Lamps to MPC's

A total of 1000 MPC's are operated at Kollam base. All these MPCs go for fishing operation twice daily viz at early morning and at late evening. During night hours these MPCs use 'Ranthal Vilakku' for lighting purpose. Kerosene is the fuel used for this 'Ranthals'. In the open market a single litre of Kerosene fetch Rs. 30/-. Usage of these kerosene based 'ranthals' in the rough and wavy sea is very risky. Under this circumstances it is advisable to use solar lights / lanterns instead of the Kerosene ranthals.

The proposal envisages providing 1000 solar lamps to MPC units. The unit cost for a single solar lamp is Rs. 4000/- and a subsidy will be provided at the rate of 50%. The total outlay of the proposal is Rs. 40 lakhs. The scheme will be implemented over a period of 2 years at the rate of 500 units per year.

The proposal will be implemented by the Fisheries Department either through

Coastal Area Development Agency or through Matsyafed and in association with ANERT and LSG's. The components include sensitization of the programme, selection of beneficiary for each year, distribution of the solar lamps etc. Only ISI certified products will be utilized for the purpose for which technical support of ANERT will be availed. The year wise details of fund requirements are given in Appendix 38 -1.

7.16 Providing GPS and Wireless Sets to the Small Mechanised Fishing Vessels

Almost 0.25 lakhs of fisher folk are engaged in fishing along 37 km coast line of the district for their livelihood. The incidents of fishermen going astray across the ocean, pulled away by strong current and wind and landing as far as in Srilanka or Male are not rare. These fishermen are caught in the turbulent sea after waging a traumatic battle for life, survive only to under interrogation and imprisonment in an alien land. This emphasize, the need for programmes to ensure safety of fishermen at sea.

Taking into consideration of all these it is proposed to provide GPS (Global Positioning System) and wireless sets to small mechanized fishing vessels on subsidy rates, so that fishermen can establish contact with land and other fishing boats in case of any emergency due to adverse weather condition etc. The proposal envisages, installation of GPS and wireless set on selected small mechanized fishing vessels below 20m length. The unit cost of one GPS and a wireless set workout to Rs.1.5 lakhs. Total outlay of the proposal is Rs. 1500 lakhs.

The proposal will be completed over a period of 10 years. A subsidy amount of Rs.0.5 lakh will be provided which will be shared by Government of India and the State in the rates 3:2. The proposal is credit linked.

The components include sensitization, identification and selection of beneficiaries, credit linking, procuring of GPS and wireless sets, releasing of the sets, training and functioning. The beneficiary should facilitate credit in his own risks. The proposal will be implemented by Fisheries Dept. The subsidy will be treated as back-ended subsidy. The year wise detailing of the financial requirement is given in Appendix 38 -1.

7.17 Scheme for Providing Assistance to Fishermen for Treatment of Fatal Diseases

The fishermen belong to one of the weakest sections of our society. The reason for the poor socio-economic condition of this section of the society is many folds. During off season and lean months as well as on special occasions like marriage, death, religious and social functions or for the treatment of diseases, the poor fishermen are forced to borrow heavily from the local money lenders. To provide relief to some extent the State Government has been implementing various welfare schemes for the fishermen.

One such scheme is the 'Financial Assistance for Treatment of fatal diseases'. The scheme is implemented by the KFWFB. The LSGIs covered are; Kollam Corporation, Oachira, Alappadu, Panmana, Chavara, Neendakara, Paravoor, Clappana, K.S.Puram, Sasthamkotta, Thekkumbhagom, Thrikkaruva, Panayam, Munro Island, E.Kallada, Kundara, Adichanalloor, W.Kallada, Trikkadavoor, Thevalakkara, Mayyanad, Chathanoor and Thodiyoor Grama Panchayats. Registered fishermen between the age of 23 and 60 years are eligible for the assistance. The maximum amount payable under this scheme is Rs.40000/-. Treatment of diseases like cancer, heart diseases, kidney diseases, brain tumour, dialysis, blood transfusion, heart open surgery etc are included under this scheme. 10 such cases are considered every year for assistance under this scheme from the district. As such a total of Rs. 4 lakhs will need to implement this scheme.

7.18 Fishermen Old Age Pension

Fishing and allied activities continue to be a way of life of vast majority of people belonging to the poor sections in the coastal areas of the district. Majority of fishermen are still continued to be poor, struggling to eke out a living from fishing activities even at their old age. The occupation of fishermen is highly hazardous and only healthy person can fight with vagaries of the sea. Getting old is huge hurdle in their way to winning the daily bread. Thus old age aggravate financial and health problems to this sector.

Considering the pathetic conditions of the aged fisher folk the State Government

launched and implemented a scheme called "Old age pension scheme" through Kerala Fishermen Welfare Fund Board. By this scheme every registered fishermen who attains the age of 60 years and whose annual income is below Rs. 5000/- is granted a monthly pension of Rs. 120/-. The numbers of pensioners in the District are around 6000. Total out lay for the proposal is Rs. 1305 lakhs.

Kerala Fishermen Welfare Fund Board is the implementing agency. The application for pension is received through the Fishery Office of the respective fishing village,. The Fishery Officer forwards it to the Commissioner of the Kerala Fishermen Welfare Fund Board for approval and allocation of fund. The disbursement of pension is effected through the Fishery Office. The year wise requirements of the funds are given in Appendix 38 -1.

7.19 Fishermen Group Insurance Scheme

Sea fishing is always a risk oriented job due to the unpredictable nature of tidal currents and waves. Mishaps in sea during post and pre monsoon are quite common in Kerala. For joining to the fishing operations the fishermen have to travel quite a long distance from the fishing village to the landing centres. Owing to the general backwardness they are unable to pay major share of there daily earning for transportation facilities and it is quite natural that they look for alternate cheap transportation facilities like open truck. Often these journey ends in accidents.

All these emphasize the need of a scheme to insure the life of the fishermen. The State Government implemented a scheme called "Fishermen Group Insurance Scheme" through the Kerala Fishermen Welfare Fund Board. By this Scheme an early premium of Rs. 20/- per registered fishermen between the age group 18 to 70 years is paid by Kerala Fishermen Welfare Fund Board to the insurance company. The amount of financial assistance is at the rate of Rs. 1 lakh for accidental death/Missing/ Permanent total disability and Rs. 0.5 lakh for permanent partial disability. About 30000 fisher folk were registered in the district and as such 6 lakh rupees is needed every year for the implementation of the scheme.

The proposal is implemented by the

Fisheries Department through Kerala Fishermen Welfare Fund Board and in association with New India Insurance Company. Roughly about 20 cases are reported in this respect every year in the district. The year wise requirements of funds are given in Appendix 38 -1.

7.20 Fishermen Personal Accident Insurance Scheme

The fishermen always have to face adverse weather conditions in their occupation. Accidents and deaths are a fellow companion to each fisherman. As the sector is socially and economically backward and such sudden demise of the sole bread winner of the family, may lead the family in utter poverty. In order to make a hand to the suffering family the state government implements a scheme called 'fishermen personal accident insurance scheme' through 'Matsyafed'. The scheme is extended for the fisher men members of the affiliated co-operatives. The scheme is implemented in collaboration with insurance companies by collecting a premium of Rs.60/-. The scheme provides a compensation of Rs. 1.5 lakh to the dependants of the fishermen, who die in accident. Loss of eyes or limbs, permanent, partial or total disabilities are also compensated for under this scheme. A total of 10000 fishermen are registered in primary co-operatives are the beneficiaries.

Fisheries department is implementing this scheme through Matsyafed. Only the members of the primary fishermen co-operative affiliated to Matsyafed are eligible for the benefit of this scheme.

7.21 Matsyafed Input Security Scheme

It is a well-known fact that the fishermen have to brave adverse weather conditions in their occupation. More over, the production inputs are always susceptible to loss. Since the capital investment of the fishing inputs is very high and fishermen can only fall back on debt once the inputs are damaged or lost. Hence insuring the inputs is essential. Under these circumstances the State Government introduced a new scheme for insuring the fishing inputs in collaboration with National Insurance Company. The scheme is implemented through Matsyafed. The insurance premium is 3 % of the cost of the production input. The coverage is for a

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continuous period of 3 years. The scheme demands a total of Rs. 5 lakhs per year for the district.

Fisheries Department implements this proposal through Matsyafed. The benefit of this scheme is extended only to the members of the affiliated primary co-operative societies. The scheme is implemented by collecting a nominal amount from the owners of the fishing inputs. If damages for inputs are reported, claims will be settled after joint verification of Matsyafed Officer and the representative of the insurance company. The year wise requirements of the funds are given in Appendix 38 -1.

7.22 Providing Subsidy to Suitable Components of Fishing Gear

The fisheries sector plays a vital role in the economy of the State by contributing 2% of the Gross Domestic Product. Despite this, the fishermen community continues to remain one of the most socially and economically backward sections of the society. The lack of basic infrastructure facilities coupled with exploitation has been instrumental for the general backwardness of the fisher folk. Owing to the economical backwardness, traditional fishermen are not in a position to own the fishing inputs. The commercial banks were not in a position to release loans to fishermen community. Quiet naturally the fishermen always approach middlemen for credit and falls into the clutches of indebtedness.

The objective of the scheme is to eliminate the exploitation of the fishermen by middle men and bring about change in the nature of production inputs and ownership patterns. The scheme provides a maximum subsidy of Rs. 6000/- per craft powered by OBM below 10 Hp for the purchase suitable complements of gear to traditional fishermen. The scheme targets about 100 traditional fishermen every year in the district and as such a total of 6 lakh

rupees is needed for the implementation of the scheme on an annual basis.

Fisheries Department is implementing this scheme through Matsyafed. Only members of the primary fishermen co-operatives affiliated to Matsyafed are eligible for the benefit of the scheme. Anticipated expenditure during plan period would be Rs. 90 Lakhs.

7.23 Scheme for Motorisation of Country Crafts

The marine fishery sector of the State has witnessed a series of advancement in fishing technology during the past few decades. There was sudden spurt in the number of mechanized boats in the State followed by the 'Mechanization Scheme'. Very soon the traditional sector began to feel the adverse effects of competition from the mechanized sector. In order to cop up with the mechanized sector, the scheme 'Motorization of country craft' was launched by the State Government through Matsyafed.

The scheme envisages distribution of out board engines below 10 Hp to traditional fishermen in a subsidized rate. As per the scheme subsidy at the rate of 50% of the cost of the OBM or Rs.20000/- whichever is less is passed to the traditional fishermen. This is a centrally sponsored scheme and the subsidy portion is met by the Central and State government in the ratio 50:50. As such a total of 25 units are motorized every year and for that a total of Rs. 5 lakhs is required in the district every year.

Fisheries Department is implementing this scheme through Matsyafed. Only members of the primary fishermen co-operatives affiliated to Matsyafed are eligible for the benefit of the scheme. Employment generated after completion will be 1500. Estimated expenditure during the plan period would be Rs. 75Lakhs.

8. Conclusion

Marine, fresh water, brackish water and Western Ghat fish diversity contribute to the fisheries wealth of the state and it

has an important role in modulating the economy of the state. The state receives a considerable income through export of fish and fishery products.

From time immemorial Kollam district has a unique position in the state's fisheries scenario. Now in order to augment the situation the present efforts through formulation of Integrated District Development Plan of which Fisheries Sector is a major component is a pathfinder. The developmental suggestions and proposals in this sector are almost in line with the State's Fisheries Policy. The developmental proposals are formulated in such a way that the capture based fishery will be sustained, Inland and Aquaculture production will be augmented in a most environment friendly manner and exports will gain a large stride which will give considerable momentum in the foreign exchange earnings. The district will attain self sufficiency in fish production and its utilization and effective measures will be taken up to conserve fish and fishery resources, development of the fisheries infrastructure and industrial fisheries. Socio economic upliftment of the dependent downtrodden, creation of alternative employments etc. will be attained.

By the implementation of these developmental proposals as described in a phased manner, the district will be in a position to achieve nearly 1 Lakh ton fish production at the end of 2015 and 2 lakh ton at the end of 2022. This provides a livelihood to 0.5 lakh people directly in the year 2015 and 0.7 lakh people in the year 2022. Over and above the key point suggested by the District Fisheries Policy as "Marine Export Zone" will be touched even before the completion of the implementation of the developmental suggestions and the District will attain the status as the Model Fishery District in the National level



Chapter 39

Industries

This chapter includes the development proposals of Industries sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the District Industries policy, by 2021 Kollam has to be converted into a destination of environment friendly agro processing and traditional industries while giving thrust to IT and health service sectors through the creation of skilled personnel. The strategies are

- I To develop agro and food processing industries

TM This is to be achieved through the development of agro bio based industries, fish processing units, dairy units, milk processing unit with chilling plant, food processing units and flour mills and curry powder manufacturing units, food parks etc.

- I To strengthen and modernize traditional industries

TM This is to be achieved through the development of mechanized coir manufacturing units, handloom industry renovation centre, clay based industries, value added cashew kernel units, handloom units, manufacturing of bamboo based products and handicrafts items, development of existing industries and starting of micro units

- I To develop Health Services industries

TM This is to be achieved through the development of public medical centre and bio medical industries and ayurvedic medicine manufacturing units

TM To develop knowledge based industries and services

TM This is to be achieved through the development of Technopark at Kundara and IT Park at Paravur

TM To revive and diversify closed and

defunct public enterprises

TM Revival of Premo Pipe Factory at Chavara, Rehabilitation of ALIND, Kerala Ceramics, Travancore Chemicals, Punalur Paper Mill and Travancore Plywood Industries Ltd., Punalur, revival of Pompsy Biscuit Manufacturing Unit, revival of Parvathy Mills and revival of other closed and defunct industries are proposed.

- I To create a pool of skilled human resource

TM This is to be achieved through the development of entrepreneurship development training centre and a tool room training centre

- I Other Proposals

TM Other proposals include new ventures like toy manufacturing, coir yarn manufacturing units, light engineering units, straw picture and screw pine products manufacturing units, note book manufacturing unit

and school bag manufacturing unit, wood based industries, rubber wood treatment plant, rubber based industries and development of existing clusters and Mini Industrial Estate, Nedugolam,

2. Proposals for Agriculture and Allied Processing Industries

2.1 Agro Bio Based Industries

Fairly a large number of people in Thevalakkara and West Kallada Grama Panchayats are depending upon coir industry for their livelihood. Coir pith dumped in bulk quantities in the coastal areas adversely affects the ecology of the locality.

Research and studies conducted by Coir Board has led to the utilisation of coir pith for the production of Briquettes, Design doors, partition boards etc.

In the light of the above findings it is proposed to start an industrial unit at Thevalakkara Panchayat. The land available with any of the coir cooperative society can be utilized for setting up the unit. Coir Board shall give required technical assistance. Other Infrastructural facilities shall be provided by District Panchayat. The Nationalized Banks in the area shall provide required working capital. The unit shall be established during 2009-2011 period.

It is expected that 30 persons can be given direct employment and another 100 families will be indirectly benefited by this unit. The unit can function in full swing by the year 2011. Power requirement for this proposal would be 15 KVA. The estimated cost for setting up of the unit would be Rs 10 Lakhs.

2.2 Fish Processing

Kollam District has a vast coastal belt covering mainly Kollam Corporation, Chavara, Neendakara, Alappad and Karunagappally Grama Panchayats. The main occupation of the people in these areas is fishing and related activities. At present the fishermen catch and sell fish in raw form without any value addition.

In the present scenario, there is ample scope for value added fish products. Based on the Development Concept, it is proposed to start 5 fish processing units each in Kollam Corporation, Alappad, Chavara, Karunagappally and Neendakara Grama Panchayats which have good potential as per the Sectoral

Analysis of Fisheries sector.

Considering the level of operation, an extent of 10 cents of land is required for setting up every unit. Thus an extent of 50 cents is enough for establishing 5 such units. An amount of Rs.10 Lakhs is estimated to be incurred for setting up each unit.

The roles of various agencies responsible for implementation of the proposal are as follows: LSGIs have to identify and acquire land. Jilla Panchayat has to arrange finance, through SHGs, for creating fixed assets. Nationalised Banks shall provide adequate working capital. District Industries Centre will arrange Licenses and Clearances through Single Window Clearance Board. Technical support will also be extended by DICs through agencies like CIFT, CFTRI, CMFRI, MPEDA etc. As per Article 6.1.5 of Chapter 38; Fisheries the technical support will be given by the Fisheries Dept.

The units shall be set up during 2008-2011 period. The proposal is expected to be completed in a period of 3 years in all the above LSGIs.

By the implementation of this scheme, value added fish products like fish pickles, ready to serve curries etc. worth Rs.132 Lakhs will be produced in the year 2011. The production in the year 2021 is proposed to touch 200 tons worth Rs.264 lakhs. This will generate direct employment for 50 persons in the year 2011 and through expansion, modernization and diversification direct employment generated would be 100 by the year 2021. The multiplier effect of employment would be 5 times the direct employment. Thus the total employment generated in 2011 would be 300 and by 2021 it is projected to be 600. This scheme will ensure regular employment throughout the year to the people involved in this activity. This can also improve the standard of living of the fishermen community. They can provide good education to their children as they earn a fixed income every month. This will liberate the fishermen from the crutches of seasonal income. Further the exploitation of middlemen in this sector can be avoided. Power requirement for this proposal would be 30 KVA.

The phasing of activities is given in Appendix 39-1.

2.3 Dairy Unit

According to the analysis of Animal

Husbandry sector, the milk production in the district is much lesser than the demand and the demand supply gap is filled by the neighboring States. Based on the District Development Concept the Animal Husbandry sector has, therefore, recommended a Mini Dairy unit at Mynagappally Grama Panchayat in Kollam District.

An extent of 50 cents of land is found to be enough for setting up this proposal. This can be arranged by Mynagappally Grama Panchayat on lease or by any other method. The Dairy Development Department, Mynagappally Grama Panchayat and District Industries Centre will identify the beneficiaries and Dairy Development Department shall purchase cows for the unit. The Animal Husbandry Department shall provide cattle feeds and medicines at subsidized rates. The cost of proposal is worked out to be Rs.10 lakhs and the proposal can be implemented in a period of one year. The finance shall be arranged by Nationalized Banks. The units shall be established during 2009-2011.

The proposal, on implementation, will provide employment to 7 persons in the initial stage. The unit can go for forward integration in the second year itself. It is expected that the unit will provide direct employment to 50 persons by the year 2021. The production of milk, at that time, will go up to 200000 liters worth Rs.44 lakhs. The production and sale of value added milk products is estimated to touch 500000 litres in 2021. Power requirement for this proposal would be 50 KVA. The phasing of activities is given in Appendix 39-1.

2.4 Milk processing unit with chilling plant

Milk processing is a lucrative industry. Other than the existing Milma Plant at Kollam Corporation, according to the Industries Sectoral analysis, it is seen that there is a scope for one more milk processing unit in the eastern parts of the District. Under the Multi Functional Zone, Anchal in Kollam District is an ideal location for setting up milk processing unit with chilling plant facility. Therefore such a unit is proposed in Anchal at a cost of Rs.1 crore.

Land to the extent of 2 Acres needed for this unit will be identified with the assistance of Anchal Grama Panchayat and

Dairy Development Department. Clearances will be issued by Health Department and Pollution Control Board for the functioning of this unit. The plant shall be set up during 2008-2012 period.

Finance for the proposal may be arranged by Jilla Panchayat, Anchal Block Panchayat and Anchal Grama Panchayat. Financial support may also be obtained from banks. The proposal can be completed in a period of 5 years or less. Skimmed milk to the tune of 730 lakh litres worth Rs.160 crore will be processed in the plant by the year 2021. The employment potential is proposed to be 50 Nos. on implementation i.e. in 2011. Around 5000 farmers will be benefited by this proposal initially itself. Considering the area limitations, the expansion may not be possible as cow rearing requires considerable land and other amenities. As per existing trend, large number of people is not taking up this lucrative activity. Therefore, by 2021, the total employment generated is expected to be 600 and beneficiaries would be at about 10000. This scheme shall be a replica of Anand model co-operative societies in our state. Power requirement for this proposal would be 50 KVA. The phasing of activities is given in Appendix 39-1.

2.5 Food Processing Unit

As per the Industries Sectoral analysis, the food processing Industry is growing at a rapid pace of around 4% annually. The most important asset to the industry is the work force employed. Currently food production and processing account for 26% of India's GDP and employs 60% of the work force. It is this industry that offers lot of scope to entrepreneurs for sustainable development. The Govt. of India is therefore committed to provide a thrust to the development of food processing industries in rural areas in order to increase the income of farmers, create employment opportunities, diversify the rural economy and increase rural industrialization. Keeping this in view and based on the sectoral analysis results, it is proposed to set up 12 micro food processing units. Of these 7 are suggested at Alayamon, Edamulakkal, Pathanapuram, Yeroor, Kadakkal, Ummannur and Vettikkavala Grama Panchayats in Agro Development Zone and 5 are suggested at Sooranad North, Sooranad South, Thodiyoor,

Kareepra and Kulakkada Grama Panchayats in Agro-allied Development Zone. Period of implementation is 2008-2011. As per Article 3.3.1, 3.4.1 and 3.6 of Chapter 34, there are proposals for productivity improvement, banana cultivation and pineapple cultivation respectively. The raw materials from these proposals can be processed in the food processing units suggested here.

An extent of 6 Acres of land is required to set up 12 units. Hence the investment outlay works out to Rs.120 lakhs. The land is expected to be identified and acquired in consultation with LSGIs. The source of finance can be from LSGIs and banks. This will create employment opportunities for 120 people in the initial period i.e. by 2011. Various food items worth Rs.2000 lakhs is expected to be produced in the year 2011. This is expected to touch 720 quintals worth Rs.4000 lakhs by the year 2021. The employment generation is projected to be 300 by 2021. Power requirement for this proposal would be 15 KVA. The phasing of activities is given in Appendix 39-1.

2.6. Flour Mills and Curry Powder Manufacturing Units

Now days, an upward trend is apparent in the food processing sector. Instead of purchasing of raw grain, people are interested in purchasing packed items such as rice powder, wheat powder, curry powder and even idli and dosa mixes. Ready to eat and ready to cook food items are in great demand now. Therefore there is ample scope for starting curry powder, units and flour mills in the panchayat areas especially where agriculture is prominent. The following panchayats are ideal to start such units: Alayamon, Anchal, Neduvathoor, Edamulakkal, Karavalloor, Kottarakkara, Veliyam, Pathanapuram, Pattazhy, Vadakkekara, Pooyappally, Yeroor, Chadayamangalam, Chithara, Elamadu, Ittiva, Kadakkal, Thalavoor, Vilakkudy, Nilamel, Melila, Mylom, Ummannur, Vettikkavala, Velinalloor in addition to Punalur Municipality. Period of implementation is 2008-2009.

The estimated cost of starting one unit with new building and related machineries is Rs.3 lakhs. The total estimated cost of starting 25 units is worked out to be Rs 75.00 Lakhs. The funds can be raised by entrepreneurs themselves or through Bank loan. District Industries Centre shall render

all assistance to start the units. 100 persons will get direct employment and it is estimated that the unit can be started by 2009. Power requirement for this proposal would be 15 KVA. The phasing of activities is given in Appendix 39-1.

Apart from these, large scale paddy processing centers are suggested in Article 2.1.4 of Chapter 34 in the Grama Panchayats of Kadakkal, Kottarakkara and Sasthamcotta. Also as per Article 3.2.3 of Chapter 34, 2 Expeller units for value addition of Coconut are proposed. These proposals can also be interlinked to industries sector.

3. Proposals for Strengthening and Modernizing Traditional Industries

3.1 Mechanized Coir Manufacturing Units

Even though Alleppey is the focal point of Coir Industries, some places in Kollam and Trivandrum Districts also manufacture coir and coir based products.

Considering the availability of raw material, ie, Husk and other favorable factors as evident from Sectoral analysis, it is suggested to set up two coir manufacturing units one at Kulasekharapuram Panchayat and the other at Paravur Municipality both in Sub Zone 4 of Special Development Zone. An extent of 50 cents of land in each location shall be provided by the local body for establishing the units.

The Social Welfare Department shall provide necessary assistance in the selection of beneficiaries. The finance to the extent of Rs.10 lakh each will be made available by the Nationalized Banks for executing the proposal. On implementation of the proposal, 50 to 60 persons will be benefited by direct employment. The proposal can be implemented in a period of 4 years commencing from 2008.

In the second phase, brand building, new products addition, vertical integration etc. can be undertaken. The second phase activities shall commence in the year 2011 and will be completed in the year 2016. By this time, through diversification and modernization, the employment generation would have gone up to 500. The production of coir and coir products in the year 2021 is proposed to touch 6000 Tons worth Rs.3.30 crores. Power requirement for this proposal would be 10 KVA. From, the

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present yarn manufacturing, there is scope for switching over to the manufacturing of geo textiles, mats, mattings, decorative items, handicrafts materials etc. In that instance the employment generation will be doubled i.e. to the extent of 1000. Total cost for two units would be 20 Lakhs. The phasing of activities is given in Appendix 39-1.

3.2 Handloom Industry Renovation Centre

Handloom Industry in Kerala is spread all over the state. In Kollam, Karunagappally, Kottarakkara and Chathannoor are the main handloom centers in the District catering to the domestic market suiting to the local tastes and preference. As in the sectoral studies there are about 40 working Handloom Co-operative Societies having 10000 (appxly.) registered weavers with 6000 looms in Kollam District.

A common facility service center (CFSC) for the dyeing of yarn and calendaring of cloth at Chathannoor is a vital proposal for the sustainable development of Handloom industry in Kollam District. Period of implementation of the project is 2009-2015.

The existing vacant land available with the Handloom Society at Nedungolam (Chathannoor) can be utilized for setting up this CFSC. The investment outlay amounting to Rs.50 Lakhs will be provided by the Department of Handloom and Textiles. The proposal can be executed in 6 years time since land is already available. 50 persons will be benefited by direct employment in the year of commissioning, ie by 2011. Around 6000 weavers in the District can avail the services of this CFSC. Power requirement for this proposal would be 20 KVA.

It is expected that services worth Rs.60 lakhs per annum will be rendered by this CFSC to the handloom weavers by the year 2021 with a projected employment generation of 150 with beneficiaries of around 10,000. The phasing of activities is given in Appendix 39-1.

3.3 Clay Based Industries

Clay based industries have good scope in Kollam District. Taking advantage of this potential, a clay based unit is proposed in Chathannoor in Kollam District for the production of pottery items, flower pots, statues etc. The availability of clay in

abundant quantities is the attractions of Chathannoor and nearby areas.

Therefore it is proposed to set up a clay based unit at Chathannoor at an investment of Rs.5 Corers. Ideal land will be identified by Soil Conversation Department or Mining & Geology Department of the State Government. Power requirement for this proposal would be 50 KVA. The agencies like Mining & Geology, Pollution Control Board etc; will provide necessary clearances for the unit. Ground Water Department will survey and locate the suitable spot for water availability. Finance for the proposal will be arranged by Government/Banks/Private agencies. The scheme will provide direct employment to the tune of 100 persons. The implementation can be completed in 5 years time from the date of commencement. It is expected that earthen ware pots, flower pots, statues etc; worth Rs. 120 Lakhs will be produced in this unit in the year 2021. The phasing of activities is given in Appendix 39-1.

3.4 Value Added Cashew Kernel Unit

Kollam is the mother land of Cashew Kernals in the world. The town of Kollam has the scope of becoming a town of Export Excellence for its cashew exports. As pointed out in Article 1.3 of Chapter 28; Finance, the Non Farm Sector shows maximum credit delivery due to high credit off take by cashew exporters. Also as per Article 3.5.1 of Chapter 34; Agriculture, there is a proposal aiming rehabilitation of 3000 ha of cashew plantations by 2014. Keeping this in mind, it is recommended for setting up value added cashew Kernel units in Panchayats like Elampalloor, Ezhukone, Kalluvathulkkal, Kareepra, Kunnathur and Pavithraeswaram in Kollam District. The units can be set up in existing or rented buildings during 2008-2010 periods.

The investment estimated is Rs. 7 Lakh per unit. The employment potential is 35 in the initial state. It is an estimated that fried and salted cashew kernels to the extent of 4200 quintals worth Rs. 15 crores will be produced in these units during the year 2021. The finance can be arranged through banks or from own sources. Export promotion council will extent necessary marketing assistance. Power requirement for this proposal would be 15

KVA. The phasing of activities is given in Appendix 39-1. Total cost for all units would be Rs 42 Lakhs.

3.5 Handloom Units

Kerala Handloom Products are unique in nature, from the rest of the country. In all major states in India, Handloom production is based on dressing materials such as sarees and dhothies. In Kerala, it ranges from very fundamental bath towel to latest trendy home fashions. Kerala Handloom Industry carries a vital role in state's economy as well as in the field of employment. It continues to play an important role in Kerala's export performance in Handloom items. Hence it is proposed to set up 10 Handloom units in Kollam District's at strategic locations like Kollam Corporation, Grama Panchayats of Chathannoor, Karunagappally, Kottarakkara, Kulathupuzha, Mayyanad, Pavithreswaram, Poruvazhthy, Thodiyoor and Paravur Municipality. The investment proposal is only Rs. 50 lakh and the employment generation is 100 Nos. The proposal can be implemented in a year time as the unit can be housed in own or rented sheds. The finance can be arranged through banks and own sources. The beneficiaries can be selected by Social Welfare Department, SC/ST Department etc. Marketing assistance will be provided by Hantex and Hanveev. School uniform cloth can be the main item of production for there units. Period of implementation is 2008-2009.

It is estimated that 240000 Mts. of Handloom cloth worth Rs. 86 Lakhs will be produced per year in these units by the year 2021. Power requirement for this proposal would be 2 KVA. The phasing of activities is given in Appendix 39-1.

3.6 Manufacturing of Bamboo Based Products and Handicrafts Items

Pirvanthoor, Kulathupuzha, Thenmala and Aryankavu are the Grama Panchayats located in the eastern part of the District. The tribal people in these areas are experts in the manufacturing of bamboo and cane based products such as baskets, mats, cane furniture, handicraft items etc. Raw materials for the manufacturing of the above products are available in plenty in these areas. But the poor tribal people are unable to get the raw materials in right quantities in right time. Therefore the above

four LSGIs shall set up a Raw Material Depot for collection and distribution of raw materials. Training shall be given to them in the manufacturing of attractive Handicraft items. The products manufactured by them shall be purchased by Government agencies. Period of implementation of the scheme is 2008-2009. This can also be linked with the proposals of Forest Sector given in Article 4.3 of Chapter 43A.

There is scope for starting 5 units each in each Panchayat. Thus the total number of units in the four Panchayats will be 20. Power requirement for this proposal would be 2 KVA. 200 persons will get direct employment by setting up the units. The total estimated cost is Rs 60 lakhs. This can be provided by concerned Grama Panchayats. The phasing of activities is given in Appendix 39-1.

3.7 Development of Existing Industries

A large number of SSI units at Elampalloor, East Kallada, West Kallada and Perayam Grama Panchayats are struggling hard for their existence. Most of the above units are working with the conventional type of machineries and other facilities. For the development of such units they have to switch over to CNC Machineries and computer Technology. If such technologies are adopted, the quality of products can be improved and capacity of the unit can be increased.

At least 3 units each from the above four Grama Panchayats shall be identified for which expansion proposal shall be prepared by District Industries Centre and implemented with the support of Financial Institutions. Necessary training shall be given to the entrepreneurs at appropriate level by different agencies. Period of implementation is 2008-2011.

An additional employment to the extent of 100 can be generated on completion of this scheme. Power requirement for this proposal would be 15 KVA. Total cost for all units would be Rs120 Lakhs @ Rs. 10 Lakh / Unit. The phasing of activities is given in Appendix 39-1.

3.8 Development of Existing Industries and Starting of Micro Units

Though Coir Mats & Matting Industrial Co Operative Society was registered at Poothakulam Panchayat, it has not started production till date. Infrastructural facilities

like land, building etc are still available with the society. At present, the circumstances for starting the unit are favorable if expert workers are available for the production of attractive items from coir yarn.

The members of the society have to be given training for the manufacturing of items either at Paravoor or at Allappuzha. The cost of training 50 members is estimated at Rs 10 Lakhs which shall be provided by LSGIs. The suggested locations are at Paravur (M), Kalluvathukkal and Poothakkulam. It is estimated that 250 persons can be given direct employment and another 50 families will be benefited by the revival of the unit by the year 2011. Period of implementation is 2008-2010.

There is ample scope for starting MICRO units at Paravoor Municipality & Kalluvathukkal Panchayat through Kudumbashree and SHGs. Ready made items, bakery products, paper envelopes, note books etc can be manufactured by these groups. Power requirement for this proposal would be 30 KVA.

100 Micro units each in Paravoor Municipality and Kalluvathukkal Grama Panchayat can be started which will generate direct employment to 100 women by the year 2010. The funds for establishment of these units shall be through Jilla Panchayat and Nationalized Banks. Total cost for all units would be Rs 610 Lakhs (including training component). The phasing of activities is given in Appendix 39-1.

4. Proposals for Health Services industries

4.1 Public Medical Centre and Bio Medical Industries

Due to the increase of new diseases, Health care is one of the major issues which has to be given prime importance. The number of hospitals with modern facilities is growing day by day which require bio medical equipments. In this context, there is ample scope for starting a Bio Medical Equipment Manufacturing unit at Kollam.

The unit is proposed at Chathannoor Panchayat. The land required is already available with Industries Department at Vanchi-Clay Mines Industrial area adjacent to KSRTC Bus station. Other infrastructural facilities like building, power, water etc. shall be provided by Government.

A public Medical Centre can also be

started in combination with the above unit. A medical lab with the facility for blood testing, X-ray, MRI Scan shall also be provided. Now the common people are depending private institutions for such services by paying huge amounts as service charges. The centre will provide the above services to common people at concession rates. The responsibility of setting up of the unit shall be vested with Health Department. Period of implementation is 2008-2010, so that the commencement of operation can be expected by 2010. Power requirement for this proposal would be 20 KVA. The direct employment generation will be 50 persons and the beneficiaries will be about 10000. Total cost for setting up that units would be Rs 400 Lakhs. The phasing of activities is given in Appendix 39-1.

4.2 Ayurvedic Medicine Manufacturing Units

Punalur in Kollam District is an ideal location for starting Ayurvedic Medicine manufacturing units due to the availability of raw materials, especially medicinal plants from surrounding Panchayats. Skilled labours in the manufacturing of various kinds of 'Lehyams', 'Tablets', 'Arishtams' and herbal and other oils are available in this area.

A suitable building either owned or rented shall be provided by Municipality. Funds for the establishment and working of the units shall be from LSGIs and Nationalized Banks. Period of implementation is 2008-2010.

The total project cost is estimated as Rs 30 lakhs. 25 persons can be given direct employment and another 50 families will be benefited by establishing this unit. Commercial production can be started by the end of 2011. Power requirement for this proposal would be 10 KVA.

The phasing of activities is given in Appendix 39-1.

5. Proposals for Knowledge based Industries and Services

5.1 IT Park, Paravur and Technopark, Kundara

The Industrial Policy of the State declares that the Govt. will establish two IT corridors stretching from Kazhakkuttom to Kollam and Kazhakkuttom to Kovalam. Therefore it is very significant to note that there is very good scope for establishing an IT Park at Paravur in an extent of 5

Acres of land. The land can be acquired with the assistance of Land Use Board or Paravur Municipality. Rail, Road linkages can be established with the support of concerned agencies. Uninterrupted power supply will be provided by Kerala State Electricity Board. The proposal can be completed by 2011 and this will provide direct employment to 100 persons at that time. Revenue generation in the park in 2011 is estimated to be Rs.650 lakhs and in the year 2021 it is expected to cross Rs.1300 lakhs with an employment potential of 250 persons.

The Govt of Kerala has decided to establish Technoparks in all Districts. The idle land to the extent of 30 acres available with M/s Kerala Ceramics Ltd, Kundara can be utilized for establishing a Technopark in Kollam District. Power requirement for this proposal would be 600 KVA. The project can be implemented with Govt funds under IT Department, Govt of Kerala. It is expected that the park will be operational by 2012. Employment generated after completion will be 100. Total cost for establishing the Park would be Rs. 800 Lakhs. The phasing of activities is given in Appendix 39-1.

5.2 Entrepreneurship Development Training Centre

Entrepreneurship Development Training is an important activity of Industries Department. Kerala Institute of Entrepreneurship Development (KIED) Kalamassery is the main agency undertaking Entrepreneurship Development Training programmes under Industries Department.

The training centre proposed in the premises of District Industries Centre, Kollam Corporation will work like a sub centre of KIED.

Project cost to the tune of Rs.65 lakhs will be met by District Panchayat. 90% of the building construction work is already completed. The full completion is expected in the year 2008. Power connection, water supply and supply of equipments will be completed in the first quarter of 2009. Power requirement for this proposal would be 2 KVA.

The first batch of training will commence in the beginning of the financial year 2009-10. Beneficiaries selected by various agencies like Dairy Development Department, Fisheries, Social Welfare, SC/

ST, Tourism, Culture and Youth Affairs, HRD etc can be trained at this center. It is expected that by the year 2021, this centre would grow to the level of KIED, KILA etc. Employment generated after completion will be 5. The phasing of activities is given in Appendix 39-1.

6. Proposals to Revive and Diversify Closed Public Enterprises

6.1 Revival of Premo Pipe Factory at Chavara

M/s Premo Pipe Factory at Chavara is defunct for the last several years. The steps initiated for the revival of this unit did not succeed due to the lack of demand for cement pipes. Therefore there is every scope for the diversification of this unit by manufacturing PVC Pipes.

The demand for PVC pipes is increasing day by day as the construction industry is booming. The production in Kerala is lesser than the present market demand. Hence there is good scope for establishing PVC pipe manufacturing units in this state.

M/s Premo Pipe Factory is located in an extent of 9.00 acres of land in Chavara Village of Chavara Panchayat. The land is adjacent to the N.H and very close to Kollam Town. Factory buildings having adequate space are available in the above premises.

At present Kerala Water Authority is sourcing the entire quantity of PVC pipes from outside agencies at exorbitant prices. Therefore this unit can be converted as a production facility of Kerala Water Authority. As an alternative, the Irrigation Department can also be brought into the picture.

An amount of Rs. 6.5 crores is estimated for converting the unit to PVC pipe manufacturing unit. The existing liabilities with statutory bodies shall be settled by the Government at an early date. Power requirement for this proposal would be 250 KVA.

On implementing this proposal, pipes of different sizes worth Rs. 8250 lakhs is expected to be produced in the year 2011. This will generate employment opportunities for 150 persons in 2011 and 320 in 2021. The corresponding production will be 3000 Ton worth Rs. 16500 lakhs in this year 2021. Employment generated after completion will be 150. The

phasing of activities is given in Appendix 39-1.

6.2 Rehabilitation of ALIND, Travancore Chemicals, Punalur Paper Mills and Travancore Plywood Industries Ltd., Punalur

M/S Alind, M/s Kerala Ceramics and M/s Travancore Chemicals all located at Kundara in Kollam District are State owned Public Sector Enterprises.

The industrial policy of the State makes necessary provisions for the revival of potentially viable sick public sector enterprises. Therefore the Technical Advisory Committee on Industries and Co-operation discussed the above cases in detail and recommended to revive the above PSUs in a period of 5 years.

The existing infrastructural facilities like land, building, machinery (to the extent possible) can be utilized for the rehabilitation process. The rehabilitation can be carried out by adopting modernization, diversification, privatization, joint venture operation etc. Period of implementation is 2009-2014.

As the existing liabilities of these PSUs are yet to be ascertained, the financial commitment for revival cannot be worked out at this stage. Besides, the revival packages have to be announced by the Government on a case to case basis. Therefore the units can be subjected to detailed techno-economic studies by experts for preparing detailed revival proposals for the consideration of the Government. Thereafter the revival can be completed in a phased manner. ALIND, Travancore Chemicals, Punalur paper mill and Travancore Plywood industries are GOI undertakings. So the rehabilitation proposal has to be formulated by GOI. Therefore cost estimation, assessment of power requirements etc. can be done only as per the final proposal.

6.3 Revival of Pompsy Biscuit Manufacturing Unit

This is a private concern, engaged in the manufacturing of biscuits, which comes under Medium Scale Industry. The unit is defunct at present due to financial problems. Government has to take steps to revive the unit in consultation with the Management. Power requirement for this proposal would be 10 KVA. The location of the unit is at Karunagappally grama panchayat. The revival of this unit will

provide employment to the workers of the unit and accelerate the development of the locality and nearby areas. The phasing of activities is given in Appendix 39-1.

6.4 Revival of Parvathy Mills

This is a proposal for starting a large scale garment manufacturing unit at Parvathy Mills, Kollam by utilizing the infrastructural facilities available there. At present the mill is working under loss and the capacity is not fully utilized.

Since this is a Public Sector Undertaking (PSU) under National Textile Development Corporation, GOI and GOK shall take appropriate steps to start the new venture. Therefore cost estimation, assessment power requirements etc can be done only as per the final proposal.

6.5 Revival of Other Closed and Defunct Industries

It is a fact that a large number of units which are started under PMRY Scheme are either closed or defunct due to various reasons. The reasons for closure of such units are lack of working capital, mismanagement and inadequate marketing of products etc. Tsunami also led to the closure of many units at Alappad Grama Panchayat. The entrepreneurs are now facing legal action from financial institutions for the realization of loans.

Industries Department shall identify revivable units from among the closed units with concrete proposals for revival. The Grama Panchayats of Alappad, Panmana, Chavara, Kulasekharapuram and Oachira shall provide necessary funds in the plan proposals for assisting the above said units. Period of implementation is 2008-2009.

It is estimated that 25 units in each Panchayats shall be revived by this scheme. Industries Department, Co-operative and Nationalized Banks shall co-operate with the revival package. 150 persons can be given re-employment by the implementation of this proposal by the year 2011. Power requirement for this proposal would be 30 KVA. Employment generated after completion will be 740. Total cost for reviving all units would be Rs 740 Lakhs. The phasing of activities is given in Appendix 39-1.

7. Creating a pool of skilled human resource

7.1 Entrepreneurship Training and Employment Exchange

Industrial units are on the look out for

trained persons for providing employment. Therefore job seekers having required qualifications need some experience in the relevant field to become employable. To achieve this objective, the Entrepreneurship Training Centre set up in the DIC premises, Kollam is proposed to function as a finishing school. Need based training programmes will be conducted at this centre as and when required. The training programmes will be arranged in consultation with industry leaders and Industrial Training Department.

An employment exchange, exclusively for the skilled persons, will be established in this institution. Pass outs from various Engineering colleges, polytechnic colleges, Management Institutes, ITIs, ITCs, Food Craft Institutes etc can register their names in this employment exchange at any point of time.

The building construction work of the training centre is already completed. Furniture, furnishing, procurement of computer and Audio Visual Equipments are not yet planned. An amount of Rs 15.00 lakhs is estimated for this purpose. The District Panchayat can provide the finance for this. The full completion is expected in the year 2008-09.

The first batch of training will commence in the first quarter of the financial year 2009-10. It is expected that by the year 2012, this centre will grow to the level of KIED, KILA etc. The phasing of activities is given in Appendix 39-1.

7.2 Tool Room Training Centre at Qet Cos, Umayanalloor

Quet-Cos is a Co-operative Institution working at Thrikkovilvattom Grama Panchayat under the administrative control of Industries Department. Main activity of the unit is manufacturing of lathes. At present the society is working under loss due to financial stringency.

District Panchayat, Kollam has constructed a factory shed in the premises of Quet-Cos with an investment of Rs.20 Lakhs. Qet-Cos has submitted a proposal to Government of India for sanctioning Tool Room Training Center in this building. The total estimated cost of the project is Rs 12 crores. Government of India shall give Rs 9 crores as grant. State government shall provide Rs.2 crores as matching contribution. Now this proposal is pending before the Ministry of Small and Medium

Entrepreneurs Govt of India, New Delhi.

If the above center is set up, it is estimated that 50 persons will get direct employment and 500 students in 10 batches shall be given training in different aspects. It is expected that the unit will be commissioned by 2010.

The phasing of activities is given in Appendix 39-1.

8. Others

8.1 Toy Manufacturing

Toys play a prominent role in our daily life. It is the necessity of every house which has a child. At present, trend is to purchase toys imported from China. Now China is supplying toys to the entire world. Quality is not a concern as far as these items are concerned. In this context, there is ample scope for starting toy manufacturing units in our state.

Oachira in Kollam is blessed with a famous temple known for centuries. Thousands of pilgrims visit this holy place every year. This opens vast opportunities for the trading of various low value items like toys, handicrafts, household implements etc.

Components of different types of toys can be purchased from other states and assembled at very competitive rates in our state. The sale is not a problem as the demand is very high.

A small Industrial Estate exclusively for toy manufacturing is proposed in Oachira Grama Panchayat under the ownership of the Panchayat. The industrial sheds constructed will be rented out to 25 prospective entrepreneurs on a monthly rent. The working capital required will be arranged by the promoters.

An extent of 50 cents of land is sufficient to set up 25 toy manufacturing units in a 5 storied building @ 500 sq.fts built up area for per unit. The total cost of construction of building will be Rs.87.50 lakhs. Funds for which shall be arranged by the Grama Panchayat.

On implementing this Proposal, 125 persons will be employed directly by 2011. Different types of Toys worth Rs.5.62 crores will be produced in the year 2011. The estimated production in the year 2021 will be 47 lakhs pieces worth Rs.11.75 corers. By that time India will be a developed country and our products will find markets in foreign countries also. This is a proposal having no environment

problem and implementing is very risk free. Diversification of products can be done at any time without incurring any fixed capital investment. Power requirement for this proposal would be 100 KVA. The phasing of activities is given in Appendix 39-1.

8.2 Mini Industrial Estate, Nedugolam

In our state vacant plots, sheds etc are in great demand now for starting new industrial units. Therefore constructing a Mini Industrial Estate in the existing vacant land available with M/s. Vinayakar Handloom Weavers Industrial Co-op. Society at Nedugolam is a very good proposal.

An extent of 1 Acre of vacant land available with the above society is very ideal for setting up 10 sheds. An amount of Rs.40 lakhs is expected to incur for this purpose. This amount shall be provided by District Panchayat. On completion of the building, 10 entrepreneurs can set up units there with an employment potential of 50 persons in the initial stage. Working capital for these units shall be provided by the banks. Agencies like KSEB and PCB will provide power and pollution control license on request. The entire activities can be completed in a period of 5 years. Power requirement for this proposal would be 50 KVA. The phasing of activities is given in Appendix 39-1.

8.3 Coir Yarn Manufacturing Units

Coir Yarn is the main input for the production of coir mats and matting. Mats and matting units are clustered in Alleppey District. Coir yarn produced at various parts of the state is brought to Alleppey and value added coir products are manufactured and exported. There is a developed coir cluster in Alleppey District.

Considering the scope and demand for value added coir products, the Technical Advisory Committee has decided to set up coir yarn manufacturing units in potential locations at Chavara, Clappana, Karunagapally, Kulasekharapuram, Munroe Island, Oachira, Panayam, Perinadu, Thekkumbhagom, Thevalakkara, Thrikkaruva and Thrikkadavoor Grama Panchayats of Kollam District. It is expected that the 13 units, set up in the above Panchayats will provide direct employment to 130 persons in the beginning itself. The scheme shall

be implemented during 2008-2010.

The investment outlay for this proposal is only Rs.13 Lakhs which will be shared by the Directorate of Coir Development and Nationalized banks. The beneficiary selection shall be done by Social Welfare Department, SC/ST Development Department etc; The Agriculture Department will ensure smooth flow of raw material (Husk) to the above units. It is estimated that 15600 quintals of coir yarn worth Rs.96 Lakhs will be manufactured in the year 2021. Power requirement for this proposal would be 5 KVA.

The phasing of activities is given in Appendix 39-1.

8.4 Light Engineering units

Light Engineering is the platform for all engineering activities. The boom in the construction industry cannot sustain without the active support of light engineering sector. The up coming mega proposals like Vallkarapadam Container Terminal, Smart City, Technopark- Kundara, Vizhijam Port, Thangasserry port, Railway Wagon Factory at Chertahala, Railway Coach Factory at Palakkad etc. open golden opportunities for this sector. Accordingly five light engineering units are proposed one each at Elampalloor, Mynagappally, Ezhukone, Kalluvathukkal and Kareepra in Kollam District.

An extent of 50 cents of land is adequate to set up 5 units. Each unit will provide employment to 5 persons. An amount of Rs. 10 lakhs is needed to set up these units@ Rs 2 lakhs /unit. The finance can be arranged through nationalized banks and from own sources. The entrepreneurs can be selected from ITIs and Polytechnics of the District. Period of implementation of the scheme is 2008-2010.

It is estimated that 10000 quintals of light engineering products worth Rs.3.3. crores will be produced in the year 2021 by these units. The units can be set up in a year time and further expansions can be carried out at any time. Power requirement for this proposal would be 8 KVA. Employment generated after completion will be 25. The phasing of activities is given in Appendix 39-1.

8.5 Straw Picture and Screw Pine products manufacturing units

Straw picture and screw pine products are two unique artisan products of Kollam District. These speciality products find good

market in foreign countries. The demand for these products is much more than the output now.

Hence it is decided to set up two separate units for the manufacture of screw pine and straw picture products one at Thrikkadavur and other at Thazhava Panchayt of Kollam District. 1.50 Acres of land is required for this purpose (1.00 acre in Thrikkadavoor Grama Panchayat and 0.50 acre in Thazhava Grama Panchayat). The units shall be established during 2008-2010 period.

The total cost of project is worked out to be Rs 15 lakhs. Various handicraft items worth Rs 35 lakhs will be produced in the year 2011 by employing 150 people. The production is expected to double by 2021. By this time the employment potential would have soared to 500. Power requirement for this proposal would be 2 KVA. The phasing of activities is given in Appendix 39-1.

8.6 Note Book Manufacturing Unit

It is proposed to set up a note book manufacturing unit at Punalur Municipality with a project cost of Rs 25 lakhs. Modern machineries having maximum capacity shall be utilized. Marketing of the products is not a problem due to the proximity of many educational institutions. 10 persons can be given direct employment. Period of implementation is 2008-2010. Power requirement for this proposal would be 15 KVA.

The phasing of activities is given in Appendix 39-1.

8.7 School Bag Manufacturing Unit

Punalur and Karunagappally are the central market place of Pathanapuram and Karunagappally Taluks. So many Government and Private educational institutions are located in and around these developing towns. Therefore the scope for establishing a large scale school bag manufacturing unit in this area is found very feasible.

The total project cost is estimated as Rs 25 lakhs. An ideal building with at least 1000 sq.ft. plinth area is required for starting the unit. This shall be hired or purchased by respective local bodies. Other infrastructural facilities such as machineries, electricity etc shall be provided by District Panchayat. The

members of Kudumbasree / SHGs shall be given training in the manufacturing of school bags by District Industries Center. Working capital shall be provided by local banks. Power requirement for this proposal would be 5 KVA.

At least 50 persons shall get direct employment in two units. The indirect employment expected is 100. The project is proposed to be commissioned by the year 2011. Total cost for all units would be Rs 50 Lakhs. The phasing of activities is given in Appendix 39-1.

8.8 Wood based Industries

Decorative wooden furniture viz. doors, windows, furniture show cases etc. form part of new houses, auditorium, shops etc. being constructed. Besides wooden legs and handles of tables, chairs, coats etc. themselves are marketable. The units envisaged here is of the above nature. High quality wood and wooden pieces available from saw mills are the principal raw materials. There is huge export demand for the products. This is due to the fact that skilled workmanship of the State is being universally acknowledged. Good tie ups with export agencies are essential for the success of this venture. Besides, there is also a good internal market for selective and highly discerning customers. Availability of raw materials in plenty also makes this an attractive venture.

The units envisage manufacturing of wooden furniture on different designs out of quality wood like Teak, Anjili, Rose wood etc. The finished products will be sold through furniture marts. Job work also will be undertaken. Wooden planks and pieces are available from saw mills. The size and designs of the products will therefore be different. For outdoor use, wood based items are good as they weather better and require very little maintenance. Garden chairs are popular products throughout the leisure industry and there is ample scope for manufacture of these items, especially when the tourism industry in the State is on a roll. Also, the Kerala weather is best suited for wood based furniture and the raw materials are available in abundance in the District. Wooden doors and window frames are still popular due to its durability and suitability for the weather prevalent in the State. A major percentage of constructions still use wood based articles and there is sustained demand as the

construction industry in the state is still growing. There is good potential in the neighboring states as well.

Considering all these favorable factors, it is proposed to promote five wooden and steel furniture units in all Panchayats/ Municipalities/ Corporation in a phased manner. The setting up of the units can be commenced in 2008-11. The cost of each unit will be Rs 10.00 Lakhs and the requirement of land is only 10-15 cents per unit. The Forest dept will arrange NOC and KSEB will ensure power supply for the units. KSPCB will issue Pollution control license for establishing the units. Nationalized and other Banks will arrange finance to the entrepreneurs for setting up these units. Power requirement for this proposal would be 50 KVA. This will create employment opportunity for 300 persons in the year 2011. Wooden and steel furniture items worth Rs 300.00 Lakhs will be produced during the year 2011 and Rs 10 Crores in the year 2021. By that time the employment generation would have crossed 1000 nos. Total Cost for all units would be 3700 Lakhs@10 lakh /unit. The phasing of activities is given in Appendix 39-1.

8.9 Rubber Wood Treatment Plant

Chemically treated soft wood is largely replacing hard wood for cost advantage and even long life. By chemical impregnation, the pore space is filled with anti fungus and fibre resisting chemicals. The wood thus becomes stronger, resistant to insects, termites, moths, fungus and even fire. Very few such plants only are now available in Kerala.

This Chemical Treatment plant can be established as a Common Facility Service Centre for the use of all wooden building materials / furniture manufacturers in the District. Pathanapuram Panchayat in Pathanapuram Taluk is the ideal location for establishing this project. The total cost of project is estimated as Rs 5.00 Crores. Land to the extent of 1.50 acres has to be arranged by the local body. The District Panchayat will provide funds for implementing this scheme. This will create employment opportunities for 10 persons in the initial stage. The implementation can be commenced in the year 2011 for the reason that many rubber wood base units should have been established before

setting up the Treatment Plant. It is estimated that 30000cft of rubber wood can be treated in a year time in this Plant. This project can be considered under Build, Operate and Transfer (BOT) basis. Power requirement for this proposal would be 200 KVA.

The phasing of activities is given in Appendix 39-1.

8.10 Rubber Based Industries

The rubber moulded articles (both natural and synthetic rubber), mainly auto components, components of electrical and other machine parts are having good demand in these days. Rubber products required for electronic industry are moulded or extruded pieces of specified designs and dimensions viz. sleeves, bushes, beadings, 'O' rings, flexible hoses, spacer links etc. They are manufactured mainly by extrusion and moulding. With more or less same infrastructure a number of items could be manufactured with slight change of formula and moulds. As there is a good production of natural rubber in the State and to increase the demand of natural rubber, user industries are to be encouraged. The production of natural rubber in the country in the year 2007-08 was 8.52 Lakh Tonnes. The target for the year 2008-09 is 8.75 Lakh tonnes. Out of this 92% goes from Kerala. Kollam District contributes 7% of the total natural rubber production in Kerala. In our State 517000 hectares are under Plantations. In India the total extent under Rubber Plantations is 6.30 Lakh hectares. It is expected that the income from natural rubber will touch Rs 10000 corers in the year 2009-10 if the prevailing market price of Rs 100 continues.

As per Article 3.1.1 of Chapter 34; Agriculture, an area of 400 ha is to be brought under rubber cultivation as part of area expansion. Also By 2021 all the plantations would be replanted by high yielding varieties. These can be utilized for the Rubber Based Industries. As per Article 4.1 of Chapter 43A, promotion of alternate species of timber for furniture is also suggested by Forest sector.

But there is hardly any value addition of natural rubber occurs in the District. There is vast potential for rubber moulding units in the District. The Technical Advisory Committee on Industries and Co operation has recommended rubber based units in

the following Grama Panchayats: Alayamon, Anchal, Aryankavu, Edamulakkal, Karavalur, Yeroor, Chadayamangalam, Nilamel, Ittiva, Pattazhy, Pathanapuram, Piravanthur, Mylom, Kulakkada and Kummil. Period of implementation is 2008-2011. Power requirement for this proposal would be 35 KVA. Employment generated after completion will be 100. Total cost for all units would be Rs 375 Lakhs.

The phasing of activities is given in Appendix 39-1.

8.11 Food Park

India has a food industry dominated by small, unorganized players that account for more than 70% of the industry output in volume terms and 50% in value terms. Food industry is a very promising field in the State of Kerala. Branded food is the rapidly rising segments of this industry. The market for branded foods is growing at a healthy rate of 10-15%. Kerala is a land with highly diversified physical features and agro ecological conditions. Due to its unique topography and climate, the State is blessed with a copious blend of agricultural resources. It has tremendous potential to become the dream zone in food processing, considering the huge domestic market it offers to this sector. When it comes to investment in food processing, the State is an ideal destination, offering a host of advantageous. The potential of the state in areas of agriculture and live stock commodities has been under utilized. Mango, banana, citrus, guava and pineapple are among the important fruit items in Kerala which have the potential of value addition through food processing. There is significant potential in all sectors of food processing for both domestic and international markets. Products from this sector have a large export market especially in West Asia, Europe and the U.S. The development of industrial infrastructure oriented towards food processing is the need of the hour. This will bring in the much awaited job opportunities while the economy will also be benefited due to the value addition to the States resources. Kerala's potential in food processing sector lies in tapping its high per capita spending consumer, a ready market from a large population of non-resident Keralites and the skills peculiar to the region.

Food processing Industrial parks, act

as catalysts for the agro industrial development of the state by providing common multi user facilities, where women entrepreneurs can set up small to large units for agro food processing. The State accounts for about 9% of all licensed food processing units in the country and next only to Maharashtra and Tamil Nadu. However, 75% of these units are in the Small and Cottage sector and only a few units are medium and large scale. However, certain segments such as sea foods and cashew have become developed and are major earners of foreign exchange. As for fruits and vegetables, the state has made good progress through exports to Gulf countries. In the present scenario of economic liberalization and globalisation, the State needs to create a favorable environment for setting up food processing units. The thrust areas for the food parks are spice extracts, oleoresins, curry powder, natural colours and flavours, malted foods, meat processing, high fructose syrup from cassava, ready-to-eat snacks, pine apple & Mango products, canned/dried fruits and vegetables and dairy products. The ideal locations for setting up Food Parks are found to be Grama Panchayats of Kundara, Karunagappally, Kottarakkara, Kollam Corporation, Paravur and Punalur Municipalities.

The land to the extent of 2.0 acres is to be arranged by the LSGIs and the funds to the extent of 60% can be provided by the District Panchayat. The rest can be arranged by private parties through bank loans either partially or fully. The project can be implemented under Public Private Participation (PPP) on BOT basis. The cost of each Food park is estimated to be Rs 500 lakhs. 25 Industrial sheds can be constructed in the park each having a plinth area of 1500 sqft. Power requirement for this proposal would be 35 KVA. This will create employment opportunities for 100 persons in the initial year. The project can be taken up for implementation during the year 2008-09 and can be completed in the year 2010-11. Total Cost for all units would be 3000 Lakhs. The phasing of activities is given in Appendix 39-1.

8.12 Development of Existing Clusters

A cluster is a geographical concentration of industries engaged in similar activities. There are about 50

registered clusters in Kerala and about 25 are in different stages of registration. In Kollam District 5 clusters are in operation.

Cluster Development Programme in the state has achieved wide spread acceptance. The Central Govt has been pumping funds for the development of industrial clusters in different states. This can be availed with a matching contribution from the state. But the State's budgetary allocation for this programme is too insufficient and hence our state is not in a position to harness Central Funds provided for cluster development. Therefore extending financial and infrastructural support to the registered clusters in the District is the need of the hour. Infrastructural facilities in the form of land, building, power, water, approach roads, rail heads etc can be provided. Funds for arranging the above items can be provided by LSGIs as part of cluster development programme. If the registered clusters already possess land, funds for building, machinery, raw material bank etc can be allotted.

Every registered cluster in the District can be supported with a maximum amount of Rs 5.00 lakhs each per year for 5 years for the above purposes, provided the consortium members approach the District Panchayat with viable proposals. Matching contribution from the side of consortium members is the pre requisite for considering these proposals. The scrutiny of District Industries Centre will be insisted for assessing the quantum of grant from district Panchayat.

The clusters can develop the areas considerably if they are supported for establishing Common Raw Material Banks, Common Facility Service Centres, Common Marketing Centres, Common Skill Training Centres etc. Period of implementation is 2008-2012.

The scheme is the need of the hour and hence the assistance can be released from 2008-09 onwards. This is a GOI undertaking proposal. So the revival proposal has to be formulated by GOI. Therefore the power requirement can be assessed only as per the final proposal. This will generate employment opportunities to the extent of 150 in the year 2010-11. Total cost for reviving / developing these clusters would be 25 Lakhs.

9. Conclusion

Kerala, popularly known as 'God's Own Country' is gifted with beautiful landscapes, rivers and backwaters. Kerala is one among the top in South Asia, for quality of life index, high literacy rate, good health standards, public hygiene and life expectancy. The social development indices of Kerala are considered as a global role model. The State has a well developed net work of roads, pollution free-low cost hydel power and immense water sources. Its long and beautiful coastal belt has provided ample opportunities for marine products and tourism sector. State is one of the premier destinations of health tourism. About 90% of the Natural Rubber in the country is produced here and it is the leading producer of coconut, pepper and cardamom. It is the second largest producer of Tapioca, Cashew and Coffee. The state contributes a significant portion of the national export from marine and spices based products.

Even though considerable investment and efforts were made for the development

of industrial sector, they have not assured well functioning and sustainable Small Scale Industries or traditional industries. Considering the global situation of market economy and the financial stringencies of Government, it is necessary to reconsider the present scenario and spending of Government funds effectively to bring desired results in industrial development.

Kerala is becoming one of the competitive industrial destinations with an investor friendly environment. It is the land with amazing social advancement and astonishing economic progress. The social development indices of the state are equivalent to developed countries. It is gifted with nature rich environment and highly educated manpower. Kerala industry is capable to adopt modern technologies for the upgradation of existing units to make them more competitive to cope up with the changing international industrial scenario. With a well defined and pragmatic approach, the state government is encouraging private sector investment

by providing a number of incentives and assistances. In order to achieve sector wise development Govt. declared some of the sectors as Thrust Industries. 100% Export oriented units, IT, tourism, agro based industries, food processing, readymade garments, Ayurvedic medicines, marine products, Light Engineering, Bio-technology and Rubber based industries are some of the industries declared as Thrust.

Our Prime Minister announced on 15-Aug-2002 that India will become a developed country by 2020. National efforts are progressing to achieve this mission. The developed countries have to export their products in a competitive way to different countries to remain as developed countries. The developing country, forgetting transformed into developed; have to market their products in other countries in a competitive way. The schemes proposed in this report can change the industrial scenario of the District by the year 2021.

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Chapter 40

Health

This chapter includes the development proposals of Health sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district health policy, by 2021 Kollam has to enhance the health status of the people of the District through preventive measures and by providing quality treatment through the three systems of medicines.

2. Proposals : Allopathy System of Medicine

2.1 Providing Existing Institutions with supportive infrastructure facilities

As per Article 1.4 of Chapter 17 spatial distribution of hospitals is not uniform. Distribution of hospitals therefore must be as per need especially focusing on remote areas. The supportive infrastructure

facilities for the existing institutions are provided accordingly.

2.1.1 District Hospital

District Hospital is one of the multi specialty hospitals under Government sector. Even then all specialties are not available particularly, neurology, nephrology, geriatrics, trauma care unit, etc. Though other specialties are there, none of the units are in full swing due to lack of specialist doctors and paramedical staff proportional to patient strength. Also there is extreme lack of modern diagnostic facilities like MRI, Micro biology, Pathology Departments. In these circumstances the following measures have to be implemented.

1. The bed strength to be increased according to OP strength. Present bed strength is 537. This is to be enhanced to 750 or more. Thus Proposal for enhancing the District Hospital to the status of General Hospital with bed

strength of 750.

2. In all the departments the post of doctors both general and specialists should be increased according to bed strength. Proposal for posting of concerned specialists according to requirement in Specialty Hospitals avoiding gross anomalies.
3. Additional specialty departments like geriatrics, oncology, neurology, nephrology, trauma care should be added with sufficient specialist doctors and paramedical staff.
4. The diagnostic facilities to be improved by establishing microbiology and pathology departments. In addition MRI facilities, Echocardiogram, EEG are to be newly attached as these are common but essential.
5. Bed strength of the pain and palliative clinic at the only District hospital in Kollam Corporation is to be raised from 6 to 15 which will give relief to the cancer

patients.

Total cost for the proposals would be 167.8 Crore. The implementing agencies are Jilla Panchayat, Health Department, NRHM etc. The required facilities and phasing are given in Appendix 40 – 1.

2.1.2 Women and Children Hospital (Victoria Hospital)

Victoria Hospital is the only Hospital exclusively for women and children in the Govt. sector in the District. Present facilities and infra structures are insufficient, taking into account the no. of patients attending the institution.

The following facilities have to be provided:

- Bed strength should be increased from 273 to the status of WandC Hospital, Thiruvananthapuram and also the staff strength should be increased according to bed strength.
- Pre-operative and immediate post operative ward with monitor facility is essential.
- Equipments like ventilator, pulse oxymeter, operation table, Boyle's apparatus are required.
- Separate theatre for operating septic cases, elective cases and emergency cases is a necessity.
- Anti natal, post natal ward is very old and in dilapidated condition and needs to be demolished and new construction is to be erected.
- Separate duty room for causality M.O and general M.O.
- Separate ward for septic cases, isolation ward and ward for emergency cases.
- Doctors room for male and female (changing room)
- Separate changing room for all paramedical staff.
- Additional sick room for paramedical staff.
- A separate canteen facility for staff.

The location of the hospital is in Kollam Corporation. Total Cost for the proposals would be Rs.117.8 Crore. The implementing agencies are Jilla Panchayat, Health Department, NRHM etc. The required facilities are given in Appendix 40 – 1.

2.1.3 Taluk Head Quarters Hospitals

The facility at Taluk Hospital Punalur are proposed to be increased to the status

of District Hospital since it is in a remote area where there is no specialty Hospitals in the nearby GPs covering Kulathupuzha, Thenmala, Aryankavu, Anchal, Yeroor, Edamulakkal, Alayamon, Piravanthoor etc.

The following facilities have to be provided:

- Bed strength to be increased from 144 to above 500.
- 5 storied building to be constructed with O.P block at the bottom, investigation. Facility in the 1st floor, theatre facility in the 2nd floor and I.P facility in the 3rd and 4th floor.
- Causality and trauma care unit.
- New specialties like dermatology, ENT, Pediatrics and Ophthalmology etc.

Total cost for the proposal would be Rs 56.17 Crores. The implementing agencies are Punalur Municipality, NUHM and Health Dept.

The requirements for the other three Taluk Head Quarters viz. Kottarakkara, Karunagapally and Sasthamcotta are given in Appendix 40 – 1. Total cost for each of the proposals would be Rs 55.14 Crores. The implementing agencies can be the Block Panchayats concerned NRHM and Health Dept.

2.1.4 Government Hospital

The only, new hospital in Govt. sector is proposed at Nedumpana. Presently it is a TB centre. The required facilities are given in Appendix 40 – 1. Total Cost for the proposal would be Rs 32.09 Crores. The implementing agencies are Nedumpana Grama Panchayat, Health Dept. and NRHM.

2.1.5 Community Health Centres

Community Health Centres (CHC) has to be raised to Indian Public Health Standard (IPHS) status. None of the CHC is having full staff strength according to the CHC pattern. This has to be rectified. In addition to that, the infra structure facilities like X-Ray unit have to be made available and the Lab facilities are to be improved. Strengthening of primary and secondary level of Health Institutions by way of optimum use of RCH programmes and NRHM are also required. The required facilities for CHC Kadakkal and Rama Rao Hospital, Nedungolam, Paravor Municipality are given in Appendix 40 – 1.

Total Cost for the proposal at Kadakkal would be Rs 32.09 Crores. The

implementing agencies are Kadakkal Grama panchayat, Health Dept., NRHM. Total Cost for the proposal at Nedungolam also would be 32.09 Crore. The Implementing Agencies can be Paravor Municipality, Health Dept., NUHM.

2.1.6 Block Primary Health Centre

For Block Primary Health Centre staff strength is to be increased according to the staff pattern of the PHC. The lab facility at block PHC level has to be enhanced. IP facility required in the following Block PHCs viz. PHCs at Kulathupuzha, Kulakkada, Pathanapuram and Anchal are given in Appendix 40 – 1.

11 Block PHC's of the District have to be raised to the status of the Community Health Centre. Modern investigative and diagnostic facilities are to be implemented in Block level hospitals of the district. At present such facilities are available only at P. H. Lab attached to District Hospital. Strengthening of primary and secondary level of Health Institutions by way of optimum use of Reproductive Child Health (RCH) programmes and National Rural Health Mission (NRHM) is also required.

2.1.7 Mini Primary Health Centres

In all the 53 Mini PHC's of the District, 24hrs service delivery is to be implemented. The staff pattern to be raised to 2 M.O's and 4 Staff nurse pattern. Provision to hire vehicle for conducting immunization session and effective supervision and strengthening of primary and secondary levels of Health Institutions by way of optimum use of RCH programmes and NRHM is also required.

2.1.8 Sub Centre facilities

There are 427 sub-centre in our District including P.P units, of which 209 are functioning in Govt. building and 182 in rented building. The facilities in the Govt buildings have to be improved so that the Junior Public Health Nurse (JPHN) can stay in the sub-centres. The rent of sub-centres has to be enhanced from 250/- to 1000/-. Land has to be acquired for constructing new sub-centres. As per rule, a population of 5000 is required for one sub centre. But at present in some areas population of about 10000 to 11000 exists for one sub centre. Hence 150 sub centres are newly required in addition to the existing 427 sub centres.

2.1.9 Specialty Care

There is one Dist TB Centre and one

T.B Hospital at Karunagappally. These two hospitals have to be converted to Hospitals for chest diseases with improved facilities.

Public Health Lab: Diagnostic facility in the public health lab is to be improved and the lab has to be converted to regional diagnostic Lab. Establishment of advanced facilities like cytopathology, Microbiology and Pathology is proposed in the Public Health Laboratory at District.

Cancer Care: A separate wing for cancer detection with treatment facility shall be attached to District Hospital. The facility at the palliative care at CHC Neendakara has to be improved.

A separate **Ophthalmic Institute** will have to be started in the District due to high incidence of cataract cases and other ocular diseases.

2.2 Proposals for Disease Preventive Measures

2.2.1 Awareness Programmes

In remote hilly and tribal areas immunization is incomplete. Drop out cases are more in these areas and hence periodic additional immunization camps and awareness programmes need to be conducted in these areas. Separate Mobile units with sufficient facilities should be made available in these areas (Kulathupuzha, Thenmala, Aryancavu, Piravanthur etc). Awareness camps is to be organized at ward level for control of both communicable and non-communicable disease.

2.2.2 Detection Camps

Detection camps are to be conducted at LSGIs for life style diseases like Hyper tension, Diabetics, Heart diseases covering all people above forty years of age utilizing Government fund and fund of LSGIs.

2.3 Proposals for Occupational Diseases

2.3.1 Cashew Workers

Periodic detection camps for cashew workers since prolapse of uterus is found to be more prevalent among cashew workers. This can be done by LSGIs through near by Govt. Hospitals and a facility at factories is to be improved.

The cashew workers should be provided with masks for preventing the entry of dust particles in to the lungs. Instead of the present method of shelling cashew nuts by sitting on the legs, proper raised plat forms should be provided so

that the workers can shell the cashew nuts either by standing or by sitting in a chair.

2.3.2 Coastal Fishermen

Among fishermen population, periodic screening camps should be conducted with the help of LSGIs, for the detection of cancer of uterus and thyroid diseases.

2.3.3 Newly Emerging Diseases

Newly emerging diseases like Chikungunya, dengue, leptospirosis etc are on the increase. Early detection facility should be available in block level laboratories. Awareness camps should be conducted at ward level. Such diseases and other communicable disease like diarrhea are associated with improper waste management. Hence there is necessity of proper waste management system which is to be provided by the Local bodies, especially in existing urban local bodies of Kollam Corporation, Punalur and Paravur Municipalities - and future urban centers like Karunagappally, Kottarakkara and Anchal as well.

2.3.4 Other proposals

Establish mobile Hospital units with all possible modern facilities and specialist to reach the tribal areas of Piravanthur, Aryankav, Kulathupuzha and Thenmala

Periodic maintenance of Hospitals and equipments are proposed for improving the service delivery system. Facility for assessing the Quality of equipments is also proposed. Service contract shall be ensuring along with purchase of equipments like EEG, CT scan, Auto Analyzer etc.

Enhancement of Co-ordination between Health Services and Local Self Governments to take up public health issues.

Existing unutilized buildings shall be utilized according to the need of the respective institution like conducting conferences, meetings, health education classes etc.

Timely release of sufficient funds for proper implementation of works.

Accredited Social Health Activists (ASHA) concept under NRHM has to be extended up to 2021 since their involvement is there in all National programmes.

2.4 Linkages with other sectors

The proposal for Ranching of

Larvivorous Fishes in Drainage Canals and other open waters for the Biological Control of Mosquitoes as per Article 5.3.4 can be linked with the health dept.

The proposal for propagation to include leafy vegetables having iron content in the diet as per Article 2.3.2 of Chapter 45; Social Welfare can be integrated with the Health Dept.

As per Articles 2.1.1.1, 2.2.1.1, 2.3.1.1 of Chapter 45, there are proposals for strengthening the women component of ICDS. The nutrition component may be strengthened by imparting awareness at Sub centre level which can be achieved through co-ordination of Health and social welfare Dept.

As suggested in Article 6.1.1 of Chapter 45, specialty departments including geriatrics have been provided in the District Hospital (Article 2.1.1 of this Chapter.)

3. Proposals : Ayurveda System of Medicine

As identified in the sectoral analysis, issues like up gradation of Government Ayurveda Institutions, problems due to higher mortality rate in the district particularly among the poor, Malnutrition, occupational hazards and diseases, recurrent infections, periodic out break of epidemics, mental illness and other chronic diseases will have to be solved. Ayurveda can be effectively advised to these problems through its safe and harmless medicines and world-renowned Panchakarma therapies.

For effective implementation the development may be based on

- Infrastructure
- ™ Patient amenity
- ™ Specialty Clinic
- ™ Medicines
- ™ Staff training

3.1 Aims

To provide quality ayurvedic treatment in the district through Department of Indian Systems of Medicine

Implement programmes to

Support the socially and economically weaker sections

Generating income to meet part expenditure of the institution.

To cherish the view "Health for all

through Ayurveda”.

- I To enable the district to become an advanced destination for ayurvedic treatment
- I To conduct field surveys awareness programmes and medical camps.
- I To promote and popularize authentic Ayurveda through Health tourism concept.

3.2 Requirements

3.2.1 District Medical Office (ISM), Kollam

District Medical Office (ISM), Kollam is now functioning in Nurses quarters in the premises of District Ayurveda Hospital. This building is in a highly dilapidated condition and certified unfit by the PWD authorities. So a separate new building is to be constructed for the District Medical Office. The suggested location for the proposal is at Kollam Corporation.

1. Vehicle facility may be provided for the smooth functioning and administration of the District Medical Officer, who is the controlling officer of the 62 Ayurvedic institutions in this district.
2. Video conferencing facility.
3. Adequate number of computer with internet facility
4. Conference Hall
5. District Medical Store attached with District Medical Office.

Period of implementation is 2007-2021. Total cost estimated is Rs 5.30 crores. The required facilities and phasing are given in Appendix 40- 1.

3.2.2 District Ayurveda Hospital, Kollam

Following proposals are included in connection with strengthening of the District Ayurveda Hospital at Kollam Corporation.

1. District Ayurveda Hospital, Kollam is to be immediately upgraded and bed strength raised to 500 in general sector.
2. Specialty wards for Marma, Panchakarma, Visha, Netra, Kauma-rabhrithya and Prasoodi-tantra with fifty bed strength each.
3. Special Pay wards with 100 rooms
4. Deluxe pay wards with 50 rooms
5. Hitech Panchakarma Theatre
6. Mini Operating Theatre
7. Ultra sound scan
8. Digital X-ray Unit
9. Clinical lab with pathologist

10. Ambulance
11. Staff quarters
12. Physiotherapy unit
13. Recreation facility
14. Canteen Service
15. Patient waiting lounge with purified drinking water, Toilet and Recreation facilities.
16. Staff training facility
17. Geriatric Centre(as suggested in Article 6.1.1 of chapter 45)
18. Research and Development Wing.

Period of implementation is 2007-2021.

Employment generated after completion will be 374. Total Cost of implementation of the proposals is Rs 12.60 crores.

3.2.3 Government Ayurveda Hospital, Ayoor

The Govt Ayurveda Hospital, Ayoor situated in Edamulakkal Grama Panchayat shall be strengthened with the following:

1. Bed strength is to be increased to 200 in general sector
2. Panchakarma, Marma, Visha Specialty units with 20 beds each.
3. X-ray Unit
4. Clinical laboratory
5. Physiotherapy and separate Panchakarma theatre for Male and Female
6. Staff quarters
7. Pay ward and Telephone facilities

Period of implementation is 2007-2018.

Employment generated after completion will be 123. Total cost of the scheme is Rs 5.58 crores. The required facilities and phasing are given in Appendix 40- 1.

3.2.4 Government Ayurveda Hospital, Paravoor

In the Govt Ayurveda Hospital in Paravoor Grama Panchayat, following improvements are suggested

1. Bed strength is to be increased to 200 in general sector
2. Marma, Panchakarma and Manasika (Psychiatry) Specialties are to be introduced.
3. X-ray unit shall be provided
4. Clinical laboratory shall be provided
5. Pay ward and Telephone facilities are to be provided
6. Staff quarters

Period of implementation is 2007-2018.

Employment generated after completion will be 123. Total cost of the scheme is Rs 5.58 crores.

3.2.5 Government Ayurveda Hospital, Thalavoor

Following improvements are suggested Government Ayurveda Hospital at Thalavoor

1. Bed strength to be increased to 200 in general sector
2. Marma, Panchakarma specialties are to be introduced
3. X-ray Unit
4. Clinical laboratory
5. Pay ward and Telephone facilities are to be provided

Period of implementation is 2007-2018.

Employment generated after completion will be 123. Total cost of the scheme is Rs 5.58 crores.

3.2.6 Government Ayurveda Hospitals at Kottarakkara, Karunagappally, Poruvazhy, Kunnathur and Nedumpna

The five Government Ayurveda Hospitals are at Kottarakkara, Karunagappally, Poruvazhy, Kunnathur and Nedumpna Grama Panchayats are proposed to be strengthened as follows:

1. Bed strength of the hospitals is to be increased to 150 each.
2. Medical Officer specialized in Kayachikitsa and Marma is to be appointed in all the five hospitals.
3. X-ray, Clinical Laboratory, Physiotherapy and telephone facilities are to be provided.

For each proposal, period of implementation is 2007-2019, employment generated after completion will be 95 and total Cost would be Rs 2.14 crores .

3.2.7 Dispensaries

Government Ayurveda Dispensaries at Kannanalloor, Kottamkara, Srayikkad, Thrikkadavoor, Kuzhikkalidavaka, Chavara and Vadakkevila are to be upgraded to 50 bedded hospitals.

These hospitals are situated in the LSGIs of suggested locations are at Alappad, Thrikkadavoor, Pavithreswaram, Chavara and Kollam Corporation respectively. The period of implementation is 2007-2017. Employment generated after completion will be 44. Total cost would be Rs 1.53 crores.

3.2.8 Government Ayurveda Dispensaries now functioning in Tribal areas

Government Ayurveda dispensaries are now functioning in tribal areas at the following places: Thenmala, Achencoil,

Kulathupuzha and Yeroor. Among them Government Ayurveda Dispensary, Thenmala may be upgraded to 150 bedded hospital envisaging the regional demand. Period of implementation is 2007-2016. Employment generated after completion will be 95. Total Cost would be 2.80 crores.

3.2.9 Construction of own building for Ayurveda dispensaries

Government Ayurveda dispensaries in places like Eravipuram, Cherukarakani, Munderothuruth, Piravanthoor, Kundara, Elampalloor, Chathanthoor, Srayikkad, Achencoil, Chadayamangalam, Chithara, Kareepra, Devikulangara, Panayam Perayam, Umayanloor, Thamarakkudy are now functioning either in rented building or building with insufficient facilities. So new buildings are to be constructed to house these Ayurveda Dispensaries at the respective Grama Panchayats. Period of implementation is 2007-2013. Total Cost for all units would be Rs 20 Lakhs.

3.2.10 Starting of new Ayurveda Dispensaries

Induction of either Ayurveda Dispensary or Hospital with I.P facilities is proposed to support the public health system in the following Panchayats (Table 40.1).

Table 40.1 : Phasing of LSGIs for Ayurveda dispensary / hospital with IP facility

| 2007 - 2011 | 2007-2012 | 2007-2013 |
|-------------------------------------|---|-----------------------------------|
| 1. Kulashekarapuram Grama Panchayat | 1. Pattazhi Vadakkekara Grama Panchayat | 1. Poothakkulam Grama Panchayat |
| 2. Sooranad North Grama Panchayat | 2. Pathanapuram Grama Panchayat | 2. Kalluvathukkal Grama Panchayat |
| 3. Vettikkavala Grama Panchayat | 3. Anchal Grama Panchayat | 3. Elamadu Grama Panchayat |
| 4. Melilla Grama Panchayat | 4. Pooyappally Grama Panchayat | 4. Nilamel Grama Panchayat |
| 5. Vilakkudi Grama Panchayat | 5. Neduvathoor Grama Panchayat | 5. Pattazhi Grama Panchayat |

Employment generated after completion will be 60. Total Cost for all units would be Rs 5 crore.

As per Articles 2.1.1.1, 2.2.1.1, 2.3.1.1 of Chapter 45, there are proposals for strengthening the Women component of ICDS. The nutrition component may be strengthened by imparting awareness through Ayurveda Dispensaries which can be achieved through co-ordination of Health and social welfare Dept.

3.3 Development requirements at a Glance

3.3.1 Dispensaries

- Building
- Compound wall
- Observation Unit
- Toilet facility
- Pure drinking water facility
- Patient's waiting lounge

3.3.2 Hospitals

- Building with compound wall
- Bed strength increase
- Specialty clinics
- Income generating measures
- Patient Amenity schemes
- Recreation facility
- Diagnostic facility
- Physiotherapy Unit
- Staff quarters

3.3.3 Medicinal Plant cultivation Unit

An area of nearly 10 acres of fertile land where water for irrigation is available (preferably in Thenmala adjacent to forest) may be acquired and medicinal plant cultivated for the purpose of manufacturing ayurvedic medicines. Here we can cultivate the most wanted and most rarely available plants. Thus the hardship of collection of rare species of plants could be rectified to a small extent, at the same time enhance the quality of medicines that are used in Government Ayurveda Hospitals and Dispensaries.

Period of implementation is 2007-2015. Employment generated after completion will be 45. Total Cost would be Rs 2.15 crores.

This can be integrated with the proposal in Article 3.11 of Chapter 34; Agriculture, supported by Article 4.4 of

Chapter 43A; Forests.

3.3.4 Medicine manufacturing Unit

A medicine manufacturing unit can be installed adjacent to the cultivation unit. Products from this institution can be utilized for the larger needs of patients and other beneficiaries approaching Government Ayurveda institutions.

The above two units can be controlled and administered by separate authorities who are under the District Medical Office. The medicines produced in this factory can be supplied in the Hospitals and dispensaries with a view of availing good quality medicine at reasonable price. The income thus generated can be utilized for the development purpose of each institution. Period of implementation is 2012-2014. Employment generated after completion will be 48. Total Cost would be

Rs. 13.45 crores.

3.3.5 Manufacture of Ayurveda Medicines

Now Oushadhi is the sole supplier of Ayurveda medicines to Ayurveda Department. This system leads to frequent shortage of medicine to the Ayurveda Institutions. In order to rectify the defects in the timely supply of medicines, district level manufacture and supply of medicines is to be introduced and this should be brought under the control of the Department of Indian Systems of Medicine.

3.3.6 Control and supervision of Private Ayurveda Institutions

Control and supervision of Private Ayurveda institutions and Massage institutions through a Licensing system is to be introduced to control the illicit method of Private Ayurveda Institutions.

3.3.7 Prevention, Treatment and Creation of Public awareness of Epidemics and Communicable diseases

A permanent solution for the newly emerging diseases like dengue fever, leptospirosis, Chikunguniya etc and other seasonal viral diseases is to be established. A district level unit with all emergency medicines with a team of medical officers and other required employees to assist them is to be made readily available on call on any spot at any time in the district. It should be managed and guided by the District Medical Officer.

Detection camps for life style disease like hyper tension, diabetes and other occupation related ailments should be conducted at the Regional and local body levels. It is to be mainly concentrated on highly populated areas and dwellings of workers like cashew workers, fishermen, coir workers, agriculture workers etc. In view of this, places like coastal areas, lakeside areas and other interior areas of the district namely Achencoil, Aryankavu, Kulathupuzha, Thenmala and Anchal can be given preference.

3.3.8 Health Tourism

Ayurveda can be effectively marketed through the fast growing health tourism concept and can be linked to Tourism as mentioned in Article 2.5.7 of Chapter 49; Tourism. However the licensing of such facilities in both public and private sectors shall be done by the Directorate of ISM. Construction of pay wards, deluxe rooms

and providing world class facilities are imperative.

3.4 General Development proposals in view of up-gradation of existing Government Ayurveda hospitals

In infrastructure development, building, furniture, water, electricity, telephone, Toilet facility, Construction of Specialty pay wards, deluxe rooms, staff quarters are to be planned.

A proper waiting lounge drinking water and toilet facility are envisaged in patient amenity sector.

Increased incidence of chronic diseases and mental illness necessitate the establishment of Speciality clinics. Hence various occupation diseases, chronic musculo-skeletal disorders, nervous system diseases, geriatric problems and mental diseases are managed.

Medicine is the inevitable factor in the management of diseases. Regular supply of medicines may be envisaged by either establishing a central manufacturing unit in the district or from other Government institutions.

Proper functioning of health care establishments largely depends upon the satisfaction of staff. To make them powerful tools for development they may be provided ideal working conditions and periodical training.

The institution wise requirements in Ayurveda sector for 2001 and 2021 is given in Appendix 40-1.

4. Proposals : Homeopathy System of Medicine

Systematic implementation of the proposals brought forward after reviewing the existing infrastructure and facilities and identifying the deficiencies shall help to uplift the health scenario of the district. Benefits of this eco-human friendly system of medicine shall reach the doorsteps of all categories of people in every nook and corner of the district by 2021, where by the goal lifetime health for all shall become a reality. The basic strategy is to provide necessary institutions with supporting infrastructure facilities.

4.1 Providing Institution with supportive infrastructure facilities

To bridge the major gap as identified in the sector analysis report " lack of institution" new dispensaries in 41

panchayats, community homoeopathy hospitals in 13 blocks and 3 taluk/urban head quarter hospitals has to be started in a phased manner as cited below. Lab facilities attached to all hospitals, computer with Internet facilities provided to all institutions, vehicles to carry out mobile clinics at the outskirts of every institution are necessities that cannot be over looked. Existing institutions shall be uplifted and modernized for achieving their full out put.

To fulfill the aim, activities are being proposed on yearly basis from 2008 to 2021 for infrastructure development. This is done by providing new institutions, development and modernization of the existing institutions.

Existing Homoeo institutions like District Medical Office, District Homoeo Hospital Kollam, Taluk Homoeo Hospital Karunagapally and Homoeo Hospital at Punalur Municipality along with 31 Rural and Six Urban Dispensaries are to be developed and modernized.

4.1.1 Providing New Institutions

As evident from the concept of Homoeo sector it is essential to concentrate in this area. Two Taluk Head quarter Hospital at Kunnathur and Kottarakkara, an Urban Head Quarter hospital at Paravur, Community Homoeo Hospital at Anchal, Kadakkal, Mayyanad, Chavara, Chathannoor, Anchalumood, Oachira, Vettikkavala and Homoeo dispensaries in 41 Grama Panchayats are the new institutions to be provided.

4.1.1.1 Taluk/ Urban head quarters Hospitals

Hospitals having minimum bed strength of 50 at Taluk and municipality levels shall provide medical care in general as well as in pediatric, gynecological, geriatric, lifestyle diseases, pain and palliative sections. Mother and childcare O.P. units shall also function to lower the maternal and child morbidity and mortality. Mobile units attached to these Head quarters shall carry out periodic general, preventive and awareness Medical camps, School Health Programme etc. It shall also function as referral hospitals with modern lab facilities to all community Homoeo hospitals and dispensaries. New block of speciality units shall function as per the health needs of the Taluk / Urban areas.

50 cents of land in the concerned area, which is easily accessible to the ailing

humanity, is required. Building (800 Sq Meter) constructed according to department approved plan with provision for future expansion. Compound wall, well, Electrification, Drinking water supply etc are not be over looked. Staff quarters are required attached to the each institution. Vehicles to carry out function of mobile units of each institution and ambulance for each institution are to be provided. Medicines, dietary articles, furniture, utensil, gas stove with LPG connection, Lab equipments and reagents, diagnostic equipments, instruments, accessories etc. are to be supplied according to need. Providing facilities for functioning of X-ray, Scan unit etc. Computer (Lap and desk top) with update facilities, Software, Communication facilities including fax, internet, Photostat Machine, Generator facilities etc. are required. Timely provision of fund for purchase and meeting establishment, miscellaneous and other recurring expenditure is a prerequisite. The suggested locations are at Kottarakkara at Kottarakkara taluk, Sasthamkotta at Kunnathur Taluk and Paravur at Paravur Municipality.

An initial approximate cost of Rs.3 Corers in a phased manner (as per activities carried out in Appendix 40 – 1.) and annual recurring expenditure of Rs. 8 Lakhs excluding salaries is anticipated in each institution.)

LSGI wise Phasing of Taluk / urban head quarter, Homoeo hospitals are to be set up by giving priority to those areas where there is no Homoeo Hospitals / disease prone area / high population density. It should be easily reachable to people from eastern area of Kollam District. The year depicts the commencement of the institutions and the activities carried (see Appendix 40 – 1) in remaining years up to 2021.

4.1.1.2 Community Homoeo Hospitals

Community Homoeo hospitals situated in each block having minimum bed strength of 25 shall function as a referral hospital to all the government Homoeo dispensaries coming under the block. It shall provide OP and I.P. Medical care in general as well as in pediatric, geriatric, gynecological, lifestyle diseases and pain and palliative sections. Mother and child O.P. units shall also function. Lab facility will be available. Mobile units attached to CHH shall conduct

periodic preventive and general medical camps as well as school health Programme in the block. New specialty unit shall be created as per the health requirements of the block.

30 cents of land in the concerned area, which is easily assessable to the ailing humanity, is required. Building (600 Sq Meter) must be constructed according to department approved plan with provision for future expansion. Compound wall, well, Electrification, Drinking water supply etc are not be over looked. Staff quarters are required to be attached to the each institution. Vehicles to carry out function of mobile units of each institution and ambulance for each institution are to be provided. Medicines, dietary articles, furniture utensil gas stove LPG connection, Lab equipments and reagents, diagnostic equipments instruments accessories etc. Computer (Lap and desk top) with update facilities, Software Communication facilities including fax inter-net, Photostat Machine, Generator facilities etc. are required. Timely provision of fund for purchase and meeting establishment, miscellaneous and other recurring expenditure is also essential. The suggested locations are at Anchal, Chittumala, Chadayamangalam, Mayyanad, Chavara, Ithikkara, Oachira, Vettikkavala, Anchalumood Grama Panchayats.

An initial approximate cost of Rs. 2 Crores in phased manner (as per activities carried out in Appendix 40 – 1,) and annual recurring expenditure of Rs. 6 Lakhs excluding salaries is anticipated in each institution.)

Total employment expected to be generated by 2021 is given in Appendix 40 – 1.

LSGI wise phasing of Community Homoeo Hospital is to be setup by giving priority to areas, which are in the eastern part of the district, absence of hospitals in that block, population density and disease prone area etc. The year indicates the priority in commencement of the institutions and further activities are carried out in a phased manner up to 2021 (Appendix 40 – 1).

As per Article 6.1.1 of Chapter 45, specialty departments including special care has to be given to the old aged. Presently palliative care for old aged is given only at Thevally, in Kollam

Corporation with only 5 beds. This is proposed to be extended to all Community Homoeo Hospitals by 2021.

4.1.1.3 Government Homoeo dispensaries

The basic unit of the Department of Homoeopathy shall function in every Grama Panchayat by 2021 in phased manner. It shall provide first aid health care facilities to all categories of suffering humanity. Mobile unit attached to the institution will carry out general preventive and awareness camps in all wards of that Panchayat. Some of this institution may function as specialty clinics as requirement arises.

10 Cents of land in the concerned area, which is easily assessable to the ailing humanity, is required. Building (200Sq Meter) constructed according to department approved plan with provision for future expansion. Compound wall, well, Electrification, Drinking water supply etc are not be over looked. Vehicles to carry out function of mobile units of each institution are to be provided. Medicines, furniture utensil gas stove LPG connection, diagnostic equipments instruments accessories etc. Computer (Lap and desk top) with update facilities, Software Communication facilities including fax inter-net, Photostat Machine, Generator facilities etc. are required. Timely provision of fund for purchase and meeting establishment, miscellaneous and other recurring expenditure are also required. The suggested locations are at Kulathupuzha, Alayamon, Thenmala, Chirakkara, Mandrothurathu, Kummil, Neendakara, Chithara, Velinalloor, Nilamel, Clappana,, Poruvazhy, Sooranad South, Yeroor Karavalur, Aryankavu, Kareepra, Kundara, Thrikkadavoor, Ittiva Panayam, West Kallada, Ummannoor, Vettikkavala Thalavoor, Veliyam, Neduvathoor, Chavara Thrikkaruva, Perinadu Elampalloor, Thazhava Mynagappally, Mylom, Vilakkudy, Pooyappally Anchal, Ezhukone, East-Kallada, Mayyanad, Kadakkal Grama Panchayats

An initial approximate cost of Rs. 40 Lakhs per institution in phased manner (as per activities carried out in Appendix 40 – 1,) and annual recurring expenditure of Rs.1 Lakhs excluding salaries is anticipated in each institution.)

LSGI wise phasing of Government

Homoeo dispensaries is carried out giving priority to areas of the eastern part of the district, costal areas, absence of Homoeo institutions in the area, disease prone area, population dense area etc. The year indicates commencement of the institution and further progress shall carried out during the years up to 2021 in phase manner as cited in Appendix 40 – 1.

4.1.2 Proposal for Development and Modernization of Existing Institutions

4.1.2.1 District Medical Office

Reviewing the sectoral analysis report of Homoeo in Government sector it is seen that the state of the existing institutions like the District Medical Office, District Homoeo Hospital, Taluk Hospital in Karunagappally, Municipal Hospital in Punalur, 31 rural and 6 urban dispensaries has to be developed and modernized to bring out its full potential to the maximum benefit and delight of the suffering humanity.

The central controlling unit of The Department of Homoeopathy in the District is currently functioning in the first floor of District Homoeo Hospital. To carry out its wide range of activities with maximum effectiveness the district medical office is to be provided with new land building and other infrastructure facilities. Under the leadership of District Medical Officer the following wings shall function.

I Administrative wing to carry out all accounts, establishment and other activities for all the institutions under its jurisdiction.

I Medical camp and exhibition of wing function to carry out general, preventive, epidemic medial camps including arogyamela. Exhibition of various aspects of system during the camp shall also be conducted. It shall conduct these ventures with the corporation of the Government Institutions where the event is to take place.

I School Health Programme wing shall carry out projects to uplift the intellectual, emotional and physical health of school children in the district round the year. They shall function in alliance with Taluk/ Block and Grama Panchayat level institution.

I District Store shall cater needs of medicine, materials, stationeries, hospital equipment, accessories etc. of the all the institutions in the districts.

- I CME Training wing consists of experts who shall impart training to Medical and Para Medical Staff of government and private Homoeo sector.
- I Research and Development Wing shall carry out research in the field of Drugs, disease (Preventive and curative aspects) in collaboration with District Hospital and specialty units, data collection and analysis. It shall also deal with Cultivation of Medicinal plants and projects there off.
- I For the functioning of the above said units, land of 25 cents and construction of building 1500 Sq Meter is required in Kollam corporation area. Conference hall (500 seating capacity) and mini conference hall with audiovisual facilities are needed. Furniture, Machine Equipments, Generator, Medicines, stationeries, hospital accessories etc. Potted plants, dry medicinal substance, laminated photos of exhibition materials etc. are required. I. T and communication facilities including internet and fax are needed. Vehicles as per the need of the units are essential. Canteen attached to the District Medical Office is required. Purchase of 10 acres of land and activities for medicinal plant cultivation. Timely and sufficient fund to carry out the activities of the various wings is of prime importance.

An approximate initial expenditure shall be about 5 corers in phased manner and recurring expenditure about Rs. 15 Lakhs is anticipated.

Agencies which help in the implementation of the activities are the Government of Kerala, Department of Homoeopathy, Jilla Panchayat, Kollam Corporation: KWA, KSEB PWD, Govt Cooperative and Private agencies, NGO'S etc.

Employment expected to be generated by 2021 is given in Appendix 40 – 1.

The suggested location is at Kollam Corporation. Period of Implementation is from 2007-2012 and 2012-2017. Employment generated after completion will be 342. Total Cost for all units would be Rs. 5 crore.

4.1.2.2 Kollam District Homoeo Hospital

The major referral unit of all Homoeo institutions in the district functioning with minimum bed strength of 100 providing OP/ IP Medical care facilities in general as well

as in pediatric, gynecological, geriatric, life style diseases, pain and palliative, mother and child health care. Separate wing for mental health research is also provided. Mental health, de-addiction and rehabilitation center in separate block with in the corporation limit under the control of District research unit with minimum bed strength of 10, shall function. Additional block and pay wards shall function as per the requirement. Full-fledged lab and updated diagnostic facilities shall render their services. Specialty clinic for Thyroid, Cancer, Allergy, Arthritis, occupational and Life style diseases shall function in different parts of Kollam Corporation under the control of District Hospital and District Research unit.

The District Homoeo Hospital is currently functioning with bed strength of 25; the existing building has a capacity to accommodate 75 beds for which sanction is required.

Land of 20 cents for Mental Health and de-addiction block, 10 cents each for various specialty clinics are required. Building 400 sq meter (provision for future expansion), 200 Sq meters are respectively required.

Construction is to be carried out according to department approved plan. compound wall, well, electrification, drinking water supply etc. are not to be over looked. Staff quarters are required to be attached to the institution. Vehicles to carry out function of mobile units of the institution and ambulance should be provided. Medicines, dietary articles, furniture, utensils, gas stove with LPG connection, Lab equipments and reagents, diagnostic equipments, instruments, accessories etc are needed. Providing facilities for functioning of X-ray, Scan unit ect) Computer (Lap and desk top) with update facilities, Software, Communication facilities including fax inter-net Photostat Machine, Generator facilities etc. are required. Timely provision of fund for purchase and meeting establishment, miscellaneous and other recurring expenditure is essential. The suggested location is at Jilla Panchayat.

An initial approximate cost of Rs 3 Crores in phased manner (as per activities carried out in Appendix 40 – 1,) and annual recurring expenditure of Rs. 12 lakhs excluding salaries is anticipated.

Period of Implementation is from 2007-2012 and 2012-2017.

Agencies involved in carrying out these activates are Government of Kerala LSGD, Department of Homoeopathy, PWD, KSEB, KWA, NRHM, Govt-Co operative Private agencies, NG.Organisation, Civil Supplies etc. Employment generated after completion will be 276. Total Cost for all units would be 3 crore.

Total Employment expected to be generated by 2021 is given in Appendix 40 – 1.

4.1.2.3 Taluk/Urban Head Quarters Homoeo Hospital

Government Homoeo Hospital Karunagappally and Government Homoeo Hospital Punalur are the only two functioning hospitals at Taluk/Municipal level. Providing land and building and other facilities will help the institutions to serve the suffering humanity to the best of their ability.

50 cents of land in the concerned area, which is easily accessible to the ailing humanity, is required. Building (800 Sq Meter) is constructed according to department approved plan with provision for future expansion. Compound wall, well, Electrification, Drinking water supply etc are not to be over looked. Staff quarters are required attached to the each institution. Vehicles to carry out function of mobile units of each institution and ambulance for each institution are to be provided. Medicines, dietary articles, furniture utensil gas stove LPG connection, Lab equipments and reagents, diagnostic equipments instruments accessories etc. Providing facilities for functioning of X-ray, Scan unit etc. Computer (Lap and desk top) with update facilities, Software Communication facilities including fax internet, Photostat Machine, Generator facilities ect. are required. Timely provision of fund for purchase and meeting establishment, miscellaneous and other recurring expenditure are also required. The suggested locations are at Karunagapally and Punalur Grama Panchayats.

An initial approximate cost of Rs. 3 Crores in phased manner (as per activities carried out in Appendix 40 – 1,) and annual recurring expenditure of Rs. 8 Lakhs excluding salaries is anticipated in each institution.) Period of Implementation is 2007-2012.

Agencies involved in carrying out these activities are Government of Kerala LSGD, Department of Homoeopathy, PWD, KSEB, KWA, NRHM, Govt-Co operative Private agencies, NG.Organisation, Civil Supplies etc. Employment generated after completion will be 167.Total Cost for all units would be Rs. 6 crore.

Employment expected to be generated by 2021 is given in Appendix 40 – 1.

LSGI wise Phasing of Taluk /Municipal Headquarter Hospital is carried out giving priority to region where the state of existing hospital is insufficient for proper functioning, tsunami, epidemic prone areas, densely populated region etc. The year of priority indicates the beginning of activities for implementation of the proposal.

4.1.2.4 Government Homoeo Dispensaries

These dispensaries are providing medical care facilities in general and shall provide weekly mother and child, geriatrics and specialist care as per the requirement of the area. Medicinal plants or trees may be cultivated in the compound. Therefore improving the existing condition will create greater ambience and will help a great deal in providing better health care facilities at the grass root levels.

10 cents of land for 11 dispensaries in the concerned LSGI which must be easily access able to the patients is to be acquired. 200 Sq.m building (according to department approved plan) for 15 dispensaries (4 dispensaries have own land) are to be constructed. Modernization of the institutions with IT, communication facilities and Basic facilities as per the needs of the institutions should be provided. Vehicle to each dispensaries for the systematic functioning of mobile units are needed. All dispensaries are to be provided with furniture, adequate medicines and dispensing materials, medical equipments and accessories etc as and when required. LPG connection with stove and cylinder is also required. Sufficient and timely supply of fund is a must. Period of implementation is 2007-2012.

An approximate initial cost of Rs.1 Crore in phased manner and recurring expenditure of Rs.40 Lakhs.

Agencies involved in carrying out the above said activities are the Govt: of Kerala, LSGD, Dept: of Homoeopathy,

P.W.D, K.S.E.B, K.W.A, Govt: Co-operative, private agencies, NGO's, NABARD, NRHM.etc. Employment generated after completion will be 333.Total Cost for all units would be Rs. 1 crore.

The staff pattern of existing institution is insufficient and is not uniform. Therefore it is proposed as given in Appendix 40 – 1.

LSGI wise phasing of Govt: Homoeo Dispensaries is carried out giving importance to dispensaries having no land and building of its own, institution in remote areas, institution with no building of its own etc.

The year of priority denotes starting of the activities, which are to be completed in a phase manner by 2021.

The medicinal plant cultivation unit suitable to the climate of Kerala as proposed in sectoral analysis report is to be carried out under the guidance of the research wing of District Medical Office. Small-scale medicinal plant cultivations may be done in the dispensary compound with assistance from tropical botanical garden, Palode, District research unit, HOMCO, Alappuzha etc.

Commencement of homoeopathic pharmacy college in Govt: sector in collaboration with education department will be the resource of pharmacists and other Para medical staff of the department.

Detailed projects of activities to be carried out from time to time may be submitted as when required.

Matters requiring legalizations shown in the sectoral report are state level issues and therefore have to be dealt with at state level.

5. Proposal for Coordinated Functions of Three Systems of Medicine

While thinking about better community health, the present approach of watertight compartmentalisation of the three systems of medicine is detrimental to easy and early achievements. In Kerala, health institutions from primary health centres to district hospitals of the three systems of medicine have already been transferred to the LSGIs. The functions and functionaries are also transferred. The LSGIs have to work out locally suitable action plans considering the infrastructure support and human resource in these three systems of medicine. For example some LSGIs can

take up initiatives in housing the three systems of medicines under common roof so that the patients can access disciplines of their choice. This will also strengthen the coordinated treatment efforts of the three systems of medicine and ultimately improve the quality of health services delivery mechanism.

6. Conclusion

Ayurveda has acquired global recognition as a safe and effective system of medicine based mostly on herbal formulations. Ayurvedic management provides better relief to a certain debilitating diseases for which there is no specific treatment in any other systems. Panchakarma therapies provide total cure to chronic diseases. Occupational diseases can be well managed and epidemics prevented. In Kollam District where cashew workers, Brick kilns, fishermen and agricultural workers are suffering chronic occupational hazards Ayurveda is a better remedy. To achieve the goal Government Ayurveda institutions are proposed to be strengthened. This will obviously help the socially and economically weaker sections of the society. Human resources mobilization will be carried out as stipulated in the department manual and staff pattern system can be reorganized on the basis of department manual.

The implementation of the proposals in the Homeo sector will provide better service to the people through harmless way of treatment to the public.

In case of Allopathy, if the suggestions depicted are implemented properly in a time bound manner, the whole community will be able to enjoy the health care facilities uniformly from the Government sector. Also the preventive curative and Rehabilitative activities will be running in a full fledged manner there by increasing general health status of this community as a whole and can be maintained provided the facilities implemented are faultless.

Thus altogether there are a lot of improvements required in the health sector particularly in the control of epidemics, life style diseases etc. which are linked with public hygiene and lot of awareness is essential for the people to prevent the diseases rather than to cure. It is expected that this can be achieved by the timely implementation of these proposals by 2021n

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Chapter 41

Drinking Water and Sanitation

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This chapter includes the development proposals of Drinking Water and Sanitation sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

The district development policy of Drinking Water and Sanitation, aims to provide sufficient drinking water and sanitation facilities in the district while assuring sustainability of water resources in the district.

The strategies for the same include

- I Source improvement of water resources including proposals for improvement of ground water sources, proposals for improvement of surface water sources by providing proposals for check dams, proposals for soil

conservation, proposals for rain water harvesting and proposals for Non conventional Sources of Water Providing sufficient quantity and quality water by suggesting proposals for water supply schemes basically comprising of source improvement, rehabilitation and extension of pipe lines etc.

- I Providing better sanitation facilities by suggesting proposals for sewerage system, proposals for Integrated Low Cost Sanitation (ILCS) for urban areas, proposals for community latrines, proposals for ecosans and proposals for Information, Education and Communication (IEC)
- I Suggesting other proposals including quality monitoring program – (setting up of labs) and replacing railway crossing for

selected areas

2. Proposals for Source Improvement

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2.1 Proposals for Improvement of Ground Water Sources

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As mentioned in Article 7 of Chapter 18, one major source of drinking water in Kollam District is Ground water. The number of existing tube wells itself is an indicator for this. However the over exploitation of the ground water has created an imbalance between withdrawal and recharging of ground water. This situation has resulted in the exhausting of ground water source. Hence now it is the time to think about replenishing of ground water. Coastal areas of Kollam district mainly depends on ground water sources. Once the water supply schemes based on river water is implemented in these Grama Panchayats, it is possible to isolate some areas where the number of tube wells can

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be reduced to a minimum and the existing tube wells can be used for the recharging of ground water.

For the purpose, tube wells can be constructed in which the rain water can be collected and allowed to percolate to connecting to the aquifer. The work can be done by Ground Water Dept. and KWA. The tube well can be constructed at a cost of Rs. 5 lakhs each. The total estimated amount is Rs.390 lakhs. The phasing of proposal is given in Appendix 41 - 1. The funding can be met by the Jilla Panchayat, LSGIs, MP/MLA funds etc.

2.2 Proposals for Improvement of Surface Water Sources

2.2.1 Proposals for Check dams

Vide article 3.4.5 of Chapter 18, it was reported that the availability of fresh water from rivers will be in a threat due to over extraction and we have to ensure the sustainability of the river sources. As explained in Chapter 18 it is required to provide check dams and reservoirs at possible locations across Achencovil river, Kallada River and Ithikkara river to safeguard the interest of public drinking water system.

Necessary EIA studies are required to be conducted for the assessment of resettlement needs in view of possible flooding due to the construction of check dams and reservoirs. However it can be presumed that the flooding and resettlement requirements will be minimum due to the higher depth of rivers due to the sand mining and hence the possibility of check dams is very high.

The proposal includes construction of check dams and dams across the rivers. As an initial proposal three to five check dams may be constructed across the four rivers. The cost per check dam will be to the tune of Rs. 20 crores which shall be met by the Jilla Panchayat, Local Self Govt. Institutions and the benefiting communities. A cost sharing approach has to be evolved for implementing the construction of check dams. For higher capacity dams, generation of electricity and/or Irrigation possibilities shall be coupled with the proposal and the project shall be started with all the concerned departments. Further financial assistance from Government of India/State Govt. and loans /grant from other financing agencies may be resorted to as source of fund.

These works are highly linked with LSGIs, Irrigation Department, River Basin Authority (under formation), Tourism and Fisheries departments etc.

The LSGIs to be served with water from the schemes will become the beneficiaries.

The maintenance of the dams and check dams shall be vested with a central agency for effective monitoring and control of the system. In the present administrative setup Jilla Panchayat can effectively carry out the operation and maintenance of these structures for the benefit of the entire community. The construction works of the check dams are to be executed by Minor Irrigation Dept.

Thus the priority areas include Velinallur (Atturkonam in Ithikkara River), Kulakkada (Madathanampuzhakadavu in Kallada River, Nedumpna (Kundumon in Ithikkara River), Chathannur (Kattachal in Ithikkara River), Kalluvathukkal (Aduthala in Ithikkara River), Mylom (Andaman Kadavu in Kallada River), Kulathupuzha (Mylammodu in Kallada River), Edamulakkal (Peringallor in Ithikkara River), Chadayamangalam (Poongodu in Ithikkara River), Poruvazhy (Edakkadu in Pallikal River), Punalur Municipality (Muttathukadavu in Kallada River) and Sooranadu North (Parakkadavu in Pallickal River). The phasing of proposal is given in Appendix 41 - 1.

2.2.2 Proposals for Soil Conservation

As mentioned in Article 7 of Chapter 18, the improvement in surface water sources can be achieved through soil conservation measures. These works are to be executed by Soil Conservation Dept.

Other surface water sources to be improved through soil conservation can be prioritized based on the analysis of severity index in Article 1.4 and water scarcity in Article 1.5 Chapter 18. The common LSGIs which are severely affected by water

scarcity, distance to water source (>0.5 Km) and insufficient water supply facilities are given top priority. The priority areas for soil conservation measures suggested and incorporated in Article 31 of Chapter 18 are as given in Table 41.1.

As per Article 1 and Appendix 36 – 1A of Chapter 36, these LSGIs have been taken for implementing soil conservation measures priority areas in each spatial development zones of District Development Concept.

2.3 Proposals for Rain Water Harvesting

Vide article 3.4.5 of Chapter 18, it was reported that the rain water harvesting can be adopted at very remote areas and isolated pockets where it is very difficult or uneconomical to provide safe drinking water through the conventional and traditional methods. The proposal is to provide rainwater harvesting units for eligible families or clusters where no other source of water is available. In Kollam such highly isolated areas are rare and hence rain water harvesting system as role source of water is not required on a community level. However such schemes can be resorted in combination with other sources and also as source of water in emergency situations.

One unit for rain water harvesting system of 5m³ capacity may cost about Rs.20,000. No land acquisition is required for this proposal since the beneficiary himself has to provide the required land at his cost and convenience.

The proposal includes the selection of beneficiary and the construction of rainwater harvesting units for the individuals. The cost of the entire proposal may come to Rs.50lakhs for 250 such units. The quality of water collected through the rain water harvesting unit has to be ensured. The finance for this can be met from the District Grama anchayat / LSGI.

Table 41.1 : Priority areas for the construction of check dams

| I Priority areas | II Priority areas | III Priority areas |
|------------------|--|---|
| LSGI selected | | |
| Aryankavu | Alayamon, Thrikkadavoor and Poothakkulam | Edamulakkal, Yeroor, Anchal, Mylom, Kulakkada, |
| | | Panayam, Perinadu, Thrikkaruva, Paravoor Municipality, |
| | | Kottamkara, Thrikkovilattom, Mayyanad, Oachira, |
| | | Kulasekharapuram, Clappana, Mamoe Island, Chathanoor, |
| | | Adichanallor, Nedumpna, Thekkumbhagam, Thevalakkara, Panmana, Chavara, Karunagappally, Alappad, Thazhava, Kalluvathukkal, Kulathupuzha, Thalavoor, Thodiyoor, Karavalloor, Pattazhy South, Ezukone, Elampallur, Velimnalloor and Pavithreswaram |
| | | |

The beneficiary of this proposal is the individual families who are ideally eligible for the scheme. The selection shall be vested with LSGI.

The activities include the design of rain water harvesting unit, selection of beneficiary, construction of RWH unit and its OandM.

The scheme can be implemented with the assistance of local bodies as shown in the activities phasing details.

The completed RWH units shall be handed over to the beneficiary and the Operation and Maintenance is the responsibility of the beneficiary. However the quality of water must be tested and assured by any authorized agency. The phasing of proposal is given in Appendix 41 - 1.

2.4 Proposals for Non conventional Sources of Water

Vide article 3.4.5 of Chapter 18, it was reported that the availability of fresh water from rivers will be in a threat due to the over extraction and other socio economic activities in the river. Still, there is a source for drinking water which is left behind as reported in Article 3.2 of Chapter 18 ie. vast area of back waters available in Kollam district, through converting into fresh water lakes with artificial means of separation with seawater. The backwaters in Kerala and in Kollam district is become unfit for drinking purpose due its proximity to tidal actions and the possible concentration of pesticides. Nowadays the concentration of pesticides is very minimum due to the decreased agricultural activities and the back water now remains as an untapped source for the drinking water.

So far no techno-economic feasibility studies are available in this regard. It is required to conduct EIA, Geographical and morphological studies to assess the spatial and subsoil character of the backwaters etc and hence such detailed studies are proposed.

The proposal includes the detailed engineering studies including EIA for the conversion of some portion of Ashtamudi kayal surrounded by Perinadu and Thrikkadavoor Grama Panchayats to a fresh water source by providing check dams near Thevally (Kadavoor) or at the eastern side of Kavanadu where the back water is at present connected with a narrow strip of water body. The cost this

proposal may come to about Rupees 50 lakhs.

The major beneficiary is Kollam Corporation where there is no own drinking water sources available and thus depends on the very far Sasthamcottah lake and Kallada dam.

The proposal can be implemented with the assistance of local bodies as shown in the activities phasing details in Appendix 41 - 1. The proposal envisages the investigation only.

3. Proposals for Water Supply Schemes

As per Article 6 of Chapter 18, only 22 LSGIs including Neendakara, Chavara, Panmana, Oachira, Clappana, Karunagappally and Alappad Grama Panchayats under TEAP and Elampalloor, Kottarakkara, Melila, Kundara, Perayam, East Kallada, Kareepra, Kulathupuzha, Eroor, Ittiva, Anchal, Alayamon, Pavithreswaram and Mylom under NABARD Schemes and Kollam Corporation under KSUDP will satisfy the criteria of achieving 100% water supply coverage by area, with 70 – 100 lpcd supply level of potable water by 2021.

So the remaining LSGIs are targeted for source improvement, rehabilitation and extension of pipe lines etc. There are new proposals as well, so that the target of achieving 100% water supply coverage by area with 70 – 100 lpcd supply level of potable water is satisfied by 2021. Apart from this, special consideration is given to ensure that 24"X7" water supply is provided in the Multi Functional and Special Development Zones.

As per Article 9 of Chapter 45; Social Welfare, it is proposed to provide fire hydrants in Multi Functional Zones (Zone 1 - Kollam Corporation and the Grama Panchayats of Kottamkara, Thrikkovilvattom, Elampallur, Panayam and Mayyanadu and Zone 2 - Punalur Municipality and the Grama Panchayats of Karunagapally, Chathannur, Kottarakkara, Neendakara and Anchal) and Special Development Zones (Paravur Municipality and the Grama Panchayats of Mayyanadu, Chathannur, Kalluvathukkal, Kunadara, West Kallada, East Kallada, Perayam, Elampallur, Ochira, Clappana, Kulasekharapuram, Alappadu, Panmana, Chavara, Thevalakkara, Mynagapally, Sasthamcottah, Neendakara and

Karunagapally). So facilities such as flanges, reducers etc. for providing hydrants are proposed to be installed in these LSGIs.

The proposals are detailed below.

3.1 Rural Water Supply Scheme to Ayoor in Edamulakkal Grama Panchayat - Source improvement

The source of the scheme is Ithikkara River. During summer season the water flow in the river become insufficient and regular pumping gets interrupted frequently. For overcoming the problem it is proposed to construct a check dam near the Perigallur pump house. Approximate cost of the above proposal is Rs.25 lakhs. The proposal is at Edamulakkal Grama Panchayat executed by the present P. H. Division, Kollam benefiting a population of 6000. Appendix 41 – 1 gives the phasing of the proposal.

3.2 Water Supply Scheme to Kadakkal Grama Panchayat for Extension of Water Supply pipe lines

Chithara water supply scheme was designed and implemented for the full coverage of Kadakkal, Chithara, Nilamel and Chadayamangalam Grama Panchayats in its ultimate stage as 2010. The implemented proposals do not cover the entire Grama Panchayat area at present. Hence extension of pipe lines to various places are essential for a total length of 21500 mts. by using 50 mm to 110 mm PVC Pipe with necessary control valve and street taps. Approximate cost of the above proposal is Rs 55 lakhs.

The proposal is at Kadakkal Grama Panchayat executed by the present P. H. Division, Kollam benefiting a population of 12200. Appendix 41 – 1 gives the phasing of the proposal.

3.3 Water Supply Scheme to Kummil Grama Panchayat - Extension of Water Supply pipe lines

Chithara water supply scheme was designed and implemented for the full coverage of the Kadakkal, Chithara, Nilamel and Chadayamangalam Grama Panchayats in its ultimate stage as 2010. Kummil Grama Panchayat is established in the year 2005 bifurcating Kadakkal Grama Panchayat. The implemented proposals do not cover the entire Grama Panchayat areas at present. Hence

extension of pipe lines to various places of Kummil Grama Panchayat areas are essential for a total length of 6000 mts. by using 50mm to 110mm PVC Pipe with necessary control valve and street taps. Approximate cost of the above proposal is Rs 18 lakhs.

The proposal is at Kummil Grama Panchayat executed by the present P. H. Division, Kollam benefiting a population of 4000. Appendix 41 – 1 gives the phasing of the proposal.

3.4 Water Supply Scheme to Chithara Grama Panchayat - Extension of Water Supply pipe lines

Chithara water supply scheme do not cover the entire area of Chithara Grama Panchayat at present. Hence extension of pipe lines to various places are essential for a total length of 6000 mts. by using 50 mm to 110 mm PVC Pipe with necessary control valve and street taps. Approximate cost of the above proposal is Rs 18 lakhs.

The proposal is at Chithara Grama Panchayat executed by the present P. H. Division, Kollam benefiting a population of 3000. Appendix 41 – 1 gives the phasing of the proposal.

3.5 Water Supply Scheme to Nilamel Grama Panchayat - Extension of Water Supply pipe lines

Chithara water supply scheme designed and implemented for the full coverage of the Kadakkal, Chithara, Nilamel and Chadayamangalam Grama Panchayats in its ultimate stage as 2010 do not cover the entire area of Nilamel Grama Panchayat at present. Hence extension of pipe lines to various places of Nilamel Grama Panchayat areas are essential for a total length of 6000 mts. by using 50mm to 110mm PVC Pipe with necessary control valve and street taps. Approximate cost of the above proposal is Rs 18 lakhs.

The proposal is at Nilamel Grama Panchayat executed by the present P. H. Division, Kollam benefiting a population of 3000. Appendix 41 – 1 gives the phasing of the proposal.

3.6 Water Supply Scheme to Kadakkal Grama Panchayat - Rehabilitation of existing damaged pipes

The existing AC Pipe line under Chithara water supply scheme was laid in

1988 – 89 period. Due to road improvement work at several time, the alignment of pipe lines are now mostly covered with tarred surface. Frequent breakages occur in the line which causes many difficulties to maintain the pipe lines during the rectification of leakages. Hence replacement of the existing damaged distribution cum transmission main pipe lines along the Nilamel – Madathara road for a total length of 5000 mts. by using 200 mm to 300 mm AC class 15 pipe, at an estimated cost of Rs 50 lakhs is proposed.

The proposal is at Kadakkal Grama Panchayat to be executed by the present P. H. Division, Kollam benefiting a population of 3000. Appendix 41 – 1 gives the phasing of the proposal.

3.7 Water Supply Scheme to Kadakkal Grama Panchayat - Construction of OHSR

The Chithara water supply scheme was commissioned on 3/1999. As per the proposal this scheme was targeted for the full coverage of the scheme area. The existing OHSR at Kottappuram is only a balancing reservoir which feeds two GLSRs. The existing reservoirs are not sufficient for feeding the entire area. At present an additional storage reservoir at Kottappuram is needed for feeding the nearby areas. Hence construction of 2 L.L. capacity OHSR at Kottappuram is necessary. Approximate cost of the above proposal is Rs 30 lakhs.

The proposal is at Kadakkal Grama Panchayat executed by the present P. H. Division, Kollam benefiting a population of 1000. Appendix 41 – 1 gives the phasing of the proposal.

3.8 Water Supply Scheme to Kadakkal, Kummil, Nilamel and Chadayamangalam Grama Panchayats - Augmentation of the Existing scheme

The Chithara water supply scheme was commissioned on 3/1999. This scheme was targeted for the full coverage of Chithara, Kadakkal, Nilamel and Chadayamangalam Grama Panchayats. The scheme is designed for the population of 109060 as per 1981 census. The estimated benefited population of the scheme in intermediate stage of 2001 and ultimate stage of 2011 are 128800 and 150800 respectively. The ultimate water demand was 9.72 mld. and the source is

adequate to meet the ultimate demand. Intake well, treatment plant, transmission main and service reservoirs are designed for the ultimate capacity based on the proposed population of 2011.

Due to frequent leakages and bursting of pipes in the pumping main and transmission main, the quantity of water produced and supplied is less than 3.12 mld. To overcome this, replacement and augmentation of the scheme is very necessary.

The source of the scheme is Kulathupuzha River, a tributary of Kallada River, and is perennial. An intake well cum pump house of 9m dia. and 17.5 m depth is constructed in the left bank of Kulathupuzha river at Mylamoodu. Since the level difference between the intake well and Treatment Plant is about 123mts, double stage pumping is done. For this a sump having capacity of 6 lakhs liters and pump house is constructed at Shivankunnu for II stage pumping.

Water is pumped from well cum pump house to sump at Shivankunnu by using 3 Nos. of 75HP (one standby) VT pump set through 4260m (240m of 350mm CI pipe and 4020m of 400mm Premo pipe) pumping main. From sump to Treatment Plant water is again pumped by using 3 Nos. of 75HP (one standby) Centrifugal pump set through 2580m pumping main (1200m of 350mm CI pipe and 1380m of 400mm Premo pipe). Water is being treated at 9.72mld capacity treatment plant at Madathara and stored at 2 lakhs liter capacity clear water sump, from their water flows by gravity into different locations of various reservoirs and distributed to the various places of the four Grama Panchayats.

Since the Premo pipe factory is not working now, Premo pipe is not available for replacement of the damaged pipe. Pumping using 2 Nos. of 75 HP pump set at a time is not possible. Hence water supply to different areas is only intermittent. This situation seriously affects the smooth functioning of the scheme. To make the scheme in a proper functioning condition the Premo pipes are to be replaced with 350mm CI pipe immediately. Also the standardization of substations and replacement of pump sets, stabilization of transmission main, source improvement works, renovation of water treatment plant

etc are required urgently. In addition, extension of pipe lines along newly formed roads after 1981 is also required.

To overcome the regular interruption to water supply, it is proposed to lay 350mm CI pumping main instead of 400mm Premo pipe. Through this scheme, the scarcity of drinking water in four Grama Panchayats can be solved completely. The coverage can be increased, thereby increasing the revenue. Due to this, an additional coverage of about 30000 people will be possible.

Water supply coverage to Nilamel Grama Panchayat is below 15%. Wards 1,2,3,4,5,6,7,9 and 10 are facing acute shortage of drinking water and the terrain here is highly undulated. A sump, pump house and GL Tank are already constructed under the existing scheme, but till date not commissioned due to the interruption in water supply. For improving the water supply, the rehabilitation and augmentation works are a prerequisite besides extension of pipe line for about 20 kms for covering the remaining portion.

All wards of Chadayamangalam Grama Panchayat are covered (75% of area) except Kannankode ward. An extension of pipe line for and about 3 kms implementing the replacement works are required.

The proposal covers Kadakkal, Kummil, Nilamel and Chadayamangalam Grama Panchayats and the works shall be executed by the present P. H. Division, Kollam. The scheme will benefit a population of 30000. Appendix 41 – 1 gives the phasing of the proposal.

3.9 Water Supply Scheme to Elamadu Grama Panchayat - Extension of water supply pipe lines

Water supply to Elamadu Grama Panchayat was included in the JBIC Scheme which is under implementation stage. The implemented proposals do not cover the entire Grama Panchayat areas at present. But adequate water is available in the tank constructed by JBIC in the above area. Extensions of pipe lines at various places are essential for a total length of 50000 mts. by using 50mm to 110mm PVC Pipe with necessary control valve and street taps. Approximate cost of the above proposal is Rs 110 lakhs.

The proposal shall be executed by the

present P. H. Division, Kollam. Appendix 41 – 1 gives the phasing of the proposal.

3.10 Water Supply Scheme to Ummannoor Grama Panchayat - Extension of water supply pipe lines

Water supply to Ummannoor Grama Panchayat was included in the JBIC Scheme, which is under implementation stage. The implemented proposals do not cover the entire Grama Panchayat areas at present. But adequate water is available in the tank constructed by JBIC in the above area. Extension of pipe lines at various places are essential for a total length of 50000 mts. by using 50 mm to 110 mm PVC Pipe with necessary control valve and street taps. Approximate cost of the above proposal is Rs.110 lakhs.

The proposal is executed by the present P. H. Division, Kollam. Appendix 41 – 1 gives the phasing of the proposal.

3.11 Water Supply Scheme to Chadayamangalam Grama Panchayat - Source Improvement

The source of the scheme is Ithikkara River. The present gallery system is choked with mud and sediments during the monsoon flow. Regular pumping is interrupted so many times due to the insufficiency of water in the well. Therefore it is urgently necessary for overcoming the problem by constructing a baby well with pipe gallery near the Poonkodu pump house to collect water for the improvement of the above scheme. Approximate cost of the above proposal is Rs.10 Lakhs.

The proposal is at Chadayamangalam Grama Panchayat and is executed by the present P. H. Division, Kollam benefiting a population of 5000. Appendix 41 – 1 gives the phasing of the proposal.

3.12 Augmentation BAWSS to Kundara and adjoining Grama Panchayats and Augmentation of RWSS in Ezhukone Grama Panchayat

Ezhukone Grama Panchayat is located in the North West part of Kottarakkara Taluk and is well connected with Kollam and Kottarakkara. Most of the house holds in this area depends on domestic wells for their drinking and other water needs. All the household wells except 5 or 6 dry during summer months of April and May. Therefore acute drinking water scarcity is being experienced by the people during

peak summer. The RWSS to Ezhukone and BAWSS to Kundara and adjoining Grama Panchayats are able to meet drinking water requirements of 60% of the population.

Even though the Ezhukone Grama Panchayat is included in the Comprehensive scheme BAWSS to Kundara and adjoining Grama Panchayats, most of the elevated portions of the pachayat still remain uncovered. Also due to inheriting problems of the above water supply scheme, water supply in the Grama Panchayat is limited to twice in a week. The distribution lines of BAWSS to Kundara and adjoining Grama Panchayats has to be augmented to cover the elevated portions.

The "RWSS to Ezhukone" with open well source also needs development as its expected life span is already over. Due to increased demand of piped water, the sustainability of source has decreased considerably. Also the old and damaged AC pipe of scheme needs urgent replacement. The ground water table in the Grama Panchayat is lowering at alarming rates and the area needs soil conservation measures for ground water recharge as an urgent remedy. The proposals comprise of following components.

1) Augmentation of BAWSS to Kundara and adjoining Grama Panchayats

The water scarcity in the southern elevated portion of the Grama Panchayat can be solved by capacity increase of the existing Thuvellloor GL reservoir in the Grama Panchayat where treated water from BAWSS to Kundara and adjoining Grama Panchayat is stored. The water is then pumped to OHSR at Kottavila in Kareepra Grama Panchayat using 160 mm PVC pumping main for about 4.5 Km. From the OHSR, additional transmission main to Ezhukone Grama Panchayat inter connecting the same with distribution lines of Ezhukone Grama Panchayat shall be laid. The possibility of extension of "RWSS to Kareepra" can also be explored by implementing the above proposal. The northern portion of Grama Panchayat can be covered by constructing a sump at Kozhikodanmukku and the existing gravity main towards Poreekal can be connected to tap the water. The water after collecting in the sump can either be pumped directly

to distribution system or pumped to existing OHSR at Kaaruvellil (Plakkadu) and distributed to the elevated northern portions by expanding the distribution system.

An additional transmission main from Idiyankunnu tank at Neduvathoor Grama Panchayat to Ambalathumkala Jn. and interconnecting the same with existing distribution system will improve water supply level to Irumpanangad, Edakkode, Amalathumkala, habitations. The extension of distribution system to the elevated areas is also proposed for full coverage of drinking water.

2) Augmentation of RWSS to Ezhukone

The proposal includes augmentation of the source by constructing bore wells at Cheerankavu, Ambalathumkala, Kakakottor, Irumpanangad and Poachakonam with on line pumping Mechanism can be adopted. The existing AC pipes of distribution system have to be replaced urgently. The pump set in the pump house needs replacement. The proposal will benefit the ultimate population of 34600 in the Year 2021 with supply level of 70 lpcd. The Kerala Water Authority shall be the agency responsible for the formation, implementation, and subsequent operation and maintenance of the scheme. The scheme is to be implemented during 2009-2014 with financial aid from NABARD/ GOI/ GOK. The cost estimated is given in Appendix 41-2.

3.13 Augmentation of ARWSS to Kulakkada and Pavithreswaram in Kulakkada Grama Panchayat

Kulakkada Grama Panchayat is located in northern part of Kottarakkara Taluk and is well connected with NH 208 and M.C Road. Open wells are generally adopted by the rural population for meeting the drinking water requirements. Due to uncontrolled sand mining most of the open wells become dry during summer, and this Grama Panchayat regularly finds a place in the list of drought hit areas in Kollam district. Even though the Revenue department and Grama Panchayat authorities supply water in lorries during summer, it is neither adequate nor satisfactory. To solve drinking water scarcity of Kulakkada Grama Panchayat, a scheme is proposed under ARWSP aiming to provide drinking water facility to Kulakkada and Pavithreswaram Grama

Panchayats. The scheme envisages meeting the water demands of the entire population of 79307 in these Grama Panchayats in the year 2029 with a water supply level of 40 lpcd. The administrative and technical sanctions were obtained for the proposal for an amount of Rs 700 lakhs. The scheme will be commissioned in the year 2010.

The Water Supply Scheme "ARWSS to Kulakkada and Pavithreswaram Grama Panchayats" has been designed for a supply level of 40 lpcd and due to shortage of fund, the length of distribution system was curtailed. The formation of new roads after the drafting of scheme report has to be taken in to account. Hence for the full coverage of Kulakkada Grama Panchayat, at water supply level of 70 lpcd in the year 2021; a new scheme is proposed.

The capacity of the ARWSS is 3.73 MLD with 16 hrs pumping. If 24 hrs of pumping is adopted the capacity of the scheme will be 5.6 MLD which is more than the capacity for full coverage at water supply rate of 70 lpcd in the Year 2021. Hence the existing infrastructures can be used without upgradation except the distribution net work, For the full coverage of Kulakkada Grama Panchayat, the extension of distribution line for a length of 64 km is required. For this purpose PVC Pipes of size 110 mm to 50 mm are proposed. The pipe line extension to various parts of the Grama Panchayat is technically feasible.

The proposal will benefit the ultimate population of 36413 in the Year 2021 with supply level of 70 lpcd. The Kerala Water Authority shall be the agency responsible for the formation, implementation, and subsequent operation and maintenance of this scheme proposed to be implemented during 2010-2013 with financial aid from the Grama Panchayat / State Government. The estimated cost is given in Appendix 41-2. Once implemented, it will be a boon for the inhabitants of the Kulakkada Grama Panchayat. The estimated cost of the proposal is Rs 160 Lakhs. Appendix 41 – 1 gives the phasing of the proposal.

3.14 Augmentation BAWSS to Kundara and adjoining Grama Panchayats, Improvements to existing schemes and Proposal for Mini water supply scheme for Neduvathoor Grama Panchayat

Neduvathoor Grama Panchayat, is

located in the northern part of Kottarakkara Taluk and is well connected with Kollam and Kottarakkara. Most of the households in this area depend on domestic wells for their drinking and other water needs. All the household wells except 5 or 6 are drying during summer months of April and May. Therefore acute drinking water scarcity is being experienced by the people of this during peak summer. The BAWSS to Kundara and adjoining Grama Panchayats cover the Neduvathoor Grama Panchayat, to meet the drinking water facilities to its 50 % of the population. Water supply scheme to Harijan colony at Anakottoor and Vallam is catering two SC habitations.

Even though the Neduvathoor Grama Panchayat included in the Comprehensive scheme BAWSS to Kundara and adjoining Grama Panchayats, most of the elevated portions of the Grama Panchayat still remain uncovered. Also due to inheriting problems of the above water supply scheme, water supply in the Grama Panchayat is limited to once in a week. The distribution lines of the BAWSS in the Grama Panchayat has to be stabilized and augmented at different parts to cover the elevated portions where extension is technically feasible. Due to highly undulating topography of the area, pipe line extensions are not feasible. Hence at some locations mini water supply schemes are required to meet the drinking water needs.

The "Water supply Schemes to Anakottoor and Vallam" with open well source also needs development as its expected life span is almost over. Due to increased demand of piped water, the sustainability of source has decreased considerably. The ground water table in the Grama Panchayat is lowering at alarming rate and soil conservation measures for ground water recharge is an urgent demand.

The proposals comprises of following components.

1) Augmentation of BAWSS to Kundara and Adjoining Grama Panchayats

The existing distribution lines of BAWSS to Kundara and adjoining Grama Panchayats need urgent attention as most of the line has to be changed and stabilized. Feasible extensions are proposed for coverage of drinking water for the habitations like Thekkumpuram,

Neelaswaram, Anoor, Neduvathoor, and Kuzhakkadu. For this purpose about 50 km of pipe line extension using pvc pipes of size varying from 140 mm to 63 mm size is required.

2) Improvements of existing Water Supply Schemes in Harijan colonies

Due to wide variation in land use pattern, the ground water recharge possibilities get reduced and the yield of open well sources of both the schemes got considerably reduced. Source augmentation by developing new sources is required. The Grama Panchayat committee has to take undue care in the development of water supply sector in Neduvathoor Grama Panchayat.

3) New Mini water supply schemes

The scheme aims to provide water supply to elevated portions of the Grama Panchayat where pipe line extensions are not feasible. The proposed Pullamala water supply scheme can cover the habitations Pullamala, Thevalappuram and Anakotoor. The mini water supply scheme proposed at Chalookonam covers, Chalookonam and Kurumballoor habitations. Micro water supply scheme at Kottathala and Venmanoor are also proposed for the full coverage in the year 2021.

The proposal will benefit a population of 29700 in the Year 2021 with supply level of 70 lpcd. The Kerala Water Authority shall be the agency responsible for the formation, implementation, and subsequent operation and maintenance of the scheme to be implemented during 2012-2016 with financial aid from GOI / GOK / SC Dept.

The estimated cost is given in Appendix 41-2.

The scheme envisages making available sufficient quantity of potable water to entire population of the Neduvathoor Grama Panchayat by the year 2021. The approximate cost of the proposal is Rs. 300 lakhs. Appendix 41 – 1 gives the phasing of the proposal.

3.15 Augmentation of JBIC assisted Water supply scheme to Meenad and adjoining Villages (Kerala Water Supply Proposal) for Pooyappally Grama Panchayat

Pooyappally Grama Panchayat is located in the south west part of Kottarakkara Taluk and is well connected with Kollam and Kottarakkara. Most of the

households in this area depend on domestic wells for their drinking and other water needs. Drinking water scarcity is being experienced by the people during peak summer. The water supply scheme to Oattumala Harijan colony and a distribution branch of "RWSS to Nedumpna" provide water supply facilities to few habitations of the Grama Panchayat. The absence of a well defined water supply system is the reason for inclusion of Pooyappally Grama Panchayat as one of the beneficiaries of JBIC assisted Kerala Water Supply Proposal to Meenad and Adjoining Villages.

The Kerala Water Supply Proposal to Meenad and adjoining villages; a comprehensive water supply scheme which covers more than 84 percentage of the population of Pooyappally Grama Panchayat is a great impetus to the water supply development sector in the Grama Panchayat. The infrastructure facilities are designed for the full coverage of Grama Panchayat population with water supply level of 100 lpcd. The scheme is proposed to be completed in the year 2009.

Even though Pooyappally is included in the comprehensive water supply scheme to Meenad and adjoining areas, only 84 percentage of the population is covered. Some parts of the Grama Panchayat are still not covered due to the development of new roads after envisioning the scheme. Hence for full coverage of the Pooyappally Grama Panchayat a proposal to extend the distribution network, is also suggested.

The JBIC Water Supply Scheme has adequate infrastructure capacity to meet the demand of entire population of the Grama Panchayat in the year 2021 except lack of distribution system in the non covered area. About 80 Km of additional distribution line is required for the various parts using PVC pipes of size varying from 140 mm to 50 mm for full coverage.

The proposal will benefit the ultimate population of 29187 in the Year 2021 with supply level of 70 lpcd. The Kerala Water Authority shall be the agency responsible for the formation, implementation, and subsequent operation and maintenance of the scheme to be implemented during 2010-2013 with financial aid from the JBIC/ State Government/ GOI.

The estimated cost is given in Appendix 41-2.

The scarcity of drinking water in the non covered areas of Pooyappally Grama Panchayat can be solved to a great extent by implementing the above proposal and water is delivered through house connections/public taps for covering the entire area with adequate drinking water facility. The approximate cost of the proposal is estimated to be Rs 200 lakhs. Appendix 41 – 1 gives the phasing of the proposal.

3.16 Augmentation of RWSS to Velinalloor Grama Panchayat

Velinalloor Grama Panchayat is located in the Southern part of Kottarakkara Taluk and is well connected with Kollam and Ayoor. Most of the households in this area depend on domestic wells for their drinking and other water needs. Acute drinking water scarcity is being experienced by the people of this area during peak summer. The RWSS to Velinalloor is the major water supply scheme catering the Grama Panchayat which covers more than 60 % of the population.

The existing source of the scheme is the well cum pump house with infiltration gallery by the side of Ithikkara River, situated in Attoorkonam ward. The water is pumped to the treatment plant (slow sand filter) through 200 mm C.I. pumping main. The water after treatment is collected in a sump of capacity 2 lakh liters. The distribution area is divided into two zones, low level zone and high level zone. The distribution in the low level zone is maintained directly from the sump. For the high level zone treated water from the sump is transmitted to Palakonam sump by 200 mm AC gravity main. From the Palakonam sump water is pumped to GLSR at Malappuram. Then the water is distributed through the distribution lines of size vary from 160 mm PVC to 50 mm PVC.

Due to increase in population and increase in demand of pipe water, the existing distribution lines has to be extended to the elevated portion of the Grama Panchayat.

The existing water supply scheme was commissioned in the year 1990 and the life spans of technical components of the schemes are almost over. Hence augmentation of the existing scheme is proposed.

The source of scheme needs improvement as the water table in the river

is lowering at alarming rate during summer months. Urgent measures for water conservation like check dam across the Ithikkara River at the down stream side are needed. Also the intake area of the source has to be de-silted to avoid regular blockages of infiltration gallery which in turn needs replacement. The river sides have to be protected near source. The replacement of the maintenance prone pump set at raw water pump house with high discharge pump sets is essential. The existing filter bed has to be repacked to improve its efficiency. Sufficient protection measures have to be adopted to protect the filter bed from falling of debris and leaves from adjacent rubber plantations.

Additional gravity main from treatment plant sump to Motorkunnu Junction has to be laid for improving the water supply coverage of Aackal area. Additional transmission mains from Malappuram tank to Vattappara is to be laid for improving the water supply facilities to elevated areas of the Grama Panchayat like 504 colony. The extension of pipe lines to non covered area for a length of 50 km is necessary. A separate pumping main from Palakonam pump house to Miyanna is required to provide drinking water facilities to Miyanna and adjoining wards. On line pumping schemes at Miyanna, Aackal habitations are also proposed for the full Coverage of Velinalloor Grama Panchayat.

The proposal will benefit the ultimate population of 33000 in the Year 2021 with supply level of 70 lpcd. The Kerala Water Authority shall be the agency responsible for the formation, implementation, and subsequent operation and maintenance of the scheme to be implemented during 2011-2013 with financial aid from NABARD / GOI/ GOK.

The cost estimation is given in Appendix 41-2.

The approximate cost of the proposal is estimated as Rs 10 Crores. Appendix 41-1 gives the phasing of the proposal.

3.17 Augmentation of JBIC assisted Water supply scheme to Meenad and adjoining Villages (Kerala Water Supply Proposal) for Veliyam Grama Panchayat

In Veliyam Grama Panchayat, located in the Southern part of Kottarakkara Taluk, most of the households depend on domestic wells for their drinking and other water

needs. Acute drinking water scarcity is being experienced by the people of this area during peak summer. The water supply scheme to Memangalam, Malayil and Maravancode Harijan colonies provide water supply facilities to few habitations of the Grama Panchayat. The absence of a well defined water supply system is the reason for inclusion of Veliyam Grama Panchayat as one of the beneficiaries of JBIC assisted Kerala Water supply proposal to Meenad and adjoining Villages.

This comprehensive water supply scheme which covers more than 62 percentage of the population of Veliyam Grama Panchayat is a great leap in the water supply development sector of the Grama Panchayat. The infrastructure facilities are designed for the full coverage of Grama Panchayat population with water supply level of 100 lpcd. The scheme is proposed to be completed in the year 2009.

Some parts of the Grama Panchayat will still remain not covered due technical non feasibility and due to the development of new roads after the envisioning of the scheme. Hence for full coverage of the Veliyam Grama Panchayat a scheme is proposed to augment the transmission mains and to extend the distribution net work.

The JBIC Water Supply Scheme has adequate infrastructure capacity to meet the demand of entire population of the Grama Panchayat in the year 2021. For the areas of technical non feasibility, extensions of transmission main to ground level sump and on line pumping mechanism are adopted. For technically feasible areas augmentation of the scheme with emphasizes on expansion of distribution net work is proposed. About 60 Km of additional distribution line is required for the various parts using PVC pipes of size varying from 110 mm to 50 mm for full coverage of drinking water facility in Veliyam Grama Panchayat.

The proposal will benefit the non covered population of 15000 in the Year 2021 with supply level of 70 lpcd. The Kerala Water Authority shall be the agency responsible for the formation, implementation, and subsequent operation and maintenance of the scheme to be implemented during 2010-2013 with financial aid from the JBIC/ State

Government/ GOI.

The cost estimation is given in Appendix 41-2.

The scarcity of drinking water in the non covered areas of Veliyam Grama Panchayat can be solved to a great extent by implementing the above proposal. The approximate cost of the proposal is estimated to be Rs 230 lakhs. Appendix 41 – 1 gives the phasing of the proposal.

3.18 RWSS to Thrikkovilvattom Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line

The existing scheme at Thrikkovilvattom Grama Panchayat includes 6 tube well, one open well and two over head tanks having capacities 2.50 lakhs liters and 0.90 lakh liters. The scheme has total distribution lines of 43.50 kms., and pumping main 3350 mts.

At present the existing source is inadequate to feed the entire area of the Grama Panchayat. The distribution lines are very old and damaged and hence effective supply can not be done. The tube well sources are not perennial and hence drilling of new tube wells are proposed at various locations.

The cost estimation is given in Appendix 41-2.

By implementing the above proposals the water supply in the scheme area will improve considerably. About 5000 people are additionally benefited by these improvements. Appendix 41 – 1 gives the phasing of the proposal.

3.19 RWSS to Kottiyam - Perayam - in Mayyanadu (Part), Adichanallur (Part) and Thrikkovilvattom (Part) Grama Panchayats- Source Improvement and Rehabilitation

The scheme area includes 4 wards in Mayyanad, 3 wards in Adhichanallur and 2 wards in Thrikkovilvattom Grama Panchayats. It includes 7 tube wells and one open well at Chooralpoika at Adhichanallur Grama Panchayat.

The areas under RWSS to Kottiyam - Perayam is highly elevated compared to the adjacent areas and face acute shortage of drinking water especially in drought season. The existing scheme is adequate for meeting the present demand. The ongoing scheme of JBIC covers only about 50% of the area. Hence proposals for source improvement and rehabilitation of

this scheme is proposed.

The components and the cost estimation of the scheme are given in Appendix 41-2.

3.20 RWSS to Mayyanad Grama Panchayat – Source Improvement and Extension of Pipe line

The existing scheme at Mayyanad Grama Panchayat includes 9 tube wells and two over head tanks one at Kottiyam having capacity of 2.50 lakhs litres and the other at Mayyanad having capacity of 2 lakhs litres. The scheme has a length of 2500 mts of pumping main and 34000 mts of distribution line.

The ongoing JBIC proposal covers about 90% of the distribution area at Mayyanad Village and extension of pipe lines required for about 5000m at Thazhuthala Village under Mayyanad Grama Panchayat.

The components and cost estimation are given in Appendix 41-2 and Appendix 41-1 gives the phasing.

By implementing the above proposals the water supply in the scheme area will improve considerably. About 80% of the population may be benefited.

3.21 RWSS to Kottamkara Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line

The existing scheme at Kottamkara Grama Panchayat includes 7 tube wells and one over head tank having capacity 4 lakhs liters. The scheme has pumping main of length 5050m and distribution line of 36 kms.

Since the existing source (tube wells) are not perennial, new tube wells are to be drilled for covering the area under Kottamkara Grama Panchayat.

The components and the cost estimation are given in Appendix 41-2.

By implementing the above proposals, the water supply in the area will increase considerably. An additional population of 5000 can be fed after completing these proposals. Appendix 41 – 1 gives the phasing of the proposal.

3.22 RWSS to Munroe Island Grama Panchayat – Source Improvement and Rehabilitation

The existing Rural Water Supply Scheme in Munroe Island draws water mainly from two tube wells and pumps to

the OHSR at Vilumangalam and Pattamthuruth of capacity 0.90 lakhs litre and 2.00 lakhs litre respectively.

In Peringalam, Kidapram (N) and Kidapram (S), supply of water is from Sasthamcoota Lake and is only on alternate days. The length of pumping main is 550m and length of distribution network in 17.50 km.

The new proposal is to drill a new tube well at Karithrakadavu the water pumped from which will be fed to Perungalam, Kidapram (S), Nenmeni (East), Kandrankani and Panampil area as in drought period, the supply of water from Sasthamcotta Lake is inadequate.

The existing distribution net work is old and its replacement is essential for efficient water supply and less wastage of water. Hence replacing the damaged old pipe lines for 3 km is proposed.

The components and the cost estimation are given in Appendix 41-2.

By implementing the Proposal a population of 3700 will be benefited Appendix 41 – 1 gives the phasing of the proposal.

3.23 RWSS to Thrikkaruva Grama Panchayat – Source Improvement and Rehabilitation

The existing Rural Water Supply Scheme to Thrikkaruva Grama Panchayat consists of extraction of under ground water through 6 tube wells, after proper disinfection it is distributed to a network of 34 km. and the length of pumping main is 1700m. There is an OHSR at Ashtamudi having capacity 90,000 liters.

Most of the distribution lines are very old and damaged, making it highly essential to replace them with new PVC pipes. Moreover this is a water logged area and well water is saline and contaminated. Hence line extension is required to give safe drinking water. The proposal includes 2 km of line extension including the replacement of damaged pipes.

The yield of the tube well at Prakkulam is less and hence it is essential to drill a new tube well at Prakkulam area.

The components of the proposal with cost are given in Appendix 41-2.

By implementing the Proposal a population of 5700 will be benefited Appendix 41 – 1 gives the phasing of the proposal.

3.24 RWSS to Perinadu Grama Panchayat – Source Improvement and Rehabilitation

At present, water supply is being given from 7 tube wells drilled at various locations across the Grama Panchayat. Each tube well acts as the source of a mini water supply scheme and the supply from the tube well is not sufficient as compared to the actual requirement. Water is supplied to the distribution net work having length of 36 km and the length of pumping main is 2 km. There is an OHSR at Vellimon having capacity 90,000 litres.

The scheme components and the cost are given in Appendix 41-2.

By implementing the scheme a population of 9800 will be benefited. Appendix 41 – 1 gives the phasing of the proposal.

3.25 RWSS to Panayam Grama Panchayat – Source Improvement and Extension of Pipe line

The existing Rural Water Supply Scheme to Panayam Grama Panchayat consists of extraction of under ground water through 7 tube wells. After proper disinfection water is distributed to 18 km of distribution network and the length of pumping main is 2 km. OHSR at Thannikkamukku having capacity 90,000 litres for feeding the Kandachira Zone is part of the scheme.

The components and the cost estimated are given in Appendix 41-2.

By implementing the scheme a population of 3200 will be benefited. Appendix 41 – 1 gives the phasing of the proposal.

3.26 RWSS to Thrikkadavoor Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line

Existing Rural Water Supply Scheme in Thrikkadavoor includes 6 tube wells and 2 OHSR having capacity 2.20 lakhs litres one at Mathilil and the other at Neeravil. The total length of distribution line is 35.50 km and length of pumping main is 1.80 km.

The AC and CI distribution line are very old and in damaged condition, hence it is very essential to replace them. Moreover most of the areas of this Grama Panchayat is water logged and well water is saline and contaminated. The existing scheme is inadequate to supply water to the entire Grama Panchayat.

Storage of water and thereby effective supply could not be effected due to lack of Over Head Reservoirs in Anchalumoodu area. Construction of 2 lakhs liters capacity OHSR at Anchalumoodu area, to supply water to the elevated areas of Kuppana and Muttathumoola and to feed the entire area of Anikulathuchira, farthest and elevated area of Anchalumoodu is therefore proposed.

The yield of tube well at Mathilil and Neeravil is less. Hence digging new tube wells to replace them are proposed.

The scheme components and the estimated cost are given in Appendix 41-2.

The proposal will reduce the water scarcity and also the frequent breakage of pipe lines, besides benefiting a population of 8900. Appendix 41 – 1 gives the phasing of the proposal.

3.27 RWSS to Paravoor Municipality – Source Improvement, Rehabilitation and Extension of Pipe line

The existing scheme of Paravoor Municipality is having 8 tube wells and one open well, 2 Over Head Reservoirs (OHR) of capacity 2.50 lakhs litres each and one OHR of capacity 1.50 lakhs litres with pumping main of 5.50 km and 50 km distribution net work.

The North-East part of Paravoor Municipality is situated at an elevated place and this area faces scarcity of water. Also the existing tube wells drilled years back are not perennial due to sand discharge. In order to tide over this situation proposals for construction of new tube wells, supply and erection of pump sets, replacement of existing damaged AC pipe line and laying new pumping main and distribution lines are made.

The components and the estimated cost are given in Appendix 41-2.

By implementing this scheme, a population of about 80% will be covered. Appendix 41 – 1 gives the phasing of the proposal.

3.28 RWSS to Adichanalloor Grama Panchayat– Source Improvement and Rehabilitation

The existing scheme of RWSS to Adichanalloor includes an open well cum pump house at Kattachal in Adichanalloor Grama Panchayat with one OHSR of capacity 2.50 lakhs liters. The scheme area has pumping main of 1200m and

distribution line of about 23 km. The existing system is inadequate to meet the demand of the people in elevated places. Hence construction of new open well cum pump house, renovation of existing infiltration gallery, repacking filter media, supply and erection of new 60 HP VT pump set for the improvement of existing pump house etc are proposed.

The components and the cost estimated are given in Appendix 41-2.

An additional population of about 4000 will be covered after the implementation of the scheme. Appendix 41 – 1 gives the phasing of the proposal.

3.29 RWSS to Chathannoor Grama Panchayat– Source Improvement and Rehabilitation

The existing scheme of RWSS to Chathannoor includes an open well cum pump house at Kattachal in Adichanalloor Grama Panchayat with an OH Reservoir of capacity 45000 liters. The scheme has pumping main of about 3 km and distribution line of about 18 km length. But the OHSR is not sufficient to meet the demand of the people of elevated places in the Panchayat. Hence construction of an OHSR of capacity 2.50 lakh litres, supply and erection of 60 HP VT pump set with all accessories and replacing of old and damaged 150mm, 100mm and 80mm AC pipe lines with new 160mm to 90 mm PVC pipe lines are proposed.

The components and the cost estimated are given in Appendix 41-2.

An additional population of about 3500 will be covered after the implementation of the scheme. Appendix 41 – 1 gives the phasing of the proposal.

3.30 RWSS to Poothakulam Grama Panchayat– Source Improvement and Extension of Pipe line

The existing scheme of RWSS to Kalakkode in Poothakulam Grama Panchayat includes 5 tube wells and one open well with Reservoir capacity 2.50 lakhs litres. The scheme area has 2.80 km pumping mains and 40 km of distribution lines. But the existing facility is inadequate to cover the elevated places of the Grama Panchayat. Hence extensions of pipe lines to such areas are proposed.

The existing tube wells at Perumkulam Vayal and EMS colony are drilled years back and are not perennial sources due to sand discharge. Hence drilling new tube

wells are proposed with all related works.

The components and the cost estimated are given in Appendix 41-2.

An additional population of about 3000 will be covered after the implementation of the scheme. Appendix 41 – 1 gives the phasing of the proposal.

3.31 RWSS to Chirakkara Grama Panchayat– Source Improvement and Extension of Pipe line

The existing scheme of RWSS to Nedungolam in Chirakkara Grama Panchayat includes two open wells, one at Nedungolam Polachira and the other at Ozhukupara with a Reservoir of capacity 45000 litres. A length of pumping main of 2500 m and 8000 m distribution lines covers this area. But water scarcity occurs in elevated places.

In order to improve the water supply scheme to Nedungolam area, a proposal of drilling new tube well, construction of pump house, laying pumping mains and distribution lines supply and erection of pump set etc. are proposed.

The components and the cost estimated are given in Appendix 41-2.

On implementing this scheme an additional population of 2500 will be covered. Appendix 41 – 1 gives the phasing of the proposal.

3.32 RWSS to Kalluvathukkal Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line

The existing water supply scheme of RWSS to Kalluvathukkal, Parippally includes an open well cum pump house at Aduthala with an OHSR of capacity 4.50 lakhs liters. The scheme area has 6.50 km pumping mains and 17.50 km distribution lines. In order to improve the present situation, rectification works of the existing OHSR, replacement of damaged AC pipe line and erection of 75 HP VT pump set etc are proposed.

The components and the cost estimated are given in Appendix 41-2.

An additional population of about 4000 will be benefited after the implementation of the above proposals. Appendix 41 – 1 gives the phasing of the proposal.

3.33 Proposal for Conservation of Sasthamcotta Lake

Sasthamcotta Lake is the largest fresh water lake in the state which lies spread in various parts of Sasthamcotta, West

Kallada and Mynagappally Grama Panchayats in Kunnathoor Taluk, Kollam district. It is an internationally recognized wet land having the status of Ramsar site from Nov.2002. The lake spreads to an area of 3.75 sq.km and has a perimeter of 25.49 km. Total catchment area is 9.34 km². Except for the southern side, all other sides of the lake are bounded by steep sloping hillocks of compact clay. The southern side of the lake is a low lying area and is separated by an artificial bund, which was constructed during 1950's. The lake enfolds an estimated capacity of 22.39 Mm³ of water and is the main source of drinking water to the Kollam Corporation and suburbs. The lake has an inverted 'F' shape with irregular border. In several places it has pocket like extensions resembling ponds.

It is estimated that the average depth of the lake is 6.8m and the maximum depth is 13.9 m at the middle of Sasthamcotta-Kallada ferry. Water is mostly calm but moderate breeze produces waves on the surface.

The soil has a reddish yellow colour; it is acidic, lateritic and extremely poor in carbon and nutrients. No top soil is present in most of the catchment area and the exposed subsoil is being hardened to laterite. The soil thus lacks good structure and porosity resulting in very low infiltration rate and high erodability. The monsoon of high erosivity find it easy to dislodge this soil and since infiltration rate is low, most of the water flows down the slope transporting the dislodge soil particles. The water loss takes place through evaporation and daily pumping out of water for drinking purpose.

The lake gets its water from 3 sources: a) direct rainfall over the lake, b) run-off from the catchment c) underground recharge, comprising the base flow from the catchment as well as from the extensive groundwater storage of the tertiary sedimentary province spreading outside the catchment, and recharge from the floodplain lying to the south of the lake and from the Kallada river. Catchment of the lake falls in three Grama Panchayat s, namely Sasthamcotta, Mynagappally and West Kallada. The ridge between Chelur Lake and Sasthamcotta Lake is a clear watershed boundary.

The following suggestions are given

for the conservation.

1. Prevention of further encroachment
2. Prevention of pollution including solid and liquid waste
3. Prevention of silting
4. Total echo system protection
5. Promoting of tourism potential
6. Patrolling

The suggested methods are as follows.

1. Construction of contour bund with earth or silt recovered from lake
2. Solid waste collection and removal
3. Sewage and sullage collection and treatment
4. Safe handling of storm water drains
5. Contour bund and side drain collection well
6. Afforestation
7. Cartable road over contour bund
8. Lake patrolling with motor boat and jeep

The components and the cost estimated are given in Appendix 41-2.

Appendix 41 – 1 gives the phasing of the proposal. Conservation measures are also suggested in Article 6 of Chapter 36; Watershed Development and Article 2.2 of Chapter 43B; Environment.

3.34 Water Supply Scheme to Poruvazhy Grama Panchayat–Source Improvement and Extension of Pipe line

This scheme is proposed to provide water to the entire area of Poruvazhy Grama Panchayat. The source is Pallikkal River and the very big pond at Narichira. Two schemes are existing with separate open wells, pump houses and pumping main, OH Tank, Distribution lines etc. The scheme was implemented in the year 1981. Existing treatment facilities are not sufficient. Requirements are pressure filter purification plant, over head tank, pumping mains and distribution mains. Two more tube wells are also required in addition to the above. This proposed scheme is to cover a requirement of 80 lpcd. Total cost including all the components is Rs. 173 Lakhs. Benefiting population is 22090. Appendix 41 – 1 gives the phasing of the proposal.

3.35 Water Supply Scheme to Sooranad North Grama Panchayat – Source Improvement

This scheme is proposed to provide water supply to the entire area of Sooranad North Grama Panchayat

The source is two tube wells. A scheme

with two tube wells, pump houses, pumping main, OH Tank, Distribution lines etc. exists which was implemented in the year 1990. Two tube wells are under proposal stage and two more tube wells are required to achieve full coverage with a supply of 80 lpcd. Total cost including all the components is Rs. 154 Lakhs. Benefiting population is 22304. Appendix 41 – 1 gives the phasing of the proposal.

3.36 Water Supply Scheme to Kunnathoor Grama Panchayat–Source Improvement

This scheme is proposed to provide water supply to the entire area of Kunnathoor Grama Panchayat.

The source is Cheloor Kayal. A scheme exists here with open well cum pump house and its pumping main, pressure filter, OH tank, distribution mains etc. The scheme was implemented in the year 1997 and the scheme is in a stage of completion. This scheme doesn't have any proper treatment plant and infiltration gallery. An infiltration gallery and a treatment plant of capacity 4 mld is to be constructed and new pump sets with higher capacity are to be installed. At Nilackal an OHSR has to be constructed and pumping main is to be laid from existing boosting station. The proposal is to augment the scheme to meet a requirement of 80 lpcd. Total cost including all the components is Rs. 226 Lakhs. Benefiting population is 20021. Appendix 41 – 1 gives the phasing of the proposal.

3.37 Water Supply Scheme to Mynagappally Grama Panchayat – Source Improvement

This scheme is proposed to provide water supply to the entire area of Mynagappally Grama Panchayat.

The source of Mynagappally Grama Panchayat is Sasthamcotta Lake and tube wells at different locations. A scheme already exists with open well cum pump house and its pumping main, treatment plant, OH tank, distribution mains etc. The scheme was implemented in the year 1995. With some modifications at the old treatment plant at Sasthamcotta by way of installing new pump sets and laying 1.5 km pumping main from WTP to OH Tank at ICS Jn., full coverage could be achieved. Total cost including all the components is Rs. 152 Lakhs. Benefiting population is 31469. Appendix 41 – 1 gives the phasing of the proposal.

3.38 Water Supply Scheme to Sasthamcotta Grama Panchayat – Source Improvement and Extension of Pipe line

This scheme is proposed to provide water supply to the entire area of Sasthamcotta Grama Panchayat.

The source is Sasthamcotta Lake. A scheme exists with open well cum pump house and its pumping main, treatment plant, OH Tank, distribution mains etc. The scheme was implemented in the year 1981. In the year 2007 a scheme was promulgated under ARP costing Rs. 427 lakhs viz 'Comprehensive water supply scheme to Sasthamcotta, West Kallada and Sooranad South Grama Panchayats'. The AS and TS are already obtained and the work is in the beginning stage. This scheme is proposed to achieve water supply at 40 lpcd. In order to achieve a full coverage with 80 lpcd supply, some modifications are required at the proposed old treatment plant. Along with new pumping mains, the pumping Hrs in ARP Scheme has to be increased from 16 Hrs to 24 Hrs. The benefited population would be 25913. Total cost including all the components is Rs. 245 Lakhs. Appendix 41 – 1 gives the phasing of the proposal.

3.39 Water Supply Scheme to Sooranad South Grama Panchayat – Source Improvement and Extension of Pipe line

This scheme is proposed to provide water supply to the entire area of Sooranad South Grama Panchayat.

The sources are Sasthamcotta Lake and tube wells. A scheme exists with open well cum pump house and its pumping main, treatment plant, OH Tank, distribution mains etc. The scheme was implemented in the year 1981. In the year 2007, a scheme was promulgated under ARP viz Comprehensive water supply scheme to Sasthamcotta, West Kallada and Sooranad South Grama Panchayats for which AS and TS are already obtained and the works are in the beginning stage, is proposed to cover a demand of 40 lpcd. In order to achieve a full coverage, some modification works are required at the old treatment plant and new pumping mains are required and the proposed pumping Hrs has to be increased from 16 Hrs to 24 Hrs. A sump cum pump house and related over head tank and its accessories are to be

constructed at Sooranadu South. Total cost including all the components is Rs. 191 Lakhs. The benefited population would be 18990. Appendix 41–1 gives the phasing of the proposal.

3.40 Water Supply Scheme to Thevalakkara Grama Panchayat – Source Improvement and Rehabilitation

This scheme is proposed to provide water to the entire area of Thevalakkara Grama Panchayat.

The source proposed for this scheme is Sasthamcotta Lake. At present a scheme exists with tube wells as source with OH tank and distribution main etc. The scheme was implemented in the year 1990. However, full coverage is not yet been achieved. In the year 2007, a scheme was proposed under ARP at a cost of Rs. 1100 lakhs viz 'Comprehensive water supply scheme to Thevalakkara and Thekkumbhagom Grama Panchayats' for which AS and TS are already obtained and works are in the beginning stage. This scheme proposes to cater water demand of only 40 lpcd. In order to achieve a full coverage with 70 lpcd, a proposal is made which include construction of 5 Tube wells, Iron removal plant and replacing the damaged AC/HDPDE pipe, increasing pumping hours from 16 Hrs to 24 Hrs etc. The total cost for all the newly proposed components comes to Rs 329 lakhs. The benefited population would be 32290. Appendix 41 – 1 gives the phasing of the proposal.

3.41 Water Supply Scheme to Thekkumbhagom Grama Panchayat – Source Improvement and Rehabilitation

This scheme is proposed to provide water to the entire area of Thekkumbhagom Grama Panchayat.

The source proposed for this scheme is Sasthamcotta Lake. At present a scheme is existing with tube wells as source with OH tank and distribution main etc. The scheme was implemented in the year 1990. However, full coverage is not yet been achieved. Thekkumbhagom Grama Panchayat is also covered under the Comprehensive water supply scheme to Thevalakkara and Thekkumbhagom Grama Panchayats mentioned above. In order to achieve a full coverage with 70 lpcd, an augmentation proposal is made

which include construction of 3 Tube wells, Iron removal plant and replacing the damaged AC/HDPE pipe, increasing pumping hours from 16 Hrs to 24 Hrs. The total cost for all the newly proposed components comes to Rs.209 lakhs. The benefited population would be 13540. Appendix 41 – 1 gives the phasing of the proposal.

3.42 Water Supply Scheme to Thazhava Grama Panchayat – Source Improvement and Extension of Pipe line

This scheme is proposed to provide water to the entire area of Thazhava Grama Panchayat.

The source proposed for this scheme is Pallickal River. At present a scheme is existing with tube wells as source with OH tank and distribution main etc. The scheme was implemented in the year 1980's. Actually present water supply system in Thazhava Grama Panchayat is going with much fatigue due to the inadequacy of source. In order to achieve a full coverage with 70 lpcd to the entire Grama Panchayat area, a scheme with the following components viz construction of weir for protecting the source from salt intrusion, well cum pump house, treatment plant, pumping main etc is made at a cost of Rs.349 lakhs. The benefited population would be 30790. Appendix 41 – 1 gives the phasing of the proposal.

3.43 Water Supply Scheme to Thodiyoor Grama Panchayat – Source Improvement and Extension of Pipe line

This scheme is proposed to provide water to the entire area of Thodiyoor Grama Panchayat.

The source proposed for this scheme is tube well. At present a scheme is existing with tube wells as source with OH tank and distribution main etc. The scheme was implemented in the year 1980's. Present water supply system in Thodiyoor Grama Panchayat is not at all enough to serve the entire area. In order to achieve a full coverage with 70 lpcd the following proposals viz construction of 3 tube well for source improvement, Iron removal plant and extension of pipe line at a cost of Rs.189 lakhs is made. The benefited population would be 35150. Appendix 41 – 1 gives the phasing of the proposal.

3.44 Water Supply Scheme to Kulasekharapuram Grama Panchayat – Source Improvement and Extension of Pipe line

This scheme is proposed to provide water to the entire area of Kulasekharapuram Grama Panchayat.

The source proposed for this scheme is tube well. At present a scheme is existing with tube wells as source with OH tank and distribution main etc. The scheme was implemented in the year 1992. Present water supply system in Kulasekharapuram Grama Panchayat is not at all enough to serve the entire area. Most of the Grama Panchayat area belongs to coastal region. In order to achieve a full coverage with 70 lpcd the following proposals are made viz construction of 2 tube wells for source improvement, laying 300mm DI K9 pipe from WTP at Oachira to existing OHSR at Puthentheruvu with source of water Achencol River, extension of pipe line and installation of Iron removal plant etc. The total cost for these components comes to Rs.424 lakhs. The benefited population would be 35200. Appendix 41 – 1 gives the phasing of the proposal.

3.45 Water Supply Scheme to West Kallada Grama Panchayat – Source Improvement and Extension of Pipe line

This scheme is proposed to provide water to the entire area of West Kallada Grama Panchayats.

The source is Sasthamcottta Lake. A scheme exists with open well cum pump house and its pumping main, treatment plant, OH Tank, distribution mains etc. The scheme was implemented in the year 1981. In the year 2007, a scheme was proposed under ARP and the proposal cost comes to 427 lakhs viz 'Comprehensive water supply scheme to Sasthamcottta, West Kallada and Sooranad South Grama Panchayats' for which AS and TS were already obtained and implementation is in the beginning stage. This scheme proposed to cover a demand of 40 lpcd. In order to achieve a full coverage, some modification works are required at the old treatment plant and new pumping mains are required and the pumping Hrs has to be increased from 16 Hrs to 24 Hrs. Total cost including all the components is Rs. 351 Lakhs. The benefited population would be 14426. Appendix 41 – 1 gives the phasing of the proposal.

3.46 ARP - ARWSS to Pathanapuram Grama Panchayat – Extension of Pipe line

The ARWSS to Pathanapuram and Piravanthoor Grama Panchayats is nearing commissioning. The sanctioned amount is not enough to cover all the distribution 'Nod' of this scheme. Hence providing distribution line for 40.K.M of various dia of PVC pipe line is proposed to cover the entire distribution 'Nod' of this scheme.

The components and the estimated cost are given in Appendix 41-2.

The implementation of this scheme will benefit more than 15,000 people of this Grama Panchayat. Appendix 41 – 1 gives the phasing of the proposal.

3.47 ARP - ARWSS to Thenmala Grama Panchayat– Source Improvement

This scheme commissioned during 1996 having a 9 m dia well and a pump house with boosting pump house and G.L. Reservoir and a 15 Km of distribution pipe line of different dia; currently benefiting about 3,000 people has Kallada River as source.

The proposal mainly aims at providing drinking water to hilly places and portions of SC/ST habitations. The implementation of this proposal will benefit more than 2000 people of this Grama Panchayat. Appendix 41 – 1 gives the phasing of the proposal.

3.48 ARP - ARWSS to Ariyamkavu Grama Panchayat – Source Improvement and Extension of Pipe line

This scheme was commissioned in 1997 with source ground water. A bore well and pump house, an O.H. reservoir having a capacity of 30,000 litre and distribution pipe line for 10 Km length of 50 mm to 160 mm dia pipes now benefits about 3000 people. A proposal for source improvement and extension of pipe line as detailed in Appendix 41-2 is made.

The implementation of this proposal will benefit more than 3000 people of this Grama Panchayat residing in the hilly area having scarcity of drinking water. Appendix 41 – 1 gives the phasing of the proposal.

3.49 R.W.S.S. to Vilakkudi Grama Panchayat – Source Improvement and Extension of Pipe line

The proposal includes the scheme for

Dharmapuri SC Colony. The source is a small river, a 6m dia well and pump house with the OH tank with capacity of 1.25 lakh litre and a pumping main, pump and motor and a distribution line 20 km with various dias of pipe are proposed.

The components and the estimated cost are given in Appendix 41-2.

The implementation of this proposal will benefit more than 10,000 people in the scheme area. Appendix 41 – 1 gives the phasing of the proposal.

3.50 R.W.S.S. to Piravanthoor Grama Panchayat – Extension of Pipe line

This scheme commissioned in 1994 has a small river as source. A 4 m dia well and pump house with a G.L. Tank and 40 mm to 150 mm distribution pipe line of length 8 km. 1,500 people of the scheme area are benefited currently.

The proposal is for extension of distribution pipe lines to uncovered areas. The components with cost estimation are given in Appendix 41-2.

The implementation of the proposal will benefit more than 5,000 people in the scheme area. Appendix 41 – 1 gives the phasing of the proposal.

3.51 U.W.S.S. to Punalur Municipality – Source Improvement and Extension of Pipe line

The proposal includes the scheme for Kadakkamon SC Colony. The source is a small river, a 6m dia well and pump house with the OH tank with capacity of 1.25 lakh litre and a pumping main, pump and motor and a distribution line of 20 km length with various dias of pipe are proposed.

The components with cost estimation are given in Appendix 41-2.

The implementation of this proposal will benefit more than 10,000 people in the scheme area. Appendix 41 – 1 gives the phasing of the proposal.

3.52 WSS to Thalavoor Grama Panchayat – New Proposal

There is no independent W. S. Scheme in this Grama Panchayat. Drinking water shortage is a major problem here. Hence a new W.S. Scheme is proposed herewith which will benefit about 10,000 people of this area.

The components and the cost estimation are given in Appendix 41-2.

The implementation of this proposal

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shall solve the scarcity of drinking water of this Grama Panchayat to a great extent. Appendix 41 – 1 gives the phasing of the proposal.

3.53 WSS to Pattazhy Grama Panchayat – Source Improvement and Extension of Pipe line

The existing rural water supply scheme serves only about 1000 people of this Grama Panchayat. Hence it is not enough to meet the drinking water demand of the population of this Grama Panchayat. Hence augmentation of the scheme by way of source improvement and extension of pipe lines to unserved areas is proposed. The components and cost estimation are given in Appendix 41-2.

The implementation of this proposal will benefit about 10000 people of this Grama Panchayat and will solve the shortage of drinking water to a great extent. Appendix 41 – 1 gives the phasing of the proposal.

3.54 WSS to Pattazhy Vadakkekara Grama Panchayat – Source Improvement and Extension of Pipe line

There is no independent W. S. Scheme in this Grama Panchayat. Drinking water shortage is a major problem of here. Hence a new W.S. Scheme is proposed to benefit about 10,000 people of this area.

The components and the cost estimation are given in Appendix 41-2.

3.55 WSS to Karavalloor Grama Panchayat – New Proposal

There is no independent WS Scheme in this Grama Panchayat. Drinking water shortage is a major problem here. Hence, a new W.S. Scheme is proposed to cover about 12,000 people of this area.

The components and the cost estimation are given in Appendix 41-2.

The implementation of this proposal shall solve the scarcity of drinking water of this Grama Panchayat to a very great extent. Appendix 41 – 1 gives the phasing of the proposal.

3.56 R W S S to Vettikkavala Grama Panchayat - Augmentation works

Vettikkavala Grama Panchayat is situated in Kottarakara Taluk in Kollam District. The population of the Grama Panchayat as per 2001 census is 31983. Out of the total 17 wards, two wards have full coverage under the existing scheme originally carried out under ARP scheme to Kottarakara, Melilla and Vettikkavala

Grama Panchayats. But water supply to Vettikkavala Grama Panchayat was not commissioned due to frequent bursting of pumping main and transmission main while charging. Water is fed to the scheme from BAWSS to Kundra and adjoining Grama Panchayats from the main storage tank at Pachilakunnu.

In the present proposal, it is proposed to relay existing transmission main, pumping main, distribution lines and supply of 50 HP V.T pump set. The approximate cost of the proposal comes to Rs.3.9 corers.

At present water supply to this area is done by tapping water from the transmission line for Kundara scheme, three days a week.

In the original proposal 8.5 km of 250/200 mm AC transmission line was laid from OH Tank Pachilakunnu to sump at Anjanamkuzy. 65,000 litres capacity sump cum pump house was constructed and pumpsets erected. Also power connection allotted. 1500 m, 200 mm AC pumping main was laid from pump house to GLSR at Kaduvappara of capacity 5.17 LL. The GLSR was completed and distribution lines were laid years back. Even though most of the works were completed, the scheme is not commissioned till date.

In this situation, it is proposed to relay the existing transmission main using 250/200 mm DI pipes for 8.5 km and existing pumping main using 200 mm DI K9 pipe (1500m). Existing distribution lines of about 15 km length is to be relayed due to damages. Maintenance works of sump and GLSR is also required.

The total cost of the proposed augmentation works to R.W.S.S to Vettikkavala Grama Panchayat comes to Rs.3.9 Corers.

The proposal will benefit a projected total population of 46792 as on 2021 AD at 100 lpcd supply level. The implementation of the scheme will be a great blessing to the beneficiaries of Vettikkavala Grama Panchayat. The scheme components and the cost are given in Appendix 41-2.

4. Proposals for Sanitation

4.1 Proposals for Sewerage System

In LSGIs coming under Multi Functional Zones are considered for proposing new sewerage system. The design population is taken as the proposed population of 2021

as given in Annexure 12 and 13 of IDDP for arriving at sewerage plant capacity and other details. Appendix 41 – 1 gives the phasing of the proposal.

The proposed plant capacity, cost and period of implementation are given in Appendix 41-2.

It may be noted that possibility for provision of sewerage facility shall be explored while formulating LDPs of LSGIs in the Special Development Zone as well, at least for the central area considering the density of population. Similarly provisions shall be given for industrial waste disposal in both Multifunctional and Special Development zones.

4.2 Proposals for Integrated Low Cost Sanitation (ILCS) for Urban areas

In areas where the sewerage system cannot be covered, there is scope to cover the households and other public places under ILCS. For this the urban local body has to prepare Detailed Project Report (DPR) and submit to the GOI through GOK. The funding is purely based on the DPR.

4.3 Proposals for Community latrines

The community latrines are to be constructed in habitats where individual latrines are not feasible. LSGIs have to identify such places and community latrines have to be constructed. The cost of a community latrine containing 10 latrines, bath and wash spaces including water supply and drainage facilities comes to Rs. 2 lakhs. Of this 80% will be the grant from TSC.

4.4 Proposals for Ecosans

As mentioned in Article 6 of Chapter 18, the water logged areas in Thekkumbhagom, Chavara, Neendakara, Thevalakkara, Panamana, Trikkadavoor, Thrikkaruva, Mynagapally, Karunagapally, West Kallada, East Kallada, Perayam, Munroe Thuruth and hilly areas of Thenmala, Piravanthur and Aryankavu are destinations where Ecosans may be provided.

The unit cost for an ecosan unit comes to Rs.15,000/- which can be jointly met from LSGI funds and TSC funds.

4.5 Proposals for Information, Education and Communication (IEC)

Awareness creation is a continuous

process for keeping the sustainability of sanitation and also to address new challenges in this realm. The essential areas invite immediate attention are solid and liquid waste management.

5. Other Proposals

5.1 Quality Monitoring Program - Setting up of Labs

Vide Article 3.4.5 of Chapter 18, it is stated that the quality of water supplied through piped water supply and well water is highly polluted/contaminated at some cases. In order to ensure safe water supply, a close monitoring of the quality of water being used by all class of consumers shall be in built with the system. It is expected that the recent proposals under implementation in Kollam District will ensure the supply of adequate quantity of water for the majority of the District population. After achieving quantity standards the question of quality will arise. Hence it is necessary to set up a comprehensive laboratory for testing and confirming the presence any pollutant/contaminates including heavy metals, pesticides and chemicals in the water being supplied.

One such unit is sufficient for Kollam district. The unit can be operated on no loss no profit basis and hence the economic feasibility is of no concern. There shall not be any concern on technical/ environmental feasibility also as the unit is to ensure supply of safe water to public of

Kollam District.

The proposal includes establishing a comprehensive laboratory for testing the water and waste water parameters. The cost of this laboratory may come about Rs.10 Crores. Finance shall be arranged from any financing agency since the testing of water can be done on cost recovery basis only.

The beneficiaries are the entire population in Kollam District. The unit can be established at Kottarakkara, a Multi Functional Zone equidistant from all parts of Kollam District. Appendix 41 – 1 gives the phasing of the proposal.

5.2 Replacing Railway Crossing for Alappad, Clappana, Oachira and Karunagappally

Vide Article 3.4.5 of Chapter 18, it is stated that Alappad, Clappana, Oachira and Karunagappally Grama Panchayats in Kollam District will be supplied with adequate quantity of quality water by 2011 itself. However there is some railway crossing under this scheme. At present these railway crossings are carried out with MS casing pipe which may last for 10 to 15 years as per the estimate of Railway Authorities. Hence it will be required to replace them by 2021. The three railway crossings under this works are at Erezha, Krishnapuram and Oachira. Land acquisition may be required at Erezha and Oachira for the implementation of this scheme. But not much

resettlement is required since the land to be acquired is very near to the railway track. The proposal is for constructing over bridges across the railway track for conveying the pipeline for which sanction from railway is required.

The cost of each construction may come to Rs. 350 Lakhs including charges to be remitted to Railway. The required amount may be paid by KWA or GoK.

The LSGIs being served with water through these supply mains will become the beneficiaries. viz, Oachira , Clappana , Alappad and Karunagappally Grama Panchayats. Appendix 41 – 1 gives the phasing of the proposal.

6. Conclusion

Through the implementation of the proposals in the drinking water sector, at the cost estimated on rates prevailing at 2008, it is envisaged that sufficient quantity of water in the supply level of 70 to 100 lpcd can be made available to the population of Kollam district by 2021.

With all the discussed interventions in the sector of sanitation 100% coverage of HHL, public latrines and appropriate waste management system will become possible by 2021. This will directly improve the health standard of the district. It is implied that special provisions shall be provided for the drinking water and sanitation facilities in the Multi Functional and Special Development Zones n

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Chapter 42

Infrastructure

This chapter includes the Development Proposals of Infrastructure based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

The development proposals encompasses the concept developed for infrastructure facilities in Kollam district, the linkages of the concept with the development concepts of other 'production sectors' and the detailing of the major proposals planned with a perspective to the year 2021.

This report is sub headed as follows:

1. District Development Concept
2. Infrastructure Development Concept
3. Sectoral Linkage Analysis
4. Detailing of Proposals

As evident from the projections, most of the major roads in the district will go

beyond their carrying capacity which stresses the need for widening of roads and provision of better road design and application of appropriate road geometrics.

As mentioned earlier, the Infrastructure Development Policy is to provide a 'Communication network for the district which will ensure smooth flow of traffic connecting the major settlements and nodes as well as the major future activity areas by the year 2021'.

The strategy is to identify and phase the infrastructure developments including widening of roads, provision of better road design and application of appropriate road geometrics etc. for various development agencies as per the Communication Network.

2. District Development Concept

Based on the GIS based spatial analysis carried out for diverse sectors by the 18 Sub Committees of Special TAC and

their sectoral analysis, a district development concept was prepared based on the land use analysis, population studies, functional classification, hierarchy of settlements & nodes, analysis of agriculture sector, animal husbandry, sector, industries sector, fisheries sector, mining sector and tourism sector. The District Development Concept consists of hierarchy of settlements and nodes, transportation network and development zones based on major functions of each LSGI.

The entire district has been classified into six different Zones based on the existing development activities in those areas.

- Zone A – Bio Reserve Zone
- Zone B – Agro Development Zone
- Zone C – Agro Allied Development Zone
- Zone D – Special Development Zone
- Zone E – Aqua Bio Reserve Zone
- Zone F – Multi Functional Zone

Based on the existing basic facilities like education, health, markets, agriculture, basic infrastructure, transportation, etc. the Local Self Government Institutions in the district have been brought under different orders of Settlement.

I 1st Order Settlement

TM Kollam Corporation

I 2nd Order Settlements

TM Kottarakkara

TM Anchal

TM Punalur

TM Chathannoor

TM Karunagappally

I 3rd Order Settlements

TM Chavara

TM Kadakkal

TM Velinalloor

TM Pathanapuram

TM Kundara

TM Sasthamkotta

I 4th Order Settlements

TM All other areas consisting of 56 LSGIs

Based on the Commercial Activity in the district, the following hierarchy of Nodes was also identified.

I 1st Order Node

TM Chinnakkada

I 2nd Order Nodes

TM Karunagappally

TM Kottarakkara

TM Anchal

TM Punalur

TM Parippally

I 3rd Order Nodes

TM Sasthamkotta

TM Chavara

TM Thevalakkara

TM Kundara

TM Kottiyam

TM Paravur

TM Kadakkal

TM Thenmala

TM Pathanapuram

TM Pooyappally

TM Ayoor

3. Infrastructure Development Concept

As per the District Development Concept, a broad transportation network is derived and which is further elaborated for the entire district to achieve the objective defined in the Policy Statement.

3.1 Roads

The proposed Road Network (Figure 42.1) consists of roads classified under

National Highways, State Highways, Primary Roads, Secondary Roads and Tertiary Roads.

3.1.1 National Highways (NH)

National Highways provide inter-state and inter-district connectivity. It is proposed to upgrade the standards of National Highways to meet the future requirements by providing a Right of Way of 30 metres, with 4-lane carriageway of lane width 3.75 metres and service roads of 3.75 metres each.

The existing National Highways in the district are 57 kilometres of the Kanniyakumari - Salem NH -47, 5 kilometres of the NH -47 Bye-pass and 81 kilometres of the Kollam - Thirumangalam NH -208. The National Highway newly proposed is the NH -220 (Kollam - Theni) whose alignment within Kollam district is yet to be finalised.

A. The alignment recommended by IDDP for the Kollam - Theni NH -220 is:

Kollam (Chemmamukku) - Kannanloor - Kundara - Chittumala - Kadapuzha - Bharanikkavu - Adoor.

The LSGIs along the alignment are Kollam Corporation and Thrikkovilvattom, Elampalloor, Kundara, Perayam, East Kallada, West Kallada, Sasthamcotta, Mynagappally, Poruvazhy, Sooranad North Grama Panchayats. Period of implementation is 2012 - 2021. Estimated cost for the proposal would be Rs 136.76 crores.

3.1.2 State Highways (SH)

State Highways provide inter-district as well as intra-district connectivity. It is proposed to upgrade the standard of the State Highways to meet future requirements and for easy upgradability, by providing a Right of Way of 30 metres with 4-lane carriageway of 3.75 metres each.

The existing State Highways in the district are the 36.70 Kilometres long portion of the Main Central (M.C.) road (SH 1), the 30.3 Kilometres long portion of the Thiruvananthapuram - Shenkotta (T.S.) road (SH 2), the 13.80 Kilometres long portion of the Punalur - Muvattupuzha (P.M.) road (SH 7), the 7.05 Kilometres long portion of Adoor - Sasthamkotta road (SH 37), the 7.30 Kilometres long portion of the Ayoor - Punalur road (SH 48) and the 23.50 Kilometres long portion of Varkala - Parippally - Madathara road (SH 64).

The State Highways proposed are:

A. Nilamel - Ayoor - Kottarakkara - Kulakkada road

The LSGIs enroute are; Nilamel, Chadayamangalam, Edamulakkal, Ummannoor, Vettikkavala, Melila, Kottarakkara, Mylom and Kulakkada Grama Panchayats. Period of implementation is 2007 - 2012.

B. Ayoor - Anchal - Punalur - Pathanapuram road

The LSGIs enroute are; Edamulakkal, Anchal, Karavallur, Punalur, Piravanthur and Pathanapuram Grama Panchayats. Period of implementation is 2007 - 2012 with an estimated cost of Rs 56.55 crores.

C. Pariappally - Nilamel - Madathara road

The LSGIs enroute are Kalluvathukkal, Nilamel, Kadakkal and Chithara Grama Panchayats. Period of implementation is 2012-2017 and the estimated cost is Rs.61.39 crores.

D. Kulathupuzha - Madathara - Chithara road

The LSGIs enroute are; Kulathupuzha and Chithara Grama Panchayats. Period of implementation is 2012-2017 and estimated cost for all units would be 33.38 crore rupees.

E. Bharanikkavu - Adoor road

The road passes through Poruvazhy Grama panchayat. Period of implementation is from 2007-2012 and estimated cost for all units would be 21.31 crore rupees.

3.1.3 Primary Roads (PR)

Primary Roads are proposed to provide connectivity between 1st Order Nodes and Junctions. The Right of Way proposed for primary roads is 21 metres with 4-lane carriageway of 3.75 metres each.

The proposed Primary Roads are:

A. Tangassery Harbour - Paravur - Chathannur road

The LSGIs enroute are; Kollam Corporation, Mayyanad Grama Panchayat and Paravur Municipality. Period of implementation is 2007-2017 and estimated cost for all units would be 112.5 crore rupees.

B. Chathannoor - Velinalloor - Ayoor road

The LSGIs enroute are; Chathannur, Adichanallur, Pooyappally, Velinalloor, Edamulakkal and Elamadu Grama

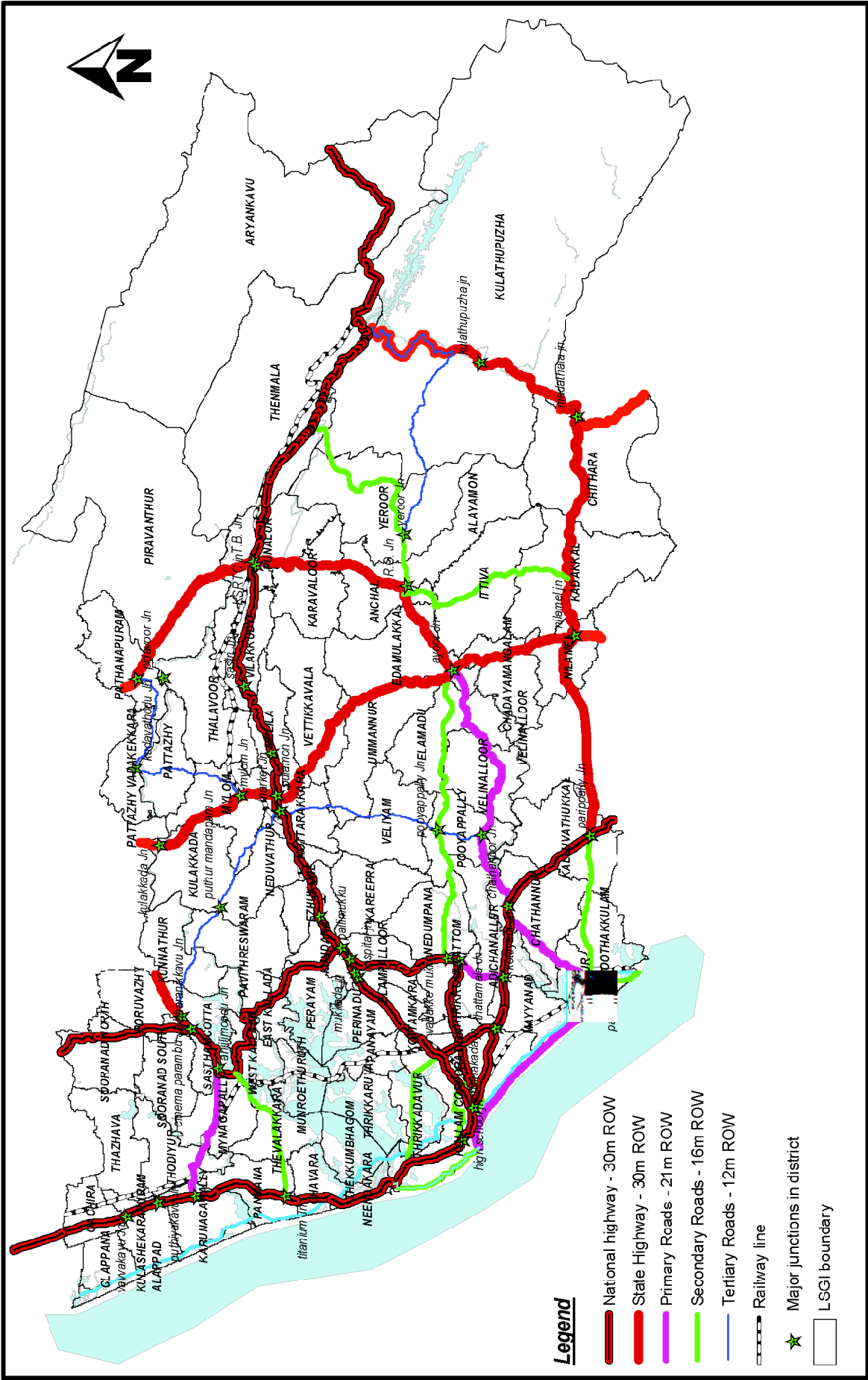


Fig. 42.1 : Proposed road network

Panchayats. Period of implementation is 2007-2012 and estimated cost for all units would be 36.63 crore rupees.

C. Kottiyam – Kannanalloor – Kundara – Bharanikkavu – Karunagappally road

The LSGIs enroute are; Mayyanad, Adichanalloor, Thrikkovilvattom, Elampalloor, Kundara, Perayam, East Kallada, West Kallada, Sasthamcotta, Mynagappally and Thodiyoor Grama panchayats. Period of implementation is 2007-2012. Estimated cost is 82.36 crore rupees.

3.1.4 Secondary Roads (SR)

Secondary Roads are proposed to provide connectivity between 1st Order Nodes and Junctions and 2nd Order Nodes and Junctions. The Right of Way proposed for Secondary Roads is 16 metres with 2-lane carriageway of 3.75 metres each with provision for 2.25 metres wide parking bays near junctions and settlements.

The proposed Secondary Roads are:

A. Chavara – Sasthamkotta road

The LSGIs enroute are; Panmana, Thevalakkara, Mynagappally, West Kallada and Sasthamcotta Grama Panchayats. Period of implementation is 2012-2017. Estimated cost is 37.86 crore rupees.

B. Paravur – Varkala road

The road passes through the Paravoor Municipality. Period of implementation is 2007-2012 and estimated cost is 9.5 crore rupees.

C. Paravur – Parippally road

The LSGIs enroute are; Paravur Municipality, Poothakkulam and Pariappally Grama Panchayats. Period of implementation is 2007-2012 and estimated cost is 15.29 crore rupees.

D. Kannanalloor – Pooyappally – Ayoor road

The LSGIs enroute are; Thrikkovilvattom, Nedumpana, Pooyappally, Velinalloor, Elamadu and Edamulakkal Grama Panchayats. Period of implementation is 2012-2017 and estimated cost is 31.33 crore rupees.

E. Kadakkal – Anchal – Chengamanad road

The LSGIs enroute are Kadakkal, Ittiva, Anchal, Yeroor and Thenmala Grama Panchayats. Period of implementation is 2012-2017 and estimated cost for all units would be 45.05 crore rupees.

3.1.5 Tertiary Roads (TR)

Tertiary Roads are proposed to provide connectivity between 3rd Order Nodes and Junctions and other roads. The Right of Way proposed for Tertiary Roads is 12 metres with 2-lane carriageway of 3.75 meters each and two-wheeler tracks on either side.

The proposed Tertiary Roads are:

A. Bharanikkavu – Kottarakkara – Pooyappally – Kurisummoodu Jn. Road

The LSGIs enroute are; Sasthamcotta, Poruvazhy, Kunnathur, Pavithreswaram, Kulakkada, Mylom, Neduvathoor, Kottarakkara, Ummannoor, Veliyam and Pooyappally Grama Panchayats. Period of implementation is 2012-2017 and estimated cost for all units would be 44 crore rupees.

B. Kottarakkara – Mylom – Pattazhy – Pathanapuram road

The LSGIs enroute are; Kottarakkara, Mylom, Pattazhy Thekkakara, Vadakkekara and Pathanapuram Grama Panchayats. Period of implementation is 2007-2012 and estimated cost for all units would be 19.55 crore rupees.

C. Anchal – Kulathupuzha – Thenmala road

The LSGIs enroute are; Anchal, Yeroor, Kulathupuzha and Thenmala Grama Panchayats. Period of implementation is 2017-2021 and estimated cost is 30.86 crore rupees.

3.2 Railways

Kollam district is catered to by the Ernakulam – Thiruvananthapuram Broad Gauge double line permanent way which is fully electrified within the district. Further developments in this route can be addition of further branch lines to facilitate operation of Suburban trains using EMUs in the Kollam Jn. – Thiruvananthapuram Central sector. A siding to the Tangassery Harbour needs to be provided for movement of cargo in containers. Improvement of facilities at the Railway Stations and development of Kollam Junction Station, Paravur Station and Karunagappally Station are proposed.

Work on the gauge conversion of the Kollam - Madurai Metre Gauge line to Broad Gauge is going on. With completion of this proposal the Tourism potential of this route can be utilised in a better way. Improvement of facilities and development

of the Kundara Station, Kottarakkara Station, Punalur Station and Thenmala Station are proposed.

A railway link connecting Tangassery Harbour and KMML in Chavara to the main line can also be explored to facilitate easy transshipment of cargo from these locations.

3.3 Inland Navigation

The proposed Inland Navigation Network (Figure 42.2) consists of the portion of the Kollam – Kovalam State Waterway from Ashtamudi Lake to Nadayara Lake via the Kollam Canal, Eravipuram Lake, Paravur Lake and Maniyankulam Canal. There is also the Kollam – Kottappuram National Waterway No.III from Kollam Boat Jetty via Ashtamudi Lake, Chavara Canal, Kannettill Canal and Kayamkulam Canal.

Development of the National Waterway No.III opens up possibility of transportation of cargo and passenger service boats. It also offers immense possibilities for attracting tourists with the Ashtamudi Lake being the centre of Lake Tourism. The main industrial centres like KMML and IRE can make use of the Waterway for transportation of raw materials and finished products.

In order to improve the water transport infrastructure in Kollam, it is imperative to construct new boat jetties along the navigation routes. Such jetties are proposed at Kappil, Paravur Thekkumbhagam, Kuttoor, Maniyankulam, Mukkam, Thanni, Eravipuram, Thomas Stephen Co., Kachikkada, Mundakkal, Kochupilamoodu, Chamakkada, Olayil kadavu, Thevally, Thoppilkadavu, Mammoottilkadavu, Kavanad, Sambranikodi, Chavara Thekkumbhagam, IRE, KMML MS Plant, Panmana, Ponmana, Vattakayal, Kattilkavu, Kannettilkadavu, Panikkarkadavu, Parayakadavu, Pattathilkadavu, Srayikkadu, Alumkadavu, Amrithapuri, Azheekal, etc. In addition to the above boat jetties, the existing facilities at Chavara Thekkumbhagam, Guhanandapuram, Arinalloor, Munroethuruthu, Prakkulam and Ashtamudi need to be improved.

Along with the construction of new boat jetties and improvement of existing ones, it is also important to look into the environmental impact of these developments. The navigation channels need to be dredged regularly to maintain the necessary depth for easy movement

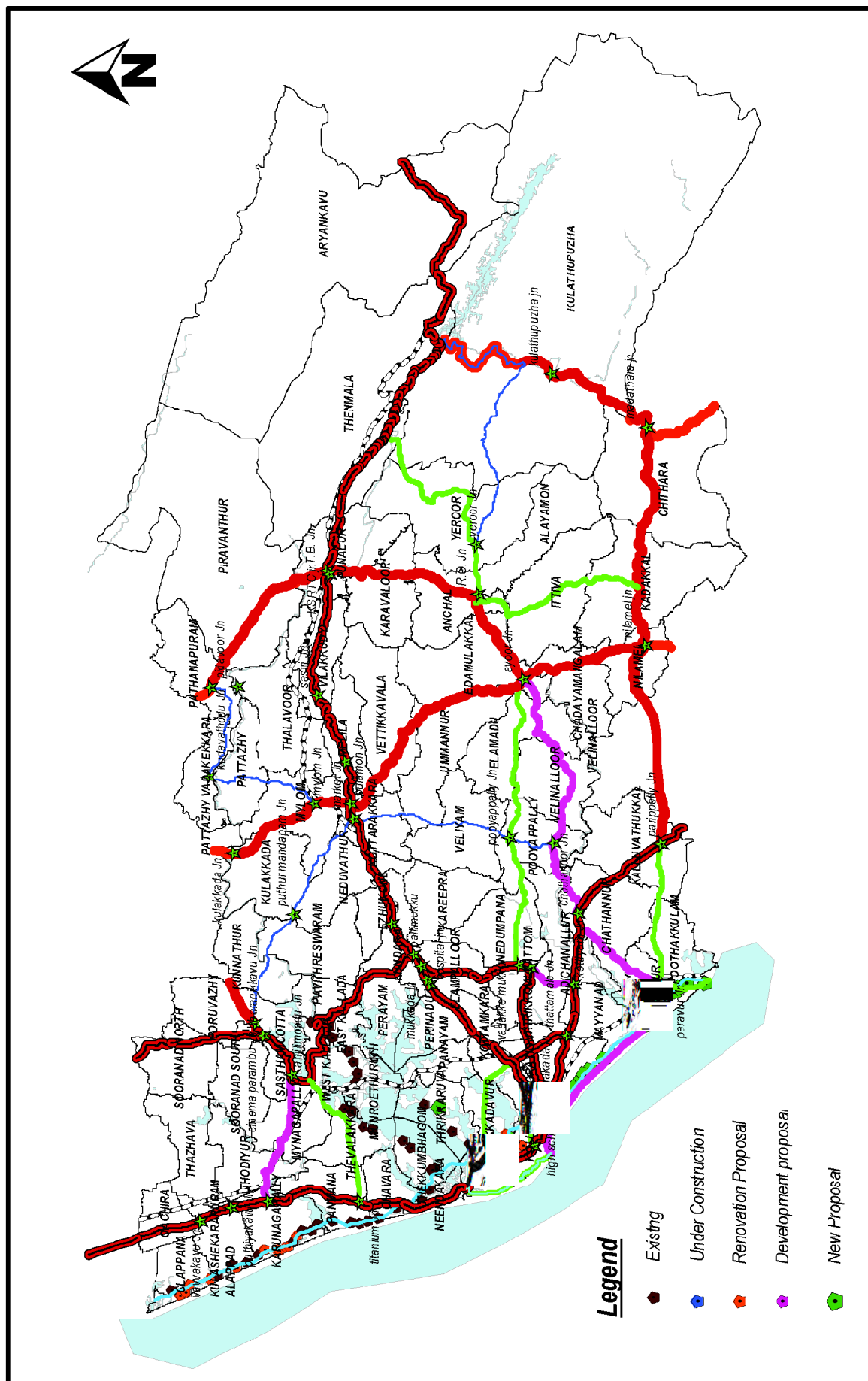


Fig. 42.2 : Proposed Navigation Network

of vessels. Beautification of the banks of the water bodies and canals is to be done and maintained in good condition. Wayside amenities like Coffee shops, Restaurants, Hotels, Resorts and Shopping Centres are proposed along the banks of the navigation routes.

3.4 Harbours

3.4.1 Neendakara Harbour

Basic standards to maintain hygienic conditions in fishing harbours have come up in International Markets, especially in European countries. This necessitates modernisation of Neendakara Fishery Harbour to meet the stringent European Quality Standards. Such a proposal has been sanctioned with financial assistance from NABARD and work on this proposal is going on. Maintaining the quality achieved in this proposal will be of prime importance. At present there is no Cargo handling facility available at Neendakara. The present

facilities need to be improved upon to enable cargo handling from the port.

3.4.2 Tangassery Harbour

The Tangassery Fishery and Cargo Harbour will be the centre of all development activities of Kollam City within the next 10 years. The infrastructure facilities being developed for the Harbour will take the lead in improving the commercial activities in Kollam. These infrastructures include a coastal road connecting the Harbour to Paravur and thereon to NH -47. This coastal road can be extended to the North to meet the NH -47 at Sakthikulangara. There should be a Railway Siding to connect the Harbour to the Ernakulam – Thiruvananthapuram Broad Gauge double line permanent way. This would make it easy to transport cargo containers by Freight trains avoiding the congestion of urban roads. A more economical transportation of cargo would

be by inland water transport. Connecting the Harbour basin with the Ashtamudi Lake can facilitate this.

Fresh water availability is very scarce in the Tangassery Harbour area. Large capacity storage tanks need to be provided for distribution in the Harbour and the surrounding areas. Operation of heavy machinery, cargo handling equipment, yard lighting, pumps, etc. operating in the port area requires setting up of an electrical substation at the port area. The proposal on Infrastructure for Tangassery Port as per Article 6.1.1 of Chapter 6.1.1; fisheries sector can be linked here.

3.4.3 Kayamkulam Harbour

The estuary of the Kayamkulam Lake is situated 26 kilometers north of Neendakara and is the boundary of the Kollam and Alappuzha districts. The new Harbour proposed at this location is intended to provide safe landing and berthing place for mechanized as well as traditional crafts. The Harbour will provide an operating facility for mechanised fishing boats from Alappuzha which are dependant on the Neendakara port now. The location of the harbour, whose work is ongoing, is ideal as it is situated quite close to the NH -47, enabling quick transportation of the perishable sea food.

3.5 Housing

As mentioned in Article 3.1.5 of Chapter 19; Infrastructure, there are certain critical LSGIs with specific housing issues including absolute housing shortage, kutcha houses, Houseless SC/ST and Houseless BPL. The priority LSGIs are listed based on LSGIs coming common in the above aspects. The house construction and maintenance activities are to be implemented as per the priority. The phasing is shown in Table 42.1.

4. Sectoral Linkage Analysis

The Infrastructure Development Concept derived from the District Development Concept has to be 'tested' for compatibility with the proposals of the 'Production Sectors'. The Development Concept can only be deemed acceptable if it satisfies the requirements of the 'Production Sectors'. Such a Linkage Analysis was carried with respect to the other sectors and the results are given in Table.42.2 to 42.7.

Table.42.1. Prioritised phasing of LSGIs for house construction and maintenance activities

| 2010 | 2015 | 2021 |
|-----------------|-----------------------|--------------------------|
| 1. Chithara | 1. Poothakkulam | 1. Adichanalloor |
| 2. Thevalakkara | 2. Kunnathur | 2. Alappad |
| 3. Aryancavu | 3. Kottamkara | 3. Anchal |
| 4. Oachira | 4. Elamadu | 4. Chadayamangalam |
| | 5. Ummannur | 5. Chathanoor |
| | 6. Sooranadu South | 6. Chavara |
| | 7. Ezhukone | 7. Clappana |
| | 8. Kollam Corporation | 8. Edamulakkal |
| | 9. Elampallur | 9. Ittiva |
| | 10. Kulathupuzha | 10. Kadakkal |
| | 11. Piravanthur | 11. Kalluvathukkal |
| | 12. Vilakkudy | 12. Karavallor |
| | 13. Kulakkada | 13. Kareepra |
| | 14. Thalavoor | 14. Karunagappally |
| | 15. Kottarakkara | 15. Kizhakkallada |
| | 16. Thazhava | 16. Kulasekharapuram |
| | 17. Alayamon | 17. Kundara |
| | | 18. Mandrothuruthu |
| | | 19. Mayyanadu |
| | | 20. Melila |
| | | 21. Mylom |
| | | 22. Mynagappally |
| | | 23. Nedumpana |
| | | 24. Neduvathoor |
| | | 25. Neendakara |
| | | 26. Nilamel |
| | | 27. Panayam |
| | | 28. Panmana |
| | | 29. Paravur Municipality |
| | | 30. Pathanapuram |
| | | 31. Pattazhy |
| | | 32. Pattazhy vadakkekara |
| | | 33. Pavithreswaram |
| | | 34. Perayam |
| | | 35. Perinadu |
| | | 36. Pooyapally |
| | | 37. Poruvazhy |
| | | 38. Punalur Municipality |
| | | 39. Sasthamcottah |
| | | 40. Sooranad North |
| | | 41. Thekkubagham |
| | | 42. Thenmala |
| | | 43. Thodiyoor |
| | | 44. Thrikkadavoor |
| | | 45. Thrikkaruvu |
| | | 46. Thrikkovilvattom |
| | | 47. Velinalloor |
| | | 48. Veliyam |
| | | 49. Vettikkavala |
| | | 50. West Kallada |
| | | 51. Yeroor |

Legend

NH - National Highway, SH - State Highway, PR - Primary Road

SR - Secondary Road, TR - Tertiary Road

The roads mentioned in the Analysis Tables are as given in 3.1.1 to 3.1.5 above

Table.42.2. Road connection availability for proposals of agriculture sector

| PROPOSAL | LOCATION (LSGI) | ROAD CONNECTION AVAILABILITY | NEAREST ROAD CONNECTION |
|---|-----------------|------------------------------|-------------------------|
| Rubber Plant Propagation Units | Punalur | NH208, SH-B | |
| | Karavallur | SH-B | |
| Paddy Seed Villages | Neduvathur | TR-A | |
| | Mylom | SH-A, TR-A, TR-B | |
| | Thalavur | Not Available | TR-B |
| | Sooranad North | NH220 | |
| Paddy Processing Centres | Kadakkal | SH-C, SR-E | |
| | Sasthamcotta | NH220, PR-C, SR-A, TR-A | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| Vegetable Seed Villages | Edamulakkal | SH-A, SH-B, PR-B, SR-D | |
| | Eroor | SR-E, TR-C | |
| | Anchal | SH-B, SR-E, TR-C | |
| Primary Agriculture Markets | Kadakkal | SH-C, SR-E | |
| | Karunagappally | NH47, PR-C | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| | Punalur | NH208, SH-B | |
| | Anchal | SH-B, SR-E, TR-C | |
| | Chathannur | NH47, PR-A, PR-B | |
| Secondary Agriculture Market | Kottamkara | NH208 | |
| Service Centres | Kollam Corp. | NH47, NH208, NH220, PR-A | |
| | Karunagappally | NH47, PR-C | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| | Punalur | NH208, SH-B | |
| | Chathannur | NH47, PR-A, PR-B | |
| Research and Training Centre | Ittva | SR-E | |
| Microbial Technology Centre | Kulathupuzha | SH-D, TR-C | |
| | Anchal | SH-B, SR-E, TR-C | |
| Recycling Facility | Mynagappally | NH220, PR-C, SR-A | |
| Bio Technology and Genetic Engineering Parks | Elampalloor | NH208, NH220, PR-C | |
| | East Kallada | NH220, PR-C | |
| | West Kallada | NH220, PR-C, SR-A | |
| | Kundara | NH208, NH220, PR-C | |
| High-tech Cultivation (Climate Controlled Computerised Poly Houses) | Elampalloor | NH208, NH220, PR-C | |
| | East Kallada | NH220, PR-C | |
| | Kundara | NH208, NH220, PR-C | |
| | Perayam | NH220, PR-C | |
| Warehouse | Kottamkara | NH208 | |
| Export Clearing House | | | |
| Processing Centres | Karunagappally | NH47, PR-C | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| | Punalur | NH208, SH-B | |

Table.42.3. Road connection availability for proposals of forest sector

| PROPOSAL | LOCATION | ROAD CONNECTION AVAILABILITY | NEAREST ROAD CONNECTION |
|---|--------------------|------------------------------|-------------------------|
| New Wildlife Sanctuary | Aryankavu | NH208 | |
| New Bird Sanctuaries at Karaali, Kandachira and Polachira | West Kallada | NH220, PR-C, SR-A | |
| | Panayam | Not Available | NH208, NH220, PR-C |
| | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Kerala Forest Research Institute (KFR) sub centre | Thenmala | SR-E, TR-C | |

Table.42.4. Road connection availability for proposals of fisheries sector

| PROPOSAL | LOCATION | ROAD CONNECTION AVAILABILITY | NEAREST ROAD CONNECTION |
|--|---------------------------|------------------------------|-------------------------|
| Aquaculture Estate | Polachira (Adichanalloor) | PR-B, PR-C | |
| | Chittumala | NH220, PR-C | |
| Aquarium Trade Unit | Perinad | Not Available | NH47, PR3 |
| Deep Sea Fishing Base at Sakthikulangara | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Oceanarium at Kollam Beach | | | |
| Ornamental Fish Shows | | | |
| Carp Seed Hatcheries | Adichanalloor | PR-B, PR-C | |
| Carp Seed Rearing Units | Oachira | NH47 | |
| | Thazhava | Not Available | NH47, NH220 |
| | Karunagappally | NH47, PR-C | |
| | Chavara | NH47 | |
| | Thevalakkara | SR-A | |
| Shrimp Hatchery | Neendakara / Chavara | NH47 | |
| Larvivorous Fish Seed Production Centre | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| All Male Tilapia Seed production Centres | | | |
| Production Enhancement through Reservoir Fisheries | Thenmala | SR-E, TR-C | |
| | Kulathupuzha | SH-D, TR-C | |
| Marine Ornamental Fish Collection and Trade Units | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Aqua Techno Park | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Theera Vanam / Hariitha Theeram | Paravoor | PR-A, SR-B, SR-C | |
| | Mayyanad | PR-A, PR-C | |
| | Kollam Corp. | NH47, NH208, NH220, PR-A | |
| | Neendakara | NH47 | |
| | Chavara | | |
| | Panmana | SR-A | |
| | Alappadu | Not Available | NH47 |
| Fish Sanctuary | Kulathupuzha | SH-D, TR-C | |
| Mahaseer Hatchery | | | |
| Modernisation of Fishing Harbours | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| | Neendakara | NH47 | |
| | Alappadu | Not Available | NH47 |
| Fisheries Research Laboratory | Kollam Corporation | NH47, NH208, NH220, PR-A | |

Table.42.5. Road connection availability for proposals of industries sector

| PROPOSAL | LOCATION | ROAD CONNECTION AVAILABILITY | NEAREST ROAD CONNECTION |
|--|--------------------|------------------------------|-------------------------|
| Fish Processing Units | Kollam Corporation | NH47, NH208, NH220, PR A | |
| | Alappad | Not Available | NH47 |
| | Karunagappally | NH47, PR-C | |
| | Chavara | NH47, SR-A | |
| | Neendakara | NH47 | |
| Toy Manufacturing Unit | Oachira | NH47 | |
| Revival of Premo Pipe Factory | Chavara | NH47 | |
| Unit | Kulasekharapuram | Not Available | NH47 |
| | Paravur | PR-A, SR-B, SR-C | |
| Dairy Unit | Mynagappally | NH220, PR-C, SR-A | |
| ALIND, Ceramics | Kundara | NH208, NH220, PR-C | |
| Travancore Chemicals | Perinad | Not Available | NH47, PR-C |
| Mini Industrial Estate at Nedungola | Poothakulam | SR-C | |
| I.T. Park at Akathukayal | Paravur | PR-A, SR-B, SR-C | |
| Biotechnology Park | Chathannur | NH47, PR-A, PR-B | |
| Milk Processing Unit with Chilling Plant | Anchal | SH-B, SR-E, TR-C | |
| Ayurvedic Medicine Manufacturing Unit | Punalur | NH208, SH-B | |
| Fish Processing Units | Karunagappally | NH47, PR-C | |
| School Bag Manufacturing Unit | | | |
| Value Added Cashew Kernels | Elampalloor | NH208, NH220, PR-C | |
| | Ezhukone | NH208 | |
| | Kalluvathukkal | NH47, SH-C | |
| | Kareepra | Not Available | NH208, PR-C, TR-A |
| | Kunnathur | TR-A | |
| | Pavithreswaram | | |
| Punalur Paper Mill | Punalur | NH208, SH-B | |
| Travancore Plywood | | | |
| School Bag Manufacturing Unit | Karunagappally | NH47, PR-C | |
| | Punalur | NH208, SH-B | |
| Tool room Training Centre | Thrikkovilvattom | NH220, PR-C, SR-D | |
| Readymade Garments Unit | Mayyanad | PR-A, PR-C | |
| Readymade Garments Unit | Nedumpana | SR-D | |
| Light Engineering Units | Kalluvathukkal | NH47, SH C | |
| | Elampalloor | NH208, NH220, PR-C | |
| | Mynagappally | NH220, PR-C, SR-A | |
| | Ezhukone | NH208 | |
| | Kareepra | Not Available | NH208, PR-C, TR-A |
| Clay Based Units | Chathannur | NH47, PR-A, PR-B | |
| Rubber wood treatment Plant | Pathanapuram | SH-B, TR-B | |
| Rubber Based Units | Anchal | SH-B, SR-E, TR-C | |
| Handloom Units | Poruvazhy | NH220, SH-E, TR-A | |
| | Pavithreswaram | TR-A | |
| | Thodiyoor | PR-C | |
| | Chathannur | NH47, PR-A, PR-B | |
| | Karunagappally | NH47, PR C | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| | Kulathupuzha | SH-D, TR-C | |
| | Mayyanad | PR-A, PR-C | |
| | Paravur | PR-A, SR-B, SR-C | |
| | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Bamboo based products and Handicrafts | Piravanthur | SH-B | |
| | Kulathupuzha | SH-D, TR-C | |
| | Thenmala | SR-E, TR-C | |
| | Aryankavu | NH208 | |
| Public Medical Centre & Bio-medical Unit | Chathannur | NH47, PR-A, PR-B | |
| Revival of Parvathy Mills | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Food Parks | Kundara | NH208, NH220, PR-C | |
| | Karunagappally | NH47, PR-C | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| | Paravur | PR-A, SR-B, SR-C | |
| | Punalur | NH208, SH-B | |

Table.42.6. Road connection availability for proposals of animal husbandary sector

| PROPOSAL | LOCATION | ROAD CONNECTION AVAILABILITY | NEAREST ROAD CONNECTION |
|---|---------------------------|------------------------------|-------------------------|
| Large Scale Dairy Farms | Adichanallur | NH47, PR-B, PR-C | |
| | Ezhukone | NH208 | |
| | Pavithreswaram, Kunnathur | TR-A | |
| | Kareepra | NH208, PR-C, TR-A | |
| | Kulakkada | Not Available | TR-A |
| | Mynagappally | NH220, PR-C, SR-A | |
| | Poruvazhy | NH220, SH-E, TR-A | |
| | Kalluvathukkal | NH47, SH-C | |
| | Sasthamcotta | NH220, PR-C, SR-A, TR-A | |
| | Nedumpana | SR-D | |
| Medium Scale Dairy Farms | Thazhava | Not Available | NH220 |
| | Sooranad North | NH220 | |
| | Sooranad South | Not Available | NH220 |
| | Elampalloor | NH220, PR-C | |
| | Thodiyoor | PR-C | |
| Feed Production, Mixing and Feed Analytical Lab | Karunagappally | NH47, PR-C | |
| Milk Chilling Plant | Kundara | NH208, NH220, PR-C | |
| | Karunagappally | NH47, PR-C | |
| Milk Processing cum Products Factory | Anchal | SH-B, SR-E, TR-C | |
| Hi-tech Parent Stock Poultry Farm and Hatchery | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Large Scale Duck Parent Stock | Paravur | PR-A, SR-B, SR-C | |
| | Munroethuruthu | Not Available | NH220, SR-A |
| Quail Parent Stock Farm and Hatchery | Veliyam | TR-A | |
| | Sasthamcotta | NH220, PR-C, SR-A, TR-A | |
| Large Scale Poultry and Quail Farms | Chathannur | NH47, PR-A, PR-B | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| | Anchal | SH-B, SR-E, TR-C | |
| | Mayyanad | PR-A, PR-C | |
| | Elampalloor | NH220, PR-C | |
| | Thrikkovilvattom | NH220, PR-C, SR-D | |
| | Karunagappally | NH47, PR-C | |
| Malabari Goat Parent Stock Farm | Piravanthur | SH-B | |
| Parent Stock Piggery Farm | Piravanthur | SH-B | |
| Rabbit Parent Stock Unit | Piravanthur | SH-B | |
| High-tech Broiler Farm | Kottamkara | NH47 | |
| | Thrikkovilvattom | NH220, PR-C, SR-D | |
| | Mayyanad | PR-A, PR-C | |
| | Punalur | NH208, SH-B | |
| | Kottarakkara | SH-A, TR-A, TR-B | |
| | Chathannur | NH47, PR-A, PR-B | |
| | Anchal | SH-B, SR-E, TR-C | |
| | Karunagappally | NH47, PR-C | |
| Meat Processing Units | Aryankavu | NH208 | |
| Veterinary Speciality Hospitals | Punalur | NH208, SH-B | |
| | Pathanapuram | SH-B, TR-B | |

Table.42.7. Road connection availability for proposals of tourism sector

| PROPOSAL | LOCATION | ROAD CONNECTION AVAILABILITY | NEAREST ROAD CONNECTION |
|----------------------------------|--------------------|------------------------------|-------------------------|
| Tourism Hub | Perinad, Perayam | NH220, PR-C | |
| Pozhikkara – Thekkumbhagom Beach | Paravur | PR-A, SR-B, SR-C | |
| Underwater Aquarium | Perayam | NH220, PR-C | |
| Eco-tourism centre | Chittumala | NH220, PR-C | |
| Underwater Marine Aquarium | Kollam Corporation | NH47, NH208, NH220, PR-A | |
| Water sports Centre | | | |
| Eco/Pilgrim Centre | Chadayamangalam | SH-A | |
| Historical Tourism Centre | Kadakkal | SH-C, SR-E | |
| Eco-tourism Centre | Veliyam | TR-A | |
| Water sports and Eco-tourism | Chathannur | NH47, PR-A, PR-B | |
| 'Ente Gramam' Village Tourism | Poothakulam | SR-C | |

It can be seen from the Sectoral Linkage Analysis above that out of the 188 proposal locations (LSGIs) of the 6 main 'Production Sectors', only 14 proposal locations are not having direct linkage with the proposed road network. Even in these 14 LSGIs, it is possible to provide connection from a proposed road from a neighbouring LSGI. Detailing of this connection can be taken care of in the Local Development Plan (LDP) of the concerned LSGIs. Thus there is more than 92% success in the planning of the road network for the district.

Environment Sector

Along those roads identified as more polluting, the junctions which are congested are black spots of air pollution as the vehicles will be having their engines idling at these road blocks thereby wasting fuel and emitting noxious fumes. Also, it is necessary to identify the junctions near settlements which are thickly habited and propose some kind of protection from vehicle exhaust pollution. Top priority may be given to junctions common to different roads selected in such a way that these junctions and urban centres are treated by the year 2011 and all other junctions are treated by the year 2016. The Table. 42.8 gives the Critical roads and junctions in NH, SH and Primary Roads.

The following proposals may be considered to control the effects of vehicular pollution.

1. Bye pass to junctions – Congestion at junctions can be prevented / controlled by providing bye passes at the junctions so that only those vehicles that need to turn off to a byroad approach the junction and all the other vehicles can bye pass the junction without passing through it.

2. Road widening for avoiding traffic blocks – Most of the roads in the district are not wide enough to have sufficient capacity to handle the present traffic. Considering

Table.42.8. Critical roads and junctions in NH, SH and Primary Roads (common jns. needing highest priority is given in bold italics)

| Sl.No. | Road | Junctions |
|----------------------|---|--|
| I. NATIONAL HIGHWAYS | | |
| 1. | NH 47 | Karunagappally, Chavara, Kavanad, Ramankulangara, Civil Station to Chinnakkada, College jn., Polayathodu, Pallimukku, Kottiyam, Chathannur, Kalluvathukkal, Parippally . |
| 2. | NH 208 | Sankar's Hospital jn., Kadappakada, 2 nd Milestone, 3 rd Milestone, Karicode, Elampalloor, Kundara Mukkada, Pallimukku , Ezhukone, Kottarakkara Market jn., Pulamon jn. , Chengamanad, Kunnicode, Punalur TB jn., KSRTC jn., Thenmala, Palaruvi jn., Aryankavu jn. |
| 3. | NH 220 (proposed) | Chemmamukku, Ayathil, Kannanalloor, Perumpuzha, Pallimukku, Chittumala, Kadapuzha, Bharanikkavu, Chakkuvally, Anayadi. |
| II. STATE HIGHWAYS | | |
| 1. | SH-A: Nilamel – Kulakkada (portion of MC road) | Nilamel , Chadayamangalam, Ayoor , Valakom, Sadanandapuram, Pulamon jn. , Kulakkada. |
| 2. | SH-B: Ayoor – Anchal – Punalur - Pathanapuram | Ayoor, Edamulakkal, Anchal, Agastyacode, Karavallur, Punalur, Alimukku, Piravanthur, Pathanapuram. |
| 3. | SH-C: Parippally – Nilamel – Madathara | Parippally , Kulakkada, Pallikkal, Nilamel , Kadakkal, Kanjirathinmoodu, Chithara , Madathara. |
| 4. | SH-D: Kulathupuzha – Madathara – Chithara | Kulathupuzha, Onthupacha, Madathara, Chithara . |
| 5. | SH-E: Bharanikkavu – Adoor | Bharanikkavu, Cinemaparambu, Sasthamnada, 7 th Mile. |
| III. PRIMARY ROADS | | |
| 1. | PR-A: Tangassery Harbour – Paravur – Chathannur | Tangassery, Pallithottam, Kochupilamoodu, Mundakkal, Kachikadavu, Eravipuram, Thanni, Pozhikkara, Maniyamkulam, Paravur, Thirumukku. |

the present rate of growth of traffic, it will not be long before the traffic on the roads comes to a standstill. Roads have to be widened to meet a projected traffic volume 15 or 20 years in the future.

3. Providing Grade Separated roads, improving geometry – Intersections of major roads are hot spots for accidents and pollution. It is necessary to properly design these intersections by providing grade separated roads wherever necessary to redirect heavy vehicles to a higher level so that the exhaust from them are taken away up into the atmosphere. Figure 42.3 shows pollution protection scheme for roads particularly for coastal roads.
4. Roadside Arboriculture – It is well known that greenery absorbs CO₂ from the atmosphere and releases Oxygen. This natural cleansing agent
5. Conversion of buses, Lorries and trucks to CNG fuel – It is only natural that once the source of the pollution is removed, the quality of air improves. From the facts mentioned above it is clear that the prime cause of air pollution is the heavy vehicles running on diesel fuel. It is high time that these vehicles, especially KSRTC buses are converted to an alternate low emission fuel. The Supreme Court of India has restricted the use of commercial diesel driven vehicles in Delhi due to its harmful effects. It has been made mandatory to use only Compressed Natural Gas (CNG) in all transport buses in Delhi. The same may be implemented

in Kollam district also. Due to the possible shortage of CNG vehicles and CNG filling stations, the conversion may be done in a phased manner. It may be proposed that KSRTC buses running on local schedules are converted to CNG by the year 2011 and conversion of all KSRTC buses are completed by 2021.

6. Redirection of vehicle exhaust – Multi-axle trailer trucks may be provided with an exhaust pipe that is directed upward just behind the cabin so that the fumes are directed away from lower level.

Interchanges for Coastal Road

Transport of cargo by road will be mainly along the coastal road which is planned as having separate lanes for trucks carrying the cargo and other vehicles. Interchanges will have to be provided at those locations where the cargo trucks may have to move off the coastal road to the National Highway or any other road. These interchanges will have to be designed in such a way that it does not hinder the movement of traffic in the lanes for other vehicles. A tentative layout of such an interchange is given in Figure 42.4.

For the successful implementation of the proposals suggested above, support from the following sectors is imperative.

- Motor Vehicles Department
- Kerala State Road Transport Corporation
- Kerala Private Bus and Lorry Operators
- Social Forestry Department
- Pollution Control Board.

5. Road Safety

Road Safety is an issue of prime importance to be addressed with the highest priority. Several accident 'Black spots' have been identified during the sectoral analysis of the existing Infrastructure facilities in the district. These are listed road-wise below.

■ NH 47

- TM Kannetttil Bridge near Karunagappally
- TM Chavara jn. and Chavara bridge
- TM Sakthikulangara
- TM Chinnakkada
- TM Kappalandimukku
- TM Thattamala jn.
- TM Mevaram jn.
- TM Mulluvila jn.
- TM Ayathil jn.
- TM Kottiyam jn.
- TM Thirumukku near Chathannur

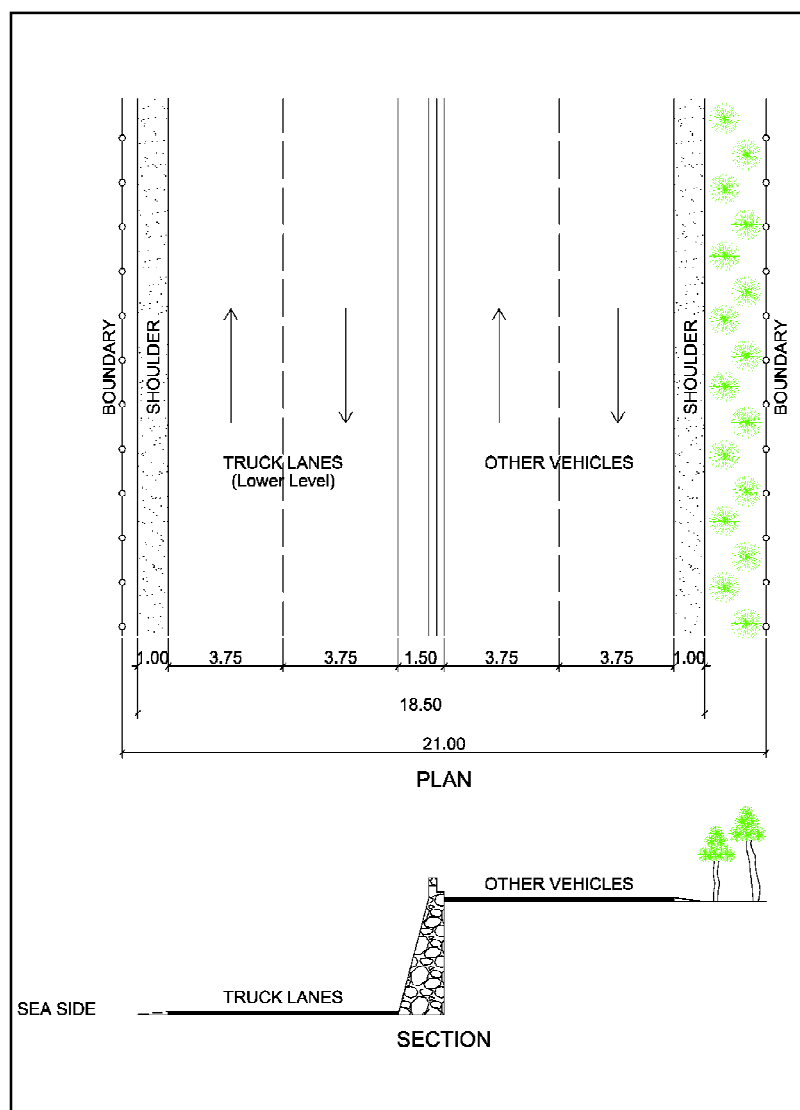


Fig.42.3. Pollution protection scheme for roads

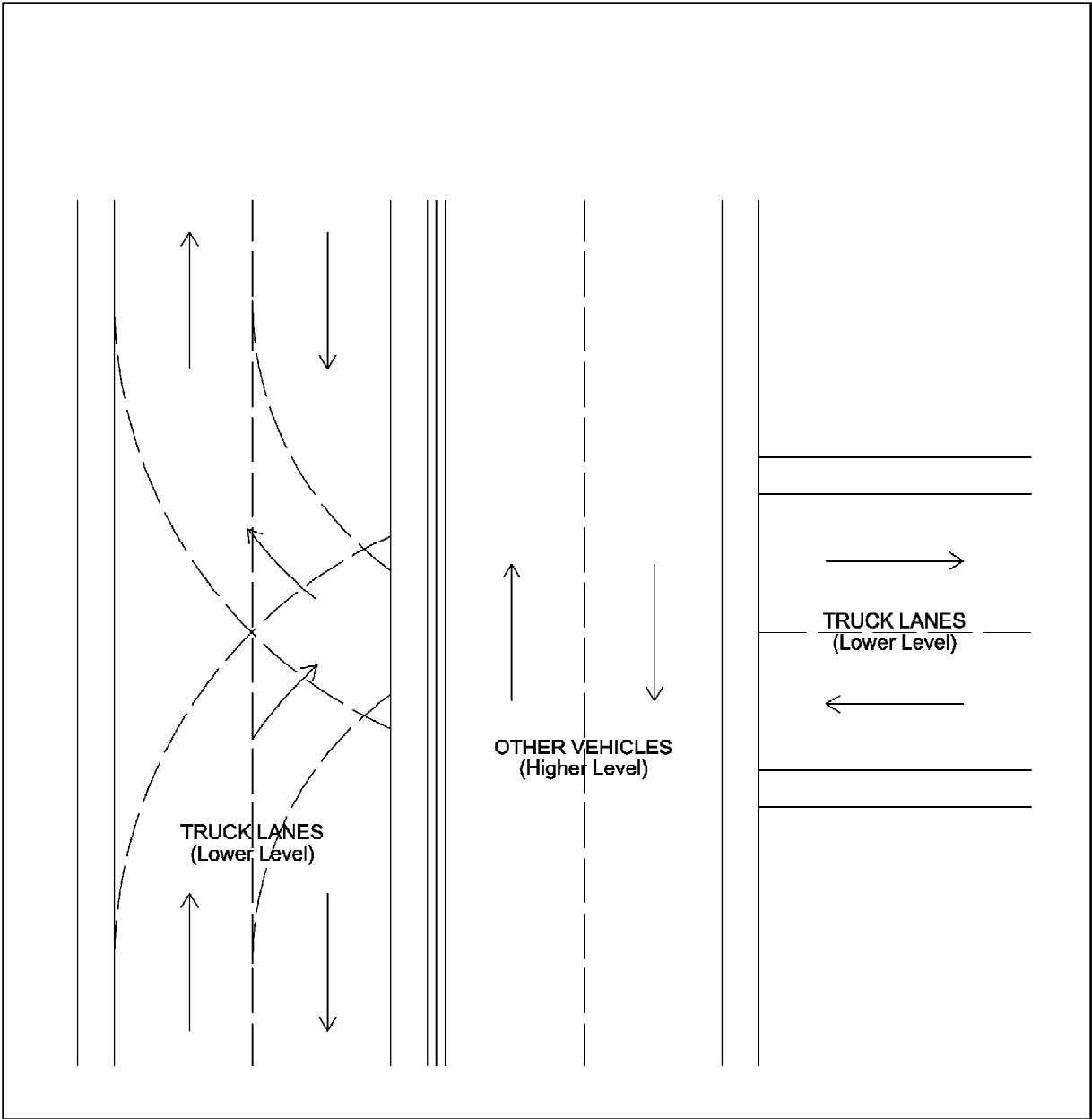


Fig.42.4. Proposed layout of interchange in coastal road

TM Kalluvathukkal jn.
NH 208
TM Kallumthazham jn.
TM Elampalloor jn.
TM Kundara Pallimukku
TM High embankments of ROBs
TM Kottarakkara Market jn.
TM Kottarakkara Pulamon jn.
TM Punalur town

The above mentioned accidents black spots need to be scientifically analysed and treated reduce accidents.

Road Safety consists of three E's; viz., Education, Engineering, Enforcement. It is of vital importance to impart proper

education on road safety to the road users (drivers and pedestrians) through conducting of awareness classes, visual media and leaflets/booklets. This can be carried out with the help of Motor Vehicle Department, SHGs and NGOs. There is a very high rate of accidents among drivers (especially of two-wheelers) in the age group of 18 – 25, causing fatalities and injuries resulting in severe physical handicaps. It would be worthwhile to think of imparting Road Safety at the High School and Higher Secondary School level in order to reduce accidents to this specific group of road users. This can be achieved

with the support of the Education Department.

6. Detailing of Proposals

In the detailing of the proposals, more specific design details have been worked out and presented. Layout and cross sections of the proposed classifications of roads are given below and the rough costs of each of the proposed alignments are also worked out. For working out the cost of the proposed roads the following factors have been considered.

- Cost of Land Acquisition
- Cost of Carriageway construction (Bitumen Macadam&Asphaltic Concrete)

National Highway (30m Land width)

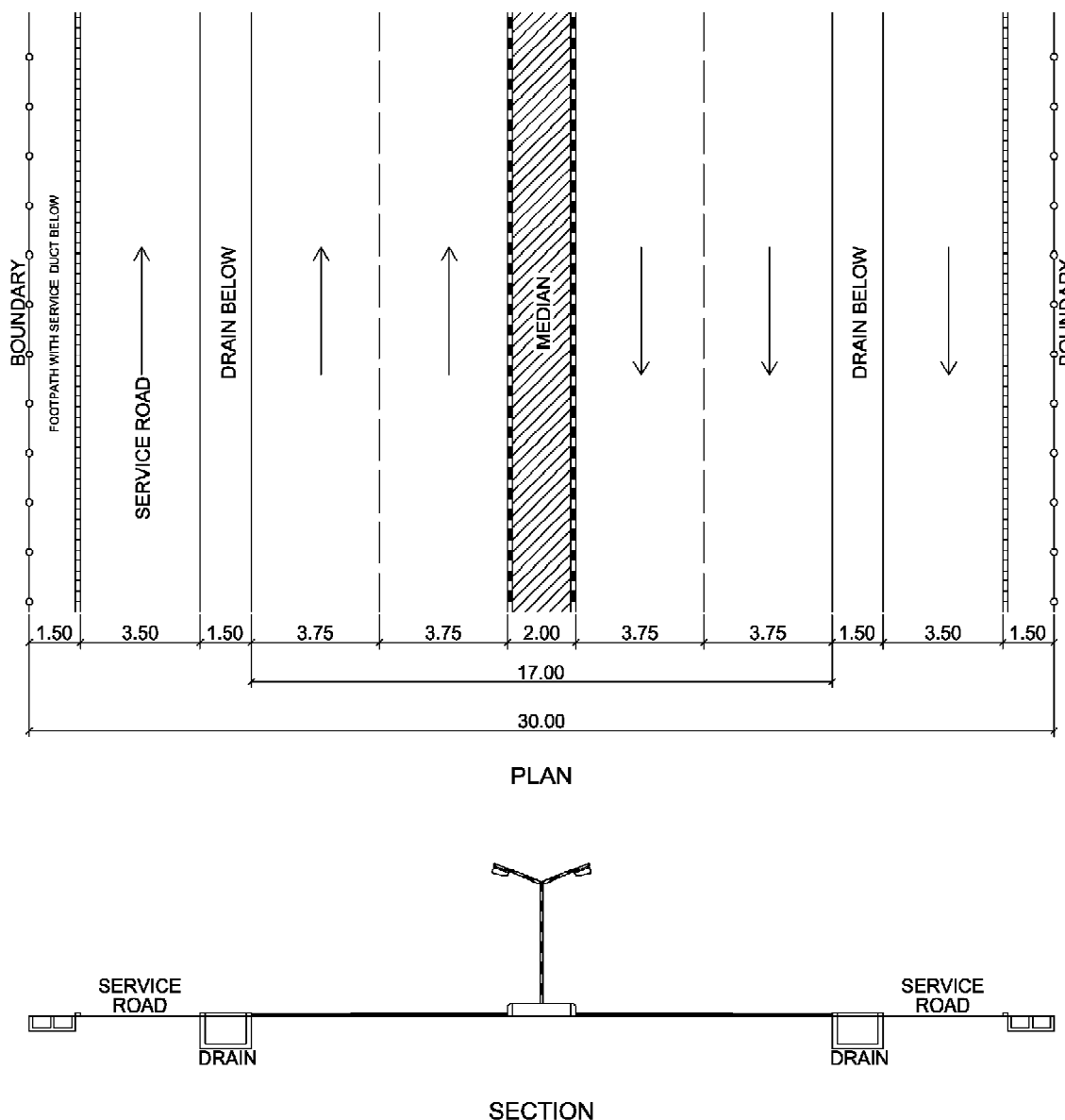


Fig.42.5. Plan and Cross section of the proposed National Highway

- Cost of re-locating existing structures
- Cost of improvement of Junctions
- Improvements of geometrics like sharp curves, steep gradients, etc.
- Road Safety measures like Road Markings, Road Signs, etc.
- Pollution control measures like Bye pass to congested junctions, Grade – separated roads, Roadside Arboriculture, phased conversion of buses, Lorries and trucks to CNG fuel.
- Widening or Reconstruction of existing

Bridges and Culverts

- Protection Works like Drains, Retaining Walls, etc.
- Shifting of Utilities like Power lines, Transformers, Telecommunication cables, Water lines, etc.

The Plans and Cross sections of the proposed classes of roads are given in Figures 42.5, 42.6, 42.7, 42.8 and 42.9.

Based on the designs detailed above and considering the various factors affecting the implementation of these

designs, the Table 42.9 gives the rough costs that have been arrived at for each of the alignments in the proposed road network.

Abstract

| | |
|------------------|---------------------|
| National Highway | -Rs. 136.76 Crores |
| State Highways | |
| (excluding A) | - Rs. 172.63 Crores |
| Primary Roads | - Rs. 231.49 Crores |
| Secondary Roads | -Rs. 139.03 Crores |
| Tertiary Roads | -Rs. 94.41 Crores |
| Total | - Rs. 774.32 Crores |

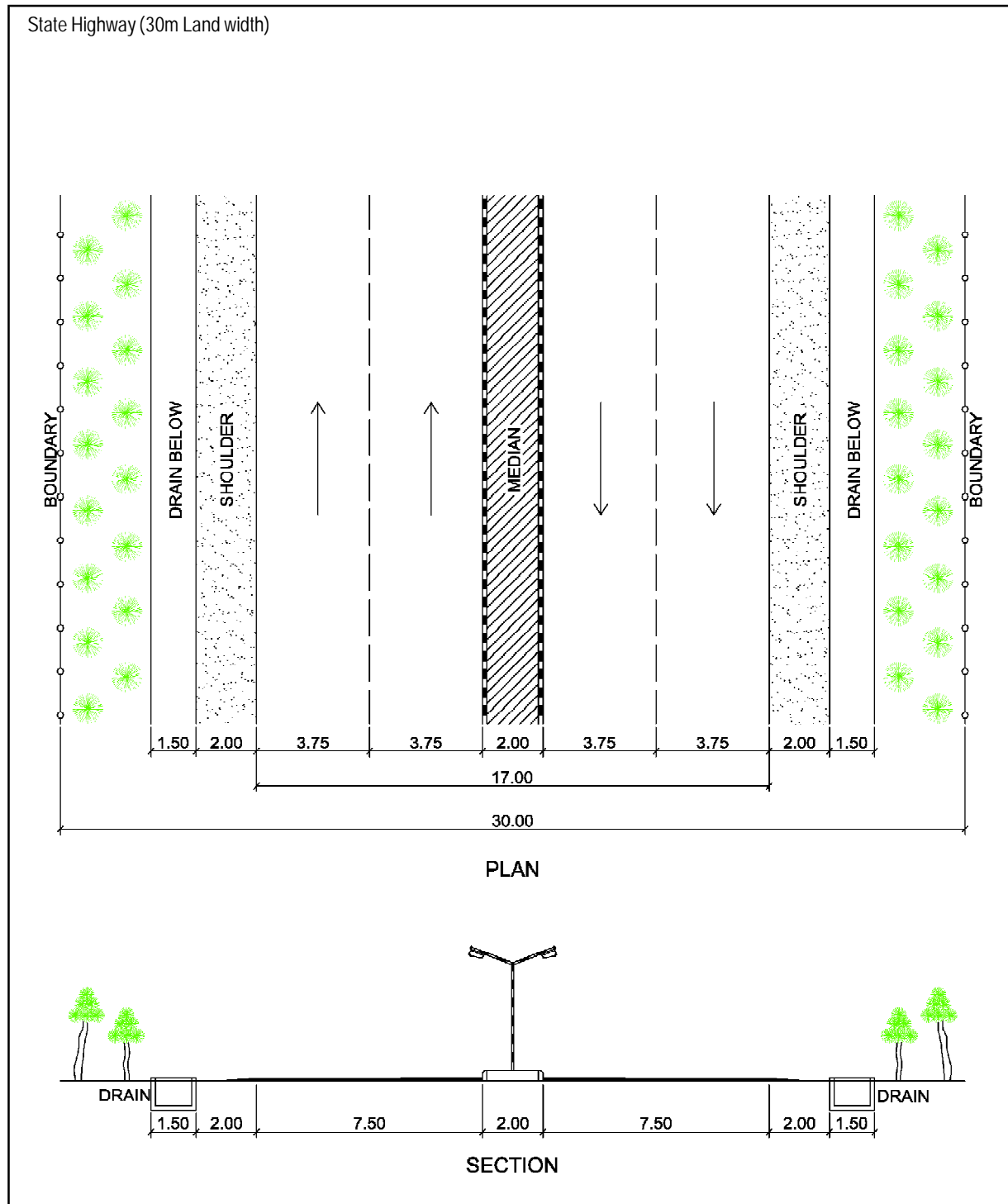


Fig.42.6. Plan and Cross Section of the proposed State Highway

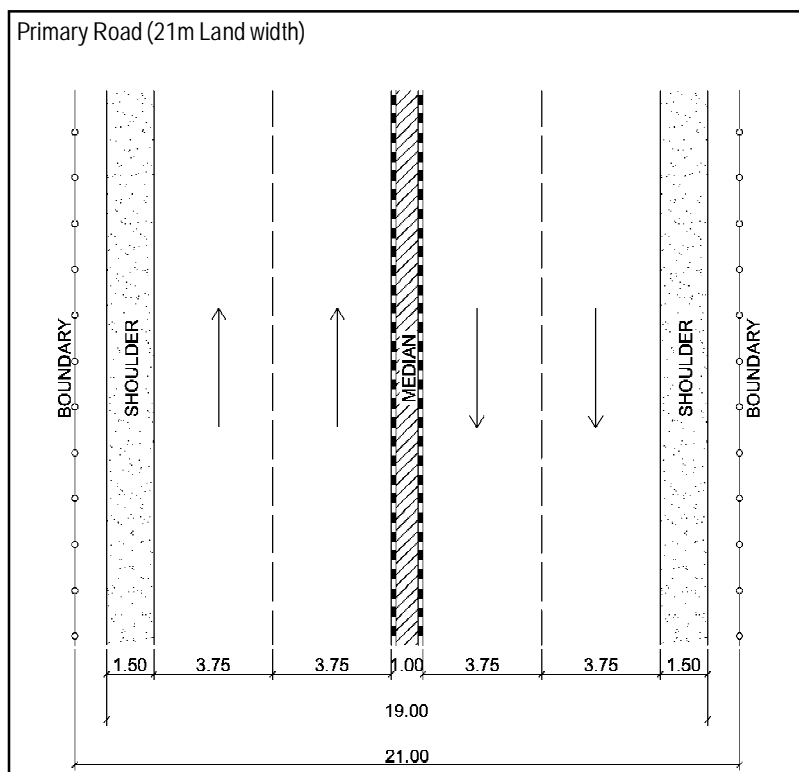


Fig.42.7. Plan of the proposed 21m wide Primary road

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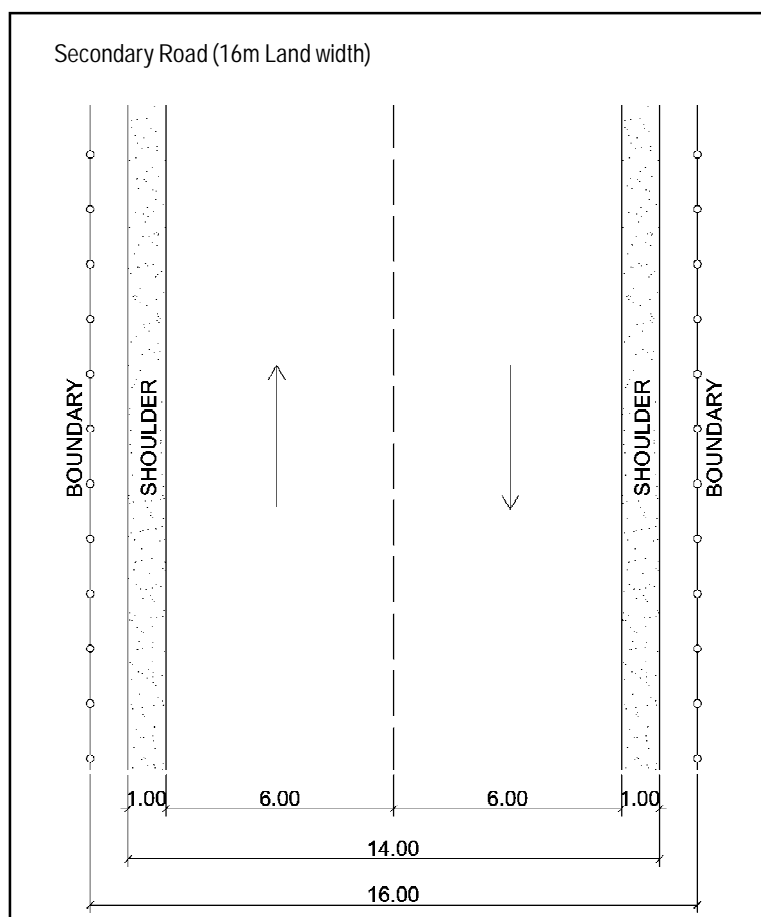


Fig.42.8. Plan of the proposed 16m wide Secondary road

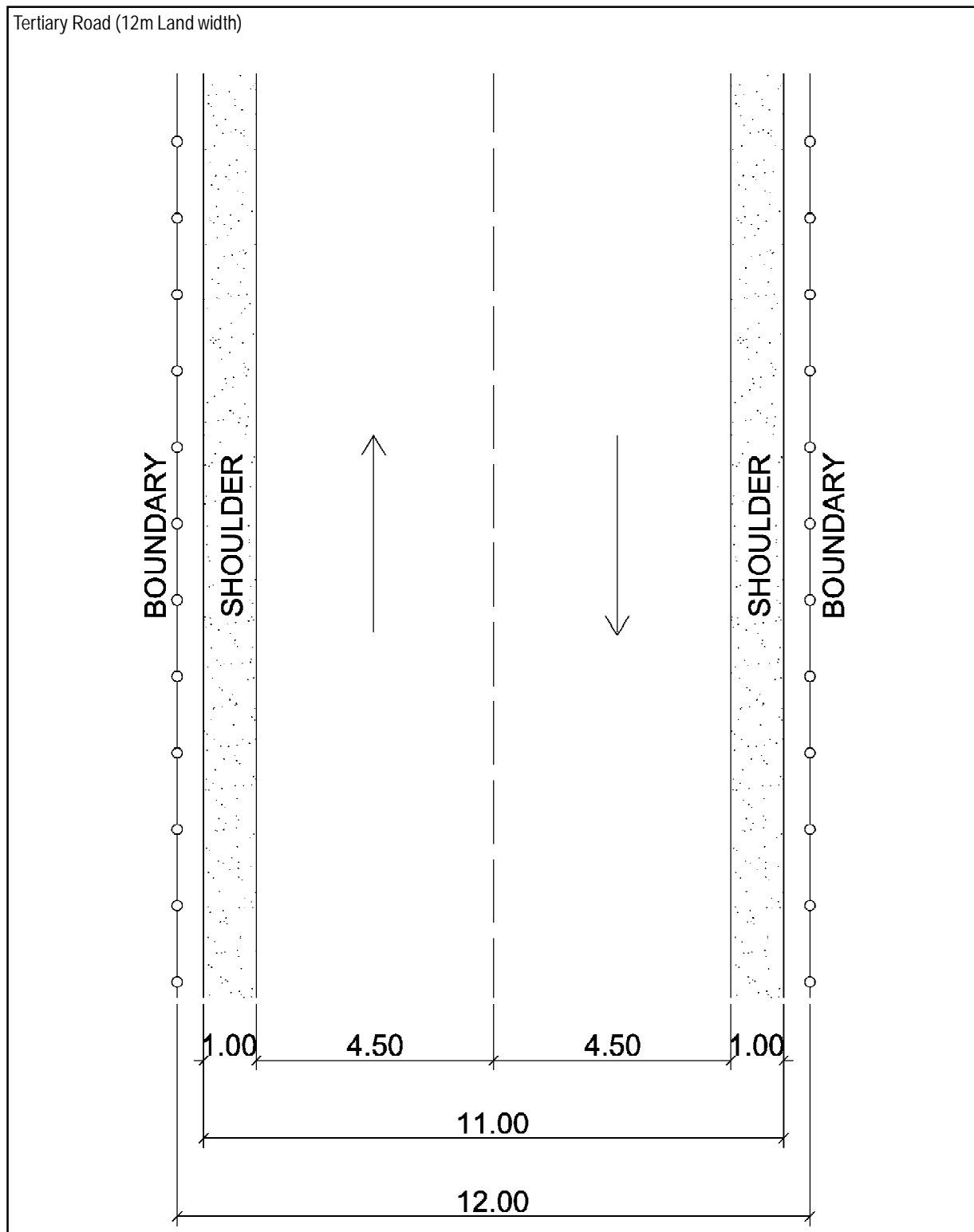


Fig.42.9. Plan of the 12m wide Tertiary road

Table 42.9 : Rough cost estimate for proposed road alignments

| Sl.No. | Road Alignment | Rough Cost (Crore Rupees) | Sectoral Linkages | Remarks |
|---------------------|---|---------------------------|--|---------------------------|
| I. NATIONAL HIGHWAY | | | | |
| A | NH 220: Kollam – Kannanalloor – Kundara – Chittumala – Bharanikkavu – Adoor | 136.76 | Agriculture, Animal Husbandry, Forest, Fisheries, Industries, Tourism. | |
| II. State Highway | | | | |
| A | Nilamel – Ayoor – Kottarakkara – Kulakkada | | Agriculture, Animal Husbandry, Fisheries, Industries, Tourism. | Being upgraded under KSTP |
| — | | | | |
| B | Ayoor – Anchal – Punalur – Pathanapuram | 56.55 | Agriculture, Animal Husbandry, Forest, Fisheries, Industries | |
| C | Parippally – Nilamel – Madathara | 61.39 | Agriculture, Industries, Tourism. | |
| D | Kulathupuzha – Madathara – Chithara | 33.38 | Agriculture. | |
| E | Bharanikkavu – Adoor | 21.31 | Fisheries, Industries. | |
| III. PRIMARY ROADS | | | | |
| A | Tangassery Harbour – Paravur – Chathannur | 112.5 | Agriculture, Animal Husbandry, Fisheries, Industries, Tourism. | |
| B | Chathannur – Velinalloor | 36.63 | Agriculture, Fisheries, Industries, Tourism. | |
| C | Kottiyam – Kannanalloor – Kundara – Bharanikkavu – Karunagappally | 82.36 | Agriculture, Animal Husbandry, Forest, Fisheries, Industries, Tourism. | |
| IV. SECONDARY ROADS | | | | |
| A | Chavara – Sasthamkotta | 37.86 | Agriculture, Animal Husbandry, Forest, Industries. | |
| B | Paravur – Varkala | 9.5 | Industries, Tourism. | |
| C | Paravur – Parippally | 15.29 | Industries, Tourism. | |
| D | Kannanalloor – Pooyappally – Ayoor | 31.33 | Agriculture, Industries. | |
| E | Kadakkal – Anchal – Chengamanad | 45.05 | Agriculture, Animal Husbandry, Forest, Fisheries, Industries, Tourism. | |
| V. TERTIARY ROADS | | | | |
| A | Bharanikkavu – Kottarakkara – Pooyappally – Kurisummoodu Jn. | 44 | Agriculture, Animal Husbandry, Forest, Fisheries, Industries, Tourism. | |
| B | Kottarakkara – Mylom – Pattazhi – Pathanapuram | 19.55 | Agriculture, Animal Husbandry, Industries. | |
| C | Anchal – Kulathupuzha – Thenmala | 30.86 | Agriculture, Animal Husbandry, Forest, Fisheries, Industries. | |

To realise the proposed road network, the support of the following sectors are required.

- I Revenue
- I Finance
- I Local Self Government Institutions
- I Power and Telecommunications
- I Drinking Water

7. Conclusion

The success rate of the Infrastructure Development Concept as shown in the Sectoral Linkage Analysis is indicative of the fidelity of the concept to the overall District Development Concept. The utility of the proposals are further emphasised by the fact that none of the proposed alignments are un-utilised. Housing is an

area which call for immediate attention from socio-economic point of view.

The biggest impediment to the successful implementation of the proposed alignments will be the availability of funds and land. These resources would be well allocated and utilised to meet the requirements of a 20 year perspective plan.



Chapter 43 A

Forest

This chapter includes the Development Proposals in Forestry Sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

The District Forest Policy, envisages that Kollam has to be made rich in biodiversity by economically developing while ecologically conserving the forest land and settlements, flora and fauna and making a greener non forest land by 2021.

2. Proposals for Ecological Conservation

2.1 New Fish Sanctuary at Kulathupuzha

Present stage of the fish population in the Kulathupuzha river adjoining the Sastha temple is under threat. This needs urgent protection and conservation measures. There is ample scope for declaring this area as a fish sanctuary.

The proposal is located in Kulathupuzha Grama Panchayat. The total

cost of implementation, works out to Rs.50 lakh. The project can generate employment to 10 persons directly and 90 persons indirectly. The fund anticipated for the execution is from the Plan fund. The period of implementation is from 2008 – 2010. The Appendix 43A gives the phasing of proposals. The fisheries department also has project to introduce fingerlings as per article 5.3.1 of Chapter 38; Fisheries. There is yet another proposal in Article 3.2.2 of Chapter 38; Fisheries for the Production Enhancement through Reservoir Fisheries. However this will be a restricted activity in the Sanctuary area. Here the license will be issued only to the Tribal population for caching and the exact locations will be finalized with the approval of Wild life Warden of the area.

2.2 Management of Protected area in Shenthuruni Wildlife Sanctuary

Shenthuruni Wild Life Sanctuary is coming under the Agasthyavanm Wild Life Circle. Area is being managed as

Protected Area under a Management Plan duly approved by competent authority.

The proposal is for the development of Eco-Tourism in the area. The proposal is located in Shenthuruni in Thenmala and Kulathupuzha Grama Panchayats. The total cost of implementation works out to Rs.25 lakh. The project can generate employment to 5 persons directly and 25 persons indirectly. The fund anticipated for the execution is from the Central Sponsored Scheme fund. The period of implementation is from 2008 – 2010. The Appendix 43A gives the phasing of proposals with details. . The proposal in Article 3.2.2 of Chapter 38; Fisheries for Production Enhancement through Reservoir Fisheries is also for Thenmala area. Here also this will be a restricted activity in the Sanctuary area. The license will be issued only to the tribal population for caching and the exact locations will be finalized with the approval of Wild life Warden of the area. Also as per Article 43C; Mining and Geology, there is a proposal

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for sediment budgeting in various areas of the reservoir. This can be implemented only with the approval of Forest Dept.

2.3 New Bird Sanctuary at Karali, Kandanchira and Polachira

All these areas are destinations of migratory birds. The 17th Asian Waterfowl Census carried out by a group of bird-watchers in January and February. This has stressed the need for protecting 1,200 acres of wetland in Polachira, Kandachira and Karali at Kollam in Kerala which are home to a number of migratory birds. The census, which monitored the status of water birds, recorded a total of 26,195 birds from 37 species in Polachira. The northern pintail, popularly known as 'soochivaalan eranda', a migratory fowl from north Asia, and the cotton teal ('paccha eranda') were observed in abundance.

A total of 954 birds belonging to 36 species were sighted at Karali wet lands. As many as 60 oriental darters, listed in red data book (endangered), were sighted at Karali. A large number of migratory birds were sighted at Polachira showing the biodiversity with abundance of fish and mussels in the area. But this biodiversity is under threat from atmospheric pollution caused by stone crusher units in the region. The sound of the units and the huge amount of dust were listed as reasons for the destruction of the wet lands.

Though several rare birds such as the spot-billed pelican, the oriental darter, the grey heron, white ibis and open-billed stork have been sighted during surveys carried out in previous years, reclamation and poaching have been cited as the main reasons for the decline in the number of birds this year.

Sand-mining and the presence of brick factories were also listed as reasons for the fewer number of birds in the Karali marshes.

The study team urged the forest department to install boards emphasizing the importance of migratory birds in Polachira. The distribution of pamphlets among locals and tourists to create greater awareness about conservation is also suggested.

According to the study, Polachira should be turned into a waterfowl sanctuary. A bird research centre and library should be set up at Ithikara. A community reserve as at Kadalundy in

Kozhikkode district is recommended for this area with the active involvement of the local self government bodies.

The proposal is located in Karali in West Kallada Grama Panchayat, Polachira in Chirakkara Grama Panchayat and Kandachira in Panayam Grama Panchayat and Kollam Corporation. The total cost of implementation works out to Rs.25 lakh. The project can generate employment to 5 persons directly and 25 persons indirectly. The fund anticipated for the execution is from the Central Sponsored Scheme fund. The period of implementation is from 2008 – 2010. The Appendix 43A gives the phasing of proposals.

2.4 Development of Mangrove areas

Though fairly good patches of mangroves are seen towards the inner corridors of the estuary (Kayamkulam Lake) 300 m away from the coastline, mangroves are absent along the shoreline. In the Ayiram Thengu area, mangroves are restricted to a small preserves (4-5 ha area) dominated by *Lumnitzera racemosa*, *Rhizophora mucronata*, *Avicennia marina* and *Aegiceras corniculatum*. Other lake shores are devoid of mangroves, though occasional mangrove elements are found distributed here and there and they may not qualify to be considered as a normal mangrove stand. Mangroves occupying the inner fringes of the ruminating lakeshore area; which are rich in trees of *Thespesia populnea*, than elsewhere. From the environmental point of view more congenial areas has to be brought under Mangrove vegetation either by planting in suitable govt. lands or by acquisition and protection of Mangrove areas.

At present the idea of acquisition of areas under mangroves is almost dropped owing to prohibitive land value. Hence planting of mangrove seedlings may be carried out every year along all the eight tributaries of the Astamudi lake by planting 1000 nos. of seedlings every year. This can be implemented with active participation of the LSGIs and NGOs.

The proposal is located in Alappad Grama Panchayat. The total cost of implementation works out to Rs.5 lakh. The project can generate employment to 50 persons. The fund anticipated for the execution is from the Central Sponsored Scheme fund. The period of

implementation is from 2008 – 2010. The Appendix 43A gives the phasing of proposals. The proposal can be linked to Article 3 and 4 of Chapter 43B; Environment and Article 5.2.3 of Chapter 38; Fisheries.

2.5 Completion of Forest Working Plan

Punalur, Thenmala, Achancoil, Shenduruny and part of Thiruvanthapuram and Konni are the Forest Divisions coming in Kollam District. All the above Forest Divisions have approved working plans except Thenmala division and are managed as per the provisions as laid down in the working plan. Preparation of Working Plan for Thenmala Division is on the last stage and it is expected that Thenmala Division also will get the working plan approved during 2008-09. As per Article 3.2 of Chapter 14; SC/ST there is a proposal for providing land to landless tribes. This also may be considered while preparing the working plans.

2.6 Prevention of Forest Fire through people's participation

The most common hazard in forests is forest fire. Forest fires are as old as the forests themselves. They pose a threat not only to the forest wealth but also to the entire fauna and flora seriously disturbing the bio-diversity and the ecology and environment of a region. During summer, when there is no rain for months, the forests become littered with dry leaves and twigs, which can be easily ignited by the slightest spark either caused by natural phenomena or man made.

Objectives:

- I To control forest fire with a view to protect and conserve both natural and plantation forest.
- I To improve productivity of forest by reducing the incidents and extent of forest fires.
- I To devise, test and demonstrate principles and techniques of prevention, detection and control of forest fires.
- I Orientation and training of staff and the public through training courses/ awareness classes designed to prepare them for participation in the forest fire management.

Requirements:

- I Wireless communication sets
- I Fire fighting equipments

- I Creation of the fire lines
- I Construction of watch towers
- I Training and demonstration
- I Research and Publicity
- I Participatory Forest Management

The proposed area is located in Mannarappara Range in Piravanthoor Grama Panchayat. The total cost of implementation works out to Rs.10 lakh. The project can generate employment to 100 persons. The fund anticipated for the execution is from the Plan fund of Forest Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

2.7 Consolidation of Forest Boundaries for Protection and Management of Forests

There had been a lot of encroachment in Reserve Forests in the last century, which made way to a heavy loss of forest and bio-diversity. Loss of forest area has a great significance and impact in the present context of a heavy shortage of drinking water due to depletion of natural forest and changing the land use pattern by the encroachers. At present most of the Reserve Forest areas have consolidated by putting masonryjundas, boundary walls etc. In balance forest areas, the boundary of which has not been demarcated and consolidated till date has to be completed within the next three years. After demarcation and consolidation of forest boundaries only, further encroachment can be prevented. Also Participatory Forest Management is being implemented which will also help the protection of remaining forests from encroachment.

The proposal areas in Punalur Division come in Pathanapuram, Piravanthoor, Alayamon, Kulathupuzha and Eroor Grama Panchayats. Those in Thenmala Division come in Thenmala, Kulathupuzha and Aryankavu Grama Panchayaths. Achancoil Division has areas in Aryankavu Grama Panchayath and Konni Division has areas coming in Piravanthoor Grama Panchayath. Schenthuruni Division has areas in Thenmala and Kulathupuzha Grama Panchayaths. Thiruvananthapuram Division has areas in Kulathupuzha Grama Panchayat. The total cost of implementation works out to Rs.50 lakh. The project can generate employment to 1000 persons. The fund anticipated for the execution is

from the Plan fund of Forest Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

2.8 Conservation of Species

The agriculture department as per their article 3.9 has recommended the conservation of species such as arrow root, kolinchi, etc. for the subsistence of the tribal population. The department also can take care of this aspect.

3. Proposals for Greening Non Forest land

As mentioned in the Sectoral analysis, according to the National Forest Policy, a minimum of 1/3rd of the total geographical area should be under forest cover. In Kerala it is reported that only 27 to 28 % of the total area is under forest cover. In order to achieve the target as envisaged by National Forest Policy, more areas have to be brought under tree cover. Several programs are in practice such as Entemaram Padhathy, Nammude Maram Padhathy, Vazhiyora thanal etc to bridge the gap of 5%. The first two programs are implemented with the whole hearted support and involvement of the student community in the district. The program started in the year 2007 and is expected to continue with the distribution of seedlings to new entrants to the Vth standard every year. The above programmes are expected to bridge the gap of 5% within a period of 5 years.

The proposed area comes in Punalur Division with sites in Pathanapuram, Piravanthoor, Alayamon, Kulathupuzha and Eroor Grama Panchayats. Thenmala Division has areas in Thenmala, Kulathupuzha and Aryankavu Grama Panchayats. For Achancoil Division the area is in Aryankavu Grama Panchayat. Konni Division's area is in Piravanthoor Grama Panchayat. Schenthuruni Division's area is in Thenmala and Kulathupuzha Grama Panchayats. Thiruvananthapuram Division has sites in Kulathupuzha Grama Panchayat. The total cost of implementation works out to Rs.50 lakh. The project can generate employment to 1000 persons. The fund anticipated for the execution is from the Plan fund of Forest Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

3.1 Government Land / Public Lands

As per Kerala conditions it is difficult to

increase the forest area since there is acute shortage of lands. Hence in order to achieve 33% tree cover, the only possibility is to afforest all available Government lands like road purampokes, Revenue purampokes, Govt. Office compounds etc. Areas with Local Self Govt. School/ College compounds and to encourage planting in private lands. As per Panchayat Raj Act, 1994, 5% of the Plan outlay needs to be spent on environmental protection works. So area needs to be identified under each Grama Panchayat and necessary funds shall be raised through Panchayats for planting the sites identified under each by the respective Foresters.

3.2 Private Holdings

Homestead planting also will be encouraged for achieving the above objective. The ongoing programmes like Ente Maram Padhathy, Nammude Maram Padhathy, etc are expected to meet this objective.

The proposal comes under all the LSGIs. The total cost of implementation works out to Rs.26 lakh. The project can generate employment to 1000 persons. The fund anticipated for the execution is from the Plan fund of Forest Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

3.3 River Bank Management

As mentioned in sectoral analysis (Article 5.2 of Chapter 20), banks of rivers are collapsing year after year since there is a depletion of vegetation on the banks. Hence in order to protect the banks and to check soil erosion, a green vegetal cover with suitable species such as reeds, bamboos etc. are the need of the hour. Other local such as Thespesia populnea, Punna, species also can be planted. Forest Dept. can raise required number of seedlings of bamboo, and other site specifically suitable species and these may be planted through participatory approach along the river banks with the active participation of local people and local self government bodies.

The proposal comes in Punalur Municipality. The total cost of implementation works out to Rs.25 lakh. The project can generate employment to 100 persons. The fund anticipated for the execution is from the Plan fund of Forest

43A

Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

3.4 Bio shield along Sea shore

Article 3.6.2 of Chapter 34; Agriculture recommends the planting of one row of cashew trees along the coast of the district. The forest department has already implemented one programme named “Harithatheeram” to protect the inhabitants of the coastal area by planting few rows of casuarina. This began during the year 2007. This continued during 2008 also by planting in the remaining area available for planting.

4. Proposals for Economic Development

In the Forestry Sector main thrust is for conservation and hence the scope for various activities for Economic Development assumes secondary importance. However without affecting conservation aspect, the following proposals are recommended for Economic Development.

4.1 Promotion of Alternate species of timber for furniture

Encourage use of alternate species of timber for furniture as the Forest areas are under the severe pressure for the production of timber. Use of treated rubber wooden furniture and such similar species may be promoted for reducing the pressure on forests for timber. New programs may be launched, such as “one home one tree”, so as to provide the basic requirements for the people. Therefore awareness has to be created among the new generation on this. Also necessary action may be initiated at the Range Office level to encourage local entrepreneurs in treating inferior species of timber for furniture.

The proposal is at Thenmala Grama Panchayat. The total cost of implementation works out to Rs.5 lakh. The project can generate employment to 10 persons directly and to about 100 persons indirectly. The fund anticipated for the execution is from the Plan fund of Forest Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals. Thrust is for creating awareness among public for the choice of alternate species.

The Promotion of rubber wood seasoning units in Alayamon, Anchal,

Aryankavu, Edamulakkal, Karavalur, Yeroor, Chadayamangalam, Nilamel, Ittiva, Pattazhy, Pathanapuram, Piravanthur, Mylom, Kulakkada and Kummil Grama Panchayat is also recommended by the industries sector as per Article 8.10 of Chapter 39.

4.2 Value addition to Minor Forest Produce

Contribution of medicinal plants and Non wood forest produce (NWFP) in economic development is substantial and value addition can generate considerable employment opportunities. Value addition will be aimed at through involvement of all sectors including Participatory Forest Management (PFM). There is a vacuum of an intermediate agency to assess the requirements of the industry and to mobilize the local resources. Cultivation of medicinal plants may be promoted on a buy back scheme from the feeder industries.

4.3 Handicraft with bamboo/ reeds

Imparting training to traditional artisans for use of advanced technology. Along with training, necessary planning may be done in advance to provide raw materials for the traditional artisans for their living. “Gramina Vana Yogana” programs may be made use of for this. This proposal can be linked with the proposal of Industries sector as mentioned in Article 3.6 of Chapter 39.

4.4 Raising medicinal plant nurseries and plantations

Medicinal Plants constitute an important component of the plant resources of Kerala. Recent studies shows that out of estimated 4600 flowering plants in Kerala, about 900 possess medicinal values. Of these, 540 species are reported to occur in forest ecosystems. Over 150 species of plants that are either indigenous or naturalized in Kerala are used in the Indian system of Medicine like Ayurveda and Sidha. The rural folk and tribal communities make use of about 2,000 species of lesser-known wild plants for various medicinal uses. About 60 to 65% of plants required for Ayurvedic medicines and almost 80% of plants used in Sidha medicines are found in the forests of Kerala.

The major medicinal plants obtained from the forests of Kerala are *Asparagus racemosus*, *Solanum anguivi*, *Desmodium* spp, *Cissus quadrangularis*, *Psuedartheria viscida*, *Strobilanthes ciliatus*, *Dysoxylum*

malabaricum, *Piper longum*, *Aristolochia indica*, *Ceasalpinia bonduc*, *Tribulus terrestris*, *Sarcostemma acidum*, *Baliospermum montanum*, *Aristolochia bracteolata* etc.

Presently most of the medicinal plants have become very rare and are on the verge of extinction due to depletion of natural forests and unscientific exploitation of these rare plants. In order to combat this problem, a long term planning is essential for the conservation and propagation of medicinal plants. Forest Department is taking steps for conservation and multiplication of rare and endangered medicinal plants. Creating awareness regarding the necessity of medicinal plants and its various uses are being propagated among the Kudumbasrees, farmers units, residents associations, local people, schools children etc. by the Forest Department so that the pressure for these from forest is reduced there by conserving the gene pool of these plants at the same time meeting the increasing demand of these plants. Involvement of Kudumbasrees in the programme can result in the improved basic amenities to the participating members.

The proposed area comes under Kulathupuzha and Sasthamcottah Grama Panchayats. The total cost of implementation works out to Rs.50 lakh. The project can generate employment to 1000 persons. The fund anticipated for the execution is from the Plan fund of Forest Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

The tourism department as per their article 2.4.1 has also mentioned about raising the medicinal garden in Perinad Panchayat. Also necessary support can be given to the proposal as per Article 3.11 of Chapter 34; Agriculture.

4.5 Multiplication and propagation of Seedlings

There has not been considerable progress in the field of raising seedlings to meet the requirements of the farmers. New technology in this sector remains to be tapped and utilised to the optimum. Adoption of the latest developments such as tissue culture, aeroponics, fertigation etc. in the field is still far away from the implementation level. There is scope for implementation, in the district by adopting latest technology.

This can be linked with the Model Bio Technology Park proposed by the agriculture sector as given in Article 5.1 of Chapter 34. This may commence functioning by 2012 as per their report.

The proposal finds application in Kottarakkara Grama Panchayat. The total cost of implementation works out to Rs.10 lakh. The project can generate employment to 10 persons. The fund anticipated for the execution is from the Plan fund of Forest Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

4.6 Improving the Productivity of the Existing Plantations

This is a policy level issue to be decided at higher levels. In order to increase the productivity of the plantations repeated crops may be avoided. New technology may be adopted in the selection of seedlings and in cultural operations. The

soil profiled may be studied and the deficient nutrients in the soil may be applied using advanced technology such as fertigation, chemigation etc. according to the requirements of the species raised.

The proposal is in Pathanapuram, Piravanthoor, Alayamon, Kulathupuzha and Eroor Grama Panchayats of Punalur Division and in Thenmala, Kulathupuzha and Aryankavu Grama Panchayats of Thenmala Division. Achancoil Division has area in Aryankavu Grama Panchayat. Konni Division has sites in Piravanthoor Grama Panchayat, and for Schenthuruni Division in Thenmala and Kulathupuzha Grama Panchayats. Finally Thiruvananthapuram Division has sites in Kulathupuzha Grama Panchayat. The total cost of implementation works out to Rs.30 lakh. The project can generate employment to 100 persons. The fund anticipated for the execution is from the Plan fund of Forest

Department. The period of implementation is from 2008 – 2021. The Appendix 43A gives the phasing of proposals.

5. Conclusion

The implementation of the recommendations is expected to bring about the developments envisaged. The limiting factors for implementation of the recommendations are the paucity of funds and the delay in obtaining sanction from the Central Govt. Since the Forest Department falls under the Concurrent List, any major activity in the forest area needs prior approval from the GOI. Most of the LSGIs have not yet realized their commitment in spending the earmarked amount of the Plan fund for afforestation works. A better co-ordination of other Departments such as Agriculture, LSGIs etc. is essential for the successful completion of the proposals. Thereby forest resources of the district can be optimally utilized for the development of the sector by 2021.

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Chapter 43 B

Environment

43 B

This chapter includes the development proposals of Environment sector based on the district development policies and strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district Environment policy, by 2021 Kollam has to become an eco friendly district through the abatement of pollution, efficient use of environmental resources by protecting and conserving critical ecological systems and resources including wet lands and green open spaces without being detrimental to traditional economic activities. As identified in the sectoral studies and spatial analysis, as far as the Bio physical environment of Kollam is considered, conservation of water bodies, abatement of air pollution, controlling land pollution and waste management are the critical aspects.

Therefore the development strategies include

- Conservation of Water Bodies including
 - Conservation of Ashtamudi Backwater through prevention of direct discharge of waste water through public drains of Kollam Corporation, providing effluent treatment plants for sea food preprocessing plants(peeling sheds), conversion of hanging toilets to eco san toilets/bio toilets, water quality monitoring of Ashtamudi Lake and modernization of coconut husk retting units
 - Conservation of Sasthamcotta Lake
 - Conservation of Paravur Kayal
 - Conservation of Edava-Nadayara Kayal
 - Enforcing Coastal Zone Regulations
 - Conservation of other water bodies
- Conservation and Regeneration of

Mangroves

- Conservation of Sacred groves
- Abatement of Air Pollution
 - Air pollution from Kerala Minerals and Metal Ltd.
 - Air pollution from Cashew factories
 - Air/Noise pollution from vehicles
 - Modernization of brick manufacturing units by providing pucca hood system with chimney and exhaust fan
- Abatement of Noise pollution
- Conservation of Hillocks
- Controlling Land Pollution
- Solid Waste Management through
 - Municipal Solid Waste Management in Kollam Corporation
 - Municipal Solid Waste Management in Multifunctional Special Development Zone
 - Municipal Solid waste management in other LSGIs

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2. Conservation of Water Bodies

Kollam is rich in aquatic bio reserve comprising of Lakshadweep sea in the west, two of the only three Ramsar sites in the State viz. Ashtamudi back water and Sasthamcotta fresh water lake, three Rivers viz. Kallada, Itthikara and Achankovil rivers, two major kayals viz. Paravur and Edava-Nadayara kayals and a number of fairly large and small size kayals and ponds like Thodiyur Vattakayal, Maruthady Vattakayal, Kanetti kayal etc.

2.1 Ashtamudi Backwater

One of the Ramsar sites in the district, the Ashtamudi back waters, has an area of 34 sq.km and is subjected to abuse in many ways in the environmental point of view. Special thrust is given to the backwater by earmarking it into the Aqua-bio reserve zone. For saving the backwater from quality deterioration mainly due to pollution the following proposals are put forward (Figure 43.B.1). The conservation

establishments consuming water are discharging the waste water directly or indirectly into the Ashtamudi Lake. Indirect method is mainly through storm water drains and nullahs maintained by LSGIs. It is envisaged to prevent such discharges completely by 2009. The suggested location is at Kollam Corporation.

Each unit will have to provide treatment facility for the waste water and then discharge only the treated water after exploring possibilities of recycling the treated water. The waste water generating units themselves have to identify space required for such facility. Period of implementation is 2008-2009.

The minimum cost anticipated for providing an effluent treatment facility for hotels is as shown in table.43.B.1:

Agencies involved include Jilla Panchayat, Hospital Development Committee, Private hospital managements, Kollam Corporation, Kerala State Pollution

II) Providing effluent treatment plants for Sea food preprocessing plants(peeling sheds)

There are about 50 numbers of fish processing units in Kavanad, Neendakara and Sakthikulangara area. Most of the solid and liquid wastes are directly entering the lake as there are no treatment facilities. Providing the minimum required treatment for such preprocessing units for meeting the standards by 2010 is envisaged. The suggested locations are at Kollam Corporation and Neendakara Grama Panchayat.

Each unit requires 0.5 acre of land for providing treatment for the effluent generated. The minimum cost anticipated for providing the above is Rs.125 Lakhs. Period of Implementation is from 2008-2009.

Agencies involved include Kollam Corporation, Neendakara LSGI and Kerala State Pollution Control Board. Employment generated after completion will be 50.

III) Conversion of hanging toilets to eco san toilets / bio toilets

Hanging toilets can be seen everywhere along the banks of Ashtamudi Lake. The human excreta is directly disposed in the lake. This unhygienic practice has to be stopped for improving the water quality of the lake and to promote tourism through the lake.

Eco friendly toilets like eco san toilets and bio toilets shall be promoted while giving proposal for replacing the hanging toilets. Through eco san toilets the waste is converted into bio fertilizer and through bio toilets methane gas can be utilized in kitchens. The suggested LSGIs are; Kollam Corporation, Neendakara, Chavara, Chavara South, Kundara, Perinad and

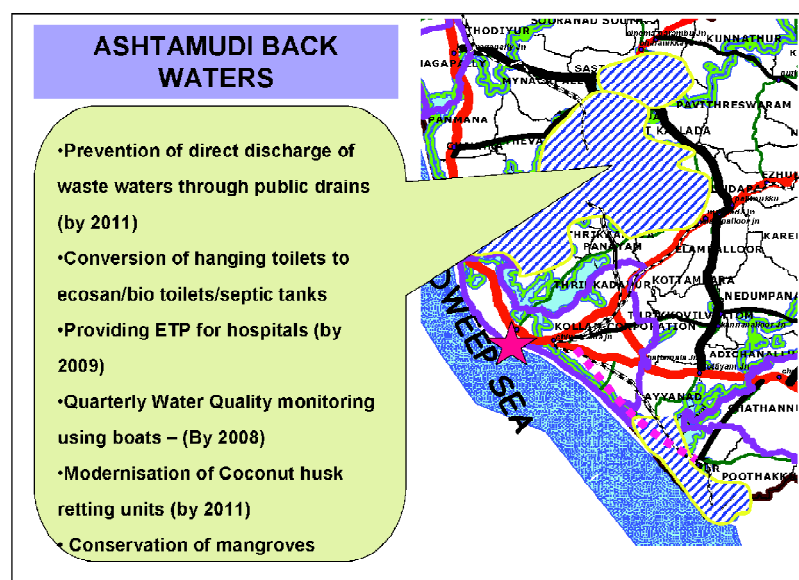


Fig.43.B.1. Proposals for the conservation of Ashtamudi Backwater

of Ashtamudi back waters include prevention of direct discharge of waste water through public drains of Kollam Corporation, providing effluent treatment plants for sea food preprocessing plants(peeling sheds), Conversion of hanging toilets to eco san toilets / bio toilets, water quality monitoring of Ashtamudi Lake and modernization of coconut husk retting units.

I) Prevention of direct discharge of waste water through public drains of Kollam Corporation

Most of the hotels, restaurants, hospitals, clinics, markets and other

Table.43.B.1. Cost estimate for providing effluent treatment plant in Hotels

| Quantity of waste water | ETP construction cost in Rupees |
|-------------------------|---------------------------------|
| 2000 Litre | 70,000/- |
| 5000 Litre | 1,50,000/- |
| 10000 Litre | 1,75,000/- |

Control Board. Employment generated after completion will be 200. Total cost for all units would be Rs.600 Lakhs.

The Phasing of the proposal is given in Appendix 43B-1.

Mundrothuruth Grama panchayats.

The number of units required is 1000 and cost for the same is Rs. 60 lakhs. Period of implementation is 2008-2010.

Agencies involved include Revenue

Department (Total Sanitation), LSGIs including Kollam Corporation, Neendakara, Chavara, Kundara, Perinad and Mundrothuruth. Employment generated after completion will be 15. Total cost for all units would be Rs.60 Lakhs.

IV) Water quality monitoring of Ashtamudi Lake

To identify the variations in the chemical characteristics of the lake, intensive monitoring of the lake by collecting and analyzing water samples during monsoon, pre monsoon and post monsoon periods is required. An extensive study incorporating about 50 sampling stations have to be planned and carried out to find out the water quality, its variations and the eutrophication status of the lake. The monitoring has to be continued till 2021 so that the effect of implementation of the proposals detailed elsewhere can also be assessed and corrective measures taken up. Period of implementation is 2008-2021.

The minimum expenditure for the above is Rs. 25 lakhs. Agency involved is Kerala State Pollution Control Board. Employment generated after completion will be 5. Total cost for all units would be Rs. 25 Lakhs.

V) Modernization of Coconut husk retting units

There are several coconut husk and fibre retting units functioning at the banks of Ashtamudi Lake at Thevalakkara, Chavara, Thekkumbhagam etc. Traditionally such units are located at the banks of the back water because the raw material needs to be soaked/retted in water for 3-4 weeks before defibring it mechanically. A golden colour indicating high quality of the fibre is attainable only after soaking. However the water gets polluted after each soaking. Recently there is a trend in the business to bring the coir fibre from Tamil Nadu for soaking/retting. The reason attributed for such a practice is water scarcity.

So modernization of the coconut husks retting /defibring units around Ashtamudi Lake with the help of M/s. Hindustan Coir, a coir research organization under Govt. of India is proposed. The technology promoted by M/s. Hindustan Coir is based on the bleaching capacity of castor oil when sprinkled on coir fibre. In this process there is no need for soaking in lake water and thus avoiding water pollution. The sprinkling

is carried out on land. Another technology patented by the Regional Research Laboratory also helps in avoiding soaking the huskfibre in lake water. Units are to be provided with effluent treatment plants attached to the soaking tanks. The suggested locations are at Kollam Corporation, Neendakara, Chavara, Chavara South, Thevalakkara, Thrikkadavur, Thrikkaruva and Mundrothuruth Grama panchayats. Period of implementation is 2008-2011.

Each unit has to find out own land for the shifting from the existing location. i.e. the lake. For the change over of technology, an additional amount of Rs. 2.5 lakhs is estimated for each unit. Common waste water treatment facility for a cluster of units under the guidance of a society can also be thought of to reduce the installation cost. Employment generated after completion will be 50. Total cost for all units would be Rs.125 Lakhs

Agencies involved include Kollam Corporation, Chavara, Chavara, Thekkumbhagam, Thevalakkara, Thrikkadavoor, Thrikkaruva and Mundrothuruth Grama Panchayats.

2.2 Sasthamcotta Lake

Another Ramsar site in the district, the Sasthamcottta fresh water lake, has an area of 373 ha. From the Sectoral studies it is seen that the largest fresh water lake of Kerala is getting polluted due to anthropological activities in and around the lake. Discharge from towns like Bharanicavu and Sasthamcotta, open defecation at the banks of the lake, discharge from poor quality latrines, retting of palm leaves in the lake, laundry activities at certain kadavs, use of fertilizers for plantation crops etc. are observed to be affecting quality of the lake water. Some of the above discharges reach the lake only in the form of surface run off during rain. As per Article 3.1 of Chapter 21A, the water quality of the lake has not deteriorated at any alarming level. Remedial measures shall be adopted for preventing it from deterioration.

The main problem faced by the lake is the water level depletion. Therefore special thrust is given to the lake also by earmarking it into the Aqua-bio reserve zone. The proposals for the lake conservation includes, providing municipal solid waste treatment facilities, construction

of fencing along the boundary of Sasthamcotta Lake, providing basic amenities like latrines, facility for laundry etc., banning of sand mining and ground water recharging.

One of the main causes of pollution of lake water is the discharge from the nearby towns and markets. The surrounding LSGIs namely Sasthamcotta, Mynagappally and West Kallada are not having proper facilities for the disposal of solid wastes. Though Sasthamcotta LSGI has installed a bio gas plant in the market at Sasthamcotta, it is far from adequate as only about 10 % of the waste generated in the Grama Panchayat is disposed through it.

Article 3.33 of Chapter 41; Drinking water and Sanitation, suggests the following conservation measures.

1. Prevention of further encroachment
2. Prevention of pollution including solid and liquid waste
3. Prevention of silting
4. Total echo system protection
5. Promoting of tourism potential
6. Patrolling

The proposal is to be implemented during 2008 - 2011.

2.3 Coastal Zone Regulations

Since the coastal line is environmentally very vulnerable, the existing Coastal Zone Regulations are to be strictly followed by the LSGIs. After the demarcation of High Tide Lines, restriction of industrial and construction activities shall be strictly observed. The suggested locations are at Paravur Municipality, Mayyanad, Kollam Corporation, Neendakara, Chavara, Alappad, Clappana and Panmana Grama panchayats. Period of implementation is 2008-2010.

2.4 Paravur Kayal

There is an urgent need for the conservation of Paravur Kayal from encroachment and pollution due to various human activities. Direct discharge of waste water to the lake is envisaged to be stopped by 2009. Hanging toilets are to be totally replaced by ecosan / bio toilets/septic tanks by 2009. The coconut husk retting being carried out in the kayal, is also intended to be stopped by modernizing the retting operation by the end of 2011. The suggested locations are at Paravur Municipality, Mayyanad and Poothakkulam

Grama panchayat. This proposal is implemented in 2011.

Land of 2 ha area each has to be identified and procured by neighboring LSGIs for coconut husk retting.

The Table.43.B.2 gives the cost details for conservation works of Paravur Kayal.

Agencies involved include Paravur Municipality, Mayyanad and Poothakkulam Grama panchayats. Employment generated after completion would be 25.

nutrient inputs and act as primary source of energy for estuaries. They stabilize the shore line and act as bulwark against impact of encroachment by the sea and check soil erosion. Human encroachment of the lake area for reclamation for settlements and agriculture, mining siltation and sedimentation are reducing the mangrove area drastically. The list of identified mangroves in the district is given in Appendix 43B-1.

demarcating low tide line with locally available "nari kallu" or dry rubble or even sand bags according to availability(Figure 43.B.4). The proposal is to complete the programme by 2011. The suggested locations are at Kollam Corporation, Neendakara, Chavara, Chavara South, Thevalakkara, Mandrothurathu, West Kallada, Thrikkadavoor, Thrikkaruva, Panayam and Kundara Grama Panchayats. Period of Implementation is from 2008-2011.

Land requirements include identified areas along the shoreline of Ashtamudi Lake. The LSGIs need to acquire land if necessary for conservation.

Cost: 1. Demarcating

LTL with narikallu : Rs. 100 lakhs

2. Land preparation, labour etc. : Rs. 75 lakhs

3. Cost of seedlings, labour charges for nurturing etc. : Rs. 50 lakhs

Total : Rs. 225 lakhs

Agencies involved include Kollam Corporation, Neendakara, Chavara, Thekumbhagam, Thevalakkara, Mandrothurathu, West Kallada, Thrikkadavoor, Thrikkaruva, Panayam and Kundara Grama Panchayats. Employment generated after completion will be 100. The proposal can be linked to Article 2.4 of Chapter 43A; Forests and Article 5.2.3 of Chapter 38; Fisheries.

Table.43.B.2. Cost details for conservation works of Paravur Kayal

| Sl no. | Item | Cost |
|--------|--|---------------|
| 1 | Procurement of land | Rs. 100 lakhs |
| 2 | Replacement of hanging toilets 500 | Rs. 30 lakhs |
| 3 | Replacement of 2 stroke engine by 4 stroke engines for boats and house boats | Rs. 50 lakhs |

2.5 Edava-Nadayara Kayal

Since a portion of the lake at Nadayara is exclusively used for coconut husk retting, there is air pollution and water pollution. While undertaking programs to conserve the lake, due consideration is to be given to the people engaged in traditional coir industry. So a proposal is made incorporating conservation of the lake without affecting the traditional industry. The suggested location is at Paravur Municipality. Period of implementation is 2008-2011.

The Table.43.B.3 gives the cost details for conservation works of Edava-Nadayara Kayal. Employment generated after completion would be 25.

2.6 Proposals for Other Water bodies

20 meter buffering using natural fencing with locally available plants for all major water bodies in the district proposed (Figure 43.B.2). This is proposed to be completed by 2015. The suggested LSGIs are; Kollam Corporation, Sasthamkotta, West Kallada, East Kallada, Puthur, Adichanalloor, Nedumpana, Edamad, Anchal, Alaymon, Kottarakkara, Mylom, Pathanapuram Grama Panchayat. Employment generated after completion will be 150. Total cost for all units would be Rs.350 Lakh.

3. Conservation and Regeneration of Mangroves

Mangroves are ecologically significant plant communities as they provide important

A proposal for the conservation and management of mangroves is detailed as follows:

Regeneration is proposed to be done by planting 3 - tier vegetation all along waterfront. The vegetation includes kandal along waterfront, kandal associates as a second layer and third layer as thick bamboo fencing as shown in Figure 43.B.3.

The planting of kandal seedlings may be done on muddy soil in the area between low tide line and high tide line after

Table.43.B.3. Cost details for conservation works of Edava-nadayara Kayal

| Sl no. | Item | Cost in lakhs |
|--------|--|---------------|
| 1 | Replacement of hanging toilets | 30 |
| 2 | Modernization of husk retting units | 50 |
| 3 | Pollution abatement study and implementation of control measures | 50 |
| | Total | 130 lakhs |

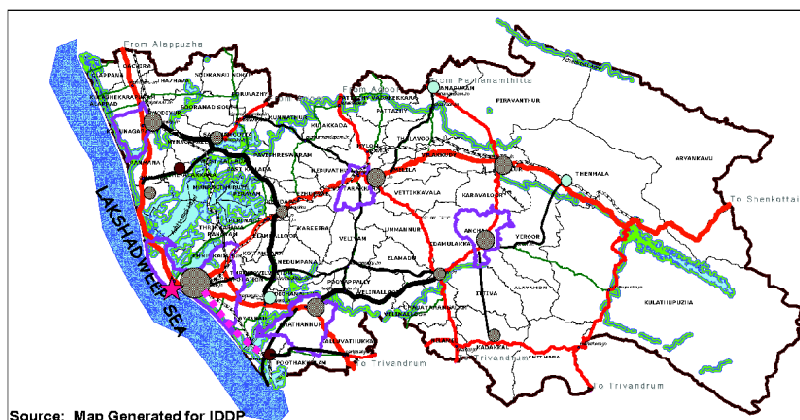


Fig.43.B.2. Proposals for the conservation of other water bodies

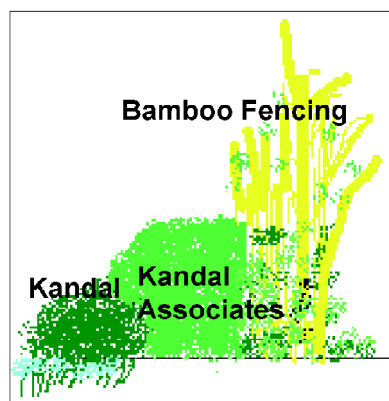


Fig.43.B.3. Three – tier planting of Kandal and kandal associates

4. Conservation of Sacred groves

Sacred groves are found to be rich in bio diversity. All the species found in the groves are protected. Sacred groves often protect water sheds and water sources. It is possible that sacred groves are the results of reasoned assertion of communities. These areas provide habitat, water and nest sites for the wild life and birds. The tree species are protected inside sacred groves for centuries.

The list of sacred groves identified by the Forests Department is given in Appendix 43B-11. Sacred groves face various threats, in the light of lack of land for human settlements and lack of interest among people for agriculture. Eroding community values are also catalyzing the fast extinction of sacred groves. A proposal is made here for conserving the sacred groves. The suggested LSGIs are; Poothakkulam, Paravur Municipality, Adichanalloor, Elampalloor, Nedumpna, Panmana, Kalluvathukkal, Thevalakkara, Thrikkovilvattom, Chavara, Kollam Corporation, Chavara south, Mayyanad, Thazhava, Oachira and Mynagappally Grama Panchayat.

The programme includes protection of the groves, planting of indigenous species, soil and water conservation and participating approach to restoration. Period of implementation is 2008-2021.

The existing areas to be maintained for the conservation of same.

Cost details are as follows.

1. Cost of seedlings : Rs. 25 lakhs
2. Cost of Nurturing and maintenance of plants and trees : Rs. 35 lakhs
3. Soil and water conservation : Rs. 50 lakhs

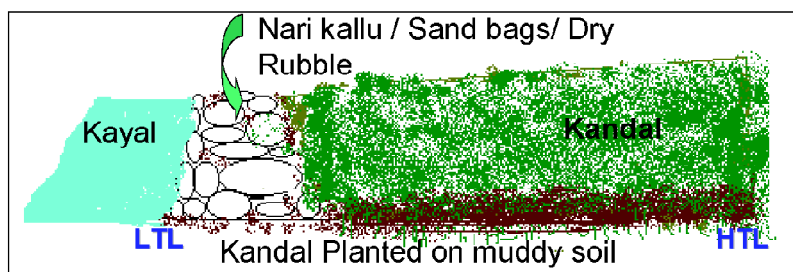


Fig.43.B.4. Typical cross-section of Kandal Planting

4. Awareness programmes

- for sacred grove conservation : Rs. 10 lakhs
 Total : Rs. 120 lakhs
 Employment generated after completion will be 65.

5. Abatement of Air Pollution

From the sectoral studies it is seen that the most critical pollution in the district is air pollution.

Out of 666 industrial units creating air pollution, majority is located in Kollam Corporation (79 units). No units are located in 5 LSGIs. The health studies also corroborate the same by finding that the most critical health issue in the district other than epidemics is respiratory diseases. It is seen that the air pollution is high in Multifunctional and Special Development Zones. The location specific proposals in this regard include litigation measures for air pollution from Kerala Minerals and Metal Ltd., air pollution from cashew factories, Air / Noise pollution from vehicles and modernization of brick manufacturing units by providing pucca hood system with chimney and exhaust fan.

I) Air pollution from Kerala Minerals and Metal Ltd.

KMML is one of the major air polluting chemical industries in the district which is in the Panmana Grama Panchayat of Special Development Zone. Pollution control facilities provided in the factory is satisfactory. But there are occasional emission of chlorine and other toxic gases outside the company premises due to power failures, valve leaks, process control failures etc. During such failures people living in the nearby areas are affected most and get hospitalized some times.

Upon the insistence of Pollution Control Board, the company management has initiated to install continuous air pollution monitors for the existing chimneys. Decentralized control systems are also

being installed.

Cost requirement for the same is Rs. 4 crores. The agencies involved are KMML and Pollution Control Board. The proposal is to be completed by 2008. Employment generated after completion will be 5.

II) Air pollution from Cashew factories

Majority of cashew processing factories of Kerala are located in Kollam district, numbering about 700. Most of the units are located in populated areas basically in Multi Functional Zone. It is a labour oriented industry. The Board prescribes no control measures other than to provide specific heights for the stacks. But the thick emission coming out from the roasting plants and borma units has now become intolerable to the public. Presence of phenolic compounds in the emission was identified by the board earlier. A lot of complaints are received on air pollution.

In these circumstances it is high time that scientific control measures for reducing air pollution from cashew processing units are planned and insisted for implementation.

A proposal for the same to be completed by 2012, is detailed here. All cashew factories operating in Kollam Corporation and four LSGIs namely Thrikkovilvattom, Elampalloor, Kundara and Kottamkara are included in the programme. Emission from roasting plant is to be scrubbed with suitable medium in a scrubber and then vented through chimneys of specified height. The same system can be followed in the case of emission from bormas. Since both are carried out as batch processes, utilizing the same scrubber is possible. For existing factories the conventional borma units shall be converted to electric bormas to reduce emission. Completion of the proposal is expected by the end of 2012. Land required can be installed inside the premises of existing units and cost details are as shown in Table 43.B.4.

Table.43.B.4. Cost details of works for abatement of air pollution in Cashew factories

| Sl.No. | Item | Quantity | Cost in lakhs |
|--------|---------------------------|----------|----------------------|
| 1 | Conversion of borma units | 100 | 150 |
| 2 | Installation of scrubbers | 150 | 250 |
| 3 | Providing ETP | 150 | 150 |
| | Total | | Rs. 550 lakhs |

The Agencies involved include all cashew factories in Kollam Corporation, Elampalloor, Kottamkara, Thrikkovilvattom, Kottamkara Grama Panchayats, Kerala State Pollution Control Board and MoEF.

III) Air / Noise pollution from vehicles

Most of the roads in Kollam town are congested. Similar situation is faced in other major towns like Punalur, Kottarakkara, Kottiyam, Karunagappally etc. i.e in the Multi Functional Zone. Traffic produces a lot of noise and air pollution. A diesel jeep or truck produces more noise than a petrol car. A very old or badly maintained automobile produces more noise than a new and good conditioned vehicle. An engine running at a less speed is less noisy than those running at higher speeds. As far as the carcinogenic effect of particulate matter emission from vehicles is concerned, a diesel car is equivalent to 24 petrol cars and 84 CNG cars.

Air pollution and noise pollution due to traffic can be abated by various town planning techniques like construction of barrier walls, allowing single lane traffic, isolated traffic for heavy vehicles, constructing smooth roads etc. For this, the innovative plan is proposed by Infrastructure sector is suggested. The suggested locations are at Kollam Corporation, Punalur Municipality, Kottarakkara, Karunagappally, Chathanoor and Anchal Grama panchayat. Period of Implementation is from 2008-2015. Total cost for all units would be Rs.250 lakhs.

IV) Modernization of brick manufacturing units by providing pucca hood system with chimney and exhaust fan

As per sectoral analysis (Article 1.1.1 of Chapter 21A), there are more than 150 number of wire cut brick manufacturing units in Kollam district. In Agro Allied Development Zone, in particular West Kallada Grama Panchayat itself, the number is about 50. During the burning time, thick and white smoke emanates from

the top portion of kilns. The emission may contain toxic gases like carbon monoxide, fluoride etc. It will spread to the nearby area providing the inhabitants with bronchial problems.

Two kilns are constructed side by side. Thatched roof on 6 no. of pillars of brick work are commonly observed. Some units are provided with extended stacks from the roof to vent the emission gases at a height of 45 ft from the ground level. PCB norms do not insist that the height should be 15 m. Considering the rising number of air pollution complaints, it is forced to insist on this condition and instruct even more stringent measures. It is observed that there is fugitive emission even when chimneys are provided.

Under the circumstances, it is clear that to reduce air pollution and alleviate pollution complaints some drastic change is required to be brought about in the design of brick kilns. An immediate solution is to provide hood system with chimney of 20 m height and sufficient draught.

Accordingly a proposal is made here to modify the emission system of existing 150 no. of wire cut brick manufacturing units operating in Kunnathur, West Kallada, Mylom, Kulakkada and Pavithreswaram, Kottarakkara, Adichanallor, Nedumpna, Poovatoor, Thazhava, Sashtamkotta, East Kallada, Mynagappally, Sooranad south, Sooranad North Grama panchayats.

No land is additionally required for the above and expenditure anticipated for changing over to the proposed design is about Rs. 3.5 lakhs per unit.

The agencies involved include existing wire cut brick units in Kunnathur, West Kallada, Mylom, Kulakkada, Pavithreswaram Grama Panchayats, Kerala State Pollution Control Board and MoEF. Total cost for all units would be Rs.525 lakhs.

6. Abatement of Noise pollution

It was discussed elsewhere about the noise pollution status of Kollam Town showing a trend exceeding permissible

levels in most of the cases. In almost all other areas of the district, exceedance of noise level is observed. Excess noise will create health problems to the people exposed to it, like cardiologic effects, hypertension, sleep disruptions etc. So it is found essential to have a comprehensive noise control programme in the district, incorporating all the LSGIs and the Departments like Motor Vehicle Dept., Industry Dept. and Pollution Control Board.

Here a proposal is made for the control of noise, to be within the permissible limits and to be implemented by 2015. The suggested locations are at Kollam Corporation, Punalur, Kottarakkara, Karunagappally, Mayyanad, Chathanoor, Anchal and Paravoor Municipality. Period of implementation is from 2008-2015.

The following regulatory measures are to be implemented during the above period.

- I Phasing out of old vehicles from plying through the roads.
- I Laying standards for each type of vehicles and observing strict adherence of the standards.
- I Change over of diesel and petrol engine to electric engines wherever possible.
- I Revamping traffic system to reduce traffic blocks and traffic jams.
- I Promote construction of upper roads to by pass cities and towns
- I To regulate honking of horns at sensitive areas.
- I Providing insulation, window shielding etc. to hospitals and school buildings existing near roads of considerable traffic,
- I Regulation of amplifiers and loud speakers at religious centres and public programs.
- I Awareness programmes projecting the necessity of controlling noise.

The cost for awareness programmes is Rs.50 lakhs. The agencies involved include Motor vehicle Dept., Public Work Dept., Police Dept., Law Dept. Kerala State Pollution Control Board and all LSGIs.

7. Conservation of Hillocks

Hillocks are mostly spread over the eastern part of the District. The porous nature of the laterite increases the water holding capacity of hillocks. In the valleys of hillocks it can be ensured that there is

presence of water throughout the year. Streams normally originate from hill valleys. Under water flows is maintained by hills. Most of the sacred grooves are in hill slopes. The sacred groves also add to the biodiversity of hills. The hillocks in the district are at present in a phase of disaster caused by soil mining from the hills. The transformation of hillocks into plain land has become a speedy affair. The large scale laterite stone mining is followed by soil extraction. To prevent the collapse of the eco systems of hillocks, some drastic action is urgently needed. New law has to be enacted for this. Awareness program is another effective measure to conserve the hillocks. The proposal is suggested in all the LSGIs.

No relevant land is required for the conservation of the same and the cost for awareness programme is Rs. 25 lakhs. The agencies involved include Forest Dept., Revenue Dept., Dept. of Mining and Geology, all LSGIs and Kerala State Pollution Control Board. The Awareness programme shall begin from 2008 onwards.

8. Controlling Land Pollution

The significant land area identified in the district as affected due to pollution is that around the factory of M/s. Kerala Minerals and Metals Ltd, Chavara.

The iron oxide pond of the effluent treatment plant in the factory was having some unidentified leaks through which acidic effluent flowed out in to the nearby canals leading to Vatta kayal. The canal flowing through the southern side of the factory was also getting polluted, since during rains all the washings from the factory enter into the canal. Thus the land around the canal got affected due to the near by paddy fields and water courses. Thus the people living in the above area had been experiencing land pollution problems since the last 10 years.

The rectification measures taken recently by the company have not shown any considerable improvement in the situation.

Hence a proposal is made here for bringing back the soil and water quality of the affected area. The suggested locations are at Chavara and Panmana Grama panchayats. The main activities to be undertaken are

- I The southern canal from the National Highway side up to the TS Canal to be made leak proof by

cement construction.

- I Provide more efficient treatment plant in the factory of KMMML and
- I Undertake recuperation works in the affected area after testing the soil and water.

It is proposed to complete the works in the affected area by 2015 and get satisfactory results by 2017.

All the affected areas of land are required for the project.

The Table 43.B.5 gives the cost details of works for controlling land pollution.

Total cost for all units would be Rs.

Table.43.B.5. Cost details of works for controlling land pollution

| Sl no. | Item | Cost |
|--------|--|----------------|
| 1 | Concreting the southern canal 2km long | Rs. 75 lakhs |
| 2 | Providing more efficient treatment plant for KMMML | Rs. 1500 lakhs |
| 3 | Testing of soil and water samples of polluted area | Rs. 25 lakhs |
| 4 | Rectification works including neutralization of soil | Rs. 500 lakhs |

2100 lakhs.

The agencies involved include KMMML, Grama Panchayats of Panmana, Chavara and Kerala State Pollution Control Board.

9. Waste Management

9.1 Municipal Solid Waste Management in Kollam Corporation

As in any other part of Kerala, Kollam district is also faced with problems related to improper handling, transportation, disposal and storage of municipal solid wastes. The key issues related to the different activities of the solid waste management system of Kollam Corporation are the following.

- I Segregation of waste at source is not started.
- I No notified places of primary collection points. So waste is dumped almost every where.
- I No proper collection / removal by transport vehicles arranged. Leachate at primary collection areas creates pollution problems.
- I Existing waste dumping yard at Kureepuzha is unscientifically managed. Leachate pollutes the nearby drinking water sources and finally reaches Ashtamudi Lake.
- I Crude dumping creates breeding ground for mosquitoes, pests and rodents.

The system proposed is a decentralized treatment and disposal facility

for the municipal solid waste generated in Kollam Corporation. This proposal is intended to improve the entire system by 2011.

Land requirements such as an area of 0.5 ha each for m³ more other than Kureepuzha yard has been procured by Kollam Corporation.

Municipal Solid Waste Management

The scenario with regard to the management and handling of Municipal Solid Waste is

- I Segregation of waste at source is not started.

- I No proper collection / removal is arranged

- I Leachates from dumping areas create pollution problems.

Hence centralized treatment and disposal systems for the waste generated in Kollam Corporation, are proposed. The proposal is to provide proper waste handling and disposal system by 2015. Employment generated after completion would be 50. The Table 43.B.6 gives the phasing of solid waste management operations in Kollam city.

9.2 Municipal Solid waste management in other LSGIs

Centralized treatment and disposal systems for the waste generated in all other LSGIs except Kollam Corporation, Sasthamkotta, Mynagappally and West Kallada LSGIs are proposed. Special provisions shall be provided for other Multi functional zones and Special development zones. The proposal is to provide proper waste handling and disposal system by 2015. Employment generated after completion would be 50.

Each LSGI shall procure a minimum area land of 0.5 ha for providing the facilities.

Cost details for each LSGIs are as shown in Table 43.B.7.

9.3 Management of waste generated based on the proposals of other sectors

As per Articles 2.3.15 and 2.3.16 of Chapter 37; Animal Husbandry there is a

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Table.43.B.6. Phasing of solid waste management operations in Kollam city

| Sl No | Project Component | Details | Total Cost (in lakhs) |
|-------|---|----------------------------|-----------------------|
| 1 | Central Plant at Kureepuzha | 20 T – 2 Nos | 160 |
| | a) Compost Plant | | 30 |
| | b) Compound Wall, Tree Planting etc. | | |
| | c) Sanitary landfill & Effluent treatment | | |
| | d) Biogas Plant | | 195 |
| | e) Compost Plant | | |
| | f) Office and other Infrastructure | 2 T – 1 No. | 25 |
| | | | 90 |
| | | 20 T – 1 No. | 25 |
| | Subtotal | | 525 |
| 2 | Decentralized Plants | | |
| | a) Corporation office, Civil Station, Hospital, abattoir (1) & Market (1) | Biogas Plant 5 Nos. | 65 |
| | b) 4 Schools | | |
| | c) Markets | | |
| | | Vermicompost | 7.5 |
| | | Biogas Plant | 41 |
| | Subtotal | | 113.5 |
| 3 | Collection & Transportation | | |
| | a) NH Collection Points | | 36 |
| | (i) Handcarts | 400 Nos | 82.5 |
| | (ii) Three Wheelers | 50 Nos Autos | |
| | b) Road side Collection | 20 auto tippers | 40 |
| | c) Street Sweeping | | 4.5 |
| | (i) Wheel Barrows | 100 Nos | 18 |
| | (ii) Tipper autos | 9 Nos. | |
| | (iii) Container Carts | 275 Nos. | 24.75 |
| | d) Cleaning | Brooms, Shovels etc. | 30 |
| | Implementation | 100 Nos. | 36 |
| | e) Dumper Container | Paving etc | |
| | f) Improvement to container stations | (57 Nos.) | 17.1 |
| | g) Dumper Placers | 7 | |
| | h) Covered Tipper Trucks | 3 | 77 |
| | i) Storage Bins at source | 33,600 | 37.5 |
| | | (10 litre & 15 litre bins) | 18.48 |
| | | | 15.12 |
| 4 | O & M Cost | | 215 |
| | Community Awareness, Education & Training Programmes | | 38 |
| | Total Cost | | 1303.45 |

Table.43.B.7. Cost details of works for solid waste management in other LSGIs

| Sl No. | Item | Cost in lakhs |
|--------|---|---------------|
| 1 | Land | 30 |
| 2 | Sanitary land fill | 25 |
| 3 | Bins to house, tricycles to house to house collectors, community bins | 5 |
| 4 | Transportation vehicle | 10 |
| 5 | Size reduction/conversion of bio degradable in to | 40 |
| | Total | 110 lakhs |

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proposal for Slaughter houses and an Abattoir. For these inbuilt treatment facilities shall be provided for the waste generated here. Also as per Articles 4.1 and 4.2 of Chapter 34; Agriculture there are proposals for Primary and Secondary Agriculture markets which are also linked with Article 6.2.1 and Article 6.2.2 of Chapter 38; Fisheries and Article 3.4 of Chapter

37; Animal Husbandry. The waste generated in the primary markets may be managed by the concerned LSGI. For the waste generated in the Secondary market at Kottamkara inbuilt treatment facilities shall be provided for the waste generated.

10. Conclusion

With the implementation of the above said proposals, it is envisaged that the

people of Kollam district will be able to have a better environment by 2021 in all respects. The air they breathe will be cleaner and water pollution problems can be contained effectively. The Ashtamudi Lake will regain its glory and attract more tourists. Sasthamcotta Lake will serve more people with drinking water without its water level getting depleted so fast as of today. **n**



Chapter 43 C

Mining and Geology

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This chapter includes the development proposals of Mining and Geology sector based on the district development policies and strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district Mining policy, by 2021 Kollam has to optimally utilise the mineral resources of Kollam District with due regards to environmental, economical and social impacts.

As identified in the Sectoral analysis, mineral sand, china clay and ordinary sand are the three major mineral resources which can be commercially utilized in the district. Thus the proposals include the extraction of the same in a phased manner.

2. Proposal for Extraction of Mineral sand

Beach placer deposits of Kerala: As mentioned in the sectoral analysis,

Kerala state has the richest beach placer deposit in India, in terms of titanium mineral placer resources, especially of ilmenite with about 60% TiO_2 in the Ilmenite deposits at Chavara. It is estimated that 22 KM long Neendakara - Kayamkulam beach placer deposit (Chavara major deposit) has 127 million tones of total heavy minerals, of which the estimated Ilmenite content is about 80 million tons. Apart from Ilmenite, the major constituents viz. Rutile, Zircon, Sillimanite, Monazite etc. are also contained in the sand and are of commercial importance in terms of quantity, quality and value. The heavy mineral reserve in the Chavara major deposit (Neendakara-Kayamkulam) contains about 5.4 million tons of Rutile, 3.44 million tons of Leucoxene, 4.82 million tones of zircon, 28.72 million tones of Sillimanite and 0.82 tons of Monazite.

Development of the mineral: Reasonably good global and domestic

growth rate, abundant resource of beach placer deposits, availability of reasonably good technology and qualified and skilled human resources etc are factors favorable for the prospective development of beach mineral based industry in the State. It is appropriate to gamer this opportunity for the benefit of the State. With this in view, Kerala Minerals and Metals Ltd has come forward with a major expansion plan to enhance the pigment production capacity to 100,000 TPY by middle of 2007, a capacity considered as globally competitive.

The potential areas for mining include Alappad, Panmana, Chavara and Neendakara (Figure.43.C.1). Appendix 43C-1 show the potential zones for mineral extraction in the Land use map of the LSGIs. The heavy mineral deposit of Kollam, one of the best of its kind in the world, is a strategic mineral which needs to be



Fig.43.C.1.Mineral sand potential zone

exploited without adverse environmental impact.

As per the Ministry of Environment and Forests Notification under Section 3(1) and Section 3(2)(v) of the Environment (Protection) Act, 1986 and Rule 5(3) (d) of the Environment (Protection) Rules, 1986 declaring coastal stretches as Coastal Regulation Zones (CRZ) and regulating activities in the CRZ, New Delhi, Dt.19.02.1991, the mining of sands, rocks and other substrata materials, except (a) those rare minerals not available outside the CRZ areas and (b) exploration and extraction of Oil and Natural Gas are prohibited activities. Mineral Sand is a rare mineral of strategic importance (used for National defense purposes) not available outside the CRZ areas of Kerala.

The existing area is having no overburden and hence no developmental work is required. The area is demarcated into different blocks. Deposits from the surface to about 7.5 meter can be tapped. Mean time the beach wash deposits can be wiped away giving chance for further deposition by the waves. Alternate blocks have to be mined. To remove the mineral sand up to its fullest depth mechanized mining methods are suggested in a block whereas in the neighboring blocks manual methods are used for the collection of beach washings.

It is proposed to dredge around 400000 tones in a single block for the first five years. In the meantime by manual methods around 150000 tons of beach washings can be collected also. Mineral Recovery Plant by suction dredge is suggestive for the opencast mining in the existing area.

However, in the other potential areas in Alappad, Panmana, Chavara and Neendakara Grama panchayats where the mining is not being done, special rehabilitation programme will have to be implemented. As mentioned in the population studies, as the coastal belt is having high population density the issue would be a sensitive one and will have to be specially considered.

This may be done in a phased manner and two alternatives are suggested.

Alternative 1: Complete rehabilitation programme

Phase 1 – Prevent Land transaction

Phase 2 – Alternate livelihood for the people (Inland fishing, Industrial work etc.)

Phase 3 – Alternate Housing for the people (near by LSGIs)

Note: Heritage sites etc. may be exempted

Alternative 2: Make shift arrangement programme

The mineral resource area is made settlement free by shifting the people to neighbouring LSGIs followed by mining and

reclamation of the land and reshifting of the people to their own lands.

Presently the mining area use strip mining methodology. Considering the environmental impact, rehabilitation of the mined areas including intensive re-vegetation with ecologically similar species and Re-contouring of the land to its original shape, including dunes, management of groundwater resources is proposed to be done.

Significance of co-products

Rutile, Zircon, leucosene, Sillimanite and Monazite are the major co products from the mineral processing of beach sand deposit. In the eastern coast of India, Garnet is also an important co-product. Zircon sand is finding increasing usage in ceramics, refractories and foundry applications and the international price is US\$ 480-500 per tones and is of great demand. Sillimanite is finding applications in special refractory application and the price is about US\$ 200 per tone.

The minerals can give value addition also. The mineral processing facility provides a multiple product mix of relatively high purity and value viz. Ilmenite, Rutile, Zircon, Sillimanite, Monazite etc. Each mineral product caters as feedstock to a chain of products of higher value added products and finds specific applications. Most of the products separated from the beach placer deposits are in increasing demand and are feed stock for value added products. The value addition of ilmenite (UD\$80 per MT) to synthetic Rutile is nearly 6 times (US\$480 per MT) and to Titanium Dioxide pigment is more than 20 times (US\$1700-1800 per MT). Titanium sponge and metal produced from Titanium Tetrachloride is of strategic importance with very high value addition (US\$12000-14000 per Ton). Value addition activities are also taking place in India. Dharangadara Chemical Works, Tuticorin (DCW) was first to start the value addition activity in India by setting up a Synthetic Rutile Plant Travancore Titanium Products, Trivandruin (TTh) established the first TiO₂ pigment plant in 1956 through Sulphate process. After about two decades Kerala Minerals and Metals Ltd (KMMIL) established the first Chloride Process TiO₂ plant in India along with a Synthetic Rutile Plant and Acid Regeneration plant. Other pigment producers are Kolinak Chemicals,

Kolkatta and Kilbun Chemicals Ltd, Tuticorin. Meanwhile, Cochin Minerals and Rutiles Ltd (CMRL) established a Synthetic Rutile plant in Edayar Cochin. Although, Indian Rare Earth Ltd established a Synthetic Rutile Plant in Orissa, it closed its operation few years ago.

Production of Synthetic Rutile is now-a-days considered as an intermediate stage of value addition with huge quantities of waste rejection. Most of the pigment plants in the developed countries are avoiding this activity and sourcing Synthetic Rutile from other countries. The production capacity of TiO₂ pigment in the country is very small when compared to other countries, although India has rich resources where as other developed countries with large TiO₂ plants have relative negligible resources.

The per capita consumption of paint and pigment is generally considered as a yardstick of quality of life. The proposed annual GDP growth rate of the country is about 6-8%. The pigment growth rate is generally considered as 1.5 times the growth rate of GDP as a thumb rule. The global growth rate of pigment demand is about 2.3%. The domestic growth rate of paint industry, the major consumer of pigment (about 65%), is about 12%. Similarly the growth rate of plastic industry, the second largest consumer of pigment (15-20%), is about 15%.

Present production of TiO₂ pigment in India is only about 55,000-60,000 tons. This caters only about 55-60% of the domestic demand. The balance quantity is being imported. Although, all this quantity can not be supplied by the domestic producers due to global business nature, the domestic market over depending on the import of pigment due to lower scale of existing capacities.

In addition, the budgetary support provided for the infrastructure and housing facilities in India are factors that boost the growth of pigment consuming industries. The per capita consumption of pigment in India is hardly 0.5 kg where as this is about 5.0 kg in the developed countries. A slight marginal improvement in the quality of life derived from the growth rate, the country can increase the paint and pigment consumption in India with more than a Billion populations. The increasing GDP growth rate of the neighbouring country China

having a population of 1.3 billion with increasing demand for pigment is also a prospective market for pigment.

A new Synthetic Rutile plant of capacity 135,000 TPY also will be set up to meet the demand pigment plant capacity. Synthetic Rutile production process will be environment friendly with neutral iron oxide as by-product. Company is also exploring the possibility of value addition from the by product iron oxide to convert it as pig iron or iron pellets so as to transform the industry to a zero effluent company.

The mining activities and mineral processing capacities also will be correspondingly increased with dredge mining so as to exploit the mineral wealth of Chavara deposits.

KMML is also considering to set up a 1000 TPY Titanium sponge plant thereby the country will become one among the 5 countries who manufacture this strategic metal. Company has already entrusted the expansion work with the engineering consultant MECON, Bangalore for EPCM work including a comprehensive EIA and EMP study of expansion proposal. Company is aiming at an overall expansion of the mineral industry with focus on sustainable development without environmental degradation. Atomic Mineral Division is the major agency to be linked here.

The rehabilitation programme is to be implemented by 2021. The Phasing of proposal is given in Appendix 43C-2.

3. Proposal for Extraction of China Clay

As mentioned in the Sectoral analysis, the China clay deposits in Kollam is part of the tertiary sedimentary formations of Kerala, which includes

1. Kundara which is exploited by M/s. Kerala Ceramic Ltd., The Department of Mining and Geology had proved a reserve of 0.75 million tones
2. Mulavana: a reserve of 1.6 million tones was proved
3. Velichikala: a reserve of china clay of 4 million tonnes was proved.

The deposits for this are available at Perayam in the Sub Zone 4 of Special Development Zone and Nedumpana in the Agro allied Development Zone.

The best varieties are useful in paper and textile industries and the other ones can be used in rubber, plastic, insecticide,

paints, medicines, ceramics, etc.

Method of development:

Mining will be carried out by open cast mechanized means. It is proposed to split the mining area into different blocks. Mining has to be carried out in each block by forming different benches. During the first five years Block A have to be worked on. The first bench of overburden of 6.0m has to be removed and stored in an area where mining is not proposed during the initial five years. Thereafter the clay depth of 6m has to be tapped. On fully extracting the mineral, the second bench of clay has to be worked out. Entire quantity of clay mined will be utilized for captive consumption at processing plant. Mechanized mining is proposed in the area. The overburden will be suitably developed to avoid contamination of the clay. The topsoil and laterite overburden generated will be initially stocked during the first five years and will be utilized for back filling the mined out areas.

The pit dimension has to be developed during the first year. The first two meters of the first clay bench will be mined during the first year. During the second year, mining will be from the same pit beneath the first level of clay mined during the first year. Third year, the second clay bench will be worked in the same pit. Fourth year, the mine face will advance towards the next block. There also the procedure as on previous block is worked out to extract the complete clay deposits. The ultimate pit level at the end of five years will be 15.0m below the original level and ultimate pit level at the end of 15 years will be 24m. Since a larger pit is required for winning the clay at deeper levels, back filling is not proposed during the first five years.

The Phasing of proposal is given in Appendix 43C-2.

4. Proposal for Ordinary Sand

The Thenmala Reservoir (Parappur Reservoir) comprising of Thenmala dam and the Ottackal weir falls in Thenmala Grama Panchayat in Kollam district at 9 57' N, 77 04' E. The dam is constructed across the Kallada River at 1225m above MSL. The reservoir has three tributaries – the Kulathupuzha, the Chendurni and the Kalthurthy. The small tributaries supply sediments as bed loads and intensify the load as suspended particles during monsoon. Sediments accumulation within

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the reservoir diminishes the storage capacity and which in turn decreases the operating efficiency of the dam.

Meanwhile the dams check the down flow of river sands, which is having a higher demand in this faster rate of urbanization and large scale construction activities. Large scale indiscriminate mining of the available sands along the river beds has imposed a partial ban on sand mining in these rivers. But the construction processes are continuing unabated and thus the need for identifying an alternate sand source is essential.

There is an increasing demand for sand in construction purposes because of which there is a tendency to over exploit and deplete the sand available in the river system of the State. The essential activity of a river in its youthful stage is high and the products thus accrued are transported by the rivers mostly during high floods whereas the velocity is checked, there is a continued slackening of flow resulting in deposits of these sorted out material carried by the rivers. The Kallada river is supplied with sediments in the upstream by the tributaries present. The Thenmala dam in the river course presently blocks these sediments. The rejuvenating tributaries increase sediment yield to the reservoir. This creates siltation of sand in the reservoir area. The balance of the components of the tidal sedimentary load depends on the

distribution of appropriate source area within the catchment and on the hydrological process that transports sediments and solutes to the streams. These areas are thus rich resource area for sand/clay. These resources if quantified and exploited may not result in serious ecological imbalance whereas it will help to increase the storage capacity of the reservoir also. Thus the aim of the proposal is for sediment budgeting in various areas of the reservoir.

The proposal can be phased as follows.

- I To find out the submerged sand bars within the reservoir
- I To evaluate these resource volume to be used as an alternative for construction material or for other purpose.
- I To study the environmental and ecological problems, if any, in mining the material from the reservoir.
- I To quantify the deposit giving regards to its quality.

This can be carried out by studying the sediment inflow, the pattern and rate of deposition and the sediment outflow. The sediment inflow can be studied with respect to sediment loads by rating curve technique achieved by turbidimetre recordings. The depositional rate of sediments can be surveyed with echo-sounds/ side-scan sonar and if possible by excavating pits in the dried area of the reservoir. The

sediment outflow can be estimated from the downstream of the dam. The sedimentation in reservoir varies with the discharge over time. It is therefore very important to study the sedimentation rate over a large range of stage over an extended time span. It is imperative that the available sand to cater the needs of the society shall be handled with care and in a planned manner. The major agencies to be linked are the Geological Survey of India to the analysis the data and execute the works. As per Article of Chapter 35; Irrigation, de-siltation of the dam is essential to regain the storage capacity of the dam. However as suggested in Article 43A, this can only be implemented with the approval of Forest Dept.

The Phasing of proposal is given in Appendix 43C-2.

5. Conclusion

It is obvious that though there are only a few types of mineral deposits in the district which can be extracted for commercial purposes, the revenue generated from some of these would be so huge to attract interest in national level. The utilization of existing potential of ordinary sand etc. which are under utilized can also satisfy the immediate needs of the district to certain extent. Thus it is expected that, the under-utilized potentials can be optimally utilized by the district by 2021.



Chapter 44

Education

This chapter includes the Development Proposals of Education sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

As per the sectoral analysis, there are certain areas of concern in the education sector in Kollam. Based on the sectoral analysis and district development concept the district education policy has been carved out.

According to the district education policy, by 2021 Kollam has to increase the coverage and quality of education and preclude spatial disparity in the distribution of higher educational institutes and establish technical institutes to support the economic activities of the district. Thus the proposals are classified as follows.

1. Proposals for increasing coverage of education

This proposal includes providing Arts and Science Colleges in the central and eastern parts and continuing Literacy

Mission Programme while improving Non-formal education.

1. Proposals for increasing quality of education

This proposal includes providing independent pre-primary education, Training programmes to teachers, providing incentives to students and parent counseling, continuing education through local libraries, improvement of parallel colleges and reducing language disparity.

1. Proposals to preclude spatial disparity in the distribution of higher educational institutions

This proposal includes providing a Govt. Nursing College, a Medical College in Govt. sector, a Law College in Govt. sector and other higher education facilities in the district where the lack of such facilities have been identified in the sectoral analysis.

1. Proposals to establish Technical Institutes to support the economic activities

This proposal includes fisheries research institute in the western coastal

region, Tourism study centre at Thenmala, Institute of Mining Technology at Chavara and Forest Research Institute at Thenmala.

1. Proposals for skill development

This proposal includes improvement in Vocational Higher Secondary Education.

1. Other Proposals

This includes suggestion on Global level education.

2. Proposals for Increasing coverage of Education

2.1 New Educational institutions in the educationally back ward areas

New educational institutions should be started in the educationally back ward areas (Eastern part of the District) under the special schemes of central Govt. to start new educational institutions specifically for socially and economically back ward society. Approximately 3 Acres of land would be required for establishing one HS/ HSS. The suggested locations are at Aryankavu, Kulathupuzha, Yeroor, Alayamon, Ittiva and Karavaloor.

Approximately Rs 50 lakhs of amount

would be required for starting one HS/HSS including infrastructure facilities. Conveyance facilities for students, like construction of road are also required. Period of implementation is from 2008-2012.

The various activities involved for establishing the institution are land acquisition, building construction, infrastructure facilities like Laboratory, Library, construction of road etc. Agencies involved for carrying out the proposal can be State Government / Jilla Panchayat, the concerned LSGI, PWD, Water Authority, KSEB, Education Department etc.

The proposal would be benefiting the socially and economically backward pupils especially SC/ST, BPL population etc. in the eastern part of the District. Employment generated after completion will be approx 5000 to 7500.

As per Article 4.3 of Chapter 44, SC/ST Pupils in Higher Secondary level often face a lot of problems in their studies, on account of the following reasons :-

1. General Intellectual Backwardness
2. Inadequate facilities in their households
3. Lack of particular attention
4. Lack of special consideration at the school

As a result of the above reasons many of them fail in examinations. So particular attention and extra classes are to be given to SC/ST Pupils. There should be a senior hand among the teachers who is entrusted with the general progress of SC/ST pupils. These pupils should be given all kinds of assistance according to their needs.

2.2 Arts and Science Colleges in the Central and Eastern parts

More Arts and Science Colleges are proposed in the central and eastern parts of the district. Government Arts and Science Colleges with Post Graduate studies are proposed in Kottarakkara Grama Panchayat and Punalur Municipality. A Junior College is to be established at Kulathupuzha Grama Panchayat in the Government sector. A Government College has to be opened at Oachira under a joint sector scheme involving the Oachira temple trust.

Period of implementation is from 2008-2012. Land area requirement would be 5 acres for an Arts and Science College and 3 Acres for a Junior College. The approximate cost would be Rs 1 Crore for

Arts and Science College and Rs 0.5 crore for each Junior College. The linked agencies would be State Government / Jilla Panchayat / Grama Panchayat / Health Department, PWD, Water Authority and KSEB. The Health Dept. shall give support for health clubs in the colleges. The proposal would benefit the students of eastern belt, in particular the SC/ST and BPL students and the northern part of the district. Employment generated after completion will be 10500.

2.3 Literacy Mission Programme

Kollam district has advanced in the field of non-formal education and it has got commendable achievements in this respect. Still some areas of Kollam district are badly in need of facilities for non-formal education for example, in coastal areas such as Azheekal, Cheriyaazheekal and tribal areas such as Achankovil. There are so many illiterate people, especially among scheduled castes and tribes and fishermen. Therefore, immediate steps to identify such illiterates and to organize massive drives to educate them are to be taken. The suggested locations are at Alappad and Thenmala.

Non-formal education should be provided in coastal areas and hilly region of the District (Especially coastal areas such as Azheekal, Cheriyaazheekal and tribal area of Achankovil) through local reading rooms and through service of unemployed educated youth. Non-formal education centres can be opened in every Panchayat.

The centres may be accommodated in Panchayat building or existing School building. The approximate cost would be Rs.25, 000/- for starting each centre.

The linked agencies would be Jilla/ Grama Panchayat, Water authority, KSEB, Education Department and Social Welfare Department. The proposal would benefit to the coastal areas and Achankovil tribal area. Employment generated after completion will be 75.

3. Proposals for Increasing Quality of Education

As mentioned in Article 3 of Chapter 22, the major attribute to quality education is the mental desire of the community to accept education as a means to social change. The extents of social commitment of teachers decide the quality dimensions. There are very limited institutions that lack

infrastructural facilities in the District. If the interest and attitude of the teachers can be changed by eliminating the economic motive from educational sphere desired quality of education can be obtained.

The percentage of drop out in all levels of education, beginning from Pre-Primary to Higher Education can be reduced if quality education is imparted to the students. The problem of drop out is not too much in Kollam District. However it is noticed as per Article 3.1 of Chapter 22 that drop-out is higher in the case of SC/ST pupils. Then SC Pupils are given Lump-sum grant @ Rs.320/- and ST Students are getting monthly stipends. Even after all these, the drop out rate among SC/ST Pupils is not decreasing. This is because the Lump-sum grant etc. is not properly used by the parents. So it is suggested to give special counseling to the parents of SC/ST Students. This will help decrease the percentage of drop out of SC/ST Pupils.

3.1 Independent Pre-primary Education

As per Article 2.1.4, Pre-Primary education in the district is ineffective. Pre-Primary institutions are to be made independent. Then only it can be made effective. The attitude of starting Pre-Primary schools attached to the existing institutions is to be discouraged. Along with that new Anganvadies are to be started at every ward by seeking help from the centrally sponsored schemes. The areas in the eastern part of the district, which are comparatively backward areas, need Pre-Primary institutions to help poor children for getting them educated and keeping them healthy. For materialising this Pre-Primary schools has to be started in each village where there is no Anganvady. The schools are proposed in all Grama Panchayats / Municipalities. Period of implementation is from 2008-2010.

In case of land, 50 cents per unit would be required. Approximate total cost would be Rs 5 Lakhs/unit. Salary @ Rs.3000/- for each Pre-Primary teacher per month (Yearly Rs.36000/-) would also be required. Linked sectors / agencies would be Jilla Panchayat/ Grama Panchayat Social Welfare Department/ Education Department/ Health, Department/ PHED and KSEB. The proposal would benefit the pre primary students of the entire district.

Employment generated after completion will be 500.

As per Article 4.1.1 of Chapter 48, there is a proposal for Pre-Primary Schools in 6 places in the District, exclusively for SC ST Students. The SC/ST Dept. also provides financial aid to these Pre-Primary Schools. There is a proposal from their part to provide SC/ST Schools in all the blocks in the District. This proposal can be implemented if special aid is obtained from the Central Government to run all these institutions. Also the Pre-Primary schools run by the General Education Department can be expanded to include all the Scheduled Caste and Scheduled Tribe pupils. In that case no separate fund is required.

3.2 Training Programmes to Teachers

The Training Programmes at present are not effective. The DIET (of Kottarakkara) sponsored Training Programme can be improved systematically. For this more funds are required. Institutions like IMG / KILA can be taken as model for re-structuring DIET. More efficient running of the institution is an urgent need. As in IMG / KILA the teachers should be asked to stay in the Institute during the period of training and should be evaluated after the period of training. There should be a mechanism at the school level for evaluation of performance of teachers preferably by the Headmaster.

Period of implementation is from 2008-2010. Rs.1 crore would be required for constructing of building and other infrastructure facilities. Linked agencies would be Jilla/Grama Panchayat, PWD, Water authority, KSEB, Education Department. The proposal would benefit all students in the Govt. and aided sectors in the district. Employment generated after completion will be 1000.

3.3 Incentives to Students and Parent Counseling

As per Article 2.1.4 of Chapter 22, the percentage of children enrolled in Standard I that complete higher education in Kollam district is less than 10. Majority of them drop out either at 10th or HSS or at Degree level. Rs.10 lakhs has to be allotted for each school in this District for improving quality in Education. This can be utilised for conducting refresher courses for

teachers / lecturers by eminent people and psychological lessons by Doctors etc.

The amount can also be utilised for giving incentives to brilliant students. Counseling for parents can also be arranged periodically at the school level for the benefit of the community as a whole. The teachers shall ensure that the counseling is done effectively. The linked agencies would be various agencies of Education Department (viz. NCERT, SSA etc.) Jilla /Grama Panchayat, Health Organizations etc. The proposal would benefit to the students enrolled between Std 1 to HSS in the entire district. Total implementation cost for all units would be 10 Lakhs.

3.4 Continuing Education through Local Libraries

Education is a continuous process. There should be opportunities for the dropouts at various levels to continue their studies. Even though there are many schemes for continuing education through Universities only a few make use of them.

Therefore, it would be better if we provide facilities for continuing education through local libraries in each Village. There should be schemes for Vocational education according to the aptitude of the people of each locality. It will definitely reduce the rate of unemployment. The scheme shall be implemented at all 72 Panchayats / Municipality. Period of implementation is from 2008-2010.

One portion of Panchayat building or vacant school buildings would be required for establishing the units. Approximate cost would be Rs.25, 000/- for starting each unit. Linked agencies are Jilla / Grama Panchayat, Water authority, KSEB, Education Department, Social Welfare Department etc. The proposal would benefit to the unemployed youths in Kollam district. Employment generated after completion will be 75. Total cost for all units would be Rs 19 Lakhs.

3.5 Parallel Colleges

As per Article 2.4.1 of Chapter 22, there are no rules at present to restrict or regulate parallel educational institutions. It is proposed to provide adequate legal framework for the functioning of these institutions. 25% of the pupils in the district are getting education through parallel institutions. A special scheme can be developed in favour of these institutions

by utilizing them to give quality education among economically backward children.

3.6 Reducing language disparity

Education is the media for cultural integration. Therefore we have to follow an integrated approach in education; languages have an important role in this respect. There should be some attempts to improve learning of languages. Whichever be the medium of instruction, enhancement of the quality should be our slogan.

4. Proposals to preclude spatial disparity in the distribution of higher educational institutions

4.1 Government Nursing College

Kerala has the richest human resources to be exported to foreign countries. It was emphasized by the Honorable President of India during his visit to Kerala. He specifically mentioned about the area of Para-medical education. There are unlimited chances for the Kerala people in foreign countries, especially in America, in the field of Para medicine. There have been no deliberate efforts in Kollam district to make use of these opportunities. There is no Nursing College in Kollam in Government Sector. Therefore, it has become inevitable to take certain steps to start Nursing Colleges and Para-medical colleges in Kollam district. A Government Nursing College may be started in the campus of High School for Girls at Kottarakkara. The proposal will be implemented in 2008-09.

No land is required as Govt. HSS for Girls, Kottarakkara is to be converted as Nursing College. Rs 50 Lakhs would be required every year as salary of staff and for purchase of equipments. The agencies involved are Jilla Panchayat/Grama Panchayat, Health Department, PWD, Water authority, KSEB and Education Department. The proposal would benefit interested students in the eastern part.

As per Article 4.3.2 of Chapter 44 the SC/ST Pupils interested in making a career in the Nursing Profession may be given additional facilities by starting a nursing college in the Corporation limit.

If an exclusive SC/ST Nursing College can be started with special budgetary provisions, that will be a great step as it would be the first one of its kind in Kerala. This fund may be fully obtained from the

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Central Government.

4.2 Medical college in Government Sector

As the status of the Thiruvananthapuram Medical College is elevated to the level of All India Medical Institute and referral in nature, an ordinary Medical College can be started at Kollam District. In fact, the population from Punalur and the Eastern regions of Kollam district and the majority of people living in the Pathanamthitta District do not have sufficient facilities for higher order health care. To address this grave problem a medical college need to be started by concentrating Punalur or Kottarakkara as possible locations. Period of implementation is 2008-2010.

10 Acres land and a sum of Rs.2 Crores for constructing purpose would be required. Rs 50 lakhs would be required every year for salary and purchase of equipment. Jilla Panchayat, Health Department, PWD, Water authority, KSEB, Higher Education Department etc are to be linked. The College will be of benefit to the entire district.

4.3 Law College in Government sector

As per Article 2.4.1 of Chapter 22, there is a need for starting a Law College in the district. So it is proposed to start a law college, in Kollam Corporation. 5 Acres land and Rs 2 Crore would be required. Jilla Panchayat, Health, PWD, Water authority, KSEB, Higher Education Department etc. are to be linked. The College will be of benefit to the entire district.

4.4 Engineering Colleges in Government sector

Analysis reveals that there is urgency of starting some institutions for higher studies in Kollam.

2 Govt. Engineering Colleges are proposed, one each at Kottarakkara and Punalur. 5 Acres land would be required for one College with Rs 2 Crores cost requirement. Government, Jilla Panchayat, Grama Panchayat / Municipality and Education Department are to be linked. The proposal would benefit to students in the eastern part.

5. Proposals to establish technical institutes to support the economic activities

5.1 Fisheries Research institute

As per Article 3.1.3 of Chapter 15, there is lack of a Fisheries Research

Institute in the district. There is only one Fisheries Research Institute in the State at Ernakulam. A similar institute may be begun in the Western part of Kollam district. It will be beneficial to thousands among the fisherman community. This can be started in coastal region at Valiyazheekkal/Cheriazheekkal. Reservation for students from the fishing community is necessary for the involvement of the local pupils.

5 Acres land would be required for the institute with Rs 3 Crore cost investment Jilla / Grama Panchayat, PWD, Fisheries Dept., Water authority, KSEB, Technical Education Dept etc. are to be linked. The proposal would benefit the entire district.

5.2 Tourism study centre

As per Article 3.1 of Chapter 27; Tourism, there is Lack of tourism study centre in the district. A tourism study centre may be started integrating Thenmala, Achenkovil, Manalar etc. Thenmala is a world famous hill station and it is a tourist spot and the study centre can be located at Thenmala. This will also help to make people aware of the region and its ecology.

1 acre land would be required with 2 Crore cost requirement. Jilla / Grama Panchayat, Forest Department, PWD, Water authority, KSEB, Irrigation Dept, Tourism Department and DTPC are to be linked. The study centre benefits the entire district.

5.3 Institute of Mining Technology

There is a centre for mining and manufacturing of minerals in the Western coast of Kollam district viz. Kerala Metals and Minerals Limited, Chavara. The coastal area is a repository of rich mineral wealth. As per Article 3.2 of Chapter 21 B; Mining and Geology, Heavy Mineral Sand deposit from Neendakara to Kayamkulam bar (22 km length, width nearly 225 m) is one of the best reserves of heavy minerals in the world, because of its high TiO₂ (60%) content in the mineral ilmenite. But this potential is not properly exploited and utilised now. Therefore, an Institute of mining technology is proposed at Chavara to support the whole round development of Kollam District.

5 acre land would be required with Rs 10 Crore cost requirement. Government, Jilla / Grama Panchayat, Mining and Geology, Soil Conservation, PWD, KSEB,

Water authority, Fisheries, Marine Department etc. are to be linked.

5.4 Forest Research Institute

The eastern part of Kollam is very rich in forest resources. As per Article 3.1 of Chapter 20; Forest, there is need for a Forest Research Institute in the district. A Forest Research Institute is therefore proposed at Thenmala, to pave way for conservation of forest with optimum utilisation of the forest resources.

Forest land can be utilized for this. Rs 10 Crore would be the cost requirement. Government, Jilla / Grama Panchayat, Forest Department, PWD, KSEB and PHED are to be linked. The proposal would benefit the entire district.

6. Proposals for Skill Development

6.1 Improvement in Vocational Higher Secondary Education

The proposal is for improvement of Vocational HSS Education. More number of Vocational Higher Secondary Schools are proposed in the district at Kottarakkara and Punalur regions. Around 10 VHSE Schools and 20 ITI / ITC can be established. The number of institutions in eastern region of the district is below average. There are limited opportunities for higher education also in these areas. Hence Vocational Institutions are to be started at all Panchayats in the eastern region so as to address the growing unemployment problem.

Land of 1 acre would be required for establishing each VHSE / ITI / ITC and Rs.25 Lakhs would be required for other components starting one VHSE / ITI / ITC (10 VHSE, 20 ITI / ITC). State Government, Jilla Panchayat, Grama Panchayat, PWD, Water authority, KSEB, Technical Education Department and General Education Department are to be linked. The proposal would benefit the eastern part of the district.

7. Others

7.1 Global level Education

In this age of Globalization, Education has become a vast area. Each educational institution has to improve to the world level. There are a few institutions which maintain international standard in Kerala. But such institutions are not reachable to the majority of our population. The thresholds of such institutions are open only to the elite class

or to those who are financially sound. It is time to have international agencies on investing money for starting highly standard educational institutions in Kollam. There must be provisions for ensuring free education for economically backward but bright students in such institutions. Discussions are to be initiated with Gulf Malayalees on such ventures. There are a few international schools in Thiruvananthapuram district; Kollam district can follow such models.

For this proposal Government can provide land free of cost at Kottarakkara or Punalur boarder. The other costs can be met with the co-operation of Gulf Malayalees. Government, Jilla / Grama Panchayat, Gulf Malayalee Association, KSEB, PWD, Education Department etc. are to be linked. The proposal would benefit the entire district.

7.2 Specific Proposals for LSGIs

As mentioned in the sectoral analysis of Education Sector, there are a number of activities which can be taken up by the LSGIs using both their Plan fund and Own fund. Detailed surveys may have to be conducted by the concerned LSGIs in this regard.

1. Facilities to provide drinking water in all Educational institutions are to be under taken by the LSGI. In this case, the institution have to be fixed as per the sectoral analysis in Drinking water sector.
2. Electrification of all educational institutions may be entrusted to LSGI. Here also the institutions have to be fixed as per the sectoral analysis of Power sector.
3. A chain of libraries in Primary Schools for the benefit of students is to be established by the LSGI. A mini theatre attached to it, exclusively for exhibiting children's films, Educational films, Science films and other good films is to be established by the LSGI.
4. Conveyance facilities for the students can be arranged by the Panchayat for all the Educational Institutions inside a panchayat. This could overcome shortage of pupils in schools which are located in remote areas in villages. Facilities for commuting physically handicapped pupils to schools are to be

arranged by the LSGI. In many villages there are no motorable approach roads to schools. Panchayats can undertake constructing approach roads.

5. Distribution of uniforms to at least BPL Pupils
6. Semi permanent shed for eating noon-meals can be constructed
7. In costal areas a number of school days are lost due to flood, sea-erosion etc. The Panchayat in costal areas can construct permanent camp to help the children continue their studies during such times.
8. In the eastern part of the district the teaching and non-teaching staff posted in remote areas has to face a lot of problems for accommodation. Panchayat can construct quarters for them in those places. Also unemployed youth can be trained to take classes in primary and high schools in the eastern area if a teaching staff is on long leave. For this, a panel of trained personnels may be prepared by each LSGI and a mere phone call can save a number of school days.
9. Panchayat can construct garbage plants in every school to keep the school surroundings clean. A social forestry scheme can be implemented by the Panchayat in every school.
10. Panchayat can deploy primary health centre staff including Doctor in every month for consulting the pupils in the schools.
11. Counselling centers can be established for the benefit of students in every panchayat.
12. Note book manufacturing center can be established along with a text book depot based on the priority fixed as per the sectoral analysis of Industries sector.
13. Places of worship like Temples, Churches and Mosques can be renovated with Panchayat fund and pupils can be taken there to study the historical and cultural importance of such places. (This can be done once in every year as an excursion.) Here also the priority has to be fixed as per the sectoral analysis of tourism sector.
14. Scholarship schemes for the top rankers

in every class can be instituted.

15. Annual literacy, sports, games and arts competitions can be conducted by the Panchayat. Mini stadium can be constructed in every Panchayat for the benefit of sports and games.
16. Special allowance schemes to pupils who join N.C.C / N.S.S / Scout and Guide etc. can be introduced.
17. A student's insurance scheme covering all students in the LSGI can be instituted.
18. Scheme of Educational loans for higher studies can be introduced.
19. LSGIs can adopt poor and orphan children till they complete the +2 course.
20. In the eastern areas of the district, there are a lot of Tamil laborers in the plantations. They do not send their children to schools. Such children can be given special classes and night classes by the Panchayat.

8. Conclusion

One among the major proposals is for starting more institutions in the Eastern part of the District (Punalur) that are educationally backward. Technical Education facilities are also very low in that part. An important aspect of Education status in the District is that almost 70% of the institutions are located in the Kollam Corporation area or along to the National Highways. So, all kinds of institutions are required in Kottarakkara, Kunnathur and Punalur Taluks. The second aspect is improvement in quality of education. In order to raise the quality of education in the District more effective training to the teachers is needed and thus the proposal to start a training institute like IMG / KILA. Third point is the opening of various Higher Education Centres in the disciplines of Medicine, Engineering, Law, Mining Technology, Forest Research, Fisheries Research etc.

Satellite linked Education Programmes like Edusat and UGC channels can be made available to all the schools and colleges in the District with help of NCERT/SSA etc. NCC, Scouts and Guides and National Service Scheme can be implemented in all schools and colleges for imparting discipline among students

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Chapter 45

Social Welfare, Women and Child Development

This chapter includes the development proposals of social welfare sector covering women and children, adolescents, old aged, retarded and physically challenged based on the district development policies and strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district development policy on Social Welfare, Kollam district has to provide better health, social status and security to women and children, adolescent girls, mentally and physically challenged and aged.

The gist of policy level intervention required to maintain resource equality between men and women through spatial plans is that 'inclusiveness of should cater to the needs of all vulnerable sections of the society including disabled, old and infirm, children both school going and toddlers, women.'

The linking those who have the resources with those who will provide the services for the vulnerable needs to be

specified as under:

Each local development plan must have the provision of women owned property for the productive woman population of the area.

Environment regeneration like water harvesting mechanism, horticulture and other programmes offered should be monitored for equal distribution between men and women for livelihood.

Project ideas in this respect may include the following.

Gender disaggregated data collection to ascertain gap and consultation to develop charter for how to make ownership equal between men and women through government grants under 10% women component and planning 10% of newly built infrastructure to be used and controlled by women alone.

Re-development of an area to set aside built infrastructure for proportionate percentage of productive women in the area

Shelters would be the integral/ central part of such plans which will take care of housing for disabled, old and women

workers who need transit accommodation.

Areas need to be redesigned to make current residential spaces and new residential areas for work that can be done near or within home spaces. For eg. women worker in shrimp or fish packaging units need differently designed change rooms to drape sarees or bathe or for lactation.

Design of lanes, lighting and planning areas with more foot fall ensures many public eyes to prevent secluded condition that foster violence.

Special spaces need to be set aside for use rights in commercial areas for women workers groups or women entrepreneurs.

Increased role of women in neighborhood care and workers placements.

Build infrastructure for working class and neighborhood services managed by women groups such as women resource centres, safe migration centres, homes for the distressed, deserted like the widowed/ old-age citizens/ disabled, etc.

An area specific approach is needed. For example panchayats like Alapad and Krunagappally could have specific programmes for women workers in coir and cashew industry.

- Public utilities building and maintenance contracts and care services near work and residential areas can be managed by women and other local groups. The strategies for the same include
- Proposals for the welfare of women comprising
 - Proposals for mothers which include welfare schemes such as 'health and nutrition, education - strengthening mother component of ICDS'
 - Proposals for women headed families which include welfare schemes such as 'health, education-strengthening widows/ deserted component of ICDS and other social development schemes'
 - Proposals for uneducated/ un-employed women which include welfare schemes such as 'health-strengthening uneducated/ un employed women component of ICDS' and other social development schemes
 - Employment schemes for women
- Proposals for the welfare of children comprising
 - Welfare schemes including 'health and nutrition, education under strengthening children component of ICDS including nutritional and health education (NHED)' and other social development schemes for victims of molestation, natural calamities, riots etc. and orphans including security
- Proposals for the welfare of adolescent girls comprising
 - Welfare schemes including 'health and nutrition, education - strengthening adolescent girls component of ICDS including nutritional and health education (NHED)' and social development schemes for victims of molestation, natural calamities, riots etc., and orphans, including security
- Proposals for the birds with broken wing (mentally and physically challenged) comprising
 - Strengthening birds with broken wing component of ICDS and

Asraya

- Social development schemes
- Employment schemes
- Proposals for old aged comprising
 - Welfare schemes including strengthening old age homes and health care
- Proposals related to other social challenges such as antisocial activities, suicides, dowry, accidents, drug addiction, female feticide, HIV positive children and white slavery
- Proposal for betterment of services through anganwadis comprising
 - Provision of infrastructure facilities
 - Training programmes for functionaries
 - Participatory intervention

2. Proposals for the Welfare of Women

2.1 Mothers

2.1.1 Welfare Schemes

2.1.1.1 Health and Nutrition, Education – Strengthening Mother component of ICDS

Following are the components of this scheme:

Pregnant mother

Special care is needed to a woman when conception is confirmed. Medical care and advice will be got from the nearest PHC and from the PHN's house visit. Nutritious supplementary feeding is given to them through Anganwadi centers to improve nutritional status.

The following diet practices and habits should be adhered to during pregnancy viz.

- a. Include leafy vegetables in daily diet
- b. Consume food containing micro nutrient and iodized salt
- c. Ensure personal hygiene and regular exercise

Also education on awareness of AIDS, STD and other contagious diseases is also required.

Lactating mother

- Nursing mother should be given nutritional supplementation with energy rich food which contains vitamins and minerals and counseled on the importance of breast feeding through anganwadies.

- Supplementary feeding (double ration) should be given to them for six months from anganwadis

- Propagate the importance of breast feeding through audio visual media regularly

- Creating awareness about personal hygiene and creating healthy family atmosphere.

2.2 Women headed families (Widows, Deserted)

2.2.1 Welfare Schemes

2.2.1.1 Health, Education - Strengthening Widows/Deserted component of ICDS

Widows and women deserted by their husbands are often ignored by society or forced to live a shadowed life due to prejudice and social customs. It is the responsibility of a cultured and refined society to bring them to the main stream of life and consider them as dignified human beings. The ICDS Services envisage the over all development of women through

- Involvement in social activities through anganwadies.
- Giving access to Medicare with the help of Anganwadi workers.
- Organising mothers meetings, in which various health and nutrition subjects are discussed.
- Teaching them to use locally available leafy vegetables, fruits to check anemia.
- Organising literary classes handled by Angawadi workers or "Preraks" to make them understand their rights.

2.2.1.2 Social Development Schemes

The women empowerment programme seeks to create a general awareness in women through ensuring information specific to equality of social status, legal rights, like those to property and inheritance, constitutional safe guards and on different development programmes / issues of concern to women.

The proposals include,

- Activities of Group- for Development
- Cultural activities
- Awareness creation against alcoholism, money lenders
- Providing of Safe drinking water
- Providing of Sanitation
- Providing of Adult education
- Developing laws and safeguards for women
- Traditional Social practices
- Providing access to savings and credit

- I Regular health checkup for cashew women workers
- I Providing creche facility for NREGA women workers



Women engaged in NREGA works

2.3 Uneducated/ Un-Employed Women

Education and economic development will help women emerge from their cocoons

(Mosquito) activities to check dengue, Chickun guinea, Malaria. Etc.

2.3.1.2 Social Development Schemes

Improving the quality of people's life is the signal function of the government. Though health is a state subject, the central government too initiated several schemes relating to various aspects of health care as part of its national planning process.

The proposals include,

- I Provide opportunity to continue education
- I Introduce them to the field of I.T.
- I Challenge traditions and social taboos
- I Create link between community and national arena
- I Integrated Child Development

through NABARD, RMK.

3. Strengthening women's participation in agricultural development, dairy development, agro services and small scale business sector.

4. Employment generation for women through JRY and EAS.

2.3.3 Specific Proposals

As per the sectoral analysis, women in the eastern belt are having low literacy rate. It is suggested that a total literacy campaign and Anganwadi based literacy programmes or functional literacy programmes have to be started in these LSGIs. The phasing is given in Table.45.1.

As per the sectoral analysis, the atrocities against women are more in Kundara police circle area. It is suggested

Table.45.1. Phasing of literacy programmes-LSGIs to be covered in each phase

| Year | 2008 | 2009-2010 | 2011-2015 | 2016-2021 |
|--|---|--|---|-------------|
| Total literacy campaign and Anganwadi based literacy or functional literacy programmes | Aryankavu, Elamadu Kulathupuzha, Thenmala, Chithara and Nilamel | Clapppana, Kulasekharapuram, Thazhava, Thodiyur, Thevalakkara, Poruvazhy, Nedumpana, Poothakkulam, Velinallur. | Thrikkadavur, Kottamakara, Throkkovilvattom | Other LSGIs |

and shed all shackles of slavery. Even today women are trying to tread her own path and establish herself as an individual in her own right.

2.3.1 Welfare Schemes

2.3.1.1 Health - Strengthening Uneducated/ Unemployed Women component of ICDS

Poverty and illiteracy pose the greatest hazards to public health. Malnutrition and lack of hygiene, sanitation, safe drinking water and civic consciousness render the vast majority of the masses disease-prone. 80% of the rural women receive no medical aid. The health strategies of ICDS services look at preventive and curative care to women.

The proposals include,

1. Access to modern medicine to under privileged
2. Intensify the house visit of health personnels and Anganwadi workers.
3. Conduct health and nutrition education in angnwadi periodically.
4. Give awareness about AIDS/ Tuberculosis and other epidemics.
5. Introduce Self Help Programme, which is cheap and effective
6. Intensify source reduction

Schemes

- I Women Empowerment Programme
- I Convergent Services
- I Gender, Development and empowerment
- I Skill Development.

2.3.2 Employment Schemes

In spite of the considerable improvement in the status of women, they still comprise of largest section of deprived population. It is widely recognized that women as a group and poor women in particular have been adversely affected by the process of growth, economic transformation and development. Lack of capital is a serious constraint to the development of women in rural areas who find little or no access to credit.

The proposals include,

1. Self employment, economic activities and training through IRDP, TRYSEM, DWCRS.
2. Credit linkage to women's groups

that functioning of 'Jagratha Samithy' (Chairman – LSGI President, Convener – ICDS Supervisor, Members-Circle Inspector of Police, Social workers etc.) in these areas are to be made effective. Legal literacy to women in this area to make them aware of their rights shall also be given through Anganwadis. Functioning of women grievance redressal cell has to be made effective in this area. Training for Self Help Groups for intervention against atrocities at home etc. shall also be given. In such events SHG members can directly intervene in the matter meeting at a third party's home by restricting the person who is creating issues. Strict enforcement of special rules for women has to be done.

The phasing is given in Table 45.2.

As per the sectoral analysis, the suicide by women is more in Punalur police circle area (Pathanapuram, Punalur Municipality, Piravanthur(part), Pattazhy, Pattazhy

Table.45.2. Phasing of setting up of Jagratha Samithy in different Police Circles

| | 2009 | 2010 | 2011 | 2012 |
|----------------------|-----------------------|--|--|---------------------------|
| Jagratha Samithy | Kundara Police circle | Sasthamcotta, Chavara, Kollam East, Chathannur, Ezhukone, Kottarakkara, Anchal, Punalur Police circles | Kulathupuzha, Kadakkal, Paravur Police circles | Kollam West Police circle |
| Legal literacy | | | | |
| Intervention by SHGs | | | | |

Vadakkekkara, Karavalur, Thalavur, Vilakkudy) and Kadakkal police circle area.

This area has to be made free from illicit liquor. Special intensive programmes have to be conducted to remove the backwardness and improve family welfare so as to reduce emotional instability and

- Special care for primary complex.
- Nutrition proposals covering:**
- Supplementary Nutrition and ready to eat food through Anganwadis
- Food containing micronutrients, Vitamins and minerals.
- Usage of iodized and iron fortified

Table.45.3. Special intensive programmes to prevent illicit liquor- LSGIs to be covered in different phases

| | 2010 | 2011-2015 | 2016-2021 |
|------------------------------|--|---|-------------|
| Special Intensive programmes | LSGIs in Punalur and Kadakkal Police circles | LSGIs in Karunagappally, Kundara Sasthamcotta, Chavara, Chathannur, Kottarakkara and Anchal, Police circles | Other LSGIs |

personality disorder. This can be done through Anganwadis. Presently this is being coordinated by Excise Dept. and the linked agencies are LSGIs, Education Dept., Dept of Collegiate Education and Kudumbasree.

The phasing is given in Table 45.3.

Another major issue among women is health related. As per the sectoral analysis, more cases of anemia are reported in Multi Functional Zones, which could be due to fast food culture. Wide propagation to include leafy vegetables having iron content, in the diet is the major suggested solution. Awareness programmes through Anganwadis, audio visual media etc., are phased as shown in Table 45.4.

The proposals can be integrated to the proposals of health sector as suggested in Article 2 of Chapter 40.

3. Proposals for the Welfare of Children

3.1 Welfare Schemes

3.1.1 Health and Nutrition, Education - Strengthening Children Component of ICDS including Nutritional and Health Education (NHED)

ICDS provides a package of services for the development of Children.

Proposals include,

Health Service proposals covering:

- Periodical health check-up of Anganwadi children by health personnels.
- Effective referred service
- Hundred percentage coverage for immunization with the help of community
- Implement strictly early detection of child-hood disabilities and community based rehabilitation programme through ICDS.

salts for cooking food in Anganwadis

Education (Non-formal Pre-School)

proposals such as

- Non formal pre school education should be made scientific and

Table.45.4. Awareness programme on women health issues- LSGIs to be covered in different phases

| | 2008 | 2010 | 2011-2015 | 2016-2021 |
|---|--------------------------------|-------------------------|--|-------------|
| Wide propagation to include leafy vegetables | LSGIs in Multi Functional Zone | Kareepra, Thrikkadavoor | Chavara, Sooranadu South, Kundara, Nilamel, Poothakkulam | Other LSGIs |
| Awareness programme through Anganwadis, audio visual media etc. | | | | |

systematic suitable to developing countries.

- Use of Audio Visual media.
- Improvement of infrastructure facilities of Anganwadis.
- Harnessing the service of well trained pre-primary teachers.
- Pleasant and clean atmosphere in Anganwadi.

3.1.2 Social Development Schemes- for Victims of Molestation, Natural Calamities, Riots etc., and Orphans including Security

Rape is the only crime which man can commit against women and not vice versa. The ultimate victims of riots or natural calamities are women and children.

Proposals include

- Moral support and protection from community
- Rehabilitation
- Counseling services
- Adoption, Intervention programme

4. Proposals for the Welfare of Adolescent Girls

4.1. Welfare Schemes

4.1.1 Health and Nutrition, Education, Counseling - Strengthening Adolescent Girls Component of ICDS including Nutritional and Health

Education (NHED)

According to WHO, Children in the age group 10 to 19 years are considered as adolescents. Adolescent population constitutes around 20% of Kerala's population while it is 16% in Kollam.

Millions of girls in India are denied the right to be born and if they are born, denied the right to lead a life of dignity. Hence intervention are required for the welfare of adolescent girls. The proposals in this respect include:

- The right to be born
- The right to live in a healthy family atmosphere.
- The right to Nutrition - Anganwadi Supplementary feeding.
- The right to health - Access to health

Service

- The right to learn - Free and compulsory education
- Counseling service-through Adolescent Girls clubs attached to Anganwadi centers.

4.1.2 Social Development Schemes for Victims of Molestation, Natural Calamities, Riots etc., and Orphans including Security

Proposals include

- Moral support and protection from community
- Rehabilitation
- Counseling services
- Adoption, Intervention programme

5. Proposals for the birds with broken wing (Mentally and physically challenged)

5.1 Welfare Schemes

5.1.1 Strengthening birds with broken wing component of ICDS and Asraya

Mental retardation (Synonyms-Mental deficiency, Mental handicap, sub normality, amentia) is a state of arrested development of the mind existing from birth or from an early age.

It has been estimated that about 5% of all babies born are retarded to some degree.

| | | | |
|--|---|--|----|
| Proposals include, | protection to neglected aged people. | dowry prohibition officer's post in each district to be assisted by a team of five social workers and with police forces. But it took more than 25 years to implement the suggestion. Thus dowry can be reduced by | 34 |
| <ul style="list-style-type: none"> Provide supplementary nutrition from nearest anganwadi centers. Periodical visit to the patients (Mentally retarded or handicapped) home by health staff /anganwadi worker and provide the medical and moral support. A small pension to the family Awareness to parents of mentally/ physically handicap's through anganwadi. Counseling service. | <ul style="list-style-type: none"> Good Respite service Geriatric care Counseling Service Entertainment (Music/games) Spiritual awareness Horticulture If healthy, encouraging donation of eye <p>As per Article 2 of Chapter 40, bed strength of the pain and palliative clinic at district hospital is to be raised from 6 to 15 which will strengthen this proposal.</p> | <ul style="list-style-type: none"> Continues awareness creation through media Service of dowry prohibition officers Refusal of bridegrooms who insists dowry by brides Timely information to police This should be included as a part of legal literacy | 35 |
| 5.2 Social Development Schemes | 6.1.2 Health care | iv) Accidents can be reduced by | |
| Proposals include, | National Policy | <ul style="list-style-type: none"> Education at school level on good driving practices Better road facilities Strict enforcement of law against road rule violators Making available Emergency Medical Service System (EMS) covering Ambulance service, Emergency medical technicians service, Good Samaritan laws etc Speedy and effective communication | 38 |
| <ul style="list-style-type: none"> Early detection of child-hood disabilities and community based rehabilitation Social acceptance sympathy/ empathy Protection from exploitation / abuse Starting of special schools for educating mentally retarded Counseling to the parents. | <p>The well being of the older persons is the goal of the national policy on older persons which will be achieved by securing them their place in society so that they live this phase of life with purpose, dignity and peace.</p> <p>The proposals include</p> <ul style="list-style-type: none"> Constitute geriatric clinic in all hospitals Constant Health Care Physiotherapy Counseling service <p>To help the elderly, offer them protection from abuse and exploitation and create opportunities for them to improve the quality of their lives.</p> | <ul style="list-style-type: none"> Strengthening the provisions of I.T Act Constituting State Cyber Rules and Regulations (including control of cyber cafes and internet service providers etc.) Strengthening the existing High Tech Crime Enquiry Cell of the Police Dept. Up-grading status of High Tech Crime Enquiry Cell and District Crime Enquiry Cell through giving powers for case registration and investigation Providing adequate qualified manpower and infrastructure facilities including building, updated software, hardware etc. Through imparting regular International/National/State level trainings to the law enforcing officials in particular by incorporating private internet service agencies like Yahoo, Google. Microsoft etc. and Social community site providers Facilities for ensuring international cooperation including that of Police Depts. and service providers of other countries | 39 |
| 5.3 Employment Schemes | 7. Other Social Challenges | | 40 |
| Support for establishing small enterprises for | Other Social challenges include antisocial activities, suicides, dowry, accidents, drug addiction, female feticide, HIV positive children and white slavery. | | 41 |
| <ul style="list-style-type: none"> Making paper Bags/Cover Toys making For Physically Handicapped: Painting works Paper Bags/Cover Cycle Repairing Running small shops | <ul style="list-style-type: none"> Counseling service | | 42 |
| 6. Old Aged | | | 43 |
| 6.1 Welfare Schemes | | | 44 |
| As per Article 1.5 of Chapter 23, increasing proportion of old aged in the population is another major problem identified by Human Resource Sector. Increased longevity, health facilities, falling birth rates and other contributing factors have increased the share of aged in the population. All the developed and developing countries are witnessing this phenomenon. This is very much visible in India, particularly in Kerala State as well as in Kollam District. Due to the limited employment opportunities, people are induced to leave their native places in search of job to far off places leaving their parents. Consequently these aged parents are left lonely in the fag end of their life. Therefore it is essential that specific welfare schemes for the old aged are implemented. | | | 45 |
| 6.1.1 Strengthening old age homes | | | 46 |
| Old age homes provide care and | | | 47 |
| | | | 48 |
| | | | 49 |
| | | | 50 |

- I Awareness programmes at Schools, Colleges and also for the public.
- I Control measures at institutions including Line Depts. , LSGIs etc. having link to cyber space through monitoring facilities, adequate security measures etc.
- I Restricting improper usage of mobile phones through proper verification of address by mobile service providers, State level coordination of mobile service providers with law enforcing agencies etc.

8. Betterment of Services through Anganwadis

8.1 Provision of Infrastructure facilities

Based on the analysis of Cumulative Index of Facilities in Anganwadis conducted in the Sectoral analysis, the LSGIs has been classified into those where there is High Development Thrust (Thrust 1A: Multi Functional Zone and Thrust 1B: CI Range 146-178), Medium Development Thrust (Thrust 2: CI Range 112-145), and Low Development Thrust (Thrust 3: CI Range 58-111). The thrust LSGIs are listed in Appendix 45-1.

Accordingly these anganwadis may be provided with facilities in a phased manner as per Appendix 45-2. The fund requirements for each thrust LSGIs is given in Appendix 45-3.

The required land can be purchased by the concerned LSGI or obtained as donations etc. The Buildings and Services can be provided by the LSGI utilizing State/ Central Fund or by NGOs etc.

8.2 Training Programmes for Functionaries

The functionaries include Anganwadi Worker / Helper, Anganwadi Supervisor and Child Development Project Officer. Following training programmes are suggested:

a) Anganwadi Worker / Helper level:

- I Pre School Training
- I Health and Nutrition
- I Organization Skills
- I First Aid

b) Anganwadi Supervisor level:

- I Pre School Training
- I Health and Nutrition
- I Hygiene and sanitation
- I Training for Resource persons
- I Capacity Building

c) Child Development Project Officer level

- I Developmental Activities
- I Health and Nutrition
- I Women Empowerment
- I Capacity Building
- I Management skill
- I Disaster /Crisis management

The trainings presently given once in 2 years should be given every year.

8.3 Participatory Intervention

Presently, awareness on various subjects to the beneficiaries are given in the Anganwadi centres. But these programmes are not fruitful as only a few are able to attend the programmes. So, participatory interventions is the best solution to tackle the issue i.e. to conduct the programmes at the work places, schools etc. of beneficiaries.

The proposals include,

- I Conducting awareness programmes in industries
- I Forcing the owners of industries/ Commercial establishments /Govt. Offices etc. to send the beneficiaries for major programmes conducted
 - i The Industries Dept. shall insist this to entrepreneurs while re-registration
 - i The district administration, including the Jilla Panchayat President, District Collector and Mayor, Kollam Corporation shall conduct continuous dialogue with the management of concerned factories, companies, commercial establishments etc.
 - i LSGIs shall insist Commercial establishments to participate in such ventures while remitting building taxes during license renewals
 - i Necessary Govt. orders may be issued in this regard to facilitate action by Govt. servants
- I Awareness through visual media at the time of festivals/ Melas etc organised at tourism centers as mentioned in Article 2.5.6 of Chapter 49; Tourism

9. Proposals for Fire and Safety

As far as fire and rescue services are considered two proposals are given.

9.1 Modernisation of Existing Fire Stations

As mentioned in Article 3.6.10 of Chapter 23; all the 7 fire stations existing in the district require urgent modernization including own buildings, recovery vehicle etc. An amount of Rs 75 lakh would be

required for the purpose. The period of implementation is 2009 – 2015. The phasing of proposals is given in Appendix 45-3.

9.2 New Fire Stations

At least 8 more fire stations will be required in the district by 2017. The cost of establishment will be Rs.2.5 crore for each station. The suggested locations for the fire stations are as follows. Here the Multi functional zones are also given priority.

1. Sasthamcotta
2. Velinallur (Oyur)
3. Kottamkara
4. Chathannur
5. Kottarakkara
6. Anchal
7. Kollam Corporation (Eravipuram)
8. Anchalommodu (Thrikkadavur)

The period of implementation is 2009 – 2017. The phasing of proposals is given in Appendix 45-3.

9.3 Proposal for Hydrants

It is also proposed to provide fire hydrants in Multi Functional Zones (Zone 1 - Kollam Corporation, Kottamkara, Thrikkovilvattom, Elampallur, Panayam, Mayyanadu and Zone 2 - Punalur Municipality, Karunagapally, Chathannur, Kottarakkara, Neendakara, Anchal) and Special Development Zones (Paravur Municipality, Mayyanadu, Chathannur, Kalluvathukkal, Kunadara, West Kallada, East Kallada, Perayam, Elampallur, Ochira, Clappana, Kulasekharapuram, Alappadu, Panmana, Chavara, Thevalakkara, Mynagapally, Sasthamcotta, Neendakara and Karunagapally) with the support of the Kerala Water Authority. As per Article 3 of Chapter 41; Drinking Water, specials such as flanges, reducers etc. for providing hydrants are proposed to be installed in these LSGIs.

10. Conclusion

The development proposals for 2021 in the social sector envisage the well being of women and children, adolescent girls, old aged and the birds with broken wings by providing timely health and nutritional services, and by organizing educational programmes, awareness programmes and self help group activities. There is a lot of victimization, fear and exploitation in our society. The frightened need assurance, the harassed need protection and the deprived and less fortunate fellow beings, need someone who will listen to them. A "Cry out for help" should be heard n



Chapter 46

Poverty Reduction

This chapter includes the Development Proposals of Poverty Reduction sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

As per the District Development Policy, the present BPL population has to be brought above the poverty line whereby the BPL population has access to better employment opportunities and infrastructure facilities both in rural and urban areas by 2021.

The strategies for the same include

- Reducing absolute poverty to less than 5% in the district through eliminating the deprivations and incapability of the poor with respect to

™ Food and Employment

™ Land and house

™ Drinking water and Sanitation

™ Knowledge and Skill etc.

This can be achieved only if the on-going and committed projects and

programmes on poverty reduction and rural development are integrated to the development proposals of production and service sectors suggested in other chapters of this report.

2. Proposals for Food and Employment

2.1 Intervention in Agricultural sector

The revival of paddy cultivation has been identified as the major area of intervention for supporting the BPL population. As per the proposal of Agricultural sector, (Chapter 34), the paddy lands of entire Agro Development Zone is to be retained and productivity is to be increased. In the case of Agro Allied Development Zone the proposal is to retain the existing area under paddy and to increase productivity along with ensuring proper marketing, storage and processing facilities. In the case of Special Development and Multi Functional Zones, though the thrust is for development of secondary and tertiary activities, it is

proposed to retain certain paddy areas. The Sub Zone 4 of Special Development Zone comes under Kayamkulam to Chavara coastal sandy tract of Onattukara region. Here also existing area is proposed to be retained and productivity to be increased. The BPL population in these areas receive the opportunity to get wage employment and to engage in lease land farming activity by forming groups (both men and women).

The paddy processing centres are intended at Kadakkal, Sasthamcotta, Kottarakkara areas which are nearer to major paddy areas. There are possibilities for setting up such centres in cluster approach by BPL SHGs with the support of LSGIs.

The BPL population can be organized and motivated to engage in this field of vegetable cultivation supported with marketing facilities as mentioned in Article 4 of Chapter 34. Areas for intensive vegetable cultivation for improving productivity are mentioned in Article 2.2.2

of Chapter 34.

Also small scale industrial units are to be promoted for processed tapioca production including starch, chips manufacturing etc. in traditional areas with special thrust to Kadakkal, Kulathupuzha, Kalluvathukkal, Anchal and Poothakulam. This proposal is helpful for ensuring income generation activities for BPL in this field.

Sesamum cultivation can be taken up by the BPL groups as an intercrop in lease land farming areas in Onattukara region viz. Clappana, Oachira, Kulasekharapuram, Thazhava, Mynagappally, Thodiyur, Thevalakkara, Chavara, Panmana, Sooranad South, Sooranad North, West Kallada, Sasthamcotta, Kunnathur and Poruvazhy Panchayats.

Apiculture activity can be undertaken by BPL families (Both individual and groups) as a promising income generating activity. Apiculture is to be implemented in 39 Panchayats of Zone A, B & C referred in 3.1.3 of Chapter 34. Processing of Honey into various edible items can be encouraged and such small and medium enterprises also can be initiated in the area.

The areas identified for coconut cultivation and rehabilitation includes Sub Zone 4 of Special Development Zone including Panmana, Chavara, Neendakara, Thevalakkara, Clappana, Kulasekharapuram, Oachira, Mynagappally and Sasthamkotta and Sub Zone 1 of Special Development Zone including Poothakulam, Kalluvathukkal, Paravoor Municipality and the selected areas from Zone B & C. When the production of coconut increases, there will be an increase in the opportunity of developing coir producing units. The revival of once popular traditional coir production in these areas will benefit the poor. Further there is scope for poor families to enter into enterprises undertaking value addition of coconut oil and products. If a mechanism for proper collection of the husk is developed in these areas facilitated by the community based social net work of the poor, there is another possibility of revitalizing the coir co-operative societies and it will provide new employment opportunities for the poor.

Banana can be cultivated as lease land farming by the poor in the areas mentioned in Article 3.5 of Chapter 34, provided the

inputs and crop insurance support are extended from Govt. side.

The forward and backward linkages including general trainings, skill trainings, entrepreneurship trainings, bank loans, procurement measures for raw materials, marketing support and business counseling supports have to be ensured through the development departments such as Rural Development, Agriculture, Industries, LSGIs, Kudumbasree, other agencies such as Development Corporations for the Backward population, banks, training institutes etc.

2.2 Intervention in Animal Husbandry sector

As per Article 2.1.2 of Chapter 37, there is scope for development of large scale dairy farms in the Grama Panchayats of Kunnathoor, Poruvazhy, Sasthamcotta, Kulakkada, Kalluvathukkal, Nedumpana, Pavithreswaram, Mynagappally, Ezhukone, Kareepra and Adichanallur of Agro-allied Development Zone and medium scale dairy farms in the Grama Panchayats of Thazhava, Sooranad north, Sooranad south, Elampalloor and Thodiyoor of Agro-allied Development Zone. Dairy development is a remunerative activity which can be taken up by poor families either individually or in group. Necessary measures to make the dairy development activity sustainable, such as ensuring the availability of feeder at affordable cost etc is required.

Another area of intervention is backyard poultry development. There is opportunity for setting up 1000 numbers of small scale poultry units of 10 hens each in a unit. In the areas mentioned in Article 2.2.6 of Chapter 37, the units can be established by individual beneficiaries as subsidiary source of income. The BPL families shall be given preference in such ventures. Similarly backyard duck units, homestead quail units, goat rearing units and piggery units etc can be started by the poor in the areas mentioned in respective articles of Article 2.2 of Chapter 37.

2.3 Intervention in Industries sector

As per Article 2.5 of Chapter 39, it is proposed to set up 12 micro food processing units, 7 in Agro Development Zone and 5 in Agro-allied Development Zone. Also there is ample scope for starting micro enterprises in Multi Functional Zones.

As per Article 2.5 of Chapter 39, there is scope for starting curry powder units and flour mills. SHG members who have capabilities of entrepreneurship can be organized to activity groups in this area. The success of such the venture depends upon the standardisation and branding of the products in the district. All the units may be motivated to work as part of a consortium which take care of the activities from raw material procurement to marketing.

In the new era of fashion, there is scope for setting up of garment making units for ready made apparels such as shirts, ladies garments, baby garments, under garments etc. in a cluster based approach. Ithikkara, Mughathala and Kottarakkara Blocks areas are ideal for setting up of such units in the context that these areas were once famous for traditional handloom industries. This intervention may open up new opportunities for the revival of traditional handloom industries as well as direct employment for atleast 2000 BPL families during the next decade.

As per Article 2.5 of Chapter 39, there is scope for Manufacturing of Bamboo Based Products and Handicrafts items in Pirvanthoor, Kulathupuzha, Thenmala and Aryankavu Grama Panchayats located in the eastern part of the District. But the BPL family members traditionally engaged in these activities and the artisans who possess the skill have to be capacitated by imparting know how of new machine based processing and skills for producing value added products which ensures quality even for export. The cashing in on such products is directly attached to the emotions that evokes in the customer. In other words the products whether they are utility products or other items they should have some unique features which attract demanding customers. Therefore production units which cater such market can be set up.

As per Article 4.1 of Chapter 39, there is ample scope for starting a BIO Medical Equipment Manufacturing unit at Chathanthoor Panchayat. In the context of emerging private hospitals in Kollam, it is possible to organize activity groups which could render service support as well as production of various materials for the use of hospitals, for, e.g. Power laundry, Cleaning services, production of surgical cloths, cleaning materials etc. This can give

direct employment to 100 BPL families.

Another avenue of employment generation for the poor is starting some enterprises for looking after the regular health check ups and administering of medicines, provided that the entrepreneurs are properly trained such ventures will be effective only if there is support from NGOs, health sector and the LSGIs.

As per Article 8.3 of Chapter 39, there is scope and demand for value added coir products. It is proposed to set up mechanized coir yarn manufacturing units in strategic locations at Chavara, Clappana, Karunagappally, Kulasekharapuram, Munroe Island, Oachira, Panayam, Panmana, Perinadu, Thekkumbhagam, Thevalakkara, Thrikkaruva and Thrikkadavoor Grama Panchayat of Kollam District. If continuous supply of raw material can be assured, 1000 BPL members can be assisted with financial support by the LSGIs, Govt. and financial institutions for setting up such units.

As per Article 8.5 of Chapter 39, it is proposed to set up two separate units for the manufacture of Screw Pine and Straw picture products in Thazhava and Thrikkadavoor Panchayats respectively. Novel and unique utility products have to be developed with high dexterity and skill in order to attract both domestic and export market and BPL members can be organized as clusters to work in this sector. Appropriate and modern training has to be imparted to the prospective entrepreneurs. Sufficient R & D has to be carried out by concerned institutions for product development. Here the availability of screw pine has become a threat. Hence LSGIs has to take up activities for the cultivation of screw pine in private as well as public land utilizing the opportunities of watershed development programmes and NREGP. Similarly Straw picture making enterprises can also be developed in household / cluster based approach in Thrikkadavoor and adjoining areas.

2.4 Intervention in Fisheries sector

As per Article 2.2 of Chapter 38, there is a proposal for Carp Seed Rearing Units in small ponds / tanks in SGHs among BPL can be motivated to take up these activities in their own / leased land. As per Article 2.2 of Chapter 39, there is a proposal for Fresh Water Fish Culture where also SGHs

can be motivated to take up activities. Another area of intervention is Ornamental Fish Culture (Article 4.1.1 of Chapter 29).

Also as per Article 2.2 of Chapter 39, there is ample scope for value added fish products. SHGs in coastal belt covering mainly Kollam Corporation, Chavara, Neendakara, Alappad and Karunagappally Grama Panchayats can be organized to take up such micro enterprise activities. Ensuring marketing strategies facilitated by fisheries Dept. and MATSYAFED is also a pre requisite for the success of such ventures.

As per Article 6.2.9 of Chapter 38, there is potential for Dried Fish Product Making Units in Paravoor, Mayyanad, Kollam, Neendakara, Thekkumbhagam, Thrikkadavoor, Thrikkaruva, Panayam, Chavara, Alappadu and Karunagappally. Modernised enterprises can be setup by activity groups formed by poor families in the said area.

As per Article 6.2.13 of Chapter 38, Fish vending, retail outlet for fresh and processed fish, processing groups, fish booth, ready to eat/ready to cook fish product making units etc. are some areas which can employ considerable woman labour. There is potential for Ready to Cook/Ready to Eat fish Product Making Units in Karunagappally, Kollam, Paravoor, Thrikkadavoor, Neendakara, Alappadu and Mayyanad. The enterprise can be setup by activity groups formed by capable and interested members of poor families of the said area, after obtaining appropriate skills through trainings.

As per Article 6.4.4 of Chapter 38, the coastal seas, extensive net work of brackish water area and the rivers & inland water bodies offer immense potential for Capture fisheries in the District. Hence there is a remunerative opportunity by setting up Net Mending Units by fisher women SHGs this area.

3. Proposals for Accessibility to Land and House

In the perspective of poverty reduction, non accessibility to land and house are considered as two important risks. By 2010 all the poor who do not have land and house has to be covered. Providing land to the landless should be a time bound agenda for all LSGIs, especially for Chavara, Thekkumbhagam, Thazhava, Pathanapuram and Thrikovilvattom Grama

Panchayats, where the issue is critical as per Article 1.2 of Chapter 24.

As part of EMS housing programme, all the LSGIs have to provide houses for the houseless poor by 2010. Providing houses for the houseless poor should also be a time bound agenda for all LSGIs, especially for Oachira, Thazhava, Thevalakkara, Alayamon and Aryankavu Grama Panchayats where the issue is critical as per Article 1.2 of Chapter 24.

While implementing these schemes SC/ ST families, destitutes, families with differently-abled members, women headed families etc should be given priority in the LSGIs having concentrations of such families as mentioned in Article 1.2 of Chapter 24.

4. Proposals for Infrastructure and Service facilities

As part of poverty reduction the critical intervention required is that infrastructure and service facilities has to be provided to those areas where BPL families and BPL SC / ST families live in groups and also in urban slums. As per Article 1.3.1 of Chapter 48 around 65% of the SC population are settled in colonies. ST people are also settled in colonies known as 'Oorukottams' which are located in the eastern part of the district especially in Kulathupuzha, Aryankavu and Thenmala Grama Panchayats. As mentioned in Article 1.2 of Chapter 23 there are 71 listed slums in the district. By dovetailing the Central and State funds with LSGI funds the issue has to be addressed fully by 2013.

5. Proposals for Social Development

As per Article 2.1.1.1 of Chapter 45, the importance of including leafy vegetables in diet of pregnant and lactating women is highlighted. This has to be propagated among the women of poor families through discussions in neighborhood groups of Kudumbasree. Service of trained health volunteers of Kudumbasree NHGs can also be utilized for the same. The members of NHGs can cultivate leafy vegetables in their homesteads.

As given Article 2.2.1.2 and 2.3.1.2 of Chapter 45, the women empowerment programme seeks to create awareness in women through IEC and capacity building in various subjects such as legal protection, legal literacy, skill development, danger of alcoholism, gender development etc. The

best platform for educating the women, especially poor women on such matters is Kudumbasree. Regular classes of legal literacy can be imparted to the volunteers of Kudumbasree, in association with District Legal Services Authority (KELSA). The gap in various skills of the women has to be assessed at LSGI level as part of their Local Development Plan and systematic and effective trainings has to be arranged in association with training institutions which have good track record. The proposal for 'strengthening birds with broken wing' component of ICDS and Asraya of Article 5.1.1 of Chapter 45 can also be linked here.

As per Article 1.2 of Chapter 23, the employability among the educated youth, especially the poor and marginalized, is below the required standard. It is fact that the soft skills of educated youths of the poor and marginalized families are below the required standards insisted by employers now. In order to overcome this handicap quality assured employability enhancement trainings has to be imparted by LSGIs.

6. Proposals for empowerment activities through Kudumbasree

Kudumbasree has entered into a new phase of reduction of poverty through various initiatives under the three paths viz social empowerment, economic empowerment and women empowerment. Govt. has prescribed a new by-law for Kudumbasree and the newly elected system is put in place. This has strengthened the CBOs of women and provided sufficient freedom for a leap

ahead. New evaluation and monitoring mechanism is also derived under the aegis of LSGIs which ensures objective based development. In view of developing the managerial capabilities of women, new initiatives on participatory gender self learning is being piloted. In the coming years this will be extended all over the state and which will tangibly enhance the capabilities of women for interacting with the societies, advocating by themselves for their rights, and even bargain for their eligible stake in governance. The prevailing social security issues can be tackled through this organizational set up. For e.g. the implementation of Rastriya Swasth Bheema Yojana (RSBY), the insurance scheme is being coordinated through Kudumbasree network.

In the area of economic development, new initiatives of enterprise development have been started. SAMAGRA – comprehensive enterprise development based on the natural, human and financial resources has already been piloted all over the state. In Kollam district such enterprise development initiatives have been started at Nedumpana, Poothakualm, Perinadu and Sooranadu South Grama Panchayats and in Mukathala Block Panchayat under the leadership of Panchayat Raj Institutions. Here, the threats in the areas of product development and marketing are addressed in order to ensure sustainability and economic feasibility of enterprise. In the area of marketing, new avenues are provided to entrepreneurs by Kudumbasree. Monthly markets provide opportunity to entrepreneurs to sell their products. In the

coming years, such markets will be opened in all Block centres. Kudumbasree facilitates entrepreneurs to exhibit and sell their products in various fairs. Tie up with dept. stores is made for providing visibility to the products of the poor. Govt. has provided sufficient funds to open designer shops in all LSGIs which will materialize by 2011. Some products have been identified for branding and packing so that the entrepreneurs can increase their stake in the emerging global market. It is expected that at least 20 products will be branded and marketed by Kudumbasree Kollam by 2011.

These initiatives will ultimately add to the various sectoral development proposals and in turn generate better results for the efforts of poverty reduction in the district.

7. Conclusion

Reducing the incidence of poverty in the district is not at all an easy job. It can be achieved by the interventions made in all sectors of development. The schemes and programmes which are chalked out for socio-economic development should therefore get some space for the economically weak and challenged families in the society. We have to give voice to the voiceless through specially planned programmes. A pro-poor approach has to be developed in the society, especially among those who lead the systems and activities. To conclude, the efforts for poverty reduction should be initiated jointly by the Govt. Departments, LSGIs and various other agencies in a dedicated, time bound, mission mode so that tangible results are manifested by 2021.



Chapter 47

Power

This chapter includes the development proposals of power sector based on the district development policies and strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district power policy, Kollam has to be equipped to provide quality power for the existing and proposed economic activities of the district by 2021 and has to give more emphasis on non conventional energy sources in the domestic and commercial sector.

Analysis reveal that there are power shortage areas in the eastern parts of the District and it is difficult to supply power to these areas in the conventional methods due to topographical constraints. Hence more emphasis to be given on non conventional energy sources to solve the power problem in areas like Aryankavu, Piravanthur, Thenmala, Yeroor, Kulathupuzha, Chithara, Alayamon, Ittiva etc.

2. Non Conventional Energy Resources

2.1 Energy from Bio-Mass

Solid waste disposal is a problem being faced by all the growing local bodies. Hence bio gas plants of capacity to consume approximately 10 tons of solid waste are proposed in the urban areas (including proposed urban areas) of the District. Bio-gas plants are proposed in and around the Kollam Corporation, Punalur Municipality and the Grama Panchayats of Karunagappally, Kottarakkara and Chathannoor. These plants shall serve the immediate surrounding local bodies also, with respect

to disposal of solid waste. Details are shown in Table 47.1 and Figure 47.1.

2.2 Others

As per Article 7 of Chapter 48, there is a proposal for electrification of un-electrified houses. It is suggested that wherever there is no possibility of extending electric lines or cables such as in deep forest areas, solar energy shall be provided.

3. Strengthening of Distribution Side to cope up with Future Power Requirements

To meet the future requirements of power, the proposals in distribution side are given in Table 47.2.

In the year-2011, 844.40 Mu

Table.47.1.Location of bio gas plants, population served and quantity of waste treated

| Location of the Plant | Surrounding LSGIsbenefited | Total Population served | Approximate quantity of waste treated |
|-----------------------|---|-------------------------|---------------------------------------|
| Kollam Corporation | Neendakara, Thrikkaruva, Thrikkadavur, Kottamkara, Kollam Corporation | 4 lakhs | 10 T |
| Karunagappally | Alappad, Clappana, Oachira | 3 lakhs | 10 T |
| Chathannur | | 3 lakhs | 10 T |
| Kottarakkara | | 3 lakhs | 10 T |
| Punalur | | 2lakhs | 7T |

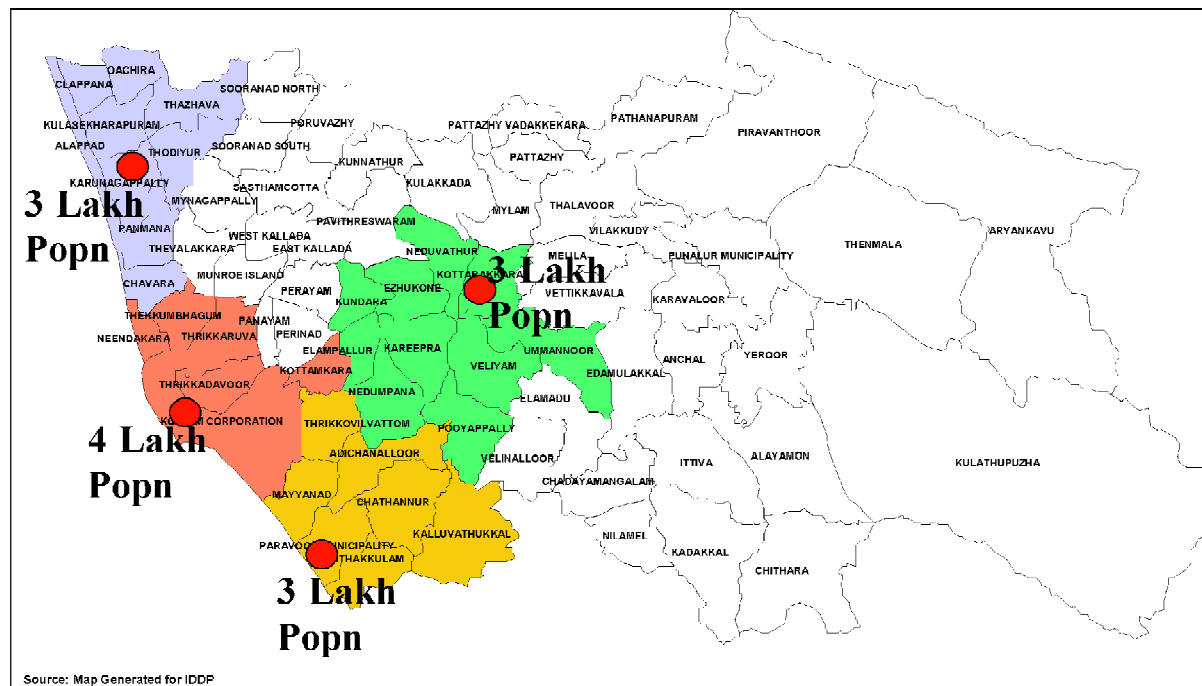


Fig.47.1. Location of bio gas plants

consumption is expected. To meet this, 3097 Km HT line, 22054 Km LT line, 3137 transformers etc. are required. The additional expenditure expected in this regard is Rs 8205 lakhs.

For the year 2021, 1226.10 Mu power consumption is expected in this District. To meet this requirement, 4496 Km HT line, 32023 Km LT line and 4556 transformers are required additionally during the period 2011-2021 at an investment of Rs 26413 lakhs.

So a proposal of 11 KV (2009-2011), 100KV transformer (2009-2011), LT 3 phase (2009-2011), LT single phase (2009-2012) and conversion (2009-2011) are suggested in Kollam District. The cost requirement for the proposals would be Rs 902.9, 935, 73.03, 513.62 and 707.55 lakhs respectively.

4. Proposals on Transmission Side

To meet the above future requirement of power, there are various proposals on transmission side in addition to the ongoing and committed works. For 2006-2011, the expected expenditure is Rs 4300 lakhs and

for 2011-2021, the expected expenditure is Rs 4600 lakhs.

The future development proposals are listed below.

During 2009-2010, 110KV substations are proposed at Enathu, Pathanapuram and Kollam Corporation. For the substation at Pathanapuram the total cost expected is Rs 12 crores and that at Kollam Corporation it would be Rs 37 crores. The proposal of upgradation of substation at Karunagapally is to be implemented during 2010-2011 and the total cost expected is Rs 120 crores. Kundara-Sasthamcotta 110 KV Double Circuit feeder is to be implemented during 2010-2011 with a total cost of Rs 5 crores. The proposals of upgradation of Edamon 220 KV substation to 440 KV (2011-2012) and upgradation of Edamon Ayoor 66 KV line to 110 KV (2009-2010) after completion will cost Rs 40 crores and Rs 4 crores respectively. The proposal of evacuation of power from Achankovil New Hydro Electric Project by constructing 110 KV line (2009-2010) will cost around Rs 10.5 crores.

The Figure 47.2 gives the proposals

on transmission side.

Approximate investment expected for meeting the development of Power Sector is given in Table 47.3.

5. Linkages with other Sectors

The major sectors requiring additional power are Industries and Agriculture. Power requirements of SC/ST sector will be met with high priority. Appendix 47-1 gives the details. It is expected that 90% of the power requirement can be met during 2008-2009 itself.

6. Conclusion

Only one generating station, (Kallada Hydro electric project) exists in the District which generates 60MU of power annually, which is only a small percentage of the total power consumed in the District. Therefore for providing quality power for the existing and proposed consumers of the District, in addition to be conventional sources of generation like Hydel, Thermal etc, non conventional sources like solar, wind etc are also to be utilized. For certain parts of the District where conventional methods of distribution of electricity is not feasible due to topographical constraints, emphasis has to be given for non

Table.47.2.Proposals for strengthening distribution side

| Year | Consumption (mu) | HT line (km) | LT line (km) | Transformers (Nos.) | Addl. Investment (Rs. In lakhs)required |
|------|------------------|--------------|--------------|---------------------|---|
| 2006 | 719.12 | 2637 | 18782 | 2672 | |
| 2011 | 844.4 | 3097 | 22054 | 3137 | 8205 |
| 2021 | 1226.1 | 4496 | 32023 | 4556 | 26413 |

Table.47.3.Investment required for proposals under power sector

| | Estimated Cost Rs in Lakhs | |
|-------------------|----------------------------|-----------|
| | 2006-2011 | 2011-2021 |
| Distribution side | 8205 | 26413 |
| Transmission side | 4300 | 4600 |
| Total | 12505 | 31013 |

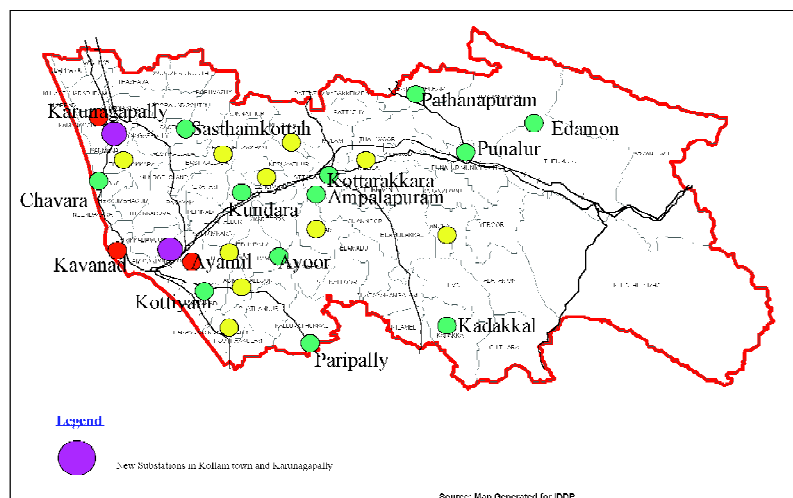


Fig. 47.2.Proposals on transmission side

conventional sources like solar energy, wind energy etc. Solid waste disposal is a problem being faced by all the growing local bodies. Hence, more emphases has to be given to bio-gas plants as a means of safe disposal of waste during the meantime generating energy.

Also there are certain local level issues to be addressed at local level itself like voltage drops, lack of infrastructure etc. These will be tackled at locally.

Over and above the proposals mentioned a culture and awareness among the consumers which is to be strongly advocated for conservation of energy to the maximum extent possible, and the importance of end use efficiency has to be educated.



Chapter 48

Scheduled Castes and Scheduled Tribes

This chapter includes the development proposals of the sector 'Scheduled Castes and Scheduled Tribes' sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

The policy of the sector is 'the socio economic development of Scheduled Castes and Scheduled Tribes to bring about social equity in terms of education, employment and social status'. To remove these disparities by 2021 urgent and concrete positive action is required.

The development strategies in this respect include:

- I To provide land to all the landless Scheduled Caste and Scheduled Tribe families in the district.
- I To provide dwelling houses to all the houseless SC/ST families in the district.
- I To provide safe drinking water to water scarce areas.
- I To electrify all the Scheduled Caste and Scheduled Tribe houses.
- I To provide quality education to

Scheduled Caste and Scheduled Tribe students.

- I To bring down the no. of BPL Scheduled Caste and Scheduled Tribe families to zero level.
- I To bring down, substantially the present level of unemployment among the educated Scheduled Caste and Scheduled Tribe youths.
- I To create healthy and hygienic environment
- I To organize awareness camps to ensure the participation of Scheduled Caste and Scheduled Tribe people in development programmes

2. Proposals for providing Shelter to the Houseless Scheduled Caste and Scheduled Tribe Families

2.1 Houseless Scheduled Caste Families

In Kollam district there were 5870 Scheduled Caste houseless families in the year 2004. Every year there is an increase of 15 to 20% houseless families. Every year around 2000 families are being assisted to construct residential houses by

various agencies. Still the problem is acute in Kollam Corporation, Chithara Grama panchayat in Chadayamangalam Block; Elampalloor and Mayyanad Grama panchayats in Mukhathala Block; Pavithraswaram, Vettikkavala, Kulakkada and Mylam Grama panchayats in Vettikkavala Block and Kulathupuzha Grama panchayat in Anchal Block. In all these LSGIs the proportion of Scheduled Caste population is high.

By 2021 the number of houseless people shall have to be brought down, for which integrated efforts by Scheduled Castes Development Department, LSGIs, RDD and Fisheries is required. Period of implementation is 2008-09 to 2020-2021.

During this period around 16000 families need to be given housing grant, for which, at the existing rate the total outlay required is Rs.120 crores. This resource can be mobilized by integrating housing schemes of Scheduled Caste Development Department, Rural Development Department, Local Bodies, Fisheries etc. (See Annexure - I). This proposal will generate a moderate employment for skilled

and semi skilled labourers.

2.2 Houseless Scheduled Tribe Families

Houseless among Scheduled Tribes is concentrated in Kulathupuzha, Chithara, Piravanthoor, Thenmala and Aryankavu Grama panchayats. Because of the peculiar cultural background of Scheduled Tribes, new houses should be in consonance with their tradition and characteristics. They should not be shifted from their original living environment as they find their livelihood from such environment. Period of implementation is 2008-09 to 2020-2021.

At present the rate of financial assistance for each house is Rs.100000/- . So in order to assist 364 Scheduled Tribe families, an investment of Rs.3.64 crores is required. Besides, provision shall have to be made for providing housing grant to the houseless who are additionally added during the period from 2008 to 2021. It is worked out to be around 160. So the total outlay required for providing houses to all the Scheduled Tribe families by 2021 is Rs.5.2 crores (See Annexure - II). This proposal will generate an employment of 18200 man days/ yr.

3. Rehabilitation of Landless Scheduled Caste and Scheduled Tribe Families

Ownership of a piece of land is considered to be a symbol of status in our society. Hence the scheme for providing land to the landless is a vital and prestigious project to be undertaken.

3.1 Landless Scheduled Caste Families

There are about 5500 landless SC Families in the district and the number is increased by 5% every year due to multiplication of families. The landless Scheduled Caste families are mainly concentrated in Kollam Corporation, Chithara, Kulakkada, Mylom and Pavithreswaram Grama Panchayats. The suggested locations include all the Grama Panchayats with emphasis to Chithara, Elampalloor, Mayyanad, Pavithreswaram, Vettikkavala, Kulakkada, Kulathupuzha, Punalur, Paravoor Municipality, Kollam Corporation. Period of implementation is from 2007-2008 to 2020-2021.

By 2021 we have to provide land to around 8200 Families. At present, every year around 700 families are being assisted

by agencies like Scheduled Caste Development Department, LSGIs, Fisheries Department etc. To bring down the number of landless Scheduled Castes families by 2021, the total investment requirement comes to Rs.41 crores. Resources for this scheme can be mobilized by integrating scheme for landless of various departments(See Annexure - III).

3.2 Landless Scheduled Tribe Families

The problem of rehabilitation of landless ST families is not so severe as they are generally seen only in Aryankavu and Thenmala Grama panchayats. More than 100 landless Scheduled Tribe families have already been rehabilitated in Kuriyottumala in Piravanthoor Grama Panchayat recently. The suggested LSGIs are; Aryankavu Thenmala and Kulathupuzha Grama Panchayats. Period of implementation is from 2007-2008 to 2010-2011.

However, we have to provide land to the remaining 8 families as well as the landless families additionally added to the existing list due to multiplication of families.

The task of providing land to those STs who live outside the forest will be undertaken by Revenue, and Scheduled Tribe Departments. Since the revenue of forest land is to be provided to them investment for the project cannot be forecasted at this stage. As far as the STs living inside the forest area, the Tribal Act, 2006 ensures all possession rights over the forest land in which they inhabit. As per Article 2.5 of Chapter 43A; (Forest), this will be considered while preparing the Working Plans. Total cost for the proposal would be Rs10 lakhs.

4. Proposals for Educational Assistance

Education is considered, to be a catalytic agent of development of any community, especially SC and ST s who were deprived of education for centuries. So these communities can be brought to the main stream of the society only through educational programmes. So while formulating policies and programmes for these sections of society, emphasis need to be given to the overall educational development also.

Now the SC and ST Development Department earmark more than 70% of

their budget for educational development of SC and ST pupils. Financial assistance in the form of lump-sum-grant, monthly stipend, hostel facilities etc are being provided to them from pre-primary level onwards.

The student's dropout from these sections is comparatively high and hence appropriate remedial measures are to be taken in this respect also.

4.1 Pre-Primary Schools

SC and ST Development Department is running pre-primary schools so as to impart Kindergarten form of child education. But the facilities available are quite inadequate. The suggested locations (Table 48.1) are the Grama Panchayats of Oachira, Thevalakkara, Kollam Corporation, Thrikkadavoor, East Kallada, Elampalloor, Kalluvathukkal, Kulathupuzha, Kadakkal and West Kallada. Period of implementation is from 2007-2008 to 2020-2021.

As mentioned in Article 4.1.1 of Chapter 26, in Kollam District there is 6 Pre - Primary schools under SC Development Department.

In these schools, besides free child education, Rs.5/- per child per day is given for mid-day meals and two sets of uniforms (at a cost of Rs. 200/- for a child) per year and Rs. 100/- as lump-sum-grant are given to each SC student. 25% of seats of these schools are reserved for non SC students and they are also given all benefits except lump sum grant. Pre-primary education becomes costly in our state and the poor SC families cannot afford cost of such education. Hence at least one nursery school need to be started, in those blocks where there is no such schools under SC Development Department, so as to minimize scarcity of schools for SC children. Employment generated after completion will be 20. Total cost for the proposal includes expected recurring expenditure of Rs 12.10 lakhs per annum and capital expenditure of Rs 1.10 crores.

4.1.1 Setting up of new Nursery Schools

Suggestions for setting up of new pre-primary schools are detailed below. (See Annexure – IV)

As per Article 3.1 of Chapter 44; (Education) it is suggested that the pre-primary schools run by the General Education Department can be expanded

Table.48.1. LSGIs where new pre-primary schools are to be located

| Name of Block | No. of children to be admitted in each school | Expected recurring expenditure per year at the present rate |
|--------------------|---|---|
| Oachira | 60(LKG.30 | 1,10,000 |
| | UKG30) | |
| Karunagappally | 60 " | 1,10,000 |
| Chavara | 60 " | 1,10,000 |
| Kollam Corporation | 60 " | 1,10,000 |
| Anchalumoodu | 60 " | 1,10,000 |
| Chittumala | 60 " | 1,10,000 |
| Mukhathala | 60 " | 1,10,000 |
| Ithikkara | 60 " | 1,10,000 |
| Sasthamcottah | 60 " | 1,10,000 |
| Anchal | 60 " | 1,10,000 |
| | 600 | |

to include all the Scheduled Caste and Scheduled Tribe pupils with out separate fund.

4.2 Pre-metric Studies

Primary Schools

As far as SC/ST students are concerned, primary schools are available to them at walkable distance making the enrollment of SC and ST Children in Primary Schools almost 100%.

L.P.Schools

In Kollam district, there are 473 L.P. Schools (Table 48.2) where in 21648 SC students were studying and 206 UP schools (Table 48.3) in which 11355 SC students were studying as on 31st March 2007. Lump-sum-grant of Rs.140/- is being given to each SC student in L.P section and Rs.240/- to each SC student in

Table.48.2. SC/ST student strength in primary schools

| Name of Block | No.of schools | Present enrollment (No.of Students) | Projected Enrollment (No.of students) | |
|--------------------|---------------|-------------------------------------|---------------------------------------|--------------|
| | | | 2015 | 2021 |
| Chittumala | 23 | 1116 | 1300 | 1500 |
| Ithikkara | 30 | 1389 | 1550 | 1750 |
| Chavara | 29 | 1103 | 1300 | 1500 |
| Anchal | 48 | 1892 | 2070 | 2250 |
| Mukhathala | 23 | 1116 | 1300 | 1500 |
| Kollam Corporation | 35 | 1987 | 2150 | 2300 |
| Ochira | 19 | 1232 | 1400 | 1600 |
| Vettikkavala | 58 | 2983 | 3150 | 3300 |
| Chadayamangalam | 39 | 1693 | 1900 | 2100 |
| Kottarakkara | 49 | 1986 | 2150 | 2300 |
| Pathanapuram | 51 | 2021 | 2200 | 2400 |
| Sasthamcottah | 32 | 1132 | 1310 | 1500 |
| Anchalumoodu | 10 | 1015 | 1200 | 1400 |
| Karunagappally | 27 | 1003 | 1200 | 1400 |
| Total | 473 | 21648 | 24180 | 26800 |

Table.48.3. SC/ST student strength in U.P schools

| Name of Block | No.of schools | Present Enrollment | Projected Enrollment | |
|--------------------|---------------|--------------------|----------------------|--------------|
| | | | | |
| Chittumala | 11 | 1051 | 1200 | 1400 |
| Ithikkara | 23 | 1345 | 1500 | 1700 |
| Chavara | 10 | 751 | 900 | 1100 |
| Anchal | 15 | 852 | 1050 | 1200 |
| Mukhathala | 11 | 710 | 900 | 1100 |
| Kollam Corporation | 12 | 416 | 600 | 850 |
| Ochira | 9 | 299 | 500 | 700 |
| Vettikkavala | 15 | 563 | 750 | 900 |
| Chadayamangalam | 28 | 915 | 1100 | 1300 |
| Kottarakkara | 20 | 1047 | 1200 | 1350 |
| pathanapuram | 20 | 795 | 1000 | 1200 |
| Sasthamcottah | 15 | 795 | 1000 | 1200 |
| Anchalumoodu | 3 | 501 | 700 | 950 |
| Karunagappally | 14 | 789 | 1000 | 1200 |
| Total | 206 | 11355 | 13900 | 16600 |

U.P. section. As far as STs are concerned in addition to lump-sum-grant they are being paid monthly stipend also. Total cost for the proposal would be Rs 8.25 crores.

Upper Primary

Cost of providing educational assistance to SC/ST students in U.P schools is Rs.5.18 crores.

High School

In Kollam district 12274 SC students are studying in 230 HS's (Table 48.4). Almost all the Gramapanchayats have at least one high school. So, SC students may have a high school with in a radius of 6 Kms. They will get Rs.330/- as lump-sum-grant. Here also ST students are getting monthly stipend. Total cost for educational assistance to SC/ST students in high schools would be Rs 7.5 crores.

There is problem of dropouts, though not serious, it has to be addressed with the help of Education Department and Local Bodies. (Annexure 5).

Almost 90% of SC/ST students are studying either in Government or Aided Schools. Unless the learning ability of these students are improved through concerted efforts, their competitive efficiency will be severely affected and they cannot compete with those who come from well placed schools.

4.3 Post - Matric Studies

On completion of S.S.L.C, students are offered different courses according to their choices. Majority of them go to HSS or VHS courses. In almost all the Post - matric

Table.48.4. SC/ST student strength in High Schools

| Name of Block | No. of schools | Present Enrollment | Projected Enrollment | |
|--------------------|----------------|--------------------|----------------------|--------------|
| | | | 2015 | 2021 |
| Chittumala | 15 | 511 | 700 | 900 |
| Ithikkara | 20 | 1294 | 1500 | 1700 |
| Chavara | 11 | 742 | 900 | 1150 |
| Anchal | 26 | 1257 | 1350 | 1500 |
| Mukhathala | 12 | 700 | 900 | 1100 |
| Kollam Corporation | 22 | 1079 | 1300 | 1500 |
| Ochira | 19 | 1067 | 1200 | 1350 |
| Vettikkavala | 17 | 537 | 800 | 1000 |
| chadayamangalam | 14 | 987 | 1200 | 1400 |
| kottarakkara | 25 | 968 | 1200 | 1400 |
| Pathanapuram | 20 | 1036 | 1250 | 1400 |
| Sasthamcottah | 11 | 749 | 900 | 1100 |
| Anchalumoodu | 5 | 559 | 750 | 900 |
| Karunagappally | 13 | 788 | 1000 | 1150 |
| Total | 230 | 12274 | 14950 | 17550 |

courses seats are reserved for SC and ST students in Government and aided institutions.

For Plus 1 course, 20% of the total seats are reserved for these two communities; (15% for SC and 5% for ST), in VHS course total reservation is 12% with respective reservation of 8% and 4% for SCs and STs. So almost all the students who seek for admission to these courses will get admission. However a few of them will not get admission to the subjects of their choice.

This course is a turning point as far as SC and ST students are concerned. Since large majority of students who got admission in these courses fail at the final examination because of the following reasons.

- I General intellectual backwardness
- I Inadequate facilities in their households
- I Lack of parental attention
- I Lack of special consideration at the school

These problems are to be properly addressed at the first year itself, so as to equip them to pass the course. The students, especially from poor families are not getting admission to professional courses because of the absence of proper guidance, backwardness and poor standards of performance in higher secondary classes. The issue is also addressed in Article 2.1 of Chapter 44; (Education).

Students of post matric courses are entitled a lump-sum-grant at the rate of Rs.715/- and a monthly stipend Rs.405/- to those students whose residence is within

8 kms and Rs.475/- if beyond 8 Kms.

Selected students from SC/ST communities are to be given special coaching for Medical, Engineering, LLB entrance examinations. Total cost for the proposal would be Rs 104 crores.

4.3.1 Degree and Post Graduate Courses

As part of general education around, 30% of those who pass Higher Secondary course join for degree course in various subjects. Now a days, conventional courses are being replaced by new courses. But most of the SC/ST students are not aware of such courses because of lack of information or guidance. A special centre, needs to be set up to give information and guidance to them regarding various modern courses. Degree students are entitled for a lump-sum grant of Rs.790/- and monthly stipend at the rate given in Higher Secondary Courses. As far as P.G. students are concerned lump-sum-grant rate is Rs.1010/-

For degree courses 20% of the seats are reserved and for P.G. courses 10% seats are reserved.

4.3.2 Vocational and Professional Courses

SC and ST students are entitled to 10% reservation in all vocational and professional courses but those who are now studying in vocational and professional courses got admissions mainly in reservation seats. Those who get admission on merit are very negligible. So to improve their competitive efficiency, it is proposed to set up three coaching centers

for entrance examinations with an average in take of 150 students. More over, one nursing college may also be set up in the district exclusively for SC students in line with the nursing school now functioning at Asramam, since new career avenues are opening up in nursing field.

Anticipated Expenditure for the new proposals

(a) Setting up of coaching centres.

The suggested locations are Punalur Municipality and the Grama Panchayat of Kundara and Karunagapally. This will generate employment to 25 persons.

- I Cost of setting of 3 temporary centres -Rs. 300000/-
- I Tuition fee for entrance coaching for 450 students -Rs.4500000/-
- I Establishment charges of coaching centers -Rs.150000 (Recurring)

(b) Setting up of Nursing College

The suggested location is at Kollam Corporation.

Cost of setting up of Nursing College (land to be provided by Revenue Department or Kollam Corporation).

- I Construction of College Bld. and Hostels - Rs.10000000/-
- I Estt.charges (recuring) - Rs.1500000/- per annum

5 Post-Matric Hostels and other facilities

Because of the diversification of professional and vocational courses, a large number of SC/ST students are coming from distant locations. So they are compelled to reside in private hostels where they are unable to afford hostel charges.

Hence two more Post matric hostels, for boys and for girls, may be set up in the central and eastern part of the district to benefit those who come from remote areas of the district. The estimate for setting up of post-matric hostels is given below.

- I Cost of building (Land will be provided by Government -Rs 15000000/-
- I Estt. Charges (recurring) -Rs 600000/-

I Other facilities -Rs. 1000000/-

The new institutions can be setup only with the help of SCDD and LSGI but for which decision at the highest level i.e., at the State level is required. The suggested locations are Kottarakkara, Karunagapally and Punalur. Article 46 of the constitution directs that the state shall promote with special care the educational and economic interests of weaker sections of the society, especially, SCs and STs and protect them from all forms of exploitations. Keeping this in view Parliament has amended Constitution to incorporate new fundamental rights under the title Right to Education. So it is the duty of State to promote the educational interests of SCs and STs to bring equity and equality in the society.

The phasing of selected LSGIs is as shown in Table 48.5.

Table.48.5. Phasing of establishing post metric hostels

| 2009 | 2010 | 2011 |
|---------------|---------|--------------|
| Karunagapally | Punalur | Kottarakkara |

6. Drinking water Programme

In certain parts of the District, drinking water is not available round the year. People have to spend more time to fetch water from distant places. Mainly the affected areas are located in the eastern and Hilly parts of the District, where large water supply schemes are not feasible. Mini water schemes are advisable in such location. Interventions are required at all the LSGIs in eastern part of the District and the Coastal LSGIs.

The problem can be settled with the help of local bodies and Rural Development Department. Rajeev Gandhi drinking water supply scheme, a centrally sponsored scheme, can be implemented for solving the drinking water problem of SC/ST habitats.

The phasing of LSGIs selected is as shown in Table 48.6.

Table.48.6. Phasing of selected LSGIs for providing drinking water facilities in SC/ST habitats

| LSGIs to be covered Year wise | | | | | |
|---|--|---|--|--|---|
| 2008 | 2009 | 2010 | 2011 | 2015 | 2016 |
| Pathanapuram, Piravanthoor, Kulathupuzha, Punaloor Municipality, Aryankavu, Thenmala, Chithara, Pavithreswarom, Neduvathoor, Valiyom, Kadakkal, Eror, Nilamel, Thalavoor, Ummannoor, West.Kallada, Kalluvathukkal, Mundro Island, East.Kallada, Nedumpna, Kulakkada, Perinad. | Kollam Corporation, Punaloor Municipality, Allappad, Mayyanad, Karunagapally, Oachira. | Pathanapuram, Piravanthoor, Kulathupuzha. | Punaloor Municipality, Aryankavu, Chithara, Thenmala, Chavara, Panmana | Villakkudi, Clappana, Thevalakkara, Sasthamcottah, Ittira, Ezhukone, Thrikkadavoor, Elampalloor, Poothakkulam. | Chadayamangalam, Pooyappally, Panayam, Sooranadu South, Mynagapally, Kulasekharapuram, Neendakara, Adhichanallor. |

7 Electrification of Un-electrified Houses

Consumption pattern of electricity is considered as a yard stick of development or backwardness. Quite a large no of SC and ST houses are still not electrified, though electricity has reached their door steps. So the thrust should be for a shift from electrification of colony to electrification of individual Houses, as most of the colonies are electrified, but a large no of individual houses are not electrified.

SC and ST Development Departments and KSEB together have taken a board initiative to electrify individual houses for which data of unelectrified houses are being collected with the help of SC promoters and local bodies. A clear picture would be available only after compilation of such data. The goal is to provide electricity to all SC and ST Households by 2010.

The Table 48.7 gives the LSGI wise list of colonies to be covered under the scheme in each year.

The electrification of unelectrified SC/ST houses will be given high priority by the Power sector as per Article 5 of Chapter 47; (Power). Where ever there is no possibility of extending electric lines or cable, as in the case of deep forest areas, solar energy shall be provided as suggested in Article 2 of Chapter 47;(Power).

8. Reduction of unemployment

Unemployment among SCs and STs is proportionately very high when compared to their counterparts in non SC/ST category. Interventions are required at all the LSGIs by RDD, SCDD, STDD. Even those who possess Degree, P.G, T.T.C. and other technical and professional qualifications are remaining unemployed despite reservation and such other facilities. In Kollam district around 25000 educated SC and ST youth got their names registered in employment exchange.

This highest incident of unemployment among this group is attributable to their

intellectual backwardness, poor competitive efficiency and lack of entrepreneurial ability to undertake self employment ventures.

So a three pronged approach is required to mitigate the problem. They are:-

I Improving competitive efficiency and thereby exploiting the opportunity available in the employment market. Modern era is the era of competition and survival of the fittest is the slogan. So without competitive efficiency none can get employment

I Posts reserved for SC/ST should be filled up at the right time itself and reservation should also be the provided in private sector.

I Imparting entrepreneurial ability to setup self employment ventures on their own.

This goal can be achieved only with great determination and dedication by the various agencies engaged in SC/ST development.

9. Bringing down SC and ST BPL families to Zero Level

BPL SC/ST families are to be assisted so as to raise them APL. This is a very gigantic task and an integrated effort of LSGIs, Rural Development / Agriculture / Animal Husbandry / Fisheries/Industry / SC and ST Development Departments is required.

Besides, the self employment schemes implemented by LSGIs, Rural Development / Industries / SC Development Departments have a very novel self employment scheme which gives the largest subsidy for individual enterprises in the State. Individual projects costing up to Rs 3 lakhs shall be considered for assistance and maximum subsidy of Rs.1 lakh shall be given. Joint venture projects costing up to Rs.10.50 lakhs can be considered and maximum subsidy of Rs.3.50 lakhs can be given. Intensive campaign is to be

Table.48.7. Electrification of un-electrified houses in SC/ST colonies/ habitats

| LSGIs to be covered Yearwise | | |
|---|---|---|
| 2009 | 2010 | 2011 |
| Kodivila, Vengoor, Ozhukupara, Chanthonikkavu, Kottakkavila, Cheriyavelinalloor, Akkal, Kannangodu and Nettayam Laksham veedu Colony in Elammadu Panchayat. | Gandhi nagar Colony, Chamavila Jayanthi Colony, Ambipyka Laksham veedu Colony, Njaliyodu Kaluvottankuzhi vayal, Chckkala Bhagom SC Colony in Elampalloor Panchayat. | Pullankuzhikanalpurampokku Colony in Mayyanad Grama Panchayath. |
| Kunnathazhikathu Thekkevila Colony, Parayarukonam Thekkekkara Colony, Poovathu Colony and Karunthalakkodu SC Colony in Nilamel Grama Panchayat. | Partavattom Bambi Colony, Thodiyodu Colony, Pathekkar Colony, Ashtamangalam Colony, Maniyoor Pthan Colony and Chottukuzhy Colony in Punalur Municipality. | Kottayekkam Colony, Chirakkara Settlement Colony and Velamannoor Ambedkar Colony in Kalluvathukkal Grama Panchayat. |
| Pavoor SC Colony, Thumbodu SC Colony, Edayannoor SC Colony, Vannam kadayil Chunda, Kovoor vayala and Kutyamoottil in Ittiva Grama Panchayat. Karakkal Sc Colony, Kollamvila Colony, Plankuzhi Colony, Kollamgodu Colony, Kundaramukku, Kokkottukonam, Panayarkunnu, Periyakkodu, Mundukonam, Kokkadu Colony and Mottokunnu Laksham veedu Colony in Velinalloor Grama Panchayat. | Andoorpacha SC Colony and Valuparampil Sc Colony in Thenmala Grama Panchayat. | Plavarakkunnu Charuvila and Mukkadu Vedar Colony in Chirakkara Grama Panchayat. |
| | Chottadi chathippu, Anakkulam, Elavoor, Konamkodu, Vadakkekkone kottavila, Kochirayil, Ward XV, Ward XVI and Ward XI colonies in Alayamon Grama Panchayat. | Kattuvapoyika Settlement Colony in Paravoor Municipality. |
| | | Pulikkunni Colony and Konathu Colony in Pattazhi Grama Panchayat. |
| | | Kadampura Colony in Piravanthoor Grama Panchayat. |
| | | Priya Estate, Aikoor, R.L.Y. Sector, 27 mala and Cheemamulakkal colonies in Aryankavu Grama Panchayat. |
| | | Arinalloor, Manalil and Velloorkkonam colonies in Eroor Grama Panchayat. |
| | | SC Colony Thakaramon in Kulathupuzha Grama Panchayath. |
| | | Chemmakkadu SC Colony in Panayam Grama Panchayath. |

conducted to propagate various self employment schemes and to induce SC and ST youths to undertake self employment ventures.

10. Providing Healthy and Hygienic living Environment

Around 60% of the SC population is living in colonies which are located in urban slums, coastal areas and other neglected areas where the environment is unhygienic and unhealthy. Because of these they are more vulnerable to contagious and infectious diseases. So their living environment should be made hygienic,

otherwise it would pose a great threat not only to their health but also to other groups.

The following suggestions are made in this regard:

- I Provision for latrines to all SC and ST families.
- I Provision for supplying Safe drinking water (without contamination of waste and other disposals)
- I Provision for proper disposal of waste water and other hazardous waste materials.
- I Intensive awareness campaign on maintenance of hygiene in their

surroundings.

Following agencies can be involved in this effort viz. Rural Development Department, LSGIs, Health Department, SC and ST Department.

Detailed survey for ascertaining the requirements of sanitary latrines and construction of retaining walls and drains will be started during the current year itself.

11. Organising Awareness Camps

One of the major hurdles which development departments face is ignorance among the scheduled caste population on schemes for their

development. Hence awareness camps, distribution of palmphlets etc. is to be arranged.

12. Conclusion

Scheduled Caste and Scheduled Tribe people are facing so many developmental as well as educational problems. It is the duty of the state to address these problems in a phased manner. The sectoral analysis report has pointed out certain specific problems for which urgent action is needed. Accordingly certain concrete suggestion has been

stemmed up and appropriate proposals have been crafted as part of preparation of IDDP.

The sectoral and spatial analysis of SC and ST sector reveals that substantial progress has been made in their life through various Govt. programmes. However, there are serious distortions in some developmental areas such as education, engagement in business and industry and possession of land and other assets. These are to be properly addressed, for which certain concrete

proposals have been included. Major thrust has been given to education sector. At the same time providing land and constructing dwelling houses also is given much importance. To inculcate entrepreneurial ability in these vulnerable groups, starting of self employment ventures has been proposed. In order to improve the quality of life of SC / ST people, co-ordinated efforts of different departments and integration of various schemes are inevitable. We may hope that this can be brought about n

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Chapter 49

Tourism

This chapter includes the Development Proposals of Tourism sector based on the District Development Policies and Strategies derived from the sectoral and settlement studies, spatial analysis and the District Development Concept.

1. Introduction

According to the district Tourism Policy, by 2021, Kollam has to optimally utilise its natural resources, art, culture and heritage and showcase the district as a slice of Kerala- God's own Country and as a model of responsible tourism destination for all seasons. The strategies for this are briefed as follows.

I Developing Back Water Tourism

According to the analysis, it is seen that Kollam has backwaters which are ecologically sensitive but having immense tourism potential. In order to optimally utilize this resource it is essential to develop the backwaters without affecting its environmental sensitiveness. In order to

achieve this strategy, the major proposals for developing Back Water Tourism include the Terminal Complex Development at Kollam boat jetty for promoting the Ashtamudi backwater tourism, beautification of Kollam Canal, preservation of natural and cultural heritage on the shores of backwaters and beaches of Kollam, smart waterway terminal cum water sports centre and introducing eco-friendly floating cottages in the backwaters.

I Developing Beach Tourism

The number of under utilized beaches in Kollam is yet another potential resource in the district as identified in the sectoral analysis. In this, the major proposals include development and beautification of Kollam beach, development and beautification of Thangassary break water beach, development of Thirumullavaram and Mundakkal Beaches, under water marine aquarium at Kollam Corporation, beautification of Paravur beach,

development of Pozhikkara beach and deep sea fishing cruise terminal complex at Neendakara.

I Promoting Eco Tourism

For the conservation and preservation of our rich natural resources, eco-tourism is planned in selected locations within the district. By augmenting the tourism attractions in sustainable manner and scale preservation of such natural resources the district can be developed into a model responsible tourism destination.

I Promoting Destination Developments

As identified in the sectoral analysis, if the tourists who are presently bypassing the district have to be made to stay at Kollam, selected potential destinations in the district have to be developed. In this connection, the major proposals include development of tourism hub at Perinad (Village Tourism Facilitation Complex), destination developments like Destination

Paravur, Destination Ashramam, Destination Sasthamkotta etc. and Poothakulam Village tourism proposals.

I Promoting Cultural and Traditional Tourism

As evident from the analysis, Kollam is fairly rich in its cultural and traditional activities and it has a number of heritage precincts to be conserved or adaptively reused. Setting up of a 'Museum of Kollam' and a 'Houseboat Construction yard cum Museum of Traditional crafts', setting up of handicraft villages, setting up of an 'interpretation center for History and Literature' and conservation of heritage precincts are the major proposals.

I Promoting Pilgrim Tourism

As per the findings of analysis, most of the pilgrim centers in Kollam lack infrastructure facilities and there is potential for promoting a number of festival activities. So proposals for these are also incorporated.

I Generating a Tourism Network

In order to make Kollam a better tourist destination, development of tourism networks are suggested. The networks include Beach-Backwater tourism circuit, Pilgrim – Eco tourism circuit, Heritage tourism circuit and a Village tourism circuit.

I Developing marketing facilities and enhancing tourism promotion

Tourism as an industry has to be marketed properly to make it more revenue and employment generating which will lead to local economic development. Some suggestions are put forward in this regard.

I Attracting Private investors

Majority of tourism activities in the district are presently operated by private players with the department of Tourism and DTPC acting more or less as facilitators. Tourism is an activity which has wide range to accommodate more private investors in the field. A few suggestions are also given to attract investors and unemployed youth towards tourism activities in the district.

2. Proposals based on Type of Tourism

2.1 Back Water Tourism Proposals

2.1.1 Ashtamudi Backwater Tourism Terminal Complex at boat jetty Kollam

As identified in the analysis, Ashtamudi is one of the major backwater tourism destinations in the State. The project envisages setting up of a state-of-the-art

Houseboat terminal complex at Kollam Boat jetty, the major transit point in the backwater, to serve it as a facilitation complex with international standard and features. The suggested location is at Kollam Corporation.

The land required, to the extent of 25 cents, is available at the proposed site. The existing offices of DTPC, KSWTD and the Pay and Use Toilet complexes have to be replaced from the location and can be conveniently relocated within the new terminal complex. The terminal complex shall comprise of Houseboat Terminal, Tourist Information Centre, Backwater Cruise Reservation Center, Travel Agency, Money Change, Communication Centres, ATMs, Souvenir shop, Pay and Use Toilet complex, Retiring Rooms, Dormitory, Restaurant, Refreshment parlors, Cafeteria, Books, Beauty Parlors, Ayurvedic spa, Parking space, Holiday shop, Library, Internet center, Courier Centre, Bio-treatment plants etc. The houseboat terminal project will be designed in consultation with the Inland Navigation Division, Kollam. Period of implementation is 2008-2009.

Permissive sanction from the Inland Navigation Division, Corporation of Kollam and KSWTD is required to commence projectisation. PWD Roads Division can also be linked with this project since the link road project is passing adjacent to the above site. The Pollution Control Board can contribute by giving technical advice on proper technology for the disposal of waste. Estimated cost for the implementation of the proposal would be Rs 80 lakhs. Employment generated after completion will be 30.

2.1.2 Beautification of Kollam Canal – Ashtamudi to Eravipuram (Phase -1)

As mentioned in the sectoral analysis, in order to develop Kollam Canal not just as a waterway but as a tourism corridor, as well, beautification measures have to be taken to make it more tourist attractive. The core purpose of the project is to revitalize the grassroots on the shores from Ashtamudi Lake to Eravipuram. The project aims to landscape both sides of the canal banks into a tourist attraction besides promoting organic cultivation of high yielding variety of all common trees and plants viz Pinapple, Pappaya, Mango, Cashew, Vegetables and other fruit bearing

plants by utilizing the entire vacant land along the canal bank.

The main components of the project are 1.Landscaping, 2.Lighting 3.Basic amenities, 4.Walkway, 5.Angling Rods and accessories, 6. Bicycles for village ride, 7. Country craft boat with life Jackets and lifebuoy, 8.Solar lighting 9. Decorated showcase for sale and display of local handicrafts / souvenirs etc.The angling can be incorporated as per the proposal on game fisheries given in Article 4.3.1 of Chapter 38.

The project has direct linkages with Agriculture, Fisheries departments and Pollution Control Board in the implementation level. The LSGI can play the role of a co-ordinator since it is a PPP model project.

2.1.3 Beautification of Kollam Canal– proposal for setting up of Kaayaloram-Responsible Tourism project for Ashtamudi and Paravur Backwaters (Phase - 2)

'Kaayaloram' – A chain of lakeside huts to encompass multipurpose facilities to receive tourists under the franchise of Kerala Tourism to reconnect the life and landscape of Backwaters. Proposal is for setting up of Kaayaloram-Responsible Tourism Project- for Ashtamudi and Paravur Backwaters. The suggested locations are at Kollam Corporation and Paravur Municipality.

The core purpose of the project is to revitalize the grassroots on the shores and islands of Ashtamudi lake and Paravur lake by linking them to offer some activity based tourism so as to help them to earn an additional income out of it, thereby reconnecting the life and landscape of our backwaters. The project aims to set up lakeside huts attached to their residential plot for providing facilities for angling, dining, resting and recreation. Replacing the existing toilet units with bio-toilet unit with quality sanitary wares to ensure minimum standard, forms part of the project. Promoting organic cultivation of high yielding variety of all common trees and plants viz Pinapple, Pappaya, Mango, Cashew, Vegetables by utilizing the entire vacant land within the compound is also aimed at. The project aims to ensure economic, social and environment responsibility through tourism. Period of Implementation is from 2008-2010.

The main components of the project are 1. Traditionally and eco-friendly designed hut with a projecting platform towards the lake –‘Angling hut’ – to accommodate minimum 4 persons, 2.A make-shift dining provision, 3.A hammock, 4.A standard toilet unit 5.Angling Rods and accessories, 6. Bicycles for village ride, 7. Country craft boat with life jackets and lifebuoy, 8.Solar lighting, 9.Decorated showcase for sale and display of local handicrafts / souvenirs. The angling can be incorporated as per the proposal on game fisheries given in Article 4.3.1 of Chapter 38.

The project has direct linkages with Agriculture and Fisheries sectors and Pollution Control Board in the implementation level. The LSGIs can play a co-ordinators role and in the selection process of beneficiaries for sanctioning the unit, since it is a PPP model project. Cost for the implementation of the proposal is estimated as Rs 25 lakhs.

2.1.4. “Paithrikatheeram”-Preservation of natural and cultural heritage on the shores of backwaters and beaches of Kollam

The objective of the proposal is the preservation of natural as well as cultural heritage on the shores of backwaters and beaches from Kannettil to Ayiramthengu. As the shores are part of the Kollam – Alappuzha backwater cruise channel, it has tremendous potential in developing tourism by setting up all the basic amenities, without compromising the preservation of natural as well as cultural heritage. The main components are renovation of boat jetties, signage, road development and lighting and landscaping, parks, tourist facilitation centres, pavilion for boat races, introduction of pleasure boats/water sports complex etc.

Land is one of the key issues for initiating the development process since, most of the sites are owned by various Departments and some under private ownership. The LSGIs can co-ordinate the process of obtaining permissive sanction from the custodian of land at the proposed tourist destinations across the channel. The Departments of Irrigation, PWD and Agriculture are directly linked in the developmental process. Period of implementation is 2008-2010. Employment generated after completion will be 100. Cost for the implementation of the proposal

is estimated as Rs 25 lakhs.

2.1.5 Smart waterway terminal cum Water sports Centre

The project aims at activity based tourism to explore the potential of growing demand for backwater based tourism, rivers etc. It also aims to develop the potential of unseen backwater / river locations which have connectivity to the villages, highways, historical places etc. Water sports centers are proposed at Thanni, Mukkam, Vattakayal, Edava, Nadayara, Kallada and Kennetti.

This project is basically meant for the development of infrastructure facilities to suit the requirements for the promotion of various water sports, pleasure boating, adventure aqua sports etc. As part of the proposal, water pavilions are proposed in certain locations to promote boat races conducted by various organizations. Introduction of variety Pleasure Boats, Floating Boat jetties, Floating restaurants, Aqua-Adventure facilities, Water pavilions etc are also envisaged. Period of implementation is 2008-2010.

As the non availability of land is the major issue in the implementation of this project, land has to be made available by the LSGIs concerned. The irrigation department can be involved in issuing permissive sanction for the proposals as well as to provide technical details for the construction and design of boat jetties and other infrastructure facilities. Pollution Control Board can be intervened to ensure proper management of waste and other related affairs with respect to the boating operation. Employment generated after completion will be 200. Estimated cost for the implementation of the proposal would be Rs 50 lakhs.

2.2 Beach Tourism Proposals

As mentioned in the Sectoral Analysis, there are a number of potential beaches in the district including Kollam, Thangassary, Thirumullavaram, Mundakkal, Paravur and Pozhikkara. In order to make the coastal belt more attractive, following proposals are suggested.

2.2.1. Development and Beautification of Kollam Beach

The project aims at developing one of the major domestic tourism hubs of Kollam district, the Kollam beach. The objective is to develop facilities and services and to add more attractions to suit the

requirements of growing domestic tourism demand. The location of Kollam beach is most ideal because of its close proximity to Kollam town. The excellent road connectivity and sufficient area for future development are major features of the Beach. Most importantly, the Beach is ideally located at the opposite side of the upcoming Water Sports Centre at Kochupilamoodu enroute the proposed Coastal Road connecting Kollam Paravur. The water sports center is one of the key attractions along the T.S Canal passing parallel to the Beach. Considering all the key developmental aspects it is proposed to develop the Kollam Beach as a key attraction of Kollam.

The project envisages a major revamping of all the existing facilities. Landscaping and lighting will be done in a state-of-the-art design. A walkway, mandapams, Pay and Use toilets, Tourist Information Center, kiosks for refreshments, latest playing equipments for children's park, redesign of open amphi theatre, seating provisions, parking area redesign, aquarium etc are planned in the proposal. The project report is already prepared by M/s.KITCO, Ernakulam and it has got approval from the Department of Tourism under Tsunami Rehabilitation Project. The Harbour Engineering Department will implement the project. As the park and beach are now under the control of Corporation of Kollam, permissive sanction from the Council is required for the finalisation of plan submitted by M/s. KITCO. An amount of Rs 2.35 crores is the estimated cost of the project. Period of implementation is 2008-2009.

The major agency involved is the Corporation of Kollam because the park is under their control. The Harbour Engineering Department has to complete all the required formalities for the successful implementation of the project in liaison with the Corporation of Kollam. The PWD Roads Division occupies a major role in ensuring better connectivity to the Beach. All roads providing access to the Beach may be converted as a Model Tourism Roads with state-of-the-art features of a tourism road. Proper landscaping, lighting, walkway, signage, parking / busbay, waste management systems etc to be incorporated in the road development project. The participation of

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Kudumbashree and other micro level agencies can be ensured in the maintenance and management of gardens and the up-keep of the entire road stretch and the beach. The Pollution Control Board can intervene by suggesting appropriate technology for the management of waste. The fund will be provided by the Department of Tourism from the TRP allocation. Employment generated after completion will be 25.

2.2.2 Development and beautification of Thangassary Break water Beach

The project aims at developing Tangassery as a Heritage beach of Kollam. The century old lighthouse and the historical links associated with Tangassery are still untouched in the tourism scenario. The breakwater could be a major attraction. A journey through the breakwater is interesting. Visit to the lighthouse and the panoramic view from there is much enchanting and has become a source of attraction among the tourists. The Fort of Tangassery which is now taken over by the ASI has a strong historic connection. In order to tap the historical as well heritage potential of Tangassery, the development of Beach is the need of the hour. Keeping this in view, a project report for the development of Tangassery Beach is prepared by M/s.KITCO as per the direction from the Department of Tourism, as part of incorporating the project under Tsunami Rehabilitation Project. The objective of the project is to develop the facilities and services and to add more attractions to suit the requirements of both domestic and foreign tourists. It is anticipated that the proposed Coastal Road will have the connectivity to Tangassery. Considering all the key developmental aspects in the future, it is proposed to develop the break water beach at Tangassery, to make it a preferred destination by tourists.

The project envisages the development of a beach with proper landscaping, lighting, walkway, basic amenities, signages; children's play area, Kiosks, Tourist Information Centres, etc. M/s. KITCO is preparing the project report and the Harbour Engineering Department will implement the proposal by utilizing the fund from the Department of Tourism. An amount of Rs.2.35crores is the approximate cost of the project. Period of

implementation is 2008-2009.

As the land is under the control of Harbour Engineering Department, their sanction is required for the implementation of the project. The Public Works Department, Environment Department etc can be involved in the developmental interventions and Kudumbashree can actively participate in the project after its completion by way of undertaking the maintenance of garden, cleaning activities etc. Employment generated after completion will be 25. Total cost for the implementation of the proposal would be Rs 2.35 crores.

2.2.3 Development of Thirumullavaram and Mundakkal Beaches

The proposal envisages the development of basic amenities at Thirumullavaram and Mundakkal Beaches. The components are basically landscaping, lighting, beach umbrella, life saving equipments, Pay and Use toilets, seating, Tourism Information Centre etc.

Thirumullavaram and Mundakkal are the two prominent beaches having potential for pilgrim tourism promotion. Basic amenities are much lacking at both the places. Lot of pilgrim tourists (domestic) are visiting these two beaches during the month of July / August. Accessibility is very good because both the beaches are located in the Corporation area. The beach at Thirumullavaram is a picturesque one and unique in nature.

As the two beaches are situated within the corporation area and the land adjacent are with the private owners, no developmental activity is materialized yet. The solution is to acquire the required land or to have joint ventures under private-public partnership. Department of Tourism may initiate steps for the acquisition of land or to fund the private-public partnership project for the implementation of basic amenities for the development of Beach Tourism. The LSGIs may also be involved in liaison with the local people or to procure required land by seeking financial assistance from the people's representatives of jurisdiction. Employment generated after completion will be 100. Estimated cost for the implementation of the proposal would be Rs 1 crore.

2.2.4 Under Water Marine Aquarium

The project envisages setting up of an under water Marine Aquarium to experience under water marine life. The

suggested location is at Kollam Corporation.

The technical know how in connection with the setting up of the aquarium has to be availed in consultation with the Fisheries Department and Central Marine Research Organizations etc. The idea is to ensure free movement through an artificial glass chamber which provides visual life of the sea – marine life- to a certain extent. The land based terminal, attached to the coastal area, can act as entry point cum facilitation centre. Period of implementation is 2008-2009. The proposal can be linked with the oceanarium proposal of Article 4.3.3 of Chapter 38.

The Department of Fisheries, Govt. of Kerala and Govt. of India occupy a lead role in materialising the proposal. Identifying suitable site for the project is also most important because the visual impact of the life under the sea has to be ensured. Kollam beach is most ideal for the setting up of such an under water aquarium due to the presence of natural reef and related components. Department of Tourism may provide necessary financial sanction for the project. The Local Self Government can also take part in the project by providing sufficient land for the proposal. Employment generated after completion will be 100. Total cost for the implementation of the proposal would be Rs 3 crore.

2.2.5 Beautification of Paravur Beach

This project aims at the development of beach tourism. Beautification of Paravur Beach and introducing Eco-friendly floating cottages in the backwaters is proposed.

The scenic coastal line and the close proximity of backwaters along with the National Waterway channel passing through Paravur, make the location an ideal spot for the development of tourism. As part of Tsunami Rehabilitation Plan, it has been decided in principle to develop and beautify beach from Kappil to Paravur. Once the beach is developed under the above scheme, it will be attracted by more people. Moreover, the project for the construction of coastal road connecting Paravur – Thangassery is in pipeline. All these infrastructure interventions will definitely add the need of tourism facilities. Accommodation facilities have to be improved in tune with the future requirements.

As the land availability is going to be a major problem in the background of CRZ, eco-friendly floating cottages can be introduced in Paravur Backwaters to meet the requirement of tourists.

The project envisages introduction of eco-friendly floating cottages, restaurants, Ayurvedic spa, pavilions for yoga, cultural programmes etc. in an eco-friendly manner. A floating boat jetty will also to be included in the existing Water Safari Park under the DTPC. The road stretch adjacent to the Beach Park has to be kept as a tourism corridor with proper lighting, walkway, parking area, gardening, signage etc. The land for the development has to be ensured by the Municipality and the line Departments concerned.

The permissive sanction from Irrigation Department is required for the preservation interventions in the backwaters, construction of Boat jetty and licencing of eco-friendly floating cottages. Harbour Engineering Department and Paravoor municipality may also be involved. The Fisheries Department can be involved in making the area a fishing friendly zone. Traditional fishing operations may be encouraged here so that tourists can participate in local fishing activities with the local fisherman. The fish products could be effectively marketed for tourists. Direct benefits of tourism can be more linked here through activity-based tourism with the participation local fisherman. Environment Department and Pollution Control Board may also be intervened in giving the technical know-how for implementing high-end waste management /disposal units for using in the floating vessels. Organic cultivation has to be encouraged with the local participation, so as to make the shores of backwaters more green meanwhile local sale of organic fruits/vegetables etc is also made possible. Employment generated after completion will be 200. Estimated cost for the implementation of the proposal would be Rs 5 crores.

2.2.6 Development of Pozhikkara Beach

The project envisages landscaping and developing of Pozhikkara Beach as a tourist attraction. A Beach Facilitation Centre cum Children's Park may also be set up at Pozhikkara.

The components of the proposals are landscaping, lighting, seating, walkway,

kiosks, basic amenities etc. The dilapidated building owned by the PWD buildings may be converted as the Beach Facilitation Centre. As Pozhikara is one of the most scenic location, the developments proposed will bring more attraction, thereby more tourists, especially domestic tourists will visit the place. Period of implementation is 2008-2009.

The PWD buildings division and LSGI can contribute in two ways. PWD may give permissive sanction for converting the building as a Beach Facilitation Centre cum Children's Park. The LSGI may allot required land at the beach side for the development. DTPC may be act as the operational agency for the Beach Facilitation Centre and all other components in the project can be operated through LSGI. The Department of Tourism may accord financial assistance for the project. Employment generated after completion will be 50. The estimated cost for the implementation of the proposal would be 50 Lakh.

2.2.7 Deep sea fishing cruise terminal complex at Neendakara

The project envisages setting up of a terminal complex for deep sea fishing cruise with all basic amenities. The suggested location is at Sakthikulangara. The proposal can be linked with deep sea fishing tour proposal of Article 4.3.4 of Chapter 38.

The components of the proposals are state-of-the-art facilities for boarding fishing boats, Information center, Sea-food Restaurant, Marine Aquarium, Route map and other basic amenities for the tourists as well as crews. The basic amenities like Dormitory, Pay and Use toilets, Kiosks for ATM, Travel Agency, Money change, Souvenir shops etc. will also be included under the project. Period of Implementation is 2008-2009.

The Department of Fisheries occupies a lead role in identifying suitable site for the project. The boat yard at Sakthikulangara is most suitable for the setting up of the terminal complex. The Chief Inspector of Boats, Department of Coast Guard may also be consulted for the technical clearance for permitting tourists to accompany the fishing boats to enjoy deep sea fishing process. The terminal complex may also act as information cum facilitation center for adventure fishing

cruise tourism. PWD Roads may develop the access road to the proposed site. Employment generated after completion will be 50. Cost for the implementation of the proposal would be Rs 1.5 crores.

2.3 Eco Tourism Proposals

This project aims at conservation and preservation of our rich natural resources, which are diverse in nature. The ponds, high-ranges, mangroves are a few. In order to augment the tourism attractions in sustainable manner and scale, preservation of such natural resources are most important and inevitable. Eco-tourism is planned at Chittumala chira, Muttara Maruthimala and Ayiramthengu which are the potential precincts identified in the Sectoral analysis.

The project envisages preservation and conservation of natural resources and makes it a source of attraction for the tourists. Basic amenities in tune with ecology of that area are planned to meet the requirements of tourists. The components of the project are 1.Trekking path, Information and Facilitation Centre, Landscaping, Parks, lighting, signage, camping facilities etc. Period of implementation is 2008-2010.

Forest Department, Revenue Department and Fisheries Department are directly linked with the project because the land is owned by them and their permissive sanction is required to utilize the land for the eco-tourism activities without disturbing the existing utility of the land. Agriculture department can be directly involved in landscaping since organic cultivation is preferred in landscaping works at most of the above locations. The concept of a 'self-contained park by ensuring natural – organic fruits and refreshments is planned at the above locations other than the construction of Kiosks and typical restaurants. Fisheries Department can be involved in fishing tourism and it can be more practical and beneficial way to achieve direct economic benefits to our local fishermen in selling their products. Employment generated after completion will be 50. Total cost for the implementation of the proposal would be Rs 2 crores.

2.4 Destination Development Proposals

These are specific tourism destinations identified for converting the district from a mere transit tourism destination to a

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responsible tourism destination.

2.4.1 Development of Tourism hub at Perinad – Village Tourism Facilitation complex

A major tourism hub identified in the District Development Concept is at Perinad. The project envisages setting up of a Village Tourism Facilitation Complex to promote village tourism. The center will act as a Gateway of Village Tourism.

The components of the proposal are state-of-the-art Village Tourism Facilitation Complex to showcase the attractions of backwater villages, village festivals, culture, traditional crafts, etc. The basic amenities like Dormitory, Pay and Use toilets, Kiosks for ATM, Travel Agency, Tour Operation, Souvenir shops etc. will also be included under the project. Rs 5 crores is the anticipated expenditure for the project. Period of implementation is 2008-2010.

The Local Self Government shall play a major role by identifying land for the setting up of the project. Connectivity from both waterway and road way is important. The Inland Navigation Division and PWD Roads may evaluate the existing conditions and prepare detailed project reports to improve / modernize the Road / Canal path. As given in Article 4 of Chapter 42, this area will have better accessibility after the completion of NH 220. Department of Tourism, Govt. of Kerala and Govt. of India may provide sufficient fund under rural tourism project for the infrastructure development. Employment generated after completion will be 100.

As per article 5.1 of Chapter 37, an elephant ride is proposed at Perinad in order to attract tourists to this place.

2.4.2 Destination Paravoor

The tourism sector in Paravoor is depending on the sea coast and back waters. Paravoor is included in the coastal tourism circuit of Kovalam–Varkala-Kollam-Alappuzha. Therefore the concentration of tourism activities will be in the coastal area and Paravoor- Nadayara back water area of Paravoor. Being an environmentally sensitive area, environment friendly tourism is the policy suitable to the tourism sector of Paravoor. Hence large scale tourist complexes are not suitable. Local level infrastructure development, giving importance to the

natural beauty, should be promoted for tourism development. Apart from proposals in Articles 2.2.5 and 2.2.6, adequate advertisements regarding tourism potential, road and rail facilities to reach Paravoor and facilities for staying in are to be provided. Construction of road signs, widening and protection of the T.S canal, construction of boat jetty / boat service for tourists, home stay facilities, back water/ canal bank roads development, tourist information centre, developing Website, look out area near Malappuram mosque, heritage museum near Puttingal temple, Elephant rides, Angling platforms at Paravoor and Nadayara back waters, Way side traditional restaurants etc. are suggested.

2.4.3 Destination Ashramam

The project envisages preservation of Ashramam and Ashtamudi area by revamping and landscaping the entire area comprising the Adventure Park and Children's Park at Ashramam.

The components are mainly beautification and landscaping of the Ashramam area with due importance to preserve the natural attractions. Major revamping of Children's Park is envisaged. The Adventure Park will be revived as a eco-tourism zone with more adventure activities in association with National Adventure Foundation. The vacant land surrounded by the Guest House and Parks will be converted as a Green Exhibition Ground. Period of implementation is 2008-2009.

The fisheries Department can be involved in making Adventure Park as a fishing friendly zone. Traditional fishing operations may be encouraged at Adventure Park, so that tourists can participate in local fishing activities with the local fisherman. The fish products could be effectively marketed for tourists. Organic cultivation has to be encouraged with the local participation, so as to make the Ashtamudi and Ashramam greener. Kiosks for the sale of organic fruits/vegetables etc may also be provided. Employment generated after completion will be 20. Total Cost for the implementation of the proposal would be Rs 2 crores.

2.4.4 Destination Sasthamkotta

The proposal is to preserve the natural attraction of the lake and to promote its heritage value as a tourist attraction.

The proposal envisages the preservation of lake with landscaping and beautification in eco-friendly manner. The components consist of walkway, organic cultivation, solar lighting, bio toilets / treatment plants for waste disposal, mandapams, kiosks for organic fruit/ refreshment parlour, boat jetty, fishing pavilion etc. The suggested location is at Sasthamkotta.

The LSGI has to issue permissive sanction for the project since the entire land is under the control of LSGI. The Water Resources Department may also be involved in the preservation initiatives of the lake. The agriculture department can be linked in promoting organic cultivation on the banks of the lake. Estimated cost for the implementation of the proposal would be Rs 2 crores.

2.4.5 Poothakulam Village tourism

The project aims to exploit the potential of village tourism with the participation of Poothakulam Grama Panchayat. The objective is to develop village tourism considering the pond as the center of attraction.

The project envisages the preservation of the pond and to incorporate some basic amenities and services viz. beautification and landscaping of pond, setting up a park, introduction of pleasure Boating, Angling, lighting, signage, Children's playing equipments, Boat Jetty etc. The total project cost is expected to be Rs. 20 lakhs and out of this Rs 10 lakhs will be supported by the Department of Tourism under the scheme – 'My village-Tourism friendly village'. Period of implementation is 2008-2010.

As this project is conceived under the village Tourism scheme of Department of Tourism, the project report has to be prepared and got approved by the LSGI. A maximum of Rs 10 lakhs or 50% of the total project cost, whichever is less shall only be sanctioned by the Department of Tourism. No fund will be provided for the acquisition of land. The LSGI has to ensure availability of sufficient land well before the preparation of the project. The Irrigation, Fisheries and Agriculture Departments can also be involved in this project by giving necessary interventions in the areas viz. technical support in the construction of boat jetty, supply of fish and development of organic fish farming, organic cultivation of

fruit / flower plants etc.

2.5 Cultural and Traditional Tourism

2.5.1 Museum at Thevally Palace

The project aims to have a Museum of Heritage and History of Kollam to showcase our rich past in a most appropriate manner and scale. It is proposed to house the museum at the Thevally Palace, due to its in-depth linkage with the formation of Kollam. The project is to convert the Thevally palace as a museum of History and Heritage of Kollam with due importance to the History of Kerala.

At present the NCC wing occupies the Palace. The location of the Palace is strategic, as it lies on the shore of Ashtamudi Lake. The Archeology Department of Kerala may be entrusted to prepare a detailed project on the subject matter. The restoration of the palace building has to be incorporated in the project report. Period of implementation is 2008-2010.

The Department of Tourism has to provide fund, since it is a tourism project. The Revenue Department may intervene to get the building back to Archeology Department. Approximate cost for the implementation of the proposal would be Rs 1 crore.

2.5.2 Houseboat Construction Yard cum Museum of Traditional Crafts at Alumkadavu

The proposal envisages setting up of a 'Houseboat Construction Yard cum Museum of Traditional Crafts' at Alumkadavu. The objective is to showcase the traditional houseboat making practices as a tourism product and make it a centre for tourist attraction. A houseboat terminal complex is also proposed under this project. A demonstration centre for exhibiting the art of making kettuvallams and a design centre for making of variety souvenirs are also planned under this project. The village – Alumkadavu – will also be form part of the project and a village route map will be prepared connecting all the houses of traditional artisans and their work place to ensure tourist visits. Period of implementation is 2008-2010. Employment generated after completion will be 10. Estimated cost for the implementation of the proposal would be Rs 15 lakhs.

2.5.3 Handicraft Villages

The proposal envisages promotion of unique handicrafts of Kollam – Screw pine

craft and straw picture craft at Thazhava and Kadavur. Model facilitation cum exhibition centre may be set up at the above locations to showcase the unique craft form and to facilitate sales and marketing of products to the tourists. The centre will provide authentic demonstrations of various processes involved in the craft making and will contribute in raising the economic status of the local people involved in that industry. The suggested locations are at Thazhava and Kadavur.

The components of the project include setting up of a facilitation centre having facilities for demonstration of the process, display of articles, sales room, accommodation for craft workers, basic amenities like toilets, ATM, Communication/ Courier centre, Packing unit, etc. In addition, it is proposed to improve the basic infrastructure facilities required for the promotion of the craft workers in their respective locations. Walkways connecting houses engaged in craft making, lighting, renovation of work shed for the craftsmen, signage, route map, branding support, promotion and publicity etc are also planned as part of the proposal. Period of implementation is 2008-2009.

The LSGIs occupies a lead role in identifying suitable site and land for the construction of Craft Facilitation Centre. The Co-operative sector, Kudumbashree units, SHGs etc can also take part in materializing upgradation of basic amenities and improvements suggested in the proposal. The Departments of Tourism, Industries and Handicrafts can co-ordinate in preparing time bound action plan in tune with the proposed development interventions. Employment generated after completion will be 100. Estimated cost for the implementation of the proposal would be Rs 50 lakhs.

2.5.4 Interpretation center for History and Literature

The project envisages showcasing the rich historical heritage of the place Mayyanad. An interpretation center cum facilitation unit will serve its purpose to reconnect the past of Mayyanad. State of the art audio-visual aids could be set up to ensure effective dissemination of information and interaction. Mayyanad may be projected as a center for history and literature of Kollam where one gets complete information about the eminent personalities

of Mayyanad. The suggested location is at Mayyanad Grama Panchayat.

The components of the proposal will be state-of-the-art facilities for the display/ documentation of history / literature / archives etc. A facilitation complex for rest and reading has also to be included. Audio/video facilities also are to be set up at the center. Proper study for the documentation is also inevitable before setting up the center. Period of implementation is 2008-2009.

The Local Self Government may involve in identifying suitable land for the setting up of the center in an appropriate location having easy access and parking. The study on the historical/ literature contributions of Mayyanad has to be undertaken by an expert panel under the auspices of Educational institutions, NGOs, LSGI etc. DTPC will have to open up a Tourist Information Centre at the center. Special cultural shows, exhibitions etc has to be conducted at the center. Employment generated after completion will be 20. Estimated cost for the implementation of the proposal would be Rs 50 lakhs.

2.5.5 Development of Heritage Precincts

The proposal envisages proper documentation of all the natural and cultural heritage precincts in Kollam and to initiate restoration and preservation activities along with minimum interventions for creating basic amenities – lighting, walkway, signages, road, etc so as to explore its tourism potential. Development of such a circuit will certainly contribute a premium tourism product of Kollam. Conservation, preservation and adaptive reuse are the major strategies. LSGIs, Dewaswam Board, Private parties owning the precincts etc. would be the major stakeholders. All the listed heritage precincts in the district are to be conserved.

2.5.6 Special Cultural Activities

In order to revive the traditional art forms, folk arts, classical arts etc. of Kerala, a traditional cultural festival is planned under the title-Utsavam-. A calendar of variety traditional art forms has been charted out for each district and it will be conducted in two venues near to a tourist destination. The department of tourism will fund the project. DTPC may document all such traditional art forms / festivals and

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provide suitable platform for their shows and promote them extensively in tie up with the private sector, line departments etc. LSGIs can also take a lead role in identifying art forms / handicrafts / traditional / indigenous form of work / festival/etc.

2.5.7 Health Tourism

Health tourism facilities can be established in both public and private sectors. The tourism hub at Perinad will be a major hub for health tourism facilities as well. As mentioned in Article 3.4.8 of Chapter 40; Health, Ayurveda can be effectively marketed through the fast growing health tourism concept. Also as mentioned in Article 3.3.8 of Chapter 40, it is suggested that the Directorate of ISM shall have licensing control over the approval of such facilities.

2.6 Pilgrim Tourism

2.6.1 Pilgrim Centre Infrastructure Development

The project envisages the creation of basic amenities for tourists by way of setting up of Pilgrim Facilitation Centers. Cultural heritage is having strong sense in tourism promotion. The diverse festivals and temple rituals are having tremendous

promotion, brochures and leaflets on festivals, facilities for seating etc. Period of implementation is from 2008-2010.

2.6.2 Proposal for the Promotion of Festivals of Kollam

The proposal aims at complete documentation of festivals of Kollam to showcase the cultural contributions of Kollam. A festival calendar comprising of all relevant data and schedule of events will be prepared in this regard. A festival facilitation center will also be launched to ensure proper facilitation to the visiting tourists at each festival venue.

The components of the proposal include documentation of festivals, preparation and compilation of data, printing of brochures etc. It is planned to create a website exclusively for the festival calendar / highlights, souvenirs, CDs of festivals etc.

3. Proposed Tourism Network

In the Sectoral analysis, a major circuit, a transit circuit and a minor circuit have been identified and all the three of them are under utilized. So a net work has to be designed in order to at least make the Transit Circuit as Sub Major Circuit as

predominant role followed by Beaches and Hill stations, Art and culture and so on. The following are the proposed network of tourism destinations.

A. Beach-Backwater tourism circuit

This would be most ideal to attract tourists of both domestic and foreign. A corridor of beaches / backwaters can be prepared by including the following locations viz. Varkala-Kappil-Paravur-Pozhikkara-Eravipuram-Tangassery-Thirumullavaram-Ashtamudi-Alumkadavu-Amrithapuri-Ayirathengu.

B. Pilgrim – Eco tourism Circuit

A pilgrim eco-tourism circuit can be developed connecting the location viz. Kollam-Panmana-Amrithapuri-Oachira-Sasthamkotta-Malanada-Kottarakkara-Punalur-Palaruvi-Thenmala-Aryankavulathupuzha-Achankovil-Kottukkal-chadayamangalm.

C. Heritage Tourism Circuit

Developing a heritage tourism circuit is proposed linking the following centres: Ashramam-Kollamtown-Tangassery-Thevally-Panmana-Alumkadavu-Ayirathengu-Krishnapuram-Punalur.

D. Village Tourism circuit

A village tourism circuit is proposed in which the following route is followed: Kadavur-Perinad-Alumkadavu-Thazhava-Munroe Island - Kallada.

E. Ashtamudi Lake circuit

The primary focus is to develop and promote a water based tourism experience that would link key 'destination points' located along the stretch of the Ashtamudi Lake. These destination points could be developed depending on the availability of land for various cultural/ recreational activities.

The locations are as follows.

Gateway 1: KSRTC Jetty- Gateway 2: Thoppilkadavu Jetty- Sambranikodi Jetty- Veerabhadra Temple- Pattam Thuruth Church- Monroe Island- Palliam Thuruth Island. The Vellimon area in the Tourism hub as mentioned in Article 2.4.1 of this Chapter will be linked to this circuit.

Palliam Thuruth Island is proposed to be developed as a hub of this lake cruise tourism circuit as shown in Figure 49.2.

As per Article 5.2.1 of Chapter 38 a base station with kayal patrolling facilities is proposed for the Marine Bio Reserve area. This facility will also be included in the Palliam Thuruth Island along with the

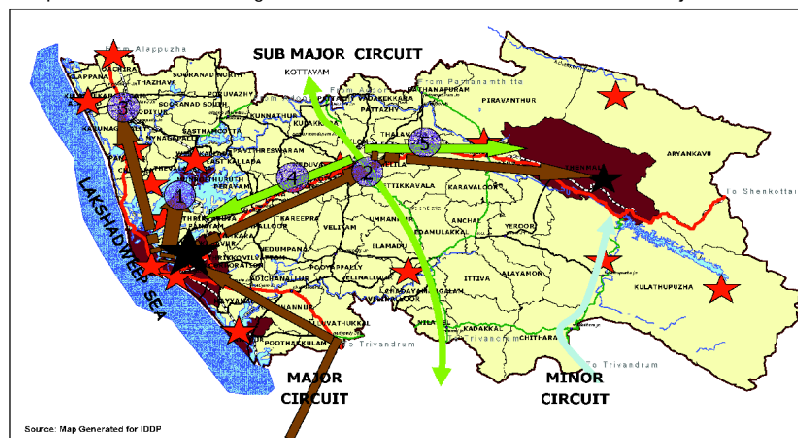


Fig 49.1. : Proposed tourism network

potential in marketing tourism. However basic amenities are lacking at many such locations. In order to manage the crowd, of both local and out station pilgrims, it is inevitable to have some quality basic amenities at such centres, to meet the requirements of pilgrims. Pilgrim Facilitation Centres are planned in association with the office bearers of the concerned temple/ church / mosque.

The project envisages a pilgrim facilitation center consisting of a hall, toilet blocks, mandapam, lighting, drinking water, preservation of natural ponds, signage for

shown in Figure 49.1.

Proper networking is essential in order to ensure effective marketing of destination – Kollam. Introduction of new tourism networks / circuits are very important to attain optimum growth. Improvement of basic amenities and promotion of existing tourism circuits are to be given priority, while creating sub-circuits and connected networks.

A network of tourism may be designed in terms of types of tourism alone or clubbed with major types of tourism. Among types of Tourism, Backwaters occupy

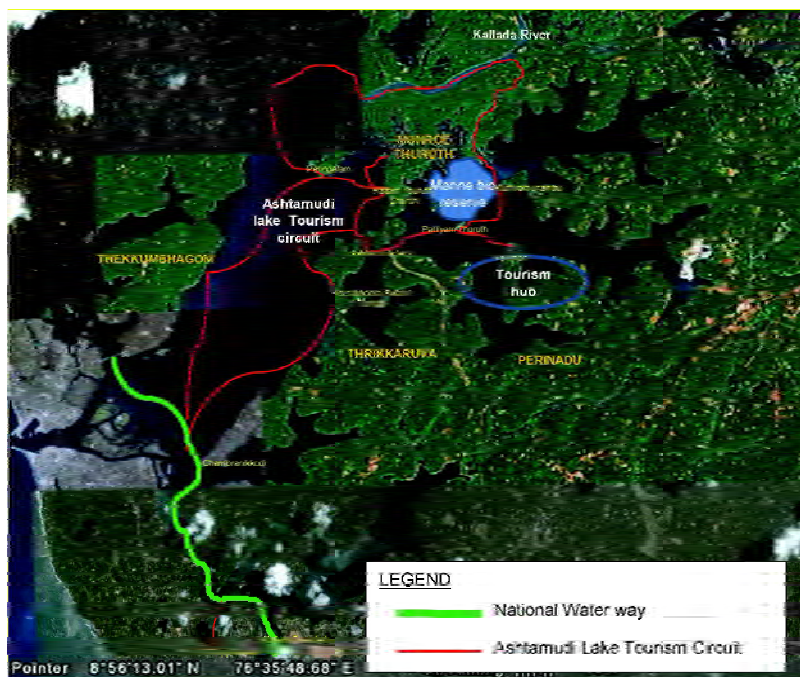


Fig.49.2.Ashtamudi lake tourism circuit

hub. Though the circuit bypasses the Reserve area, tourism activity will be totally prohibited in the marine bio reserve area. Further, the boats used in this particular circuit will be only those having in-boat engine facilities and kerosene powered engines will be prohibited.

4. Proposals for Marketing and Promotion

The essence of every industry is its Marketing and Promotion. As a service industry and being an intangible product, the survival of tourism is possible only through aggressive marketing and promotion. The campaign of 'God's Own Country' is the marketing campaign being used by the Kerala Tourism to position Kerala among the Tourism world. Similarly each district has to concentrate on identifying its unique selling proposition (USP) in tune with the state marketing campaign. Kollam is blessed with Backwaters, Hill stations and Beaches. The diverse festivals, Art, cultural / historical resources of Kollam make it a real slice of Kerala. The logo –Kollam-God's Own Capital is one of the most deserving captions to market its tourism potential. In order to ensure effective marketing of a destination private-public partnership is a must. The private sector occupies major role in marketing and promotion of a tourist destination.

As suggested in Article 3.2 of Chapter 26, a Calendar of major tourism events

shall be prepared. The primary objective is to make awareness among the stake holders as well as clients about the destinations. Brochures, leaflets, Travel Marts, Road shows, Publications, Advertisements in print / visual medias, Farm trips, Shopping Festivals, Events, Pilgrimage, CDs, website, Portals etc are the various sources of tourism marketing. Aggressive marketing with the participation of all stake holders are to be carried out in a time bound manner so as to attain optimum and comprehensive growth. Here the role of Dept. of Tourism is to conceive marketing strategies in tune with the international trends and focus. Priorities will be fixed by the Dept. of Tourism in promoting destinations /regions etc. At present, the thrust is being given to promote Malabar in the tourism map. Aggressive Marketing campaigns of Kerala Tourism consist of all tourism products irrespective of district boundaries. The role of DTPC is to identify new destinations / new concepts / new products/ indigenous festivals / art forms etc and collect authentic details and proposals. Festivals and events may be organized by DTPC so as to promote the destination (For eg. Paaramparya festival, Boat race at Ashtamudi, Folk art festival, etc) Department of tourism will provide fund for marketing such events within the national boundary. The LSGIs can take part in marketing by bringing all relevant details from grass root level including

documentation of the assets / resources both natural / cultural etc. The same may be brought to the notice of DTPC and local level promotion shows / festivals may be chalked out and later this will become a part of State level ad campaigns.

5. Proposals for Private Investors

The major part of the development of tourism lies in the private sector. The role of Government is to act as a catalyst for the development of tourism with the active participation of host community. The schemes, strategies and action plans for the development of tourism are planned with an objective to encourage private investment in tourism. There is extensive network of private sector ranging from Tour Guide / Tourist Taxi Driver to Star Category Hotel / entertainment firms. The Government is giving assistance to the prospective investors in terms of financial subsidy, tax exemption, concessions, single window clearance, marketing support, classification, certification, basic infrastructure facilities etc. The following are the on going schemes of Kerala tourism to attract investors and unemployed youth towards tourism which can be improved.

1. Home stay classification scheme
2. Tourism investment subsidy for Hospitality / tour / travel / houseboat / entertainment / handicrafts / Restaurant etc.
3. Classification scheme for Ayurveda Centre
4. Green Farms Scheme
5. Grihashthali scheme
6. Vazhiyoram – Way side amenity Centre
7. 'My Village Tourism Friendly Village' scheme – for LSGIs only
8. Town square development scheme – for Corporation/Municipality
9. Pilgrim Facilitation Centre scheme

As far as private investment is concerned Dept. of Tourism is occupying lead role in sanctioning incentives/ concessions/single window clearances / tax holidays etc as per the state policy guidelines.

The DTPC is doing district level liaison works in tune with the guidelines of the Dept. of Tourism. The role of DTPC may be redefined in two ways. Consultancy assistance may be provided on the scope/ feasibility of a tourism product/property development etc. The second thing is

preparation of a Land Bank concept. Such a land bank would be ideal and easy for potential investors to locate the land required for the development. The complete details of potential sites along with owner's details, extent, survey and maps may be prepared and made available for presentation before the prospective clients. DTPC can act as a facilitator between the client and the land owner.

Consultancy assistance may also be

provided with relevant projections and figures regarding the trend of tourism in district/state/national scenario. The LSGIs can co-ordinate in materializing the land bank concept in association with DTPC. Local level clearance for various issues relating to the investment may also be streamlined by LSGIs in association with DTPC.

6. Conclusion

It is expected that the proposals will indeed bring up the tourism industry in the

district. It may be noted that all the proposals are carved giving due consideration to the ecological aspects. This makes Kollam district a model responsible tourism destination. Through the implementation of these proposals in a time bound manner by 2021 better service and infrastructure facilities will be given to the visitors to the 'Gods Own Capital' by making Kollam a complete destination for all seasons n



Chapter 50

Finance

The Development Proposals of Finance Sector discusses mainly the sources of funds for the various development sectors for implementing the proposals suggested.

1. Introduction

Based on sectoral analysis, settlement analysis, spatial analysis and the district development concept, all the development sectors have carved proposals in a 20 year perspective. The finance sector attempts to identify the financial resources to implement these schemes.

2. Sources of Fund for Sectoral Proposals

There are different sources to raise funds required for infrastructure development. Capital structure is financed by long term sources which consist of debt and equity. Long term debt consists of loans

from term lending institutions and commercial banks. Debt also consists of funds raised through issue of debentures. While it is difficult to raise equity capital, it is fairly cheap compared to cost of borrowed funds from financial institutions (long term) and the commercial banks (short term) for working capital purposes.

To meet long term requirements of funds, securities are issued to public (issue of capital) by firms in the corporate sector and public sector. Securities represent claims on a stream of income or particular assets. Long term debts can be raised from development financial institutions (DFI) like SFC, SIDBI, IDBI, TFCI etc. NABARD also supports infra developmental schemes under RIDF.

Applicants can raise external commercial loans from any internationally,

recognized source including CBs, export credit agencies and suppliers of equipment, foreign collaborators, foreign equity holders and international capital markets subject to the rules of SEBI issued from time to time.

Lease finance is a cheap and flexible means of financing as compared to term loans from financial institutions. Here the lender books to the cash flow from the specific assets or collection of assets in which their funds are invested. Co financing with NABARD is another source.

Under Rashtriya Krishi Vikas Yojana, the GOI will provide substantial amount if state government contributes matching contribution on the basis of size of agri GDP of the state and the potential yield gap.

A new urban governance culture is required. Attempts are made to develop a

municipal bond market and FIs are creating a pool of money to fund this bond. JNNURM, is also providing subsidies/ grants ranging from 35 to 60% of project cost to municipal bodies by levying user charges.

Venture proposals of technocrats with high technology which are new and high risk are financed by venture capital funds.

Developing a long term debt market is a crucial element in infrastructure finance. A qualitative change in the entire financial environment is required.

The Indian financial system is undergoing an important phase of transition. The transition path should be flexible rather than prescriptive.

Simple derivatives such as plain vanilla interest rate swaps and forward rate agreements are required.

It is not merely getting money but it is the management of the use of money which is crucial. Returns to the investment in infrastructure course over a long period of time are an option.

To raise long term debt you should have a well functioning secondary debt market.

Infrastructure Development Finance Corporation's mission is not to provide capital but to lead capital.

Cost of capital can be reduced through more efficient financing ie. cost effective capital. Pension funds and insurance companies are holding huge funds at their disposal; which can be tapped. New classes of issues like municipal corporation bonds are alternative source.

Securitization will bring banks, housing finance and consumer credit companies into the market for their refinancing needs.

There is stamp duty on transfer of debentures issued by private sector corporates unlike PSUs.

DFIs are far better equipped than commercial banks with regard to long term financing of industry.

The future architecture of the financial system is viewed in terms of the kind of financial services that would be increasingly needed by our growing and fast changing economy.

We should not put DFIs in strait jackets, but allow them to remain innovative, flexible and agile.

The investor issues a bond as an investment a risky product, whereas he

sees the bank deposit as a safe product.

Any financial institution, while considering proposals of infrastructure finance, looks into whether the work would lead to desired objectives, appraises for technical feasibility, financial viability and economic benefit done. Total costs and total benefits are weighed. For bridges etc, the data on actual vehicular traffic will be collected and converted into standard passenger per unit based on a table. Travel time saved can be converted into man days and value arrived. Saving on vehicle operating cost can also be worked out. Then there are players like IL & FS to support infrastructure development. IL & FS (Infrastructure leasing and financial services Ltd) is one of India's leading infrastructure development and finance Companies. This company is promoted by CBI, HDFC, UTI with broad based share holding including of SBI, LIC, Abu Dhabi Investment Authority etc. IL & FS provides the complete array of services including development, finance, management, technology and execution.

Other independent source of funds

- I Grant funds from International Agencies.
- I Loans from ADB, World Bank etc.
- I Raising loans from LIC/ HUDCO/ IDBI/ ICICI
- I Municipal Bonds

There is a need for financial intermediary to pool the projects of various departments.

The Bond Bank can be formed at national level as a SPV or as subsidiary of the Financial Institutions.

FDI could be permitted through Financial Collaborations, Joint Ventures, Capital markets, Private placements or preferential allotments.

Enabling public - private – partnerships and government citizen partnership.

Institutions in Kerala supporting infrastructural development

- I KURDFC (Kerala Urban & Rural Development Finance Corporation Ltd). Incorporated in 1970 as a private Ltd. Co. subsequently converted into public Ltd. Co.
 - I Kerala Sustainable Urban Development Project.
 - I Kerala State Transport Development Corporation.
- Jawaharlal Nehru Urban Renewal

Mission schemes like UIDSSMT, BSUP etc. are encouraging States to innovate new funding mechanisms, which may prove beneficial in turning around urban infrastructure. Pooled finance development fund (PFDF) and credit rating of local bodies by the urban development ministry – have put the states to serious task. PFDF would help even smaller urban local bodies leverage market funds for improving infrastructure without the need of state guarantee.

Focus under JNNURM schemes has clearly shifted to implementation of projects and reforms, which include revamping of procurement/ contracting, tendering procedures, standardization of pre-qualification criteria etc.

Pooled finance mechanism has the objective of helping urban local bodies to reduce the cost of borrowings and restructuring of costly debt. Bonds issued under the pooled finance development fund scheme will be eligible for tax breaks. This facility can well be structured to satisfy both infrastructure funding needs of local governments and the investment criteria of investors.

Pooled financing can facilitate decentralization by providing financing mechanism to local governments so as to decrease reliance on state level guarantees and subsidies. The facility would also stabilize revenue streams and create an opportunity to tap the local capital market for infrastructure financing.

Cross Industry benchmarking

Cross-industry benchmarking holds the potential to provide 'innovative' and adoptable ideas from players across the industries. It can expose an organization to novel ideas if practices and data across industries are understood with meaningful insights and contextual inferences.

Public Private Partnerships

The key to make PPP acceptable is to create an environment where PPPs are seen to be a way of attracting private money into public projects and not putting public resources into private projects.

3. Suggestions on Sources of Fund

The different proposals submitted by the departments and the sources identified are given in Table 50.1.

Specific sources of fund are detailed in Appendix 50 – 1.

Table 50.1 : Details of proposals submitted by various Departments with source of fund

| Major Department | Proposals | Sources |
|----------------------|--|--|
| Education Loan Dept. | Education Institutions, literacy Programmes, Teachers Training programmes, Education through Libraries etc. | Budgetary allocation, RIDF of NABARD & Jilla / Grama Panchayat fund. |
| Minor Irrigation | Watershed development and land use | Fund allocation from Jilla Panchayat/ Grama Panchayat. RIDF from NABARD |
| Roads | National/ State High Way developmental Work | Budgetary fund of GOI/ StateRIDF & Jilla Panchayat/ Grama Panchayat Budget |
| Industries | Various industrial Development sectors like fishery products,dairy, Flour mills, Coir sector, Clay industries, Handloom Industries, Bamboo based Industries etc. | Bank loans for Individual entre-preneurs & NABARD schemes for common facility and Government Grants under Budgetary Allocation |
| Dept. of Medicine | Construction of hospitals and para medical institutions | Support of budget fund MP / MLAs fund, RIDF etc. |
| Agriculture Dept. | Food Processing centres Intensive cultivations, Productivity improvement Programmes, service centres Govt/etc. Promotion of high tech. Cultivation etc. | Bank loan,RIDF support ,Budgetaryfund of Gov/etc. |

4 Conclusion

As the Indian economy embarks on the process of globalization, it has become all the more important that our financial markets

remain healthy, strong and efficient. The financial sector reforms have provided a solid platform to launch the next phase of reforms after learning lessons from the past.

The different sources of finance described here can be utilized by the various agencies to suit to their requirements to successfully implement their proposals by 2021 n

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| Appendix 34-1 | | | | | | | | |
|---|---------------|-----------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| Paddy areas to be protected in each LSGI in Zone wise | | | | | | | | |
| Zone A | | | | | | | | |
| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| 1 | Kulathuppuzha | Kadamancode | 33 | 60 | | | | |
| | | Villumala | 3 | 8 | | | | |
| | | Thakaraman | 12 | 26 | | | | |
| | | Valiyela | 16 | 32 | 4 | 6 | | |
| | | Dally | 1 | 3 | | | | |
| | | Madathikonam | 5 | 16 | | | | |
| | | Kalluvettamkuzhy | 5 | 8 | | | | |
| | | Total | 75 | 153 | 4 | 6 | 0 | |
| 2 | Thenmala | Andoorpacha | 6 | 25 | | 6 | 12 | |
| | | Edamon | 9 | 50 | | 0 | 0 | |
| | | Cheruthannur | 10 | 28 | | 0 | 0 | |
| | | Uppukuzhy | 7 | 28 | | 0 | 0 | |
| | | Total | 32 | 131 | | 6 | 12 | |
| 3 | Piravanthoor | Athikal-Karimpalamkod | 6 | 20 | 2 | 6 | 1.7 | 6 |
| | | Punnala-Ela | 10.5 | 51 | 6 | 16 | 12 | 15 |
| | | Elikattoor Ela | 5 | 20 | 0 | 0 | 2 | 6 |
| | | Total | 21.5 | 91 | 8 | 22 | 15.7 | 27 |
| Zone B | | | | | | | | |
| 1 | Neduvathur | Pullamala | 12.32 | 58 | 1 | 8 | 0.5 | 4 |
| | | Thevalappuram | 8.78 | 45 | 1 | 9 | 0.5 | 5 |
| | | Thevalappuram-B | 16.108 | 51 | 3 | 25 | 1.5 | 12 |
| | | Thekkumpuram | 9.32 | 41 | 1 | 8 | 0 | 0 |
| | | Vallom | 1.7 | 13 | 0 | 0 | 0 | 0 |
| | | Annur | 8.62 | 31 | 1 | 9 | 0.4 | 3 |
| | | Anakkottur | 5.824 | 36 | 1 | 6 | 0.6 | 6 |
| | | Total | 62.672 | 275 | 8 | 65 | 3.5 | 30 |
| 2 | Pooyappally | Kottara | 15 | 73 | 0 | 0 | 0 | 0 |
| | | Chekkodu | 20 | 76 | 0 | 0 | 0 | 0 |
| | | Chempakasseri | 14 | 36 | 0 | 0 | 0 | 0 |
| | | Elavamkonam | 12 | 48 | 0 | 0 | 0 | 0 |
| | | Kozhikkodu | 10 | 34 | 0 | 0 | 0 | 0 |
| | | Nelliparampu | 10 | 47 | 0 | 0 | 0 | 0 |
| | | Chekulam | 34 | 100 | 0 | 0 | 0 | 0 |
| | | Kalikonam | 10 | 34 | 0 | 0 | 0 | 0 |
| | | Madavana | 14 | 44 | 0 | 0 | 0 | 0 |
| | | Marunthamompally | 27 | 88 | 0 | 0 | 0 | 0 |
| | | Punnakkodu | 14 | 60 | 0 | 0 | 0 | 0 |
| | | Mathiyodu | 16 | 73 | 0 | 0 | 0 | 0 |
| | | Parangodu | 14 | 65 | 0 | 0 | 0 | 0 |
| | | Total | 210 | 778 | 0 | 0 | 0 | 0 |
| 3 | Velium | Maroor | 8 | 42 | 6 | 0 | 0 | 0 |
| | | Kudavattoor | 9 | 49 | 7 | 0 | 0 | 0 |
| | | Neduvana | 7 | 39 | 0 | 0 | 0 | 0 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|-------|--------------|----------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| | | Thamarasseri | 5 | 3 | 7 | 0 | 0 | 0 |
| | | Karingola-Kanannor | 5 | 17 | 0 | 0 | 0 | 0 |
| | | Muttara | 6 | 27 | 0 | 0 | 0 | 0 |
| | | Pullanjikkadu | 7.5 | 29 | 8 | 0 | 0 | 0 |
| | | Paruthiyara Melayil | 0 | 0 | 6 | 0 | 0 | 0 |
| | | Total | 47.5 | 206 | 34 | 0 | 0 | 0 |
| 4 | Kottarakkara | Pandivayal | 30 | 55 | 34 | 0 | 0 | 0 |
| | | Thrikkannamangal | 25 | 52 | 0 | 0 | 0 | 0 |
| | | Neeleswaram | 20 | 58 | 0 | 0 | 0 | 0 |
| | | Ampalappuram | 30 | 65 | 0 | 0 | 0 | 0 |
| | | Total | 105 | 230 | 34 | 0 | 0 | 0 |
| 5 | Yeroor | Muzhathangu | 7.6 | 40 | 3 | 8 | | |
| | | Anchal | 16 | 65 | 0 | 0 | | |
| | | Ayuranelloor | 17 | 70 | 0 | 0 | | |
| | | Vadakkevayal | 16 | 52 | 0 | 0 | | |
| | | Thekkevayal | 5 | 15 | 5 | 10 | | |
| | | Padijattinkara | 16.2 | 62 | 0 | 0 | | |
| | | Puthady | 7.1 | 21 | 2 | 6 | | |
| | | Ayilara | 17.7 | 74 | 0 | 0 | | |
| | | Panayam | 17.4 | 76 | 2 | 5 | | |
| | | Total | 120 | 475 | 12 | 29 | | |
| 6 | Edamulakal | Kambamcode | 32 | 148 | 12 | 46 | 1 | 3 |
| | | Kaippally | 25 | 137 | 5 | 22 | 2 | 9 |
| | | Thangaravally | 7.5 | 83 | 0 | 0 | 0 | 0 |
| | | Nedumgottukonam | 15 | 117 | 0 | 0 | 0 | 0 |
| | | Kangivathara | 2 | 12 | 0 | 0 | 0 | 0 |
| | | Maroor | 2 | 14 | 0 | 0 | 0 | 0 |
| | | Thevarthottam | 23 | 98 | 2 | 13 | 0 | 0 |
| | | Kuttara-Maravor | 15 | 76 | 0 | 0 | 0 | 0 |
| | | Edayam | 3 | 17 | 0 | 0 | 0 | 0 |
| | | Pullamcode | 15 | 97 | 5 | 27 | 2 | 11 |
| | | Chirathekayal | 26 | 112 | 5 | 29 | 2 | 13 |
| | | Kokkad | 3 | 14 | 0 | 0 | 0 | 0 |
| | | Total | 168.5 | 925 | 29 | 137 | 7 | 36 |
| 7 | Karavaloor | Perumathuthara Ela | 6.5 | 29 | 0 | 0 | | |
| | | Thachancode | 3.62 | 19 | 0.5 | 3 | | |
| | | Erichikal | 4.66 | 15 | 0 | 0 | | |
| | | Panangattu | 2.84 | 11 | 0 | 0 | | |
| | | Narikkuzhi | 1.516 | 8 | 0 | 0 | 0.5 | 2 |
| | | Theriyottu | 2.616 | 11 | 0 | 0 | | |
| | | Kattupara | 4.708 | 18 | 0 | 0 | | |
| | | Karottu | 7.36 | 21 | 1 | 4 | | |
| | | Adakkalamoola | 8.12 | 22 | 1 | 3 | | |
| | | Puthuveetilchira | 11.5 | 33 | 0 | 0 | | |
| | | Vallattu | 9 | 34 | 1.5 | 2 | | |
| | | Madathil | 2.532 | 9 | 1 | 3 | 1 | 2 |
| | | Manjalara | 3.732 | 19 | 0 | 0 | | |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|-------|----------|---|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| | | Total | 68.704 | 249 | 5 | 15 | 1.5 | 4 |
| 8 | Alayamon | Kuttinadu-Karukone Ela Samithy | 14.47 | 57 | 1 | 5 | 20 | 7 |
| | | Elavoor Group farming Ela Samithy | 11.22 | 45 | 1 | 6 | 1 | 10 |
| | | Uthampallil Ela Samithy | 12.5 | 45 | 5 | 6 | 1.5 | 8 |
| | | Kodanloor-Anakkulam Ela samithy | 11.42 | 36 | 11 | 19 | 0.4 | 7 |
| | | Pullanjiyodu Valiyela Ela Samithy | 8.07 | 30 | 5 | 13 | 1.5 | 6 |
| | | Thazhee Meenkulam Vellaram culam Manacodu Ela samithy | 10.36 | 45 | 4 | 5 | 1 | 5 |
| | | Total | 68.04 | 258 | 27 | 54 | 25.4 | 43 |
| 9 | Anchal | Agustiacode Ela | 15 | 70 | 5 | 30 | 3 | 15 |
| | | Anchal Ela | 12 | 50 | 6 | 30 | 4 | 12 |
| | | Nediyara Ela | 5 | 30 | 8 | 40 | 2 | 5 |
| | | Mavila Ela | 8 | 40 | 4 | 20 | 2 | 8 |
| | | Areplachy Ela | 5 | 40 | 3 | 15 | 1 | 4 |
| | | Choranad Ela | 8 | 20 | 5 | 15 | 2 | 4 |
| | | Moolakonam Ela | 8 | 32 | 3 | 16 | 2 | 6 |
| | | Panayanchery Ela | 18 | 35 | 2 | 6 | 1 | 3 |
| | | Konalam Ela | 20 | 37 | 5 | 10 | 2 | 7 |
| | | Vadomon Ela | 17 | 36 | 3 | 10 | 1 | 5 |
| | | Arem Ela | 5 | 10 | 2 | 8 | 1 | 3 |
| | | Thazhamel Ela | 12 | 38 | 5 | 10 | 3 | 5 |
| | | Total | 133 | 438 | 51 | 210 | 24 | 77 |
| 10 | Nilamel | Poovathur | 6.8 | 29 | 0.2 | 3 | | 29 |
| | | Mulayakonam | 6.5 | 24.0 | 14.5 | 39 | | 24 |
| | | Kaithode | 6.5 | 16 | 10.5 | 30 | | 16 |
| | | Veykal | 2 | 4.0 | 8 | 21 | | 16 |
| | | Vellny | 2 | 3.0 | 9 | 26 | | 14 |
| | | Murukkuman | 6 | 13.0 | 10 | 22 | | 35 |
| | | Konnamkode | 2 | 5.0 | 3 | 4 | | 6 |
| | | Total | 31.8 | 94 | 55.2 | 145 | 0 | 140 |
| 11 | Elamad | Paramcodu samithy | 17 | 90 | 13.0 | 50 | 1.50 | 8 |
| | | Vengoor | 6 | 28 | 6.0 | 22 | 0.50 | 4 |
| | | Nettayam | 9 | 51 | 6.0 | 20 | 1.00 | 7 |
| | | Arappura | 7.5 | 51 | 4.5 | 15 | 1.50 | 9 |
| | | Arkannoor | 12.5 | 65 | 7.5 | 22 | 1.50 | 7 |
| | | Cheruvakkal | 7.5 | 50 | 7.5 | 19 | 1.00 | 5 |
| | | Cheriyavelinalloor | 10 | 57 | 8.0 | 26 | 1.00 | 7 |
| | | Karalikkonam | 5.5 | 20 | 4.5 | 12 | 0.50 | 5 |
| | | Mullassery | 10.5 | 44 | 9.5 | 29 | 1.00 | 8 |
| | | Thottathara | 14 | 65 | 8.0 | 21 | 1.50 | 9 |
| | | Total | 99.5 | 521 | 74.5 | 236 | 11 | 69 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|-------|-----------------|------------------------|-------------------|----------------|-----------------------|----------------|---|----------------|
| | | | Area (Ha) | No. of farmers | Area (Ha) | No. of farmers | Area (Ha) | No. of farmers |
| 12 | Chithara | Kanoor-Sathyamanglam | 1925 | 20 | 2.0 | 5 | Nil | |
| | | Karara-Arippal | 1250 | 23 | 2.0 | 3 | Nil | |
| | | Muthayil | 2802 | 43 | 2.0 | 7 | Nil | |
| | | Mathira | 2520 | 53 | 0.0 | 0 | Nil | |
| | | Thattupalam | 974 | 19 | 3.0 | 9 | Nil | |
| | | Chittara-Anjirakuzhi | 845 | 28 | 4.0 | 14 | Nil | |
| | | Chiravoor | 800 | 22 | 3.0 | 5 | Nil | |
| | | Total | 11116 | 208 | 16.0 | 43 | | |
| 13 | Ittiva | Thekkekkottukkal | 4 | 25 | 5 | 9 | 1 | 4 |
| | | Mundamon Kovoov | 14 | 32 | 8 | 14 | 1 | 5 |
| | | Nedumpuram | 3 | 20 | 4.5 | 8 | 0.5 | 3 |
| | | Chunda-Muttodi | 2 | 19 | 1 | 4 | | |
| | | Kathrikovil | 5 | 18 | 4.5 | 8 | 0.5 | 3 |
| | | Kavingal Thennayathu | 4 | 28 | 4 | 6 | | |
| | | Thrangode | 3 | 25 | 6 | 12 | | |
| | | Malapperoor | 1.5 | 8 | 1.5 | 5 | | |
| | | Vattappadu-Perumkular | 4 | 27 | 1.5 | 14 | 0.5 | 3 |
| | | Mannoor | 4 | 28 | 2.5 | 13 | 0.5 | 2 |
| | | Punnamon | 4 | 19 | 3 | 9 | | |
| | | Kadambra | 2.5 | 19 | 0.5 | 9 | | |
| | | Chanappara | 5 | 20 | 4.5 | 8 | 0.5 | 2 |
| | | Vayala Kottaram - Vath | 5 | 19 | 2 | 8 | | |
| | | Chambamon | 4 | 24 | 3 | 9 | | |
| | | Kaneeyarukonam | 7 | 39 | 6.5 | 18 | 0.5 | 2 |
| | | Keezhuthoni | 5 | 24 | 13 | 19 | | |
| | | W.Vayala | | | | | | |
| | | Total | 77 | 394 | 71 | 173 | 5 | 24 |
| 14 | Chadayamangalam | Kuriyode | 35 | 102 | 2 | 7 | | |
| | | Velloopara | 10 | 58 | 5 | 23 | | |
| | | Chadayamangalam | 18 | 60 | 7 | 18 | | |
| | | Edakkode | 8 | 30 | 2 | 12 | | |
| | | Poonkode | 6 | 22 | 4 | 14 | | |
| | | Karode | 8 | 26 | 2 | 11 | | |
| | | Akkonam | 5 | 13 | 3 | 10 | | |
| | | Total | 90 | 311 | 25 | 95 | | |
| 15 | Kadakkal | Vadakkevayal | 20 | 120 | 12 | 45 | 0 | 0 |
| | | Elampazhannur | 18 | 103 | 7 | 16 | 0 | 0 |
| | | Pullanjiyode | 3 | 21 | 2 | 8 | 1.5 | 5 |
| | | Thachonam | 5 | 29 | 4 | 18 | 2 | 7 |
| | | Edathara | 5 | 45 | 6 | 26 | 1 | 3 |
| | | Elavumkonam-Kummil | 9 | 59 | 3 | 12 | 1 | 4 |
| | | MuthayilKondodi | 20 | 58 | 3 | 13 | 0 | 0 |
| | | Mankad | 6 | 32 | 2 | 11 | 0 | 0 |
| | | Mankad-Nilamel | 15 | 108 | 3 | 16 | 1 | 4 |
| | | Anappara-Velloorela | 3 | 12 | 1.5 | 7 | 0 | 0 |
| | | Total | 104 | 587 | 43.5 | 172 | 6.5 | 23 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|-------|----------------|-----------------------------|-------------------|----------------|-----------------------|----------------|---|----------------|
| | | | Area (Ha) | No. of farmers | Area (Ha) | No. of farmers | Area (Ha) | No. of farmers |
| 16 | Velinalloor | Chenkor | 14 | 43 | 2 | 6 | 2 | 12 |
| | | Neduveli | 6 | 19 | 2 | 7 | 15 | 54 |
| | | Adayara | 2 | 11 | | | 4 | 18 |
| | | Alummode Vadavoor | 8 | 40 | 1 | 3 | 0.4 | 21 |
| | | Puthiyidam | 3 | 19 | | | 2 | 2 |
| | | Kalavayal | 10 | 41 | 1 | 6 | 1 | 6 |
| | | Orkkode | 10 | 49 | | | 1 | 7 |
| | | Kiliyoor-Meeyana | 6 | 24 | | | 2 | 24 |
| | | Aramannoor | 2 | 11 | | | 2 | 5 |
| | | Peruvanthode | 6 | 16 | | | 1 | 13 |
| | | Karamana Attoorkonam | 1 | 8 | | | 2 | 9 |
| | | Kattenil Cheriavelinallo | 1 | 7 | | | 2 | 7 |
| | | Total | 69 | 288 | 6 | 22 | 34.4 | 178 |
| 17 | Thalavoor | Kodumon-Velipra | 5.2 | 32 | 8.1 | 49 | 0.7 | 3 |
| | | Chemmana-Venkulam | 6.6 | 35 | 8.7 | 85 | 0.4 | 6 |
| | | Elangamon | 5.6 | 24 | 1.3 | 27 | 0.1 | 2 |
| | | Nilamel | 7.9 | 31 | 0.7 | 6 | 0.2 | 4 |
| | | Uppuzhu-Ambalamthek | 3.2 | 15 | 11.4 | 98 | 0.5 | 7 |
| | | Pandithirra | 0.4 | 2 | 10.3 | 31 | 0.2 | 5 |
| | | Total | 28.9 | 139 | 40.5 | 296 | 2.1 | 27 |
| 18 | Pattazhi North | | | | | | | |
| | | Chempannoor-Thottakattu Ela | 15 | 43 | 5 | 17 | 2 | 7 |
| | | Kuttikkad Vellor | 10 | 27 | 4 | 9 | 2 | 8 |
| | | Naraman-Pattiyara | 10 | 24 | 6 | 16 | 1 | 4 |
| | | Methukumel | 12 | 21 | 7 | 19 | 5 | 11 |
| | | Maloor | 5 | 16 | 5 | 13 | 2 | 4 |
| | | Karimpaloor (Manyaro) | 8 | 20 | 4 | 11 | 3 | 7 |
| | | Total | 60 | 151 | 31 | 85 | 15 | 41 |
| 19 | Pattazhi South | Vekulam | 9 | 40 | 13 | 20 | | |
| | | Konnakkal | 9 | 40 | 3 | 15 | | |
| | | Idakalanjoor | 4 | 20 | 6 | 15 | | |
| | | Viruthi | 30 | 150 | 10 | 50 | | |
| | | Kulakkadi | 8 | 25 | 2 | 15 | 5 | 3 |
| | | Total | 60 | 275 | 34 | 115 | 5 | 3 |
| 20 | Vilakkudy | Kuriyottu Ayathoor | 9 | 48 | 5 | 14 | | |
| | | Chandanappuram | 12 | 60 | 7 | 20 | | |
| | | Plathara | 11 | 24 | 7 | 29 | | |
| | | Aroor Kanavoor | 9 | 23 | 3 | 18 | | |
| | | Maravam Vayal | 9 | 20 | 5 | 15 | | |
| | | Kulapalathinkal | 21 | 50 | 11 | 20 | | |
| | | Benglavil | 13 | 34 | 11 | 30 | | |
| | | Madathil Kaniyamkonam | 15 | 44 | 9 | 44 | | |
| | | Polikka Konam | 9 | 16 | 3 | 12 | | |
| | | Vellakonam | 13 | 36 | 7 | 31 | | |
| | | Total | 121 | 355 | 68 | 233 | | |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|---------------|--------------|------------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| 21 | Pathanapuram | Pathirickal | 1.88 | 7 | 10.36 | 30 | | |
| | | Nadumurippu | 5.336 | 18 | 3.716 | 14 | | |
| | | Edathara | 2.072 | 5 | 5.46 | 23 | | |
| | | Nadukkunnu | 1.74 | 6 | 15.228 | 52 | | |
| | | Manchalloor | 1.49 | 9 | 6.992 | 29 | | |
| | | Chithalvely | 0 | 0 | 11.912 | 66 | | |
| | | Total | 12.518 | 45 | 53.668 | 214 | | |
| 22 | Vettikkavala | Panavelly | 11.5 | 50 | 46.5 | 142 | 2 | 8 |
| | | Thettiyode | 20 | 55.0 | 6 | 55 | 4 | 15 |
| | | Nedumeer | 10 | 40 | 36 | 153 | 4 | 15 |
| | | Kamukincode | 8 | 35.0 | 61 | 135 | 1 | 2 |
| | | Kaduvappara | 7 | 24.0 | 15 | 86 | 0 | 0 |
| | | Thalachira | 5 | 17.0 | 40 | 143 | 0 | 0 |
| | | Chakkuvarakkal | 7 | 30.0 | 44 | 143 | 4 | 12 |
| | | Kottavattam | 5 | 14.0 | 13 | 40 | 0 | 0 |
| | | Total | 73.5 | 265 | 261.5 | 897 | 15 | 52 |
| 23 | Melila | Melila | 2 | 15 | 80 | 276 | 2 | 5 |
| | | Chethady | 6 | 25.0 | 22 | 105 | 4 | 10 |
| | | Villoor | 3 | 18 | 37 | 157 | 0 | 0 |
| | | Pattamala | 0 | 0.0 | 32 | 80 | 0 | 0 |
| | | Chengamanad | 0 | 0.0 | 58 | 211 | 2 | 4 |
| | | Iypalloor | 3 | 26.0 | 47 | 126 | 2 | 8 |
| | | Iringoor | 3 | 22.0 | 60 | 157 | 3 | 8 |
| | | Total | 17 | 106 | 336 | 1112 | 13 | 35 |
| 24 | Ummannur | Vadakkode-Mannatham | 14 | 51 | 3 | 11 | 1 | 6 |
| | | Thevannur- Pera | 15 | 64.0 | 3.5 | 64 | 1.5 | 11 |
| | | Nelikkunnam - Kattattu | 13 | 46 | 20 | 128 | 2 | 18 |
| | | Vayanaamoola | 12 | 42.0 | 7 | 48 | 1 | 5 |
| | | Vayakkal | 8 | 37.0 | 11 | 61 | 1 | 6 |
| | | Nelikkunnam - Plappall | 8 | 39.0 | 1 | 13 | 1 | 7 |
| | | Valakam-Maragottukona | 8 | 41.0 | 5.5 | 13 | 1.5 | 9 |
| | | Kannamkulam - Patteri | 8 | 36.0 | 11 | 54 | 3 | 17 |
| | | Andoor - Kattiyamkode | 12 | 46.0 | 11 | 61 | 2 | 16 |
| | | Pazhinjam - Perumba | 10 | 48.0 | 12 | 59 | 2 | 18 |
| | | Total | 108 | 450 | 85 | 512 | 16 | 113 |
| 25 | Mylom | Pallichal | 10 | 27 | 57 | 41 | 3 | 8 |
| | | Karichal | 10 | 32 | 17 | 21 | 5 | 12 |
| | | Parambil | 5 | 12 | 15 | 30 | 0 | |
| | | Methamon | 3 | 16 | 19 | 36 | 0 | |
| | | Mechalyi | 2 | 8 | 10 | 32 | 0 | |
| | | Total | | 95 | 118 | 160 | 8 | 20 |
| Zone C | | | | | | | | |
| 1 | Ezhukone | Idakkodu | 2.78 | 13 | 1.22 | 10 | 0 | 0 |
| | | Karippuram | 1.8 | 12 | 4.12 | 30 | 0 | 0 |
| | | Chittacodu | 4.32 | 21 | 1.68 | 15 | 0 | 0 |
| | | Thrippilazhikam | 10.22 | 33 | 0.78 | 6 | 0 | 0 |
| | | Kakkakottur | 2.9 | 15 | 1.1 | 6 | 0 | 0 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|-------|----------------|------------------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| | | Irumanangadu | 2.3 | 17 | 0.692 | 5 | 0 | 0 |
| | | Ezhukone | 0.68 | 4 | 0.94 | 6 | 0 | 0 |
| | | Total | 25 | 115 | 10.532 | 78 | 0 | 0 |
| 2 | Kareepra | Ullacodu | 2.4 | 16 | 1 | 5 | 0 | 0 |
| | | Thrippilazhikam | 7.6 | 62 | 0.5 | 4 | 0 | 0 |
| | | Vakkanadu | 7 | 52 | 1 | 8 | 0 | 0 |
| | | Thalavurkonam | 10.5 | 58 | 1.5 | 3 | 0 | 0 |
| | | Karikal-Chirakkadavu | 10.8 | 55 | 0.5 | 6 | 0 | 0 |
| | | Madanthacode | 11 | 65 | 2 | 15 | 0 | 0 |
| | | Ettuvaikodu | 2.7 | 17 | 0.5 | 4 | 0 | 0 |
| | | Chowallur | 2 | 20 | 0.25 | 3 | 0 | 0 |
| | | Mannorkavur | 3.8 | 22 | 0.25 | 2 | 0 | 0 |
| | | Placodu | 2.6 | 24 | 0.5 | 4 | 0 | 0 |
| | | Kunnumvattom | 2 | 16 | 1.5 | 6 | 0 | 0 |
| | | Mundoor ela | 5 | 32 | 1 | 3 | 0 | 0 |
| | | Kadakodu | 2 | 12 | 0.5 | 4 | 0 | 0 |
| | | Thettikunnil | 1.5 | 10 | 0.5 | 3 | 0 | 0 |
| | | Total | 70.9 | 461 | 11.5 | 70 | 0 | 0 |
| 3 | Thodiyoor | Aryanpadam West | 29.2 | 62 | 40.8 | 28 | 29 | 14 |
| | | Aryanpadam East | 8.8 | 34 | 16.2 | 12 | 0 | 0 |
| | | Puthuseri Padam | 1.4 | 15 | 2.6 | 6 | 0 | 0 |
| | | Karoor padam | 2 | 7 | 3 | 8 | 0 | 0 |
| | | Vengaloor padam | 0.6 | 3 | 4.4 | 6 | 0 | 0 |
| | | Chamathura padam | 2 | 7 | 3 | 8 | 0 | 0 |
| | | Mamel Puncha | 0 | 0 | 0 | 0 | 12 | 38 |
| | | Total | 114.9 | 589 | 81.5 | 138 | 41 | 52 |
| 4 | Mynagappally | N. Mynagappally | 6 | 25 | 30 | 98 | 4 | 12 |
| | | Chempinal Ela | 2 | 5 | 10 | 21 | 3 | 8 |
| | | Chirakkuthazhe samithy | 2 | 7 | 3 | 9 | 4 | 11 |
| | | Claisrakkunmeal samithy | 0 | 0 | 2 | 16 | 0 | 0 |
| | | Vettikkattu Kizhakke samithy | 12 | 20 | 15 | 36 | 8 | 24 |
| | | Aalhikkattu vadakke samithy | 2 | 9 | 6 | 20 | 2 | 5 |
| | | Koonanchanal group farm | 0 | 0 | 2 | 15 | 0 | 0 |
| | | Chalayimundakan | 0 | 0 | 2 | 8 | 2 | 6 |
| | | Total | 24 | 66 | 70 | 223 | 23 | 66 |
| 5 | Sooranad North | Kochu Punja | 13.844 | 62 | 2.8 | 16 | 1.6 | 8 |
| | | Aanayady | 40.08 | 138 | 1.36 | 7 | 0.8 | 4 |
| | | Mannumpuram | 24 | 79 | 0.86 | 4 | 0.4 | 2 |
| | | Onampally | 12.97 | 66 | 1.84 | 10 | 0.6 | 3 |
| | | Kurikkuzhy | 42.27 | 102 | 2.27 | 12 | 1.8 | 9 |
| | | Virippoyil | 30.006 | 108 | 0.71 | 3 | 0.4 | 2 |
| | | Nediyapaadam | 52.42 | 175 | 2.42 | 12 | 1.2 | 6 |
| | | Thaazemendakan | 46.00 | 116 | 1.36 | 7 | 0.6 | 3 |
| | | Kizhakkida | 51.00 | 179 | 2.18 | 11 | 1.4 | 7 |
| | | Total | 312.59 | 1025 | 15.8 | 82 | 8.8 | 44 |
| 6 | Kunnathur | Tholical Padasekharam | 3 | 18 | 7 | 40 | 5 | 20 |
| | | Manampuzha " | 2 | 10 | 2 | 10 | Nil | 0 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|-------|----------------|-------------------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| | | Perumkulanj " " | 1 | 5 | 1 | 5 | Nil | 0 |
| | | Thamuzhamkulam " " | 4 | 25 | 75 | 300 | 21 | 30 |
| | | Iypadam | 5 | 28 | 5 | 28 | 2 | 2 |
| | | Vallikulam ela | 1 | 6 | 5 | 28 | 1 | 1 |
| | | Manikyamangalam | Nil | Nil | 5 | 30 | Nil | 0 |
| | | Karumbinpuzha | Nil | Nil | 6 | 35 | 4(Not cultivable) | 20 |
| | | Kannimel chalu, Ambikunnu ela | 1 | | 4 | 30 | 8(Not cultivable) | 30 |
| | | Total | 17 | 92 | 110 | 506 | 29 | 103 |
| 7 | Poruvazhy | Venkulam Ela | 90 | 200 | 40 | Nil | | |
| | | Veesjnal Ela | 3 | 10 | 37 | Nil | | |
| | | Kurumpukara Ela | 1 | 4 | 13 | Nil | | |
| | | Kuduvankul Ela | 2 | 4 | 9 | Nil | | |
| | | Kanjirakkadu Ela | 1 | 3 | 9 | Nil | | |
| | | Kaniyakuzhy Ela | 1 | 2 | 9 | Nil | | |
| | | Total | 98 | 223 | 117 | | | |
| 8 | Sasthamcotta | Manakkara | 5 | 15 | 5 | 75 | 5 | 25 |
| | | Muttupilakkad | 2 | 7 | 0 | 0 | 0 | 0 |
| | | Panappetty | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Aryanpadam | 5 | 25 | 0 | 0 | 0 | 0 |
| | | Cheloor | 2 | 4 | 10 | 25 | 10 | 25 |
| | | Changoodu | 2 | 4 | 5 | 15 | 5 | 15 |
| | | Palliserikkal | 2 | 5 | 0 | 0 | 0 | 0 |
| | | Total | 18 | 60 | 20 | 115 | 20 | 65 |
| 9 | Sooranad South | Pandhirampally Ela | 20 | 75 | 12 | 95 | 5 | 35 |
| | | Kumaramchira Ela | 48 | 170 | 15 | 122 | 13 | 162 |
| | | Chakkuvally Ela | 3 | 14 | 0 | 0 | 3 | 14 |
| | | Thamarassery Ela | 7 | 22 | 0 | 0 | 3 | 18 |
| | | Vengola Ela | 8 | 28 | 0 | 0 | 2 | 12 |
| | | Total | 86 | 309 | 27 | 217 | 26 | 241 |
| 10 | Elampalloor | Njettayil | 20 | 40 | 0 | 0 | 5 | 12 |
| | | Kallupalakkada. | 18 | 45 | 0 | 0 | 2 | 6 |
| | | Thazhepunukkanoor | 21 | 98 | 0 | 0 | 12 | 20 |
| | | Pattu Purakkal | 16 | 80 | 0 | 0 | 4 | 11 |
| | | Kallingal | 14 | 80 | 0 | 0 | 2 | 8 |
| | | Thalapparampu | 12 | 85 | 0 | 0 | 6 | 20 |
| | | Mevanam | 22 | 112 | 0 | 0 | 3 | 15 |
| | | Panamkutty | 7 | 96 | 0 | 0 | 3 | 15 |
| | | Elampalloor | 8 | 42 | 0 | 0 | 2 | 12 |
| | | Punukkonnoor | 153 | 718 | 0 | 0 | 44 | 131 |
| 11 | Thazhava | Thazhavayal North | 9.36 | 26 | 1 | 2 | 1 | |
| | | Thazhavayal South | 27.5 | 80 | 1 | 4 | 1 | |
| | | Mullasser | 5 | 20 | 1 | 4 | 0.5 | |
| | | Chalivayal | 9.74 | 32 | 1.2 | 4 | 0.5 | |
| | | Karyappalli | 11.8 | 34 | 3 | 10 | 1 | |
| | | Kuttathukuzhi | 6.8 | 12 | 2.8 | 5 | 1 | |
| | | Nediyathu | 4.9 | 12 | 0.8 | 2 | 0.5 | |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|---------------|----------------|---------------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| | | Manappalli South | 15.2 | 50 | 2 | 7 | 1 | |
| | | Churuli | 56 | 80 | 3 | 14 | 1 | |
| | | Perackavayal | 5.9 | 10 | 1.8 | 4 | 1.8 | |
| | | Thodiyoor Vattakkayal | 110 | 100 | 90 | 70 | 80 | |
| | | Total | 262.2 | 456 | 107.6 | 126 | 89.3 | 0 |
| 12 | Adichanalloor | Thazhuthala Ela | 7 | 25 | 5 | 15 | | |
| | | Adichanalloor Ela | 30 | 105 | 15 | 35 | | |
| | | Kattachal Kummalloor E | 7 | 25 | 5 | 20 | | |
| | | Kaithakuzhy Ela | 7 | 25 | 5 | 15 | | |
| | | Total | 51 | 155 | 25 | 70 | | |
| 13 | Nedumpana | Puliyila Ela | 22.4 | 122 | 1 | 4 | 16 | 38 |
| | | Elavoor Ela | 1 | 4 | 4 | 12 | 3 | 23 |
| | | Kulappadam Ela | 10 | 26 | 6 | 21 | 6 | 26 |
| | | Nallila Ela | 20 | 88 | 2 | 11 | 5 | 21 |
| | | Chilavoorkonam | 10.8 | 49 | 4 | 17 | 1 | 56 |
| | | Miyannoor Ela | 12.27 | 54 | 10 | 39 | 1 | 7 |
| | | Nedumpana North | 6 | 21 | 4 | 11 | | |
| | | Pazhangalam Ela | 20 | 97 | 3 | 17 | | |
| | | Kundumon Ela | 13.25 | 24 | | | | |
| | | Parakkottukonam Ela | 12 | 44 | | | | |
| | | Total | 127.72 | 529 | 34 | 132 | 32 | 171 |
| 14 | Pavithreswaram | Karikkal | 25 | 99 | 9 | 38 | 8 | 22 |
| | | Kaithakode | 14 | 46 | 10 | 30 | 8 | 18 |
| | | Maranadu | 20 | 85 | 5 | 12 | 5 | 10 |
| | | Alassery | 17 | 65 | 12 | 38 | 7 | 21 |
| | | Edavattom | 6 | 26 | 5 | 18 | 5 | 15 |
| | | Thazham | 5 | 22 | 4 | 16 | 5 | 17 |
| | | Total | 87 | 343 | 45 | 152 | 38 | 103 |
| 15 | Kulakkada | Poovattoor East | 16 | 78 | 11 | 104 | | |
| | | Poovattoor West | 10 | 56.0 | 7 | 30 | | |
| | | Sasthamangalam | 3 | 21 | 2 | 11 | | |
| | | Kundan Thodu- Thuruth | 15 | 57.0 | 6 | 39 | | |
| | | Attuvassery | 16 | 66.0 | 16 | 60 | | |
| | | vendar | 2 | 27.0 | 4 | 26 | | |
| | | Mylamkulam | 2 | 31.0 | 5 | 15 | | |
| | | Puthur | 6 | 38.0 | 3 | 34 | | |
| | | Thotteketthu Ela | 4 | 47.0 | 10 | 55 | | |
| | | Total | 74 | 421 | 64 | 374 | 0 | 0 |
| Zone D | | | | | | | | |
| 1 | Oachira | Chenattuseri Padasekharam | 10 | 35 | 15 | 30 | 4 | 12 |
| | | Theepura Padasekharam | 5 | 20 | 7 | 21 | 2 | 12 |
| | | Unduruthy Padasekharam | 6 | 20 | 7 | 18 | 2 | 11 |
| | | Thazhavayal Padasekharam | 4 | 15 | 6 | 17 | 2 | 12 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|-------|----------------|----------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| | | Total | 25 | 90 | 35 | 86 | 10 | 47 |
| 2 | Clappana | Thazhavayal | 2 | 7 | 8 | 35 | 4 | 18 |
| | | Kakkachal padam | 1.5 | 10 | 6 | 31 | 3 | 16 |
| | | Mundakappadam | 5.6 | 26 | 50 | 90 | 6 | 8 |
| | | Thachankattil vayal | 1 | 6 | 4 | 13 | 4 | 17 |
| | | Total | 10.1 | 49 | 68 | 169 | 17 | 59 |
| 3 | Kalluvathukkal | Kadambattukonam | 4.1 | 57 | | | | |
| | | Mevanakkonam | 10.62 | 35 | | | | |
| | | Ezhippuram | 6.05 | 19 | | | | |
| | | Varinjam | 8.06 | 27 | | | | |
| | | Kizhakkanela | 11.9 | 38 | | | | |
| | | Kavadikkonam Kulamad | 3.36 | 13 | | | | |
| | | Aduthala | 3.968 | 61 | | | | |
| | | Elamkulam | 22.9 | 72 | | | | |
| | | Karimpaloor | 15.12 | 45 | | | | |
| | | Nadakkal | 14.14 | 21 | | | | |
| | | Kottakkeram | 7.02 | 29 | | | | |
| | | Chirakkara | 4.5 | 14 | | | | |
| | | Velamannoor | 8.5 | 17 | | | | |
| | | Vilavoorkonam | 14.312 | 35 | | | | |
| | | Total | 134.55 | 483 | | | | |
| 4 | Poothakkulam | Kalakkode Ela | 10 | 90 | | | | |
| | | Vadakkela | 15 | 218 | | | | |
| | | Thekkela | 12 | 70 | | | 3 | 5 |
| | | Perumkulam Ela | 6 | 60 | | | 2 | 14 |
| | | Puthankulam Ela | 5 | 13 | | | 1 | 3 |
| | | Thalakkulam Ela | 6 | 25 | | | 3 | 8 |
| | | Kurakulam Ela | 9 | 80 | | | 2 | 9 |
| | | Punnakkulam Ela | 10 | 107 | | | 0 | 0 |
| | | Total | 73 | 663 | | | 39 | 11 |
| 5 | Paravoor | Pasumam Ela | 11.96 | 46 | | | 4.04 | 19 |
| | | Klavara Mmangad Ela | 7.56 | 27 | | | 1.6 | 19 |
| | | Total | 19.52 | 73 | | | 5.64 | 38 |
| 6 | Thevalakkara | Indralipariyaram | 3.6 | 13 | 2.5 | 7 | 1.5 | 6 |
| | | Cholayil | 6.4 | 20.0 | 2.8 | 8 | 1.8 | 7 |
| | | Mundottil | 3.2 | 17 | 2.2 | 7 | 1.5 | 5 |
| | | Kaippallil | 1.6 | 10.0 | 1.2 | 5 | 1 | 4 |
| | | Mannoorkulangara | 1 | 2.0 | 2 | 7 | 2 | 7 |
| | | Perumattumattom | 3.6 | 14.0 | 1.5 | 4 | 1 | 3 |
| | | Thnikkattam | 1.4 | 8.0 | 1 | 3 | 0.5 | 2 |
| | | Punnilam | 3.2 | 14.0 | 1.5 | 5 | 1.5 | 5 |
| | | Karingattuvara | 1 | 4.0 | 0 | 0 | 0 | 0 |
| | | Kaippuzha | | | 20 | 62 | 20 | 62 |
| | | Total | 25 | 102 | 34.7 | 108 | 30.8 | 101 |
| 7 | Panmana | Anuvelippuram | 8.5 | 17 | 5.5 | 7 | | |
| | | Veloorpadam | 1.5 | 6.0 | 1 | 3 | 2 | 7 |
| | | Muttath Ela | 2 | 3 | | | 3 | 11 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|---------------|------------------|----------------------|-------------------|---------------|-----------------------|---------------|---|---------------|
| | | | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers | Area (Ha) | No.of farmers |
| | | Kallakapadam | 2 | 4.0 | | | | |
| | | Karangal padam | | | | | 3 | 12 |
| | | Chempavadipadam | | | | | 1.5 | 9 |
| | | Vadakkekkallare | | | | | 2.5 | 8 |
| | | Chennarapadam | | | | | 6.5 | 42 |
| | | Palliyekkara padam | | | | | 3 | 21 |
| | | Total | 14 | 30 | 6.5 | 10 | 21.5 | 110 |
| 8 | Chavara | Kottakkakom | 10 | 15 | | 3 | 4 | |
| | | Puthukkad | 6 | 9.0 | | 2 | 3 | 7 |
| | | Mukundapuram | 10 | 18 | 30 | | | 11 |
| | | Kanicheril | 12 | 20.0 | | | | |
| | | Total | 38 | 62 | 30 | 5 | 7 | 18 |
| 9 | Kundara | Mulavana | 13.4 | 53 | 2 | 10 | | |
| | | Karippuram | 11.3 | 39.0 | 3.4 | 12 | 2 | 6 |
| | | Kanjirakod | 4.7 | 21 | 1.5 | 7 | 2 | 5 |
| | | Total | 29.4 | 113 | 6.9 | 29 | 4 | 11 |
| 10 | Perayam | Perayam East Ela | 5 | 37 | 5 | 34 | | |
| | | Perayam West Ela | 5 | 34.0 | 5 | 30 | | |
| | | Total | 10 | 71 | 10 | 64 | 0 | 0 |
| 11 | Panayam | Charukad Chemmakka | 12 | 45 | 25 | 110 | 10 | 35 |
| | | Total | 12 | 45 | 25 | 110 | 10 | 35 |
| Zone E | | | | | | | | |
| 1 | West Kallada | Idiyattupuram | 16 | 90 | 8 | 50 | 8 | 50 |
| | | Neduchal | 6 | 20 | 20 | 60 | 20 | 60 |
| | | Chakulam Chelukuzhi | 4 | 20 | 0 | 0 | 0 | 0 |
| | | Mepadam | 2 | 10 | 8 | 20 | 8 | 20 |
| | | Nannumpuram | 0 | 0 | 16 | 35 | 16 | 35 |
| | | Plapuram | 0 | 0 | 1 | 2 | 1 | 2 |
| | | Total | 28 | 140 | 53 | 167 | 53 | 167 |
| 2 | Thrikkovilvattom | Valiyela | 6.25 | 12 | 3 | 6 | 2 | 6 |
| | | Chenyela | 15.00 | 35 | 6 | 21 | 3 | 12 |
| | | Vettliathazham.I | 8.25 | 23 | 10 | 29 | 15 | 19 |
| | | Vettliathazham.II | 10.00 | 32 | 20 | 12 | 5 | 8 |
| | | Kalkulam | 3.00 | 12 | 7 | 16 | 2 | 5 |
| | | Kizhavor-Kurumana | 3.00 | 12 | 5 | 12 | 3 | 11 |
| | | Andoorkonam | 15.75 | 40 | 0 | 0 | 0 | 0 |
| | | Perayam | 8.00 | 22 | 1 | 4 | 1 | 3 |
| | | Cherikkonam-Pankonam | 14.37 | 36 | 6 | 21 | 0 | 0 |
| | | Puthuchira Mylapore | 12.00 | 30 | 4 | 18 | 4 | 8 |
| | | Thattarukonam | 3.00 | 16 | 9 | 23 | 8 | 15 |
| | | Total | 98.62 | 270 | 71 | 162 | 43 | 87 |
| 3 | Kottamkara | Mampuzha | 20 | 62 | 65 | 340 | 45 | 225 |
| | | Peroor | 5 | 15 | 60 | 240 | 60 | 240 |
| | | Njettail | 7 | 32 | 18 | 115 | 18 | 115 |

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| Sl.No | LSGI | Name of Padasekharam | Under cultivation | | Not under cultivation | | Kept as fallow for more than five years | |
|---------------|----------------------------------|---------------------------|-------------------|----------------|-----------------------|----------------|---|----------------|
| | | | Area (Ha) | No. of farmers | Area (Ha) | No. of farmers | Area (Ha) | No. of farmers |
| | | Total | 32 | 109 | 143 | 695 | 123 | 580 |
| 4 | Thrikkaruva | Mulakkal Ela | 5 | 34 | 0 | 0 | 0 | 0 |
| | | Pavoor Ela | 6 | 28 | 0 | 0 | 0 | 0 |
| | | Prakkulam | 0 | 0 | 0 | 0 | 3 | 20 |
| | | Total | 11 | 62 | 0 | 0 | 3 | 20 |
| 5 | Thrikkadavoor | Nilamel | 5.5 | 24 | 0 | 0 | 0 | |
| | | Murunthal | 2 | 9 | 0 | 0 | 0 | |
| | | Total | 7.5 | 33 | 0 | 0 | 0 | |
| 6 | Perinad | Edavattam | 15 | 49 | 5 | 61 | | 6 |
| | | Kuzhiyam | 10 | 52.0 | 4 | 30 | | 7 |
| | | Total | 25 | 101 | 9 | 91 | 0 | 13 |
| 7 | East Kallada | Navumkara | 10 | 38 | 12 | 32 | 20 | |
| | | Thriveni | 5 | 20.0 | 10 | 12 | 5 | |
| | | Veranoor | 15 | 42 | 1 | 5 | 1 | 4 |
| | | Kuthiyil | 12 | 32.0 | 5 | 12 | 2 | 0 |
| | | Chempu | 5 | 15.0 | 14 | 5 | 1 | 0 |
| | | Total | 47 | 147 | 42 | 66 | 29 | 4 |
| Zone F | | | | | | | | |
| 1 | Karunagappally | Moonamthazhavayal | 10 | 25 | Nil | 0 | 0 | 0 |
| 2 | Kollam Corporation (Vadakkevila) | Perumkulam Ela | 7 | 30 | 63 | 50 | 63 | 50 |
| 3 | Kollam Corporation (Eravipuram) | Karikkuzhi | 7 | 33 | 43 | 126 | 43 | 126 |
| 4 | Mayyanad | Umayanalloor | 85 | 128 | 20 | 55 | 21 | 112 |
| 5 | Chathannoor | Meenad Ela | 68 | 10 | 2 | 6 | | |
| | | Edanad Ela | 78 | 15 | 3 | 12 | | |
| | | Chathannoor Ela | 78 | 12.5 | 2.5 | 8 | | |
| | | Varinjam Ela | 146 | 25 | 5 | 16 | | |
| | | Kurungal Ela | 86 | 26 | 2 | 9 | 2 | 6 |
| | | Total | 456 | 88.5 | 14.5 | 51 | 2 | 6 |
| 6 | Chirakkara Panchayat | Chirakkara | 25 | 138 | 6 | 21 | | |
| | | Uliyanadu | 8 | 46 | | | 2 | 8 |
| | | Kuzhippil | 20 | 144 | 5 | 19 | | |
| | | Thazham Thekku | 6.5 | 13 | | | | |
| 7 | Kollam Corporation (Kilikolloor) | Mangadu | 2 | 17 | 0 | 0 | 2 | 12 |
| | | Karicodu | 2 | 5 | 4 | 16 | 4 | 16 |
| | | Arunnuttimangalam | 0 | 0 | 3 | 21 | 3 | 21 |
| | | Total | 4 | 22 | 7 | 37 | 9 | 49 |
| 8 | Punalur | Asthamangalam | 22 | 40 | 15 | 40 | | |
| | | Paravattom | 2 | 5 | 12 | | | |
| | | Arapunna | 10 | 25 | 12 | 30 | | |
| | | Valakodu | 10 | 20 | 8 | 20 | | |
| | | Chemmanthoor | 5 | 15 | 7 | 30 | | |
| | | Mylackal | 3 | 12 | 13 | 15 | | |
| | | Pananthakara Villakuvatom | 3 | 6 | | 15 | | |
| | | Karakkad | 5 | 12 | | 20 | | |
| | | Total | 60 | 135 | 67 | 170 | | |

| Appendix 34-2 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 2.1.1 Paddy Seed Villages | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Selection and registration of (Training | Production of Breeder/ Foundation seed (Location specific) | ▲ Foundation seed production (15 Ha) | Certified seed production (235 ha). Commences Seed Processing Centre at Kottarakkara | Certified seed production (235 ha) | Certified seed production (235 ha) | Certified seed production (235 ha) |
| Agencies | LSGI,Agri.Dept, Kerala Agri. University (KAU), Regional Agriculture Technological Training Centre (RATTC), | KAU | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Certified seed production (235 ha) | Certified seed production (235 ha) | Certified seed production (235 ha) | Certified seed production (235 ha) | Certified seed production (235 ha) | Certified seed production (235 ha) | Certified seed production (235 ha) |
| Agencies | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) | Seed Authority, Agri. Dept. (Seed Farms) |

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| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|--|---|---|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 2.1.2 Improving Rice Production and Productivity through Paddy conservation | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | ▲ Legislation for conserving and developing wet lands | ▲ 7000 Ha/ annum ▲ Infrastructural facilities like drainage, irrigation should be ensured | 8000 Ha/ annum | 9000 Ha/ annum | 10000 Ha/ annum | Maintenance | Maintenance | | |
| Agencies | Govt., Agriculture Dept., Law Dept. | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance. Achieves Production target 5T/Ha | | |
| Agencies | Krishi Bhavan LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | Krishi Bhavan, LSGI Revenue, Minor Irrigation, Co-operatives | | |

| Appendix 34-2 Proposal Phasing | | | | | | | |
|---|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Name of Proposal : 2.1.3 Aromatic & Medicinal paddy cultivation | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 50 Ha- 75 Tonnes @ Rs 75 per Kg | 51 Ha- 75 Tonnes @ Rs 75 per Kg | 52 Ha- 75 Tonnes @ Rs 75 per Kg | 53 Ha- 75 Tonnes @ Rs 75 per Kg | 54 Ha- 75 Tonnes @ Rs 75 per Kg |
| Agencies | | | Dept of Agri., Co-operative, LSGI | Dept. of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 55 Ha- 75 Tonnes @ Rs 75 per Kg | 56 Ha- 75 Tonnes @ Rs 75 per Kg | 57 Ha- 75 Tonnes @ Rs 75 per Kg | 58 Ha- 75 Tonnes @ Rs 75 per Kg | 59 Ha- 75 Tonnes @ Rs 75 per Kg | 60 Ha- 75 Tonnes @ Rs 75 per Kg | 61 Ha- 75 Tonnes @ Rs 75 per Kg |
| Agencies | Dept of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI | Dept. of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI | Dept of Agri., Co-operative, LSGI |

| Appendix 34.2 Proposal Phasing | | | | | | | | | |
|---|---------------------------|---------------------------|--|--------------------------------|--------------------------------|---------------------------|---------------------------|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 2.1.4 Paddy Processing Centres | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | | | Land acquisition | Construction of Infrastructure | Construction of Infrastructure | Procurement, Transport | Procurement, Transport | | |
| Agencies | | | Dpt. Revenue, Agri. Co-operation, LSGI, Emt. | LSGI, Power, Agri | LSGI, Power, Agri | LSGI, Agri, Co-op Labour. | LSGI, Agri, Co-op Labour. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Procurement, Transport | Procurement, Transport | Procurement, Transport | Procurement, Transport | Procurement, Transport | Procurement, Transport | Procurement, Transport | | |
| Agencies | LSGI, Agri, Co-op Labour. | LSGI, Agri, Co-op Labour. | LSGI, Agri, Co-op Labour. | LSGI, Agri, Co-op Labour. | LSGI, Agri, Co-op Labour. | LSGI, Agri, Co-op Labour. | LSGI, Agri, Co-op Labour. | | |

| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|--|---|---|---|---|---|---|---|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 2.2.1 Vegetable Seed villages | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | 1. Training 2. Crop rising - 20 ha in each LSGI | 1. Crop rising - 20 ha in each LSGI 2. Certification, Processing and packing | 1. Crop rising - 50 ha in each LSGI 2. Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | | |
| Agencies | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Production, Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | Production, Certification, Processing and packing | | |
| Agencies | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | Agriculture Dept., Kerala State Seed authority, LSGI. | | |

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| Appendix 34-2. Proposal Phasing | | | | | | | | |
|---|---|---|---|---|---|---|---|--|
| Name of Sector : Agriculture | | | | | | | | |
| Name of Proposal : 2.2.2 Intensive Vegetable Cultivation and Improving Productivity | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | |
| Activities | 1. Formation of farming groups and strengthening | 1. Crop rising - 1000 ha in total 2. Marketing | Maintanace | Maintanace | Maintanace | Maintanace | Maintanace | |
| Agencies | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| Activities | Maintanace | Maintanace | Maintanace | Maintanace | Maintanace | Maintanace | Maintanace | |
| Agencies | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | Agriculture Dept., Co-operative societies, HortiCorp, LSGIs | |

| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|--|---|---|---|---|---|---|---|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 2.3 Tapioca cultivation | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | 1.Introduction and Populisation of new varieties in 2000 ha | 1.Introduction and Populisation of new varieties in 4000 ha | 1.Introduction and Populisation of new varieties in 4000 ha | Maintanace | Maintanace | Maintanace | Maintanace | | |
| Agencies | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Maintanace | Maintanace | Maintanace | Maintanace | Maintanace | Maintanace | Maintanace | | |
| Agencies | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | Agriculture Dept., Central Tuber Crops Research Institute (CTCRI), Kudumbasree, LSGI. | | |

| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 24 Rural homestead farming | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | Flexicredit of Nabard as a model 25000 Farm families of Mini and Micro farmers in rural areas | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | | |
| Agencies | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year | 10% enhancement Per year Achieves 50000 families | | |
| Agencies | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | Agri. Dept., LSGL, Banks, Total Sanitation, Health | | |

| Appendix 34-2 Proposal Phasing | | | | | | | |
|--|---------------------------|---|---|---|---|---------------------|---------------------|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 2.5 Sesamum cultivation | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Additional crop in 100 Ha | additional crop in 100 Ha (Total - 200) | additional crop in 100 Ha (Total - 300) | additional crop in 100 Ha (Total - 400) | additional crop in 100 Ha (Total - 500) | 500 Ha | 500 Ha |
| Agencies | Dept of Agri.,LSGI | Dept of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 500 Ha | 500 Ha | 500 Ha | 500 Ha | 500 Ha | 500 Ha | 500 Ha |
| Agencies | Dept of Agri.,LSGI | Dept of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI | Dept. of Agri.,LSGI |

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| Appendix 34-2 Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|----------------------------------|----------------------------------|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 3.1.1 Rubber area expansion | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Site clearing and land development in 100 Ha 2. Planting material production for 100 Ha | 1. Rubber Planting (June) & Banana inter cropping in 100 Ha (Piravanthoor) 2. Site clearing and land development in 100 Ha | 1. Rubber Planting (June) & Banana inter cropping in 200 Ha 2. Site clearing and land development in 100 Ha | 1. Rubber Planting (June) & Banana inter cropping in 300 Ha 2. Site clearing and land development in 100 Ha | Rubber Planting (June) & Banana inter cropping in 400 Ha | Banana inter cropping in 300 Ha | Banana inter cropping in 200 Ha |
| Agencies | 1.Rubber Board of Agri | 1.Rubber Board of Agri | 1.Rubber Board of Agri | 1.Rubber Board of Agri | 1.Rubber Board of Agri | 1.Rubber Board of Agri | 1.Rubber Board of Agri |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Banana inter cropping in 100 Ha | Maintanance of Rubber Plantation | Maintanance of Rubber Plantation | Maintanance of Rubber Plantation | Maintanance of Rubber Plantation | Maintanance of Rubber Plantation | Maintanance of Rubber Plantation |
| Agencies | 1.Rubber Board of Agri | Rubber Board | Rubber Board | Rubber Board | Rubber Board | Rubber Board | Rubber Board |

| Appendix 34-2 Proposal Phasing | | | | | | | |
|---|--|---|---|---|---|--|---|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 3.1.2 Productivity improvement of Rubber | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Re Planting in 5000 Ha & Banana inter cropping in 5000Ha 2. Rubber maintenance in 35000 Ha & Tapping in 35000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 10000Ha 2. Rubber maintenance in 35000 Ha & Tapping in 30000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 15000Ha 2. Rubber maintenance in 35000 Ha & Tapping in 25000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 20000Ha 2. Rubber maintenance in 35000 Ha & Tapping in 20000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 17000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 18000 Ha | 1.Re Planting in 5000 Ha & Banana inter cropping in 14000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 19000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 11000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 19000 Ha |
| Agencies | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Re Planting in 5000 Ha & Banana inter cropping in 8000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 22000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 8000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 25000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 8000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 28000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 8000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 28000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 8000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 28000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 8000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 28000 Ha | 1. Re Planting in 5000 Ha & Banana inter cropping in 8000Ha 2. Rubber maintenance in 38000 Ha & Tapping in 28000 Ha |
| Agencies | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI | Rubber Board , Dept. of Agri ,LSGI |

| Appendix 34.2 Proposal Phasing | | | | | | |
|--|--|--|---|--|--|--|
| Name of Sector : Agriculture | | | | | | |
| Name of Proposal : 3.1.3 Apiculture in Rubber Plantation | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Activities | Arrange & Supply of hives | 1. 10000 hives Training 2. Marketing Organisation | 1. 50000 hives more (60000) 2. Local Processing centers under KVIB to be established every year in the selected panchayaths | 1. 50000 hives more (110000) 2. Local Processing centers under KVIB to be established every year in the selected panchayaths | 1. 50000 hives more (160000) 2. Local Processing centers under KVIB to be established every year in the selected panchayaths | 1. 50000 hives more (210000) 2. Establishment of value addition and export units |
| Agencies | KSHFDC,K&V, Dept of Agri. | LSGI,Regional Agriculture Technological Training Centre (RATTC),Dept. of Agri | LSGI, Regional Agriculture Technological Training Centre (RATTC) Dept. of Agri. | LSGI, Regional Agriculture Technological Training Centre (RATTC),Dept. of Agri. | LSGI,Regional Agriculture Technological Training Centre (RATTC),Dept. of Agri. | LSGI,Regional Agriculture Technological Training Centre (RATTC),Dept. of Agri. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Activities | 1. 50000 hives more (310000) 2. Establishment of value addition and export units | 1. 50000 hives more (360000) 2. Establishment of value addition and export units | 1. 50000 hives more (400000) 2. Establishment of value addition and export units | Maintenance | Maintenance | Maintenance |
| Agencies | LSGI,Regional Agriculture Technological Training Centre (RATTC),Dept. of Agri. | LSGI,Regional Agriculture Technological Training Centre (RATTC),Dept. of Agri | LSGI, Regional Agriculture Technological Training Centre (RATTC) Dept. of Agri. | LSGI, Dept. of Agri. | LSGI, Dept. of Agri. | LSGI, Dept. of Agri. |

| Appendix 34.2 Proposal Phasing | | | | | | | | | |
|--|--|--|--|--|--|--|---|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 3.2.1 Rehabilitation of coconut | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | Seeding production (85000) / arrangements | 1. Under replanting 1000 Ha(85000 seeding) 2. Better management in 9000Ha 3. Seedlings production | 1. Under replanting 1000 Ha(85000 seeding) 2. Better management in 9000Ha 3. Seedlings production | 1. Under replanting 1000 Ha(85000 seeding) 2. Better management in 9000Ha 3. Seedlings production | 1. Under replanting 1000 Ha(85000 seeding) 2. Better management in 9000Ha 3. Seedlings production | 1. Under replanting 1000 Ha(85000 seeding) 2. Better management in 9000Ha 3. Seedlings production | 1. Under replanting 1000 Ha(85000 seeding) 2. Better management in 9000Ha 3. cut and removal of renile plants in 1000 Ha under planted in 2008 | | |
| Agencies | Agri. Dept. | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | | |
| Agencies | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | LSGI,Krishni Bhavan | | |

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| Appendix 34.2 Proposal Phasing | | | | | | | | | |
|--|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 3.2.2 Coir pith composting and other products | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | ▲ Infrastructural developments | Raw material procurement | Increase Production by 30% every year | increase Production by 30% every year | Increase Production by 30% every year | Increase Production by 30% every year | Increase Production by 30% every year | | |
| Agencies | LSGI Co-operative Agri. Dept, Pollution Control Board | Krish Bhavans | Krish Bhavans | Krish Bhavans | Krish Bhavans | Krish Bhavans | Krish Bhavans | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Increase Production by 30% every year | Increase Production by 30% every year | Increase Production by 30% every year | increase Production by 30% every year | Increase Production by 30% every year | Increase Production by 30% every year | Increase Production by 30% every year | | |
| Agencies | Krish Bhavans | Krish Bhavans | Krish Bhavans | Krish Bhavans | Krish Bhavans | Krish Bhavans | Krish Bhavans | | |

| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|---|--|------------------|------------------|---|---|---|---|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 3.2.3 Value addition of Coconut oil and Products | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | | | | ▲ Self Help Groups for bi products of coconut 500 /day per unit for virgin coconut oil and chips ▲ milk products total 100 units | ▲ Self Help Groups for bi products of coconut 500 /day per unit for virgin coconut oil and chips ▲ milk products total 100 units | ▲ Self Help Groups for bi products of coconut 500 /day per unit for virgin coconut oil and chips ▲ milk products total 100 units | ▲ Self Help Groups for bi products of coconut 500 /day per unit for virgin coconut oil and chips ▲ milk products total 100 units | | |
| Agencies | | | | LSGI,Agri. Dept. Industries Dept., Kudumbasree. | LSGI,Agri. Dept. Industries Dept., Kudumbasree. | LSGI,Agri. Dept. Industries Dept., Kudumbasree. | LSGI,Agri. Dept. Industries Dept., Kudumbasree. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Expeller units 2 nos at kottrakkara, kalluvathukkal. 2000 KV substation for each production centre | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | ▲ coconut oil production to commercial scale | | |
| Agencies | KSEB, Agri.Dept. | KSEB, Agri.Dept. | KSEB, Agri.Dept. | KSEB, Agri Dept. | KSEB, Agri Dept. | KSEB, Agri.Dept. | Industries Dept., Co-operative Agri. | | |

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| Appendix 34-2 Proposal Phasing | | | | | | | |
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| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 3.3.1 Productivity improvement in Pepper | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | ▲ . Production of rooted pepper cuttings ▲ 2 lakhs for replanting in 2000 Ha in 2008 season | ▲ . Replanting in 2000 Ha, Maintenance through better management in 8000 Ha2. Production of 2 lakh cutting for planting in 2000 Ha in 2009 harvest from 8000 Ha | ▲ Replanting in 2000 Ha, Maintenance in 8000 Ha ▲ Production of 2.2 lakh cutting for planting in 2010 harvest from 8000 Ha | ▲ Replanting in 2000 Ha, Maintenance in 8000 Ha ▲ Production of 2.2 lakh cutting for planting in 2011 harvest from 4000 Ha | ▲ Replanting in 2000 Ha, Maintenance in 8000 Ha ▲ Production of 2.2 lakh cutting for planting in 2012 harvest from 4000 Ha | ▲ Replanting in 2000 Ha, Maintenance in 8000 Ha Maintenance in 4000 Ha | ▲ Maintenance in 10000 Ha, Harvest from 8000Ha |
| Agencies | Dept. of Agri., KAU | Dept. of Agri., KAU | LSGI,Krshi Bhavan | LSGI,Krishi Bhavan | LSGI,Krishi Bhavan | LSGI,Krishi Bhavan | LSGI,Krshi Bhavan |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | ▲ Maintenance in 10000 Ha , Harvest from 8000Ha | ▲ Maintenance in 10000 Ha , Harvest from 10000Ha | ▲ Maintenance in 10000 Ha , Harvest from 10000Ha | ▲ Maintenance in 10000 Ha , Harvest from 10000Ha | ▲ Maintenance in 10000 Ha , Harvest from 10000Ha | ▲ Maintenance in 10000 Ha , Harvest from 10000Ha | ▲ Maintenance in 10000 Ha, Harvest from 10000Ha |
| Agencies | LSGI,Krishi Bhavan | LSGI,Krishi Bhavan | LSGI,Krshi Bhavan | LSGI,Krishi Bhavan | LSGI,Krishi Bhavan | LSGI,Krishi Bhavan | LSGI,Krshi Bhavan |

| Appendix 34-2 Proposal Phasing | | | | | | |
|--|---|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | |
| Name of Proposal : 3.5.1 Value Addition of Banana products | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Activities | Small units of 5 Lakh investment X 10 months infrastructural development required for Banana chips and powder | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year |
| Agencies | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Activities | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year | 10% enhancement in production of chips and provides per year |
| Agencies | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. | Dept. of Agri. (Marketing), LSGI, Industries Dept. |

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| Appendix 34-2 Proposal Phasing | | | | | | | |
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| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 3.6.1 Cashew Development Programme (Area expansion and re-planting) | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Arrange seedlings / grafts (1 lakh) for 2008 planting | Planting in 500 Ha , seedling (1 lakh) for 2009 | Planting in 500 ha maintenance in 500 Ha . Seedlings (1 lakh) for 2010 | Planting in 500 ha maintenance in 1000 Ha . Harvest 500 Ha, Seedlings (1 lakh) for 2011 | Planting in 500 ha maintenance in 1500 Ha.harvest 1000 Ha, Seedlings (1 lakh) for 2012 | Planting in 500 ha maintenance in 2000 Ha.harvest 1500 Ha, Seedlings (1 lakh) for 2013 | Planting in 500 ha maintenance in 2500 Ha .harvest 2000 Ha, |
| Agencies | Agri Dept.,KAU | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance in 3000 Ha .harvest 2500 Ha, | Maintenance in 3000 Ha .harvest 3000 Ha, | Maintenance in 3000 Ha .harvest 3000 Ha, | Maintenance in 3000 Ha .harvest 3000 Ha, | Maintenance in 3000 Ha .harvest 3000 Ha, | Maintenance in 3000 Ha .harvest 3000 Ha, | Maintenance in 3000 Ha .harvest 3000 Ha, |
| Agencies | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan | Cashew council,LSGI,Krishi Bhavan |

| Appendix 34-2. Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 3.7 Pineapple cultivation | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | New planting in 5000 Ha (inter crop) . Arrange planting material@ 20000/Ha | 2 nd year ratoon 5000 Ha | 3 rd year ratoon 5000 Ha | New planting in 5000 Ha (inter crop) . Arrange planting material@ 20000/Ha | 2 nd year ratoon 5000 Ha | 3 rd year ratoon 5000 Ha | New planting in 5000 Ha (inter crop) . Arrange planting material@ 20000/Ha |
| Agencies | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 2 nd year ratoon 5000 Ha | 3 rd year ratoon 5000 Ha | New planting in 5000 Ha (inter crop) . Arrange planting material@ 20000/Ha | 2 nd year ratoon 5000 Ha | 3 rd year ratoon 5000 Ha | New planting in 5000 Ha (inter crop) . Arrange planting material@ 20000/Ha | 2 nd year ratoon 5000 Ha |
| Agencies | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI | Dept. of Agri., Kerala State Horticulture Products Development Corporation (KSH-PDC)/ Vegetable and Food Promotion Council of Kerala (VFPOCK) / LSGI |

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| Appendix 34-2 Proposal Phasing | | | | | | | | | |
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| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 3.8 Proposal for Jatropha Cultivation | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | | | | | | | Seed material collection for 25 Ha | | |
| Agencies | | | | | | | National seed co-operation, Agri.Dept. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Jatropha cultivation 25 Ha seed material collection for 25 Ha | cultivation in additional 25 Ha (total -50) | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | | |
| Agencies | Dept. Agri.,Dpt. Revenue,LSGI, PCB, Industries Dept., KSEB | Dept. Agri.,Dpt. Revenue,LSGI, PCB, Industries Dept., KSEB | Dept. Agri.,Dpt. Revenue,LSGI, PCB, Industries Dept., KSEB | Dept. Agri.,Dpt. Revenue,LSGI, PCB, Industries Dept., KSEB | Dept. Agri.,Dpt. Revenue,LSGI, PCB, Industries Dept., KSEB | Dept. Agri.,Dpt. Revenue,LSGI, PCB, Industries Dept., KSEB | Dept. Agri.,Dpt. Revenue,LSGI, PCB, Industries Dept., KSEB | | |

| Appendix 34-2 Proposal Phasing | | | | | | | |
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| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 3.10 Floriculture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Planting material production at Ittiva | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities |
| Agencies | Agriculture Dept., | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | 1. Planting material production at Ittiva 2. Formation of 100 units of Flori clubs 3. Marketing facilities | Marketing facilities | Marketing facilities | Marketing facilities |
| Agencies | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation | Agriculture Dept., HORTICORP, Transportation |

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| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|--|--|---|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 3.11 Aracanut cultivation | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | Planting material production | 1. Planting material production 2. Training 3. Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | | |
| Agencies | Agriculture Dept., | 1 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 2 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 3 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 4 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 5 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 6 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | | |
| Agencies | 1 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 2 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 3 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 4 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 5 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 6 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | 7 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | | |

| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|--|--|---|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 3.12 Medicinal Plants | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | Planting material production | 1. Planting material production 2. Training 3. Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | | |
| Agencies | Agriculture Dept., | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | Production, Processing and marketing | | |
| Agencies | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | Agriculture Dept., SC/ST, Co-operative Dept., Kudumbasree, Small Industries. | 7 & 2. Agriculture Dept., 3. Agriculture Dept., Kudumbasree, Small Industries | | |

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| Appendix 34.2: Proposal Phasing | | | | | | |
|---------------------------------------|--|--|--|--|--|--|
| Name of Sector: Agriculture | | | | | | |
| Name of Proposal: 4.4 Service Centres | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Activities | Primary market in Anchal and Kottarakkara | Primary market in Karunagapally and Punalur | 1. Primary markets in all Multi Functional Zones 2. Service Centres in all Multi Functional Zones | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market |
| Agencies | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Activities | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market | 1. Upgradation and maintenance Primary markets in all Multi Functional Zones 2. Upgradation and maintenance Service Centres in all Multi Functional Zones 3. Upgradation and maintenance of Secondary market |
| Agencies | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. | Agri. Dept., Marketing, Co-operative, Transportation, Animal Husbandry, Dairy, Fisheries, LSGIs, Pollution Control Board, Telecommunication, Quality Control Institutions. |

| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|--|------------------|--|--|---|---|---|---|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 5.1 Model Bio Technology Park(including Microbial Technology centre) | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | | 1. Acquire land (in KIP area) Bio pesticides Lab 2. Bio pesticides production commences | 1. Kulathupuzha / Thennala Biofertiliser Lab 2. Bio Fertiliser production commences Bio pesticides production continues | Establish Quality testing centre | Establish Facilitation Centre for Life Science Enterprises | 1. Infrastructure development phase 1 2. 5 units | 1. Infrastructure development phase 2 2. 5 units | | |
| Agencies | | Revenue, water Resources, Dept. of Agri., KSEB, Kerala Agri. Uni. | Revenue, water Resources, Dept. of Agri., KSEB, Kerala Agri. Uni. | Dept. of Agri., Kerala Agri. Uni. | Industries Dept. | Industries Dept. | Industries Dept. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Private ventures | Ventures for biochemicals, secondary metabolites production | Ventures for biochemicals, secondary metabolites production | Ventures for biochemicals, secondary metabolites production | Ventures for biochemicals, secondary metabolites production | Ventures for biochemicals, secondary metabolites production | Ventures for biochemicals, secondary metabolites production | | |
| Agencies | Industries Dept. | Industries Dept. | Industries Dept. | Industries Dept. | Industries Dept. | Industries Dept. | Industries Dept. | | |

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| Appendix 34-2 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 5.2 Poly House Cultivation | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Poly House Cultivation in 1 ha | Poly House Cultivation in 2ha | Poly House Cultivation in 4 ha | Poly House Cultivation in 3ha | Maintenance | Maintenance |
| Agencies | | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance |
| Agencies | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB | Agriculture Department, Input agencies, Marketing, KSEB |

| Appendix 34-2 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 5.3 Bio Technology and Genetic Engineering Park | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Land acquisition | Infrastructure development | Research facilities | Enterprise facilitation | Establishment of Life Science Enterprises | Maintenance |
| Agencies | | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance |
| Agencies | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board | Science and Technology Dept., Agriculture Dept., Pollution Control Board |

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| Appendix 34-2 Proposal Phasing Name of Sector : Agriculture | | | | | | | | | |
|--|--|--|--|--|---|---|---|--|--|
| Name of Proposal : 6.1 Water conservation programmes | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | Commence in 6000 Ha | Commence in 6000 Ha Maintain 6000 Ha | Commence in 6000 Ha Maintain 12000 Ha | Commence in 6000 Ha Maintain 18000 Ha | Commence in 6000 Ha Maintain 24000 Ha | Commence in 6000 Ha Maintain 30000 Ha | Commence in 6888 Ha Maintain 36000 Ha | | |
| Agencies | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Maintain 42288 Ha | Maintanance | Maintanance | Maintanance | Maintanance | Maintanance | Maintanance | | |
| Agencies | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | Agri. Dept, Irrigation Dept., Soil Conservation Dept., LSGI | | |

| Appendix 34-2 Proposal Phasing | | | | | | | |
|-------------------------------------|--|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal :6.3 Solar Fencing | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Surveying of land to be protected by fencing | providing fencing and solar panels installation | | Annual maintenance as per requirement | Annual maintenance as per requirement | Annual maintenance as per requirement | Annual maintenance as per requirement |
| Agencies | Agriculture Dept., Forest Dept, Civic society groups (NGOs), LSGIs | Forest Dept.,ANERT | | Forest Dept.,ANERT | Forest Dept ,ANERT | Forest Dept.,ANERT | Forest Dept.,ANERT |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Annual maintenance as per requirement | Annual maintenance as per requirement | Annual maintenance as per requirement | Annual maintenance as per requirement | Annual maintenance as per requirement | Annual maintenance as per requirement | Annual maintenance as per requirement |
| Agencies | Forest Dept ,ANERT | Forest Dept.,ANERT | Forest Dept.,ANERT | Forest Dept.,ANERT | Forest Dept ,ANERT | Forest Dept.,ANERT | Forest Dept.,ANERT |

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| Appendix 34-2 Proposal Phasing | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | | | |
| Name of Proposal : 7.2 Recycling Facilities | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | |
| Activities | 2 Units in Anchal and Kottarakkara | 2 Units in Karunagapally and Punalur | 1. Units in all Multi Functional Zones | Operation and maintenance | Operation and maintenance | Operation and maintenance | Operation and maintenance | | |
| Agencies | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept. LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Activities | Operation and maintenance | Operation and maintenance | Operation and maintenance | Operation and maintenance | Operation and maintenance | Operation and maintenance | Operation and maintenance | | |
| Agencies | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept. LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | Agri. Dept, LSGL, Pollution Control Board. | | |

| Appendix 34-2 Proposal Phasing | | | | | | | |
|---|--|--|--|--|--|--|--|
| Name of Sector : Agriculture | | | | | | | |
| Name of Proposal : 7.4 Research and Training Centre | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Training Hall and Equipments | 1.Basic Training commences 2.Accommodation | 1.Basic Training continues 2. Accommodation Completion | 1. Full fledged Training commences | 1. Full fledged Training continues | 1. Full fledged Training continues | 1. Full fledged Training continues |
| Agencies | Agri. Dept, | 1. Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.) 2. Agri. Dept, | 1. Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.) 2. Agri. Dept, | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Full fledged Training continues | 1. Full fledged Training continues | 1. Full fledged Training continues | 1. Full fledged Training continues | 1. Full fledged Training continues | 1. Full fledged Training continues | 1. Full fledged Training continues |
| Agencies | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University | Agri. Dept., Kudumba sree, Poverty alleviation unit, LSGI, Entrepreneurship Training Institutes (Banks etc.), KILA, State Agri. University |

**Appendix 35-1
Phasing of Proposals**

| Name of Sector : Irrigation | | | | | |
|-----------------------------|--|---|---|--|--|
| Year | 2008 | 2009 | 2010 | 2011 | 2012 |
| Activities | First phase (20 padasekharams) Area identification, rectification | Monitoring 1st phase (20 padasekharams) Area identification, Rectification IIrd phase (20 padasekharams) | Monitoring 2 phases (40 padasekharams) Area identification, Rectification IIIrd phase (20 padasekharams) | Monitoring 3 phases (60 padasekharams) Area identification, Rectification IVth phase (20 padasekharams) | Monitoring 4 phases (80 padasekharams) Area identification, Rectification Vth phase (20 padasekharams) |
| Agencies | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan |
| Year | 2013 | 2014 | 2015 | 2016 | 2017 |
| Activities | Monitoring 5 phases (100 padasekharams) Area identification, Rectification VIth phase | Monitoring 6 phases (125 padasekharams) Area identification, Rectification VIIth phase | Monitoring 7 phases (150 padasekharams) Area identification, Rectification VIIIth | Monitoring 8 phases (175 padasekharams) Area identification, Rectification IXth phase | Monitoring 9 phases (200 padasekharams) Rectification Xth phase |
| Agencies | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan |
| Year | 2018 | 2019 | 2020 | 2021 | |
| Activities | Monitoring all phases (227 padasekharams) | Monitoring all phases (227 padasekharams) | Monitoring all phases (227 padasekharams) | Monitoring all phases (227 padasekharams) | |
| Agencies | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | Minor Irrigation, KIP, Krishi Bhavan | |

| Appendix 36-1 A | | | |
|---|--|--|---|
| Priority areas Suggested by Linked Sectors | | | |
| Priority area of Agriculture as per Article 2.2.1 and 5.2 of Chapter 34 | Priority area of Irrigation as per Article 3 of Chapter 35 | Priority area of Drinking Water as per Article 2.2.3 of Chapter 41 | Priority area of Environment as per Article 2.1, 2.2, 2.3 & 2.4 of Chapter 43 B |
| | East Kallada, Kundara, | Aryankavu (I priority) | Ashtamudi Back water, Sasthamcotta lake, Paravur Kayal and Edava – Nadayara kayal |
| Edamulakkal, Yeroor and Anchal | West Kallada, Anchal, Yeroor, Nilamel, Poothakkulam, Melila, Punalur Mity, Chavara, Neendakara, Thevalakkara, Clappana, Oachira, Kulasekharapuram, Pattazhy Vadakkekara, Pattazhy, Kadakkal, Alappad, Aryankavu, Kulathupuzha, Thenmala, Thrikkadavur, Thrikkaruva, Chithara, Thekkumbhagam, Mandrothuruth, Panayam, Perayam, Perinadu, Kottamkara, Thrikkovilvattom, Piravanthoor, Kollam Corporation | Alayamon, Thrikkadavoor and Poothakkulam (II priority) | |
| Elampalloor, East Kallada, Kuncara and Perayam. | | Edamulakkal, Yeroor, Anchal, Mylom, Kulakkada, | |
| | | Panayam, Perinadu, Thrikkaruva, Paravoor Municipality, | |
| | | Kottamkara, Thrikkovilvattom, Mayyanad, Oachira, | |
| | | Kulasekharapuram, Clappana, Manrice Island, Chathanoor, | |
| | | Adichanalloor, Nedumpna, Thekkumbhagam, Thevalakkara, | |
| | | Panmana, Chavara, Karunagappally, Alappad, Thezhava, | |
| | | Kalluvathukkal, Kulathupuzha, Thalavoor, Thodiyoor, | |
| | | Karavalloor, Pattazhy South, Ezukone, Elampallur, | |
| | | Velinalloor and Pavithreswaram (III priority) | |

| Appendix 36-1B | | | |
|---|------------------------------|---|---|
| Final Priority Area for Watershed Development | | | |
| Top priority | I priority LSGIs | II priority LSGIs | III priority LSGIs |
| | <u>Agro Development Zone</u> | <u>Bio Reserve Zone</u> | <u>Bio Reserve Zone</u> |
| Ashtamudi Back water, Sasthamcotta lake, Paravur Kayal and Edava – Nadayara kayal | Yerpoor | Aryankavu, Kulathupuzha, | Thenmala, Piravanthoor, |
| | <u>Multi Functional Zone</u> | <u>Agro Development Zone</u> | <u>Agro Development Zone</u> |
| | Anchal | Edamulakkal, Pattazhy Thekkekara, | Nilamel, Melila, Pattazhy Vada kkekkara, Kadakkal, , Chithara, Alayamon, Mycm, Thalavoor, Karavalloor |
| | | <u>Agro- Allied Development Zone</u> | <u>Agro- Allied Development Zone</u> |
| | | Elampalloor, East Kallada, | Kulakkada, Adichanalloor, Ezukone Nedumpana, Thazhava, Thodiyoar, |
| | | <u>Aqua – Bio Reserve Zone</u> | <u>Aqua – Bio Reserve Zone</u> |
| | | Thrikkadavur, Thrikkaruva, Thekkumbhagam, Mandrothuruth, | Paravoor Municipality, |
| | | <u>Special Development Zone</u> | <u>Special Development Zone</u> |
| | | Poothakkulam, Alappad, Kundara, Perayam, Chavara, Kulasekharapuram, Oachira, Clappana, Thevalakkara, Peravam and Perinadu | West Kallada, Chathanoor, Panmana, Kaluvathukkal, |
| | | <u>Multi Functional Zone</u> | <u>Multi Functional Zone</u> |
| | | Thrikkovilvattom and Panayam | Punalur Mity, Neendakara, Kottamkara, Kolam Corporation, Mayyanad and |

Appendix 36-2 Details of Treatments Proposed

1. Agro forestry

Agroforestry is the production of crops and forest plants or animals or both simultaneously or sequentially on the same unit of land. It is a sustainable land management system conserving soil, water and biomass and meeting the multiple needs for food, fuel, fodder, fibre etc. Different agroforestry practices like silvi-pastoral system, agri-silvi system, agri-horti system, etc can be adopted depending upon the local compatibility and needs. This system promotes bio diversity in the area.

2. Live fencing and border planting

Live hedges and contour strips of grasses or shrubs can be raised alone or in combination with mechanical measures to control soil erosion.

3. Cover cropping

Leguminous climbers can be grown as cover crops to protect the soil and to smother the weeds. Being leguminous species they will enrich the soil by fixing atmospheric nitrogen. They will also add organic matter to soil.

4. Contour strip cropping

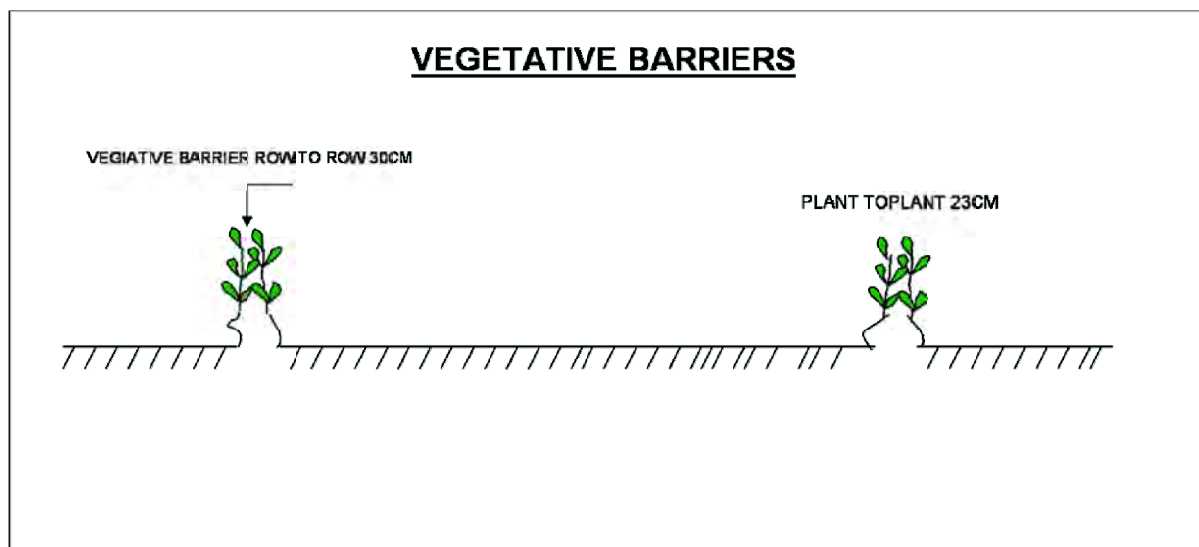
It is the practice of growing alternate strips of erosion permitting and erosion resisting crops across the slope and along the contour.

5. Mulching

Mulching is the practice of providing soil cover by spreading stubble, trash, organic materials or synthetic materials like plastics. The use of organic mulches has the advantage of minimizing the impact of raindrops and controlling splash, reducing evaporation, controlling weeds, reducing soil temperature during daytime, encouraging microbial growth and adding nutrients to the soil.

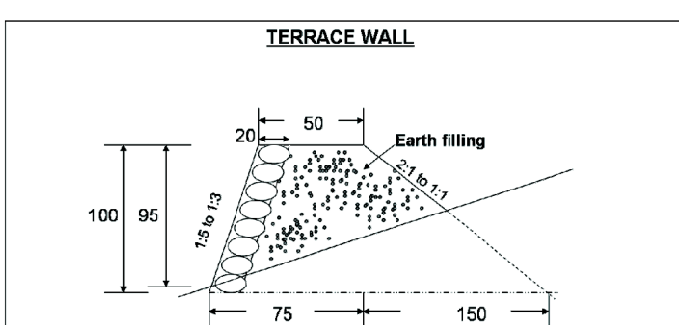
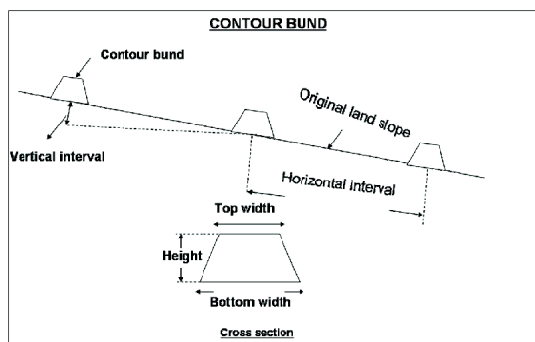
6. Vegetative barriers

Vegetative barriers are closely spaced plantations usually of a few rows of grasses or shrubs grown along contour for erosion control and moisture conservation.



7. Contour bunds and terrace walls

Bunds constructed along contours are called contour bunds. Bunds are constructed out of the earth excavated from borrow pits which are taken upstream of the bund so that they can be easily filled by the soil moving down. Contour bunding with dry rubble, country stones or laterite pitched walls are generally practiced in Kerala, having slope upto 20% with vertical intervals of 2 to 2.5m.

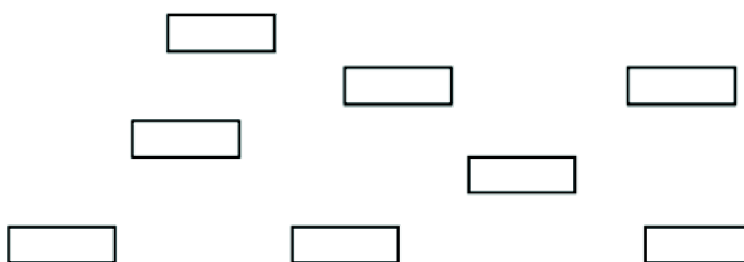


8. Trenches and pits

Trenches are constructed along the contour lines forming embankments on the downhill side of the trenches with material taken out of them. The main idea is to create more favorable moisture conditions and thus accelerate the growth of planted trees. Contour trenches are excavated at suitable intervals depending upon the slope of the land and the cross sections are designed to collect and convey the runoff expected from the interspaces between the successive trenches and this determines the size of the trench.

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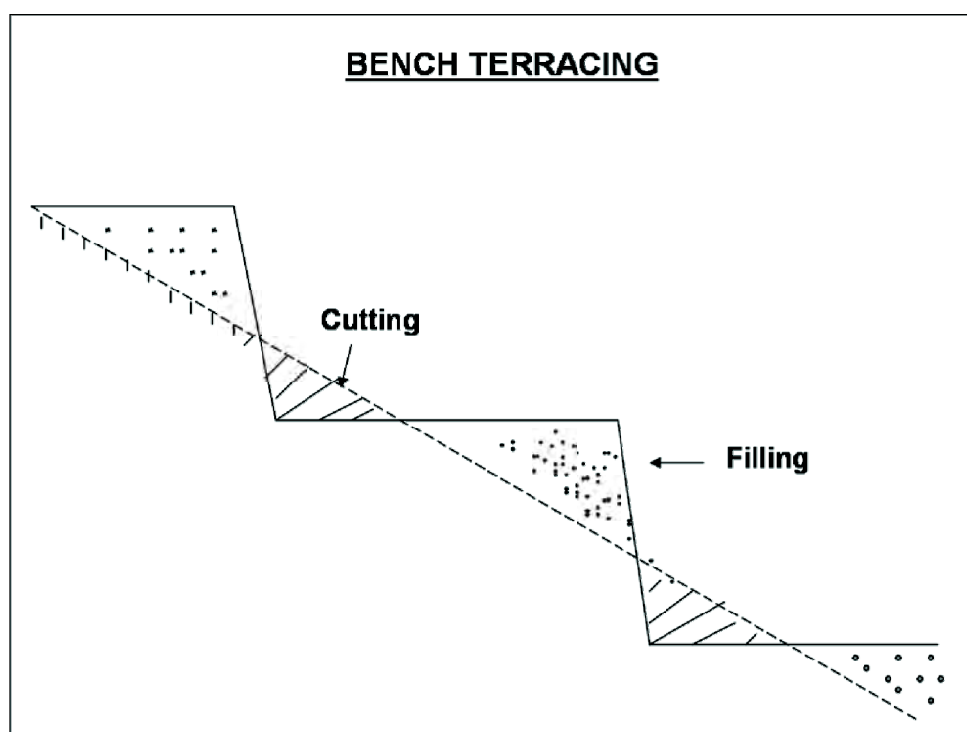
CONTOUR TRENCHES



9. Bench terracing

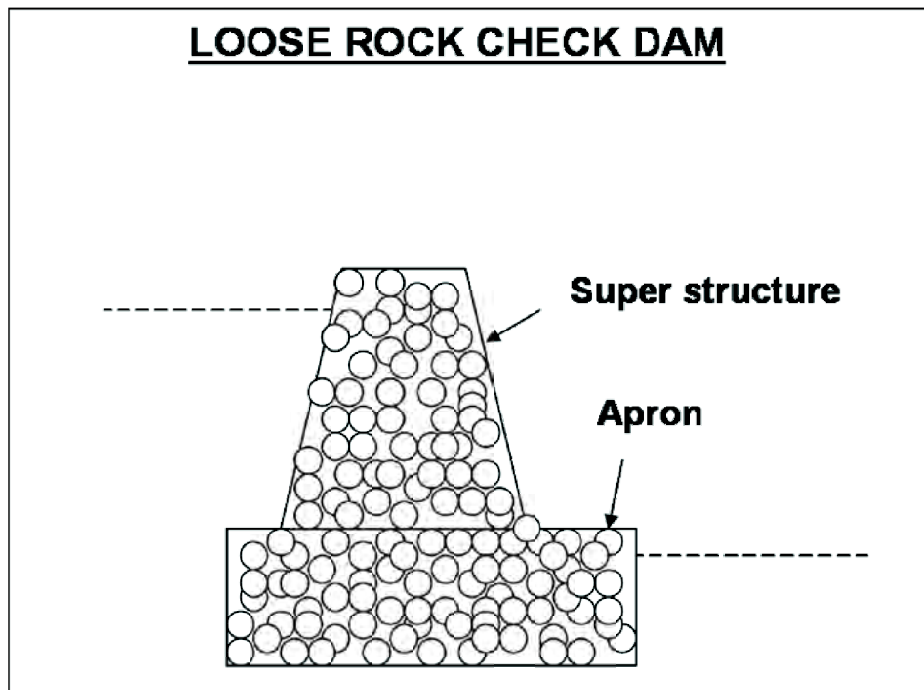
Bench terracing involves converting the original ground into level step like fields constructed by half cutting and half filling helps in reducing the degree of slope substantially. In addition, it also helps in the uniform distribution of soil moisture, retention of soil and manure and also in better application of irrigation water where available. However, in rain fed areas, bench terracing is practiced normally in the 16-33% slope range. The bench terraces are of four types i.e., level bench terraces, inwardly sloping bench terraces, outwardly sloping bench terraces and Puerto Rican type of terraces.

BENCH TERRACING



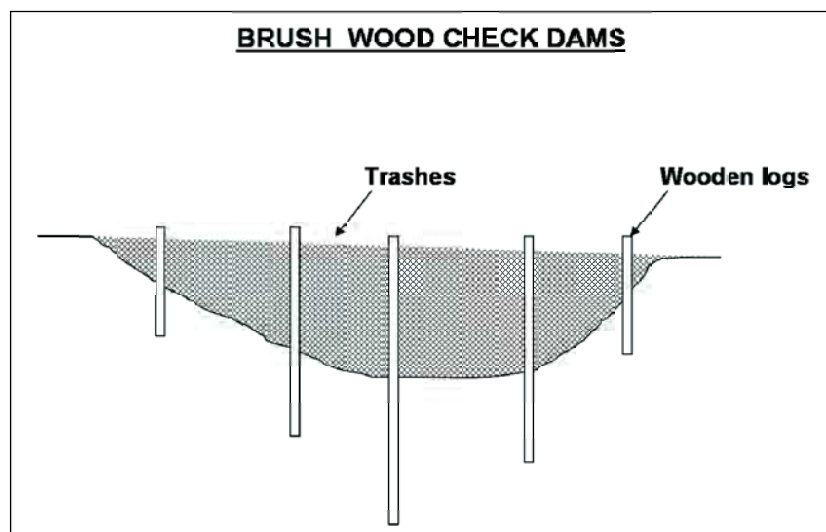
10. Loose rock check dams

Only small check dams of a maximum height of 1.5 m is proposed. Spillways are provided to avoid overtopping during high flows. Keying of the check dams into the side and floor of the gully greatly improves its stability. This entails digging a trench usually 60 cm deep and wide, across the channel. If the channel is deeply cracked and fissured, the trench depth should be increased to 120 cm. Aprons have to be installed downstream to prevent scouring. The length of the apron suggested is 2.5m. At the downstream end of the apron, a loose sill about 15cm height may be built to create a pool to help absorb the energy of water falling over spillway. The spillway should be designed to convey peak flow with 10 year return period. The spillway bottom width should be equal to the bottom width of the stream.



11. Brushwood check dams

Brushwood check dams do not call for any detailed design procedures. A double fence brushwood check dam is constructed by first sloping back the bank of the gully and erecting two rows of stout posts of 10 to 15cm diameter driven 100 to 120 cm into the hard bed of the gully. A 150cm thick layer of litter is then placed on the floor of the gully extending upstream to the base of the dam and downstream to the end of the apron. A 30 cm layer of brush is positioned on the apron and attached to the lower row of posts. A row of stakes is also driven through the middle of the apron into the gully floor and the brush is tied to it to form a mat. The space between the two rows of posts is filled with brushwood laid across the gully, compressed tightly and held in position with wires. Litter is then placed on the upstream face of the dam. The details of a brushwood check dam is given in figure. These loose rock and brushwood check dams are provided intermittently in a gully along its course as conservation measures.



12. Grassed waterways

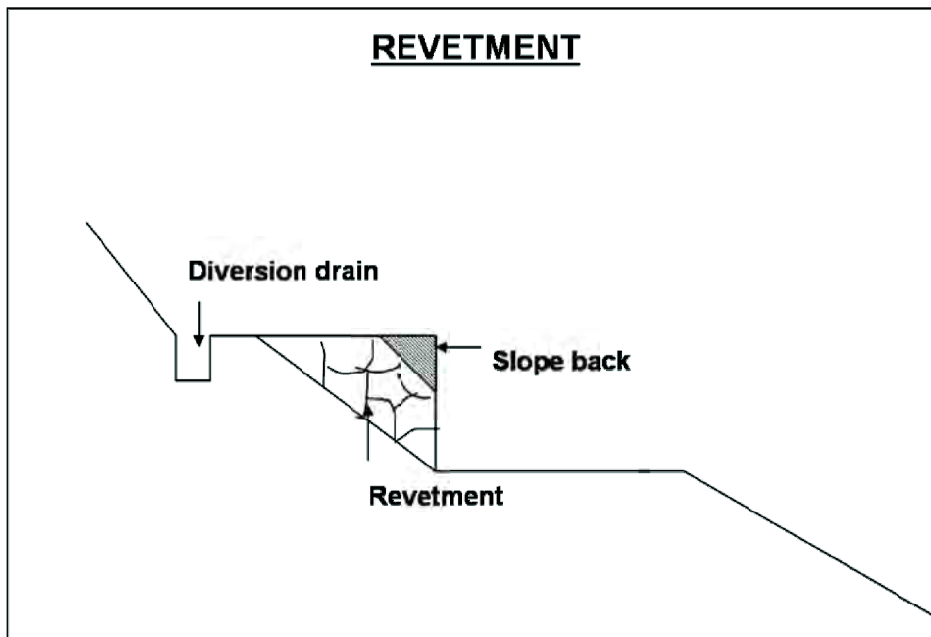
This is growing grass species along drainage channels to control the flow velocity and for safe disposal of runoff. Flow velocity varies depending upon the growth habit of grass, cover, growth conditions, soil conditions and slope of channel.

13. Disposal Drain

Safe disposal of excess surface runoff from any land/field is very necessary. If this excess surface runoff is not properly guided then it erodes the streams which may lead to gully formation or widening of stream thus damaging valuable land.

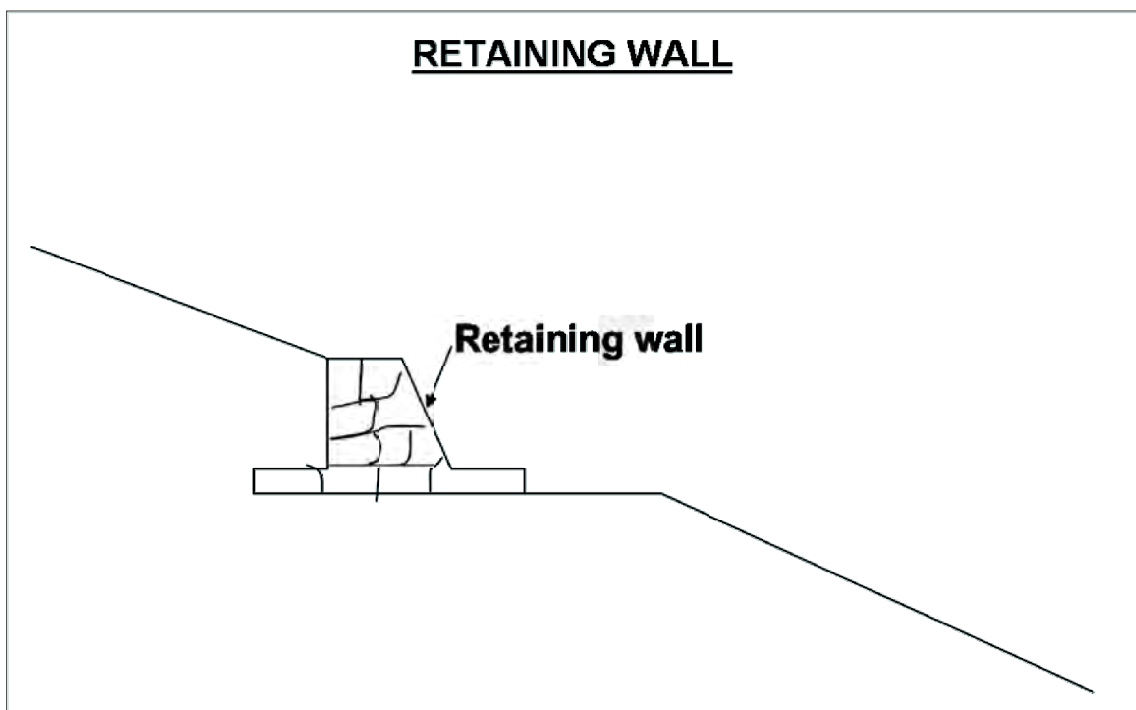
14. Revetment

In some cases, it becomes necessary to slope back the vertical cut and pitch it with stone which otherwise would have slide or slipped. This is known as revetment.



15. Retaining Walls

A retaining wall works as revetment on steep slopes near the toe i.e. lower bank in protecting bank from erosion or deep cut on road side. It acts as a toe wall. As a rule of thumb, for gabion structures the bottom width is kept $\frac{2}{3}$ rd the height for walls upto 6m in height with 1m top width and for stone wall it may be kept a minimum one-third of the height. When there is surcharge, a 2m top width may be adopted.

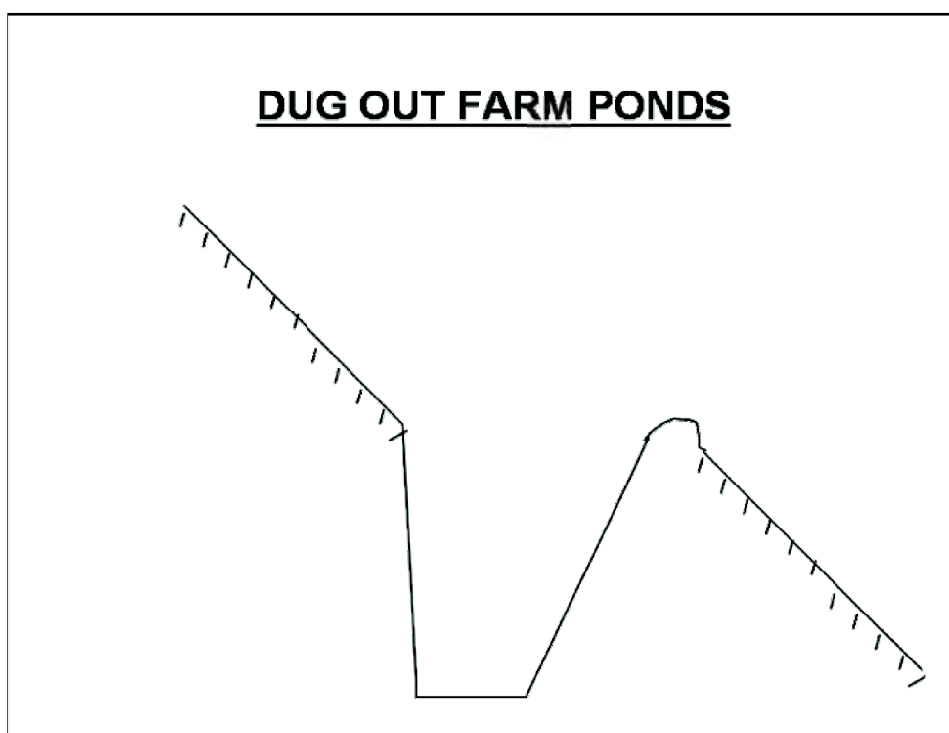


16. Percolation Ponds

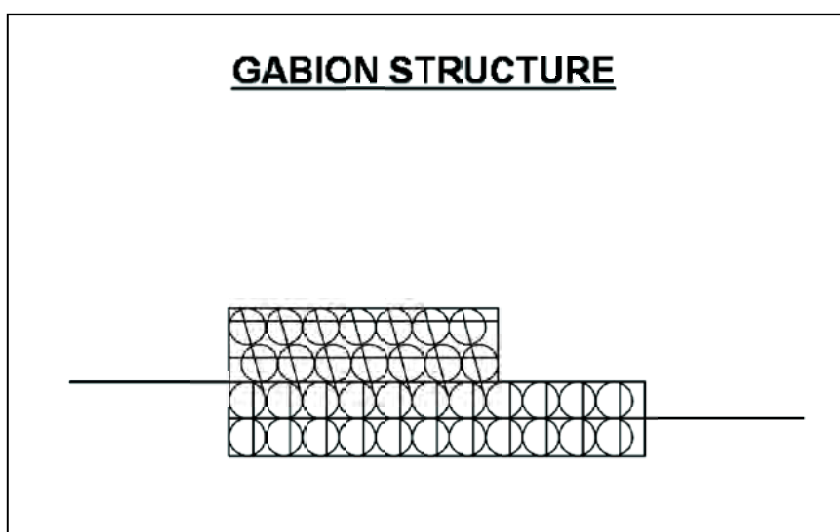
The percolation tank/farm pond/check dam is a multipurpose conservation structure that may depending upon its location and size, store water for irrigation, livestock, recharging the ground water and in combination of these uses. In general this is constructed by excavating or digging out a depression thus forming an excavated reservoir or by constructing an embankment in the natural ravine to form an impounding type of reservoir.

17. Dug out Farm Ponds

Where the topography does lend into itself to embankment construction, dugout or excavated ponds can be constructed in a relatively flat terrain. Since dugout ponds can be constructed to expose a minimum water surface area in proportion to volume, they are advantageous where evaporation losses are high and water is scarce. The watershed must be capable to furnishing the annual runoff sufficient to fill the dugout. Diversion ditches are often used in adding supplemental drainage. The low point of a natural depression is often a good location for a dugout pond. At locations where the water table rises to within a few meters of the ground surface, dugouts can be constructed to intercept the water, adjusting the depth to the fluctuations expected. Locations of this type may furnish supplies all the year round.

**18. Gabion Structures**

Construction of check dams or retaining wall using rubble or locally available stones in GI wire Knitted boxes for checking erosion along the drains and for stream bank stabilization.



Appendix 36-3

Phasing of Activities

Name of Sector : Watershed development and land use

Name of Proposal : Proposals for Bio Reserve zone

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|--|---|--|---|---|--|--|
| Activities | Capacity building, preliminary survey, delineation and estimate preparation for Aryankavu. | Execution of watershed development activities like vegetative measures in Aryankavu. | Execution of watershed development activities like safe disposal of runoff measures in Aryankavu. | Execution of watershed development activities like drainage course management in Kulathoopuzha Capacity building and preliminary works in Kulathoopuzha | Execution of watershed development activities like vegetative measures in Kulathoopuzha | Execution of watershed development activities like safe disposal of runoff measures in Kulathoopuzha | Execution of watershed development activities like drainage course management in Aryankavu. Capacity building and preliminary works in Thenmala. |
| Agencies | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation and Soil Survey Departments |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Execution of watershed development activities like vegetative measures in Thenmala | Execution of watershed development activities like safe disposal of runoff measures in Thenmala | Execution of watershed development activities like drainage course management in Thenmala. Capacity building and preliminary works in Piravanthoor | Execution of watershed development activities like vegetative measures in Piravanthoor | Execution of watershed development activities like safe disposal of runoff measures in Piravanthoor | Execution of watershed development activities like drainage course management in Piravanthoor | Monitoring and evaluation studies. |
| Agencies | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation Department | Soil Conservation Department |

| Name of Sector : Watershed development and land use | | | | | | | |
|--|--|--|---|--|--|---|--|
| Name of Proposal : Proposals for Agro Development zone | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Capacity building, preliminary survey, delineation and estimate preparation I Priority area (Yeroor) | Execution of watershed development activities like vegetative measures | Execution of watershed development activities like mechanical measures | Execution of watershed development activities like drainage course management .Capacity building and preliminary works in II Priority areas (Edamulakkal, Pattazhy Thekkekara) | Execution of watershed development activities like vegetative measures | Execution of watershed development activities like mechanical measures | Execution of watershed development activities like drainage course management in. Capacity building and preliminary works in III Priority areas (Nilamel, Melilla, Pattazhy Vadakkekara, Kadakkal, , Chithara, Alayamon, Mylom, Thalavoor, Karavaloor) |
| Agencies | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation, Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation, Minor Irrigation and Soil Survey Departments |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Execution of watershed development activities like vegetative measures | Execution of watershed development activities like mechanical measures | Execution of watershed development activities like drainage course management Capacity building and preliminary works in Other areas in Agro Development Zone | Execution of watershed development activities like vegetative measures | Execution of watershed development activities like mechanical measures | Execution of watershed development activities like drainage course management | Monitoring and evaluation studies. |
| Agencies | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation ,Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation and Minor Irrigation Department | Soil Conservation Department |

| Name of Sector : Watershed development and land use | | | | | | | |
|---|---|---|---|---|--|---|--|
| Name of Proposal : Proposals for Agro Allied Development zone | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Capacity building, preliminary survey, delineation and estimate preparation with Top priority of Sashtamcotta and in II Priority areas (Elampalloor and East Kallada) | Execution of watershed development activities like vegetative measures Sashtamcotta lake protection and in II Priority areas (Elampalloor and East Kallada) | Execution of watershed development activities like mechanical measures Sashtamcotta lake protection and in II Priority areas (Elampalloor and East Kallada) | Execution of watershed development activities like drainage course management. Capacity building and preliminary works in II Priority areas of Kulakkada, Adichanalloor and Ezukone | Execution of watershed development activities like vegetative measures | Execution of watershed development activities like mechanical measures | Execution of watershed development activities like drainage course management in Capacity building and preliminary works in II Priority areas of Nedumpana, Thazhava and Thodiyoor |
| Agencies | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation, Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation, Minor Irrigation and Soil Survey Departments |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Execution of watershed development activities like vegetative measures | Execution of watershed development activities like mechanical measures | Execution of watershed development activities like drainage course management Capacity building and preliminary works in other LSGs in Agro Allied Development zone | Execution of watershed development activities like vegetative measures | Execution of watershed development activities like mechanical measures | Execution of watershed development activities like drainage course management | Monitoring and evaluation studies. |
| Agencies | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation, Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation and Minor Irrigation Department | Soil Conservation Department |

| Name of Sector : Watershed development and landuse | | | | | | | |
|---|--|--|---|--|--|---|--|
| Name of Proposal : Proposals for Special Development zone | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Capacity building, preliminary survey, delineation and estimate preparation in II Priority areas of Thevalakkara, Kundara, Clappana, | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management Capacity building and preliminary works in II Priority areas of Poothakkulam, Alappad, Chavara, Kulasekharapuram and Oachira | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management in. Capacity building and preliminary works in III Priority areas of West Kallada, Chathanoor, Panmana, Kalluvathukkal |
| Agencies | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation, Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation, Minor Irrigation and Soil Survey Departments |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Execution of watershed development activities Agroforestry | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course Capacity building and preliminary works in Other LSGIs in Special Development zone | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management | Monitoring and evaluation studies. |
| Agencies | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation ,Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation and Minor Irrigation Department | Soil Conservation Department |

| Name of Sector : Watershed development and landuse | | | | | | | |
|--|--|--|--|--|--|---|--|
| Name of Proposal : Proposals Aqua bio reserve zone | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Capacity building, preliminary survey, delineation and estimate preparation in II priority Areas of Thrikkadavur, Thrikkaruva, Thekkumbhagam and Mandrothuruth | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management. Capacity building and preliminary works in II Priority area Perayam, and Perinadu | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management in. Capacity building and preliminary works in III Priority areas of Kollam Corporation and Paravur Municipality |
| Agencies | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department, fisheries dept | Soil Conservation, Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation, Minor Irrigation and Soil Survey Departments |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Execution of watershed development activities Agroforestry | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course Capacity building and preliminary works East Kallada, Sasthamcotta, West Kallada Chavara, Neendakara, Thevalakkara and other LSGIs in Aqua Bio Reserve zone | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management | Monitoring and evaluation studies. |
| Agencies | Soil Conservation and Agriculture Departments | Soil Conservation Department, fisheries dept | Soil Conservation, Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department | Soil Conservation and Minor Irrigation Department | Soil Conservation Department |

| Name of Sector : Watershed development and landuse | | | | | | | |
|--|--|--|---|---|--|--|--|
| Name of Proposal : Proposals Multifunctional zone | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Capacity building, preliminary survey, delineation and estimate preparation in II Priority Area of Thrikkovilattom and Panayam | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management.Capacity building and preliminary works | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course management in. Capacity building and preliminary works. Kotamkara |
| Agencies | Soil Conservation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department,fisheries dept | Soil Conservation,Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department and Minor Irrigation department | Soil Conservation,Minor Irrigation and Soil Survey Departments |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Execution of watershed development activities Agroforestry | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course Capacity building and preliminary works Karunagappally | Execution of watershed development activities like agroforestry measures | Execution of watershed development activities like drainage protection | Execution of watershed development activities like drainage course | Monitoring and evaluation studies. |
| Agencies | Soil Conservation and Agriculture Departments | Soil Conservation Department ,fisheries dept | Soil Conservation ,Minor Irrigation and Soil Survey Departments | Soil Conservation and Agriculture Departments | Soil Conservation Department ,fisheries dept | Soil Conservation and Minor Irrigation Department | Soil Conservation Department |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|--|---|--|--|--|--|--|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.1 Large scale dairy farms | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries |
| | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries |
| | 3) Establishment of Large scale dairy units 4 each at Adichanelloor, Ezhukone and Pavithreswaram panchavaths | 3) Establishment of Large scale dairy units 4 each at Kunnathoor, Kareppra, Kulakkada and Myanagappally | 3) Establishment of Large scale dairy units 4 each at Poruvazhy, Kalluvathukkal and Sasthameotta | 3) Establishment of Large scale dairy units 4 at Nedumpana | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each |
| | | | | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Agencies | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | |
| | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 1)LSGI |
| | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 2) AHD |
| | | | | | | | 3) Milk Co-operative Societies |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries |
| | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries |
| | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each | 3) Establishment of Large scale dairy units 4 each |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Agencies | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI |
| | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD |
| | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|---|---|---|---|---|--------------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.2 Medium scale dairy farms | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Selection of beneficiaries | 1) Selection of beneficiaries | | 1) Selection of beneficiaries | | 1) Selection of beneficiaries | |
| | 2) Training of beneficiaries | 2) Training of beneficiaries | Maintenance and Monitoring | 2) Training of beneficiaries | Maintenance and Monitoring | 2) Training of beneficiaries | Maintenance and Monitoring |
| | 3) Establishment of Medium scale dairy units 20 numbers at Thazhava | 3) Establishment of Medium scale dairy units 20 numbers at Sooranad North | | 3) Establishment of Medium scale dairy units 20 numbers at Sooranad South, Elampalloor and Thodiyur | | 3) Establishment of Medium scale dairy units 20 | |
| Agencies | 1)LSGI | 1)LSGI | | 1)LSGI | | | |
| | 2) AHD | 2) AHD | AHD | 2) AHD | AHD | 1)LSGI | AHD |
| | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | | 3) Milk Co-operative Societies | | 2) AHD | |
| | | | | | | 3) Milk Co-operative Societies | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | | | 1) Selection of beneficiaries | | 1) Selection of beneficiaries | | 1) Selection of beneficiaries |
| Activities | 1) Selection of beneficiaries | Maintenance and Monitoring | 2) Training of beneficiaries | Maintenance and Monitoring | 2) Training of beneficiaries | Maintenance and Monitoring | 2) Training of beneficiaries |
| | 2) Training of beneficiaries | | 3) Establishment of Medium scale dairy units 20 numbers at selected | | 3) Establishment of Medium scale dairy units 20 numbers at selected | | 3) Establishment of Medium |
| | 3) Establishment of Medium scale dairy units 20 numbers at selected panchayaths. | | | | | | |
| | | | 1)LSGI | | 1)LSGI | | 1)LSGI |
| Agencies | AHD | AHD | 2) AHD | AHD | 2) AHD | AHD | 2) AHD |
| | | | 3) Milk Co-operative Societies | | 3) Milk Co-operative Societies | | 3) Milk Co-operative Societies |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.3 Ksheerasamrudhy dairy scheme | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries |
| | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries |
| | 3) Establishment of the scheme in 16 selected LSGIs. | 3) Establishment of the scheme in 15 selected LSGIs. | 3) Establishment of the scheme in 9 selected LSGIs. | 3) Establishment of the scheme in 7 selected LSGIs. | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring |
| Agencies | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | | |
| | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 1)LSG | 1)LSGI |
| | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 2) AHD | 2) AHD |
| | | | | | | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries |
| | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries |
| | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring | 3) Establishment of the scheme in 7 selected LSGIs.Maintenance and Monitoring |
| Agencies | | | | | | | 1)LSGI |
| | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSGI | 1)LSG | 2) AHD |
| | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 3) Milk Co-operative Societies |
| | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | |

Appendix 37-1 Phasing of Proposals

Name of the Sector :Animal Husbandry

Name of the Proposal: 2.1.4 Existing dairy farms with increased productivity

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|---|---|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Activities | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1. Selection of beneficiaries | 1. Selection of beneficiaries | 1. Selection of beneficiaries |
| | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2) Training of beneficiaries | 2. Culling of animals | 2. Culling of animals | 2. Culling of animals |
| | 3) Selection and registration of elite cows | 3) Selection and registration of elite cows | 3) Selection and registration of elite cows | 3) Selection and registration of elite cows | 3. Replacement with premium animals | 3. Replacement with premium animals | 3. Replacement with premium animals |
| | 4) Replacing the animals in the selected farm at Thazhava with animals having improved productivity | 4) Replacing the animals in the selected farm at Sooranad North with animals having improved productivity | 4) Replacing the animals in the selected farm at Sorenad South and Elampaloor with animals having improved productivity | 4) Replacing the animals in the selected farm at Thodiyur | | | |
| | | | | with animals having improved productivity | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Agencies | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | | |
| | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 1) LSGI | 1) LSGI |
| | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3) Milk Co-operative Societies | 3. KLD Board | 2) AHD | 2) AHD |
| | 4) KLD Board | 4) KLD Board | 4) KLD Board | 4) KLD Board | | 3. KLD Board | 3. KLD Board |
| | 5) Kerala Feeds | 5) Kerala Feeds | 5) Kerala Feeds | 5) Kerala Feeds | | | |
| | 6) NABARD | 6) NABARD | 6) NABARD | 6) NABARD | | | 2021 |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | |
| Activities | 1. Selection of beneficiaries | 1. Selection of beneficiaries | 1. Selection of beneficiaries | 1. Selection of beneficiaries | 1. Selection of beneficiaries | 1. Selection of beneficiaries | 1. Selection of beneficiaries |
| | 2. Culling of animals | 2. Culling of animals | 2. Culling of animals | 2. Culling of animals | 2. Culling of animals | 2. Culling of animals | 2. Culling of animals |
| | 3. Replacement with premium animals | 3. Replacement with premium animals | 3. Replacement with premium animals | 3. Replacement with premium animals | 3. Replacement with premium animals | 3. Replacement with premium animals | 3. Replacement with premium animals |
| | | | | | | | Maintenance and |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | |
| | | | | | | | |
| | | | | | | | |
| Agencies | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI |
| | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD |
| | 3. KLD Board | 3. KLD Board | 3. KLD Board | 3. KLD Board | 3. KLD Board | 3. KLD Board | 3. KLD Board |

| Appendix 37-1 Phasing of Proposals | | | | | | |
|---|---|---|---|---|---|---|
| Name of the Sector :Animal Husbandry | | | | | | |
| Name of the Proposal: 2.1.5 Fodder production units | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2014 |
| Activities | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 1)Selection of beneficiaries based on availability of land | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units |
| | 3) Establishment of 15 units each with fodder production in one hectare each in the five selected villages | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | 2) Infrastructure facilities to establish commercial fodder production units | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages |
| | | | 3) Establishment of fodder production units of one hectare each in selected villages | | | |
| | | | 4. Monitoring | | | 1) LSGI |
| Agencies | 1) LSGI | | | 1) LSGI | | 2) Department of Dairy Development |
| | 2) Department of Animal Husbandry | 1) LSGI | 1) LSGI | 2) Department of Dairy Development | 1) LSGI | 3) Department of Animal Husbandry |
| | 3) Department of Dairy Development | 2) Department of Dairy Development | 2) Department of Dairy Development | 3) Department of Animal Husbandry | 2) Department of Dairy Development | |
| | 4) Dairy Co-operatives | 3) Department of Animal Husbandry | 3) Department of Animal Husbandry | | 3) Department of Animal Husbandry | |
| | 5) K.D. Board | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2021 |
| Activities | | | | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units |
| | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | 1)Selection of beneficiaries based on availability of land and water 2)Providing infrastructure facilities to establish commercial fodder production units | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages |
| | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | | 3) Establishment of 15 units each with fodder production in one hectare each in the thirteen selected villages | |
| | | | | | | |
| Agencies | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI |
| | 2) Department of Dairy Development | 2) Department of Dairy Development | 2) Department of Dairy Development | 2) Department of Dairy Development | 2) Department of Dairy Development | 2) Department of Dairy Development |
| | 3) Department of Animal Husbandry | 3) Department of Animal Husbandry | 3) Department of Animal Husbandry | 3) Department of Animal Husbandry | 3) Department of Animal Husbandry | 3) Department of Animal Husbandry |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|--|--------------------------------------|--------------------------------------|--------------------------------|---------------------------------|---------------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.6 Feed production, Mixing unit and Feed analytical lab | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1)Selection of land for erecting large scale commercial feed mixing unit with a capacity of 10000 MT per day at Karunagappally | Acquisition of land for establishment of feed mixing plant (10 Acre) | Construction of store houses | Construction of store houses | Commissioning of the plant | 50 percent capacity utilisation | 90 percent capacity utilisation |
| | 2)Feasibility study. | | Installation of the feed mixing unit | Installation of the feed mixing unit | | | |
| Agencies | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Department of Animal Husbandry |
| | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Jilla panchayath, Kollam. |
| | Kerala Feeds | Kerala Feeds | Kerala Feeds | Kerala Feeds | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | | Capacity increase as per demand | Construction of store houses | Construction of store houses | | |
| Agencies | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. | Jilla panchayath, Kollam. |
| | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | | |
| | | | | | | Department of Animal Husbandry | Department of Animal Husbandry |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|---------------------------------|---|--|--|---|--|--|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.7 Silage production units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Identification of site | Establishment of silos in the five selected LSGIs. | Identification of site | Establishment of silos in the five selected LSGIs | Identification of site | Establishment of silos in the five selected LSGIs. |
| | | | | | | | |
| | | Acquisition of land | | Acquisition of land | | Acquisition of land | |
| | | | | | | | |
| | | Feasibility Study | | Feasibility Study | | Feasibility Study | |
| Agencies | | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development |
| | | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Identification of site | | | | Identification of site | Establishment of silos in the five selected LSGIs. | Establishment of silos in the five selected LSGIs. |
| | | Establishment of silos in the five selected LSG s | Identification of site | Establishment of silos in the five selected LSGIs. | | | |
| | Acquisition of land | | | | Acquisition of land | | |
| | | | Acquisition of land | | | LSGI | LSGI |
| | Feasibility Study | | | | Feasibility Study | Department of Dairy Development | Department of Dairy Development |
| | | | Feasibility Study | | Maintenance and Monitoring | Department of Animal Husbandry | Department of Animal Husbandry |
| | LSGI | LSGI | LSGI | LSGI | LSGI | | |
| Agencies | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | | |
| | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | | |

[illegible]

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|---------------------------------|---------------------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.9 Chilling plant | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of site at Karunagappally | Maintenance and Monitoring | Maintenance and Monitoring | Identification of site at Kundara | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | | | | | | |
| | Acquisition of land | | | Acquisition of land | | | |
| | | | | | | | |
| | Feasibility Study | | | Feasibility Study | | | |
| | | | | | | | |
| | Establishment of the Plant | | | Establishment of the Plant | | | |
| | | | | | | | |
| Agencies | LSGI | Department of Animal Husbandry | | LSGI | | | |
| | | | Department of Animal Husbandry | | Department of Animal Husbandry | | |
| | Department of Animal Husbandry | Department of Dairy Development | | Department of Animal Husbandry | | Department of Animal Husbandry | Department of Animal Husbandry |
| | | | Department of Dairy Development | | Department of Dairy Development | | |
| | Department of Dairy Development | | | Department of Dairy Development | | Department of Dairy Development | Department of Dairy Development |
| | | | | | | | |
| | MILMA | | | MILMA | | | |
| | | | | | | | |
| Year | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and Monitoring | | | | | | |
| | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry |
| Agencies | | | | | | | |
| | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|---------------------------------|--|---|---------------------------------|--|---|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.10 Quality control of milk and milk products | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1)Identification of site at the six selected places in Multi Functional Zone-1 | Establishment of the Labs at the selected sites | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | | 2)Acquisition of land | | | | |
| Agencies | | | LSGI | LSGI | | | Department of Animal Husbandry |
| | | | | | Department of Animal Husbandry | | |
| | | | Department of Animal Husbandry | Department of Animal Husbandry | | Department of Animal Husbandry | Department of Dairy Development |
| | | | | | Department of Dairy Development | | |
| | | | Department of Dairy Development | Department of Dairy Development | | Department of Dairy Development | |
| | | | MILMA | MILMA | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | | | | | | 1)Identification of site at the six selected places in Multi Functional Zone-2 | Establishment of the Labs at the selected sites |
| Activities | Strengthening the quality control labs | Maintenance and Monitoring | Maintenance and Monitoring | Strengthening the quality control labs | Maintenance and Monitoring | 2)Acquisition of land | |
| | Improving the facilities of labs | | | Improving the facilities of labs | | | |
| | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | Department of Animal Husbandry | LSGI | LSGI |
| Agencies | | | | | | Department of Animal Husbandry | Department of Animal Husbandry |
| | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development | Department of Dairy Development |
| | | | | | | MILMA | MILMA |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|------------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.11 Establishment of milk processing cum products factory | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | Identification of site | Acquisition of land | Establishment of the Plant | | Acquisition of land |
| | | | | | | | |
| | | | | Feasibility Study | | | Construction of building |
| | | | | | | | Installation of machinery |
| | | | | | | | |
| Agencies | | | MILMA | 1) MILMA | MILMA | | 1) MILMA |
| | | | 2) Dept of Dairy Development | 2) Dept of Dairy Development | Dept of Dairy Development | | 2) Dept of Dairy Development |
| | | | 3) AHD | 3) AHD | | | 3) AHD |
| | | | 4) Milk Co-operatives | 4) Milk Co-operatives | | | 4) Milk Co-operatives |
| Year | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Commissioning of the plant | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) MILMA | MILMA | MILMA | MILMA | MILMA | MILMA | MILMA |
| Agencies | 2) Dept of Dairy Development | | | | | | |
| | 3) AHD | Dept of Dairy Development | Dept of Dairy Development | Dept of Dairy Development | Dept of Dairy Development | Dept of Dairy Development | Dept of Dairy Development |
| | 4) Milk Co-operatives | | | | | | |

Appendix 37-1 Phasing of Proposals

Name of the Sector :Animal Husbandry

Name of the Proposal: 2.1.12 Dhenuraksha scheme

[illegible]

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.1.13 Comprehensive Baby Calf Health Scheme | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. |
| | | | | | | | |
| | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. |
| | | | | | | | |
| | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. |
| Agencies | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs |
| | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry |
| | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds |
| | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. | 1) Purchase of feed, medicines and supplements. |
| | | | | | | | |
| | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. | 2) Selection of healthy female calves at the age of 6 months. |
| | | | | | | | |
| | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. | 3) Enrolment of the calves. |
| Agencies | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs | 1) LSGIs |
| | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry | 2) Department of Animal Husbandry |
| | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds | 3) Kerala Feeds |
| | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives | 4) Milk Co-operatives |

[illegible]

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|----------------------------|----------------------------|--|----------------------------|--|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.1 Hi-tech Parent stock and Poultry farm rearing high producing cross bred layer birds and hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Construction of farm building | 1) Construction of farm building | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Purchase of Parent Stock (5000 birds) | 2) Purchase of Parent Stock (10000 birds) | | | | | Purchase of Parent Stock (10000 birds) |
| | 3) Establishment of hatchery with setting capacity of 13500 eggs per week | 3) Enhancement of setting capacity to 33000 eggs per week | | | | | |
| Agencies | 1) AHD | 1) AHD | | | | | |
| | 2) KSPDC | 2) KSPDC | AHD | AHD | AHD | AHD | AHD |
| | 3) KAU | 3) KAU | | | | | |
| | 4) NABARD | 4) NABARD | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC |
| | 5) LSGI | 5) LSGI | | | | | |
| | | | | | | | |
| Year | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| Activities | Maintenance and Monitoring | | | | | | |
| | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | | | | Purchase of Parent Stock (10000 birds) | | |
| | | | | | | | |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|--|--|----------------------------|----------------------------|---------------------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.2 Large scale Duck parent stock | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Establishment of the unit at Paravur. | 1) Establishment of the unit at Munroe island. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Construction of farm building | 2) Construction of farm building | | | Purchase of Parent Stock (1500 birds) | | |
| | 3) Purchase of Parent Stock (1500 birds) | 3) Purchase of Parent Stock (1500 birds) | | | | | |
| | 4) Establishment of hatchery with setting capacity of 4500 eggs per week | 4) Establishment of hatchery with setting capacity of 4500 eggs per week | | | | | |
| Agencies | 1) AHD | 1) AHD | | | | | |
| | 2) KSPDC | 2) KSPDC | AHD | AHD | AHD | AHD | AHD |
| | 3) KAU | 3) KAU | | | | | |
| | 4) NABARD | 4) NABARD | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC |
| | 5) LSGI | 5) LSGI | | | | | |
| | | | | | | | |
| Year | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and | | | | | | |
| | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | Purchase of Parent Stock (1500 birds) | | | Purchase of Parent Stock | | |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|----------------------------|---------------------------------------|---------------------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.3 Quail Parent Stock Farm and Hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Establishment of the unit at Veliyam and Sastamcotta. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Construction of farm building | | Purchase of Parent Stock (1000 birds) | | Purchase of Parent Stock | | Purchase of Parent Stock |
| | 3) Purchase of Parent Stock (1000 birds) | | | | | | |
| | 4) Establishment of hatchery with setting capacity of 4500 eggs per week | | | | | | |
| Agencies | 1) AHD | | | | | | |
| | 2) KSPDC | AHD | AHD | AHD | AHD | AHD | AHD |
| | 3) KAU | | | | | | |
| | 4) NABARD | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC |
| | 5) LSGI | | | | | | |
| | | | | | | | |
| Year | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| Activities | Maintenance and Monitoring | | | | | | |
| | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | Purchase of Parent Stock | | Purchase of Parent Stock (1000 birds) | | Purchase of Parent Stock | |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC | KSPDC |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---------------------------------------|--|--|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.4 Nurseries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Establishment of 5 units each at Chathnnoor and Velivam | 1) Establishment of 5 units each at Anchal and Pathanapuram. | 1) Establishment of 5 units at Sasthamcotta. | | | | |
| | 2) Selection of beneficiaries | 2) Selection of beneficiaries | 2) Selection of beneficiaries | Quality control of the poult produced | Quality control of the poult produced | Quality control of the poult produced | Quality control of the poult produced |
| | 3) Supply of infrastructure | 3) Supply of infrastructure | 3) Supply of infrastructure | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | | | Supply of chicks | Supply of chicks | Supply of chicks | Supply of chicks |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | | | | | | | |
| Year | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| | | | | | | | |
| Activities | Quality control of the poult produced | Quality control of the poult produced | Quality control of the poult produced | Quality control of the poult produced | Quality control of the poult produced | Quality control of the poult produced | Quality control of the poult produced |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | Supply of chicks | Supply of chicks | Supply of chicks | Supply of chicks | Supply of chicks | | Supply of chicks |
| | | | | | | | |
| | | | | | | | |
| | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| Agencies | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|--|--|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.5 Large scale poultry/ quail farms | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Establishment of 5 units each of poultry and quail farms at Chathnnor and Kottarakkara. | 1) Establishment of 5 units each of poultry and quail farms at Anchal and Mayyanad | 1) Establishment of 5 units each of poultry and quail farms at Elampallur, Thrikkovilattam and Karunagappally. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Construction of farm building and setting up of cages. | 2) Construction of farm building and setting up of cages. | 2) Construction of farm building and setting up of cages. | | | | |
| | 3) Purchase of chicks. | 3) Purchase of chicks. | 3) Purchase of chicks. | | | | |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|---|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.6 Backyard poultry units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of 1000 units of backyard poultry with 10 birds each in 5 panchayaths | Establishment of 1000 units of backyard poultry with 10 birds each in 5 panchayaths | Establishment of 1000 units of backyard poultry with 10 birds each in 5 panchayaths | Establishment of 1000 units of backyard poultry with 10 birds each in 3 panchayaths | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | | | |
| | 2) Training | 2) Training | 2) Training | 2) Training | | | |
| | 3) Implementation of the project | 3) Implementation of the project | 3) Implementation of the project | 3) Implementation of the project | | | |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and Monitoring | | | | | | |
| | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| Agencies | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |

Appendix 37-1 Phasing of Proposals

Name of the Sector :Animal Husbandry

Name of the proposal: 2.2.7Duck Rearing Units

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|--|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Activities | 1)Establishment of 4 units at Paravur 2) Construction of farm building 3) Purchase of day old chicks. | 1) Establishment of 4 units at Munroe Island 2) Construction of farm building 3) Purchase of day old chicks. | 1) Establishment of 4 units at Punalur and Sooranad South 2) Construction of farm building 3) Purchase of day old chicks. | Maintenanace and Monitoring | Maintenanace and Monitoring | Maintenanace and Monitoring | Maintenanace and Monitoring |
| Agencies | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenanace and Monitoring | Maintenanace and Monitoring | Maintenanace and Monitoring | Maintenanace and Monitoring | Maintenanace and Monitoring | Maintenanace and Monitoring | Maintenanace and Monitoring |
| Agencies | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI | 1)AHD 2)KSPDC 3)LSGI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|---|---|---|---|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.8 Backyard duck rearing units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of 200 units of backyard duck with 12 birds each in 6 panchayaths | Establishment of 200 units of backyard duck with 12 birds each in 6 panchayaths | Establishment of 200 units of backyard duck with 12 birds each in 6 panchayaths | Establishment of 200 units of backyard duck with 12 birds each in 6 panchayaths | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | | | |
| | 2) Training | 2) Training | 2) Training | 2) Training | | | |
| | 3) Implementation of the project | 3) Implementation of the project | 3) Implementation of the project | 3) Implementation of the project | | | |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | | | | | | |
| Activities | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| Agencies | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|---|---|---|---|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.2.9 Homestead Quail units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Establishment of 25 units each at the four selected LSGIs. | 1) Establishment of 25 units each at the four selected LSGIs. | 1) Establishment of 25 units each at the four selected LSGIs. | 1) Establishment of 25 units each at the four selected LSGIs. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Construction of farm building and cages | 2) Construction of farm building and cages | 2) Construction of farm building and cages | 2) Construction of farm building and cages | | | |
| | 3) Purchase of chicks. | 3) Purchase of chicks. | 3) Purchase of chicks. | 3) Purchase of chicks. | | | |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and Monitoring | | | | | | |
| | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|---|--|---|---|--|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 23.1 Male Calf fattening Scheme | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1)Beneficiary Selection | 1)Beneficiary Selection | 1)Beneficiary Selection | 1)Beneficiary Selection | 1)Beneficiary Selection | 1)Beneficiary Selection | Maintenance and Monitoring |
| | 2) Society selection | 2) Society selection | 2) Society selection | 2) Society selection | 2) Society selection | 2) Society selection | |
| | 3) Male calf Selection | 3) Male calf Selection | 3) Male calf Selection | 3) Male calf Selection | 3) Male calf Selection | 3) Male calf Selection | |
| | 4) Implementation of the project among 500 selected calves in the agro allied development zone | 4) Implementation of the project among 500 selected calves in the agro development zone | 4) Implementation of the project among 500 selected calves in the bio-reserve zone | 4) Implementation of the project among 500 selected calves in the aqua bio-reserve zone | 4) Implementation of the project among 500 selected calves in the multi functional zone | 4) Implementation of the project among 500 selected calves in the agro allied development zone | |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | | | | | | |
| Activities | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives | Milk Co-operatives |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|----------------------------|---|----------------------------|----------------------------|-----------------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.2 Malabari Goat Parent Stock Farm | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1) Setting up of infrastructure facilities including animal houses. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | 2) Purchase of breeding stock | | | | | |
| | | 3) Enhancement of staff position | | | Replacement of the breeding stock | | |
| Agencies | | Jilla Panchayath | AHD | AHD | AHD | AHD | AHD |
| | | AHD | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | | Replacement of the breeding stock | | | Replacement of the breeding stock | | |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.3 Malabari Goat rearing Satellite Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of four units each in the four selected LSGIs. | Establishment of four units each in the six selected LSGIs. | Establishment of four units each in the five selected LSGIs. | Establishment of four units each in the ten selected LSGIs. | Establishment of four units each in the ten selected LSGIs. | Establishment of four units each in the ten selected LSGIs. | Establishment of four units each in the ten selected LSGIs. |
| | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. |
| | 2) Purchase of animals | 2) Purchase of animals | 2) Purchase of animals | 2) Purchase of animals | 2) Purchase of animals | 2) Purchase of animals | 2) Purchase of animals |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.4 Goat rearing Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of four units each in the thirteen selected LSGIs. | Establishment of four units each in the twelve selected LSGIs. | Establishment of four units each in the eleven selected LSGIs. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | | | | |
| | 2) Purchase of animals | 2) Purchase of animals | 2) Purchase of animals | | | | |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | | | | | | | |
| | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.5 Goat Nurseries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of four units each in Mylum pachayath | Establishment of four units each in Edamulakkal panchayath | Establishment of four units each in Sooranad South and Kareepra Panchayaths | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | 1) Setting up of infrastructure facilities including animal houses. | | | | |
| | 2) Purchase of animals | 2) Purchase of animals | 2) Purchase of animals | | | | |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | | | | | | | |
| Year | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | | | | | | | |
| | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.6 Parent Stock Piggery Farm | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Setting up of infrastructure facilities including animal houses. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Purchase of breeding stock | | | | | | |
| | 3) Enhancement of staff position | | | | | | |
| Agencies | Jilla Panchayath | AHD | AHD | AHD | AHD | AHD | AHD |
| | AHD | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| Agencies | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.7 Piggery Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Setting up of infrastructure facilities including animal sheds. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Purchase of piglets | | | | | | |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | MPI | MPI | MPI | MPI | MPI | MPI | MPI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | | | | | | | |
| | | | | | | | |
| | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | MPI | MPI | MPI | MPI | MPI | MPI | MPI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.8 Rabbit Parent Stock Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Setting up of infrastructure facilities including animal houses. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Purchase of breeding stock | | Replacement of the parent stock | | Replacement of the parent stock | | Replacement of the parent stock |
| | 3) Enhancement of staff position | | | | | | |
| Agencies | Jilla Panchayath | AHD | AHD | AHD | AHD | AHD | AHD |
| | AHD | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | | Replacement of the parent stock | | Replacement of the parent stock | | Replacement of the parent stock | |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| Agencies | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath | Jilla Panchayath |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|----------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.9 Rabbit Nursery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1)Selection of beneficiary | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Setting up of infra structure | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits |
| | 3)supply of 30 day old kits | | | | | | |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits | supply of 30 day old kits |
| | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.10 Rabbit Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of 25 units in the four panchayaths of Bio reserve zone as first phase | Establishment of 25 units in the four panchayaths of Bio reserve zone as second phase | Maintenance and Monitoring | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1)Selection of beneficiary | 1)Selection of beneficiary | Replacement of parent stock | Maintenance and Monitoring | Replacement of parent stock | Replacement of parent stock | Replacement of parent stock |
| | 2) Setting up of infra structure | 2) Setting up of infra structure | | Replacement of parent stock | | | |
| | 3) Purchase of animals | 3) Purchase of animals | | | | | |
| | | | | | | | |
| Agencies | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | MPI | MPI | | | | | |
| Year | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | Replacement of parent stock | Replacement of parent stock | Replacement of parent stock | Replacement of parent stock | Replacement of parent stock | Replacement of parent stock | Replacement of parent stock |
| | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI | LSGI |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.11 High Tech Broiler Farm | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of the units at the three selected LSGIs. | Establishment of the units at the five selected LSGIs. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) Construction of shed to rear 6000 birds at a time | 1) Construction of shed to rear 6000 birds at a time | | | | | |
| | 2) Setting up of infrastructure including multi-tyre cages, automatic drinkers and waterers etc | 2) Setting up of infrastructure including multi-tyre cages, automatic drinkers and waterers etc | | | | | |
| | 3) Purchase of chicks | 3) Purchase of chicks | | | | | |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | | | | | | |
| Activities | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| Agencies | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|---|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.12 Broiler Farms | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of broiler units, 10 units each in 3 selected Panchayaths | Establishment of broiler units, 10 units each in 5 selected Panchayaths | Establishment of broiler units, 10 units each in 3 selected Panchayaths | Establishment of broiler units, 10 units each in 3 selected Panchayaths | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) Construction of shed | 1) Construction of shed | 1) Construction of shed | 1) Construction of shed | | | |
| | 2) Purchase of Birds | 2) Purchase of Birds | 2) Purchase of Birds | 2) Purchase of Birds | | | |
| Agencies | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | | | | | | |
| Activities | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| Agencies | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.13 Turkey farm including hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Setting up of infrastructure including turkey sheds. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Purchase of instruments including setters and hatches. | | | | | | |
| | 3) Setting up of a turkey meat processing plant cum products manufacturing unit. | | | | | | |
| Agencies | Jilla Panchayath | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | LSGI | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | AHD | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | KSPDC | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI |
| | Meat Products of India Ltd. | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | | | | | | |
| Activities | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| Agencies | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|---|---|---|---|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.14 Homestead Turkey Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | 1) Selection of beneficiaries | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 2) Training | 2) Training | 2) Training | 2) Training | | | |
| | 3) Establishment of the project in the 5 selected panchayaths | 3) Establishment of the project in the 5 selected panchayaths | 3) Establishment of the project in the 5 selected panchayaths | 3) Establishment of the project in the 3 selected panchayaths | | | |
| Agencies | 1) LSGI | 1) LSGI | 1) LSGI | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) AHD | 3) AHD | 3) AHD | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | | | | | | |
| Activities | | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD | 1) AHD |
| Agencies | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC | 2) KSPDC |
| | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI | 3) LSGI |
| | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI | 4) MPI |

Appendix 37-1 Phasing of Proposals

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|--|--|--|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.15 Slaughter houses | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Establishment of slaughter at 20 LSGIs | Establishment of slaughter at 20 LSGIs | Establishment of slaughter at 20 LSGIs | Establishment of slaughter at 20 LSGIs | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| | 1) Identification and acquisition of land | 1) Identification and acquisition of land | 1) Identification and acquisition of land | 1) Identification and acquisition of land | | | |
| | 2) Setting up of infrastructure facilities | 2) Setting up of infrastructure facilities | 2) Setting up of infrastructure facilities | 2) Setting up of infrastructure facilities | | | |
| Agencies | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI |
| | 2) KAU | 2) KAU | 2) KAU | 2) KAU | 2) AHD | 2) AHD | 2) AHD |
| | 3) AHD | 3) AHD | 3) AHD | 3) AHD | | | |
| | 4) MPI | 4) MPI | 4) MPI | 4) MPI | | | |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | | | | | | | |
| | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI |
| Agencies | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD | 2) AHD |
| | | | | | | | |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|----------------------|-------------------------|--|--------------------------|-----------------------------|---------------------------------|----------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.16 Abattoir, Meat Production& tanning | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Location identification | Feasibility study | Construction of building | Installation of machineries | 50 percent capacity utilisation | Waste disposal |
| Agencies | | AHD, LSG,PWD | Technical Committee Approved agency for construction of building, installation of machinery | PWD | AHD, PWD,LSG | AHD, PWD,LSG | AHD, LSG |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Capacity Enhancement | Byeproducts factory | Maintanance | Capacity Enhancement | Maintanance | Maintanance | Maintanance |
| Agencies | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|----------------------|------------------------------------|---|----------------------|----------------------|---------------------------|----------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.17 Meat processing units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | | | | | | | |
| Activities | Location | Feasibility study | installation of plant and machinery waste disposal unit | MAINTANACE | Capacity enhancement | Evaluation & maintainance | Waste disposal |
| | identification | infra structure construction | | | | | |
| Agencies | AHD,LSG | AHD,LSG, PWD, Construction agency. | Technical Committee Approved agency for construction of building, installation of machinery | PWD | AHD, PWD,LSG | AHD, PWD,LSG | AHD, LSG |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Capacity Enhancement | Byeproducts factory | Maintanance | Capacity Enhancement | Maintanance | Maintanance | Maintanance |
| Agencies | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG | AHD, LSG |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|---|----------------------------|---|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 2.3.18 Meat export | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Establishment of Veterinary Specialty Hospital at Punalur Municipality. | Maintenance and Monitoring | Establishment of Veterinary Specialty Hospital at Pathanapuram. | Maintenance and Monitoring | Establishment of Veterinary Specialty Hospital at Kottarakkara. | Maintenance and Monitoring |
| | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | |
| Agencies | | LSGI | 1) LSGI | LSGI | 1) LSGI | LSGI | 1) LSGI |
| | | RIDF | 2) AHD | RIDF | 2) AHD | RIDF | 2) AHD |
| | | AHD | | AHD | | AHD | |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Establishment of Veterinary Specialty Hospital at Kottiyam. | Maintenance and Monitoring | Establishment of Veterinary Specialty Hospital at Karunagappally. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment | | | | |
| | LSGI | 1) LSGI | LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI |
| Agencies | RIDF | 2) AHD | RIDF | 2) AHD | 2) AHD | 2) AHD | 2) AHD |
| | AHD | | AHD | | | | |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|---|---|---|---|----------------------------|---|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 3.5 Veterinary specialty hospitals | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Establishment of Veterinary Specialty Hospital at Punalur Municipality. | Maintenance and Monitoring | Establishment of Veterinary Specialty Hospital at Pathanapuram. | Maintenance and Monitoring | Establishment of Veterinary Specialty Hospital at Kottarakkera | Maintenance and Monitoring |
| | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | |
| Agencies | | LSGI | 1) LSGI | LSGI | 1) LSGI | LSGI | 1) LSGI |
| | | RIDF | 2) AHD | RIDF | 2) AHD | RIDF | 2) AHD |
| | | AHD | | AHD | | AHD | |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Establishment of Veterinary Specialty Hospital at Kottiyam. | Maintenance and Monitoring | Establishment of Veterinary Specialty Hospital at Karunagappally. | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | | | | |
| | LSGI | 1) LSGI | LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI |
| Agencies | RIDF | 2) AHD | RIDF | 2) AHD | 2) AHD | 2) AHD | 2) AHD |
| | AHD | | AHD | | | | |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|--------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 3.6 Artificial insemination centre | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of Areas where the centre to be located | Thazhava | Sasthamcotta | Kalluvathukkal | Mynagappally | Mandro Island | Thekumbhagom |
| | | Chathannoor | Sooranas North | Elampalloor | Thodiyoor | Karavalloor | Yeroor |
| | | Kunnathoor | Sooranas South | Nedumpana | Ezrukone | Kadakkal | Perinad |
| | | Poruvazhy | Kulakkada | Pavithreswaram | Kareepra | East Kallada | |
| Agencies | | LSGI | 1) LSGI | LSGI | 1) LSGI | LSGI | 1) LSGI |
| | | RIDF | 2) AHD | RIDF | 2) AHD | RIDF | 2) AHD |
| | | AHD | | AHD | | AHD | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | E Elampalloor | Thermala | Infrastructure improvement | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | Chithara | Kulathupuzha | | | | | |
| | Pooyappally | Aryankavu | | | | | |
| | LSGI | 1) LSGI | LSGI | 1) LSGI | 1) LSGI | 1) LSGI | 1) LSGI |
| Agencies | RIDF | 2) AHD | RIDF | 2) AHD | 2) AHD | 2) AHD | 2) AHD |
| | AHD | | AHD | | | | |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|----------------------------|--|---|---------------------------------------|----------------------------|---|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 3.7 Semen holding bank | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Construction of building for the semenholding bank | Purchase of containers and allied infrastructure. | Construction of liquid nitrogen plant | Maintenance and Monitoring | Capacity enhancement programmes Evaluation of semen. | Maintenance and Monitoring |
| | | &Quality Control lab for semen purchased from agencies | Purchase of premium semen from reputed agencies. | | | | |
| Agencies | | | AHD,KLDB | AHD,KLDB | 1 AHD | LSGI | AHD |
| | | AHD | | | | RIDF | |
| | | | | | | AHD | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | | | | | | | |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| Agencies | | | | | | | |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|--|--|------------------------------|--|---|----------------------------|---|----------------------------|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 3.8 Marketing outlets (LIPCOS) | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Detailing the frame work of the marketing organization | Framing operational protocol | Revising the apex body with the representatives from the societies | Increasing the quality of the products marketed | Organic products marketing | Establishment of Veterinary Specialty Hospital at Kottarakkara. | Maintenance and Monitoring |
| | Identification of areas | Giving brand names | | | | Upgradation of the existing infrastructure to veterinary specialty hospital with most modern diagnostic and treatment facilities. | |
| | Selection of the suitable buildings | Advertisement and publicity | | | | | |
| Agencies | | LSG | LSG | LSG | 1 LSG | LSG | LSGI |
| | | Jilla panchayath | Jilla panchayath | Jilla panchayath | Jilla panchayath | Jilla panchayath | Jilla panchayath |
| | | AHD | AHD | AHD | AHD | AHD | AHD |
| | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Improving the infrastructure | Starting new outlets | Starting new outlets | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring | Maintenance and Monitoring |
| Activities | | | | Starting new outlets | Starting new outlets | Starting new outlets | Starting new outlets |
| Agencies | | LSG | LSG | LSG | 1 LSG | LSG | LSGI |
| | | Jilla panchayath | Jilla panchayath | Jilla panchayath | Jilla panchayath | Jilla panchayath | Jilla panchayath |
| | | AHD | AHD | AHD | AHD | AHD | AHD |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 4.3 Prevention of cruelty against animals | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Printing of brochures | Conduct of seminars | Establishment of cattle/animal pound for stray animals | Mobile van for sick animals | Printing of brochures | Printing of brochures | Printing of brochures |
| | | Establishment of karuna clubs in schools | | Conduct of animal welfare seminars, quiz, drawing competition etc | Conduct of seminars | Conduct of seminars | Conduct of seminars |
| | Establishment of Units at taluk level | Awareness class for School children | | | Establishment of karuna clubs in schools | Establishment of karuna clubs in schools | Establishment of karuna clubs in schools |
| | | | | | Awareness class for School children | Awareness class for School children Conduct of animal welfare seminars, quiz, drawing competition etc | Awareness class for School children Conduct of animal welfare seminars, quiz, drawing competition etc |
| Agencies | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | LSG | LSG | LSG | LSG | LSG | LSG | LSG |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Printing of brochures | Printing of posters | Printing of brochures | Printing of posters | Printing of brochures | Printing of posters | Printing of brochures |
| | Conduct of seminars | Conduct of seminars | Conduct of seminars | Conduct of seminars | Conduct of seminars | Conduct of seminars | Conduct of seminars |
| | class for School children Conduct of animal welfare seminars, quiz, drawing competition etc | class for School children Conduct of animal welfare seminars, quiz, drawing competition etc | class for School children Conduct of animal welfare seminars, quiz, drawing competition etc | class for School children Conduct of animal welfare seminars, quiz, drawing competition etc | class for School children Conduct of animal welfare seminars, quiz, drawing competition etc | class for School children Conduct of animal welfare seminars, quiz, drawing competition etc | class for School children Conduct of animal welfare seminars, quiz, drawing competition etc |
| | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | LSG | LSG | LSG | LSG | LSG | LSG | LSG |

| Appendix 37-1 Phasing of Proposals | | | | | | | |
|---|--|--|--|--|--|--|--|
| Name of the Sector :Animal Husbandry | | | | | | | |
| Name of the Proposal: 4.4 Population control programme for dogs | | | | | | | |
| year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Taking censuss of dog population, stray dogs, female dogs. | Animal birth control programmes | Establishmwent of pound for stray animals | Establishmwent of mbile surgery van | Vasectamy for male dogs | Vasectamy for male dogs | Vasectamy for male dogs |
| | | Licensing of dogs | Vasectamy for male dogs | Vasectamy for male dogs | Ovarectamy for female dogs. | Ovarectamy for female dogs. | Ovarectamy for female dogs. |
| | | Vasectamy for male dogs | Ovarectamy for female dogs. | Ovarectamy for female dogs. | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies |
| | | Ovarectamy for female dogs. | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | | | T |
| Agencies | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | LSG | LSG | LSG | LSG | LSG | LSG | LSG |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Vasectamy for male dogs | Vasectamy for male dogs | Vasectamy for male dogs | Vasectamy for male dogs | Vasectamy for male dogs | Vasectamy for male dogs | Vasectamy for male dogs |
| Activities | Ovarectamy for female dogs. | Ovarectamy for female dogs. | Ovarectamy for female dogs. | Ovarectamy for female dogs. | Ovarectamy for female dogs. | Ovarectamy for female dogs. | Ovarectamy for female dogs. |
| | Vaccination of all susceptible population against SPCA | Vaccination of all susceptible population against SPCA | Vaccination of all susceptible population against SPCA | Vaccination of all susceptible population against SPCA | Vaccination of all susceptible population against SPCA | Vaccination of all susceptible population against SPCA | Vaccination of all susceptible population against SPCA |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | LSG | LSG | LSG | LSG | LSG | LSG | LSG |

Appendix 37-1 Phasing of Proposals

Name of the Sector :Animal Husbandry

Name of the Proposal: 6.4 Comprehensive Rabies Control Programme

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|--|--|--|--|--|--|--|
| Activities | Taking censuss of dog population, stray dogs, female dogs. | Licensing of dogs | Establishment of pound for stray animals | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies |
| | | Animal birth control programmes | | Oral vaccine distribution | Oral vaccine distribution | Oral vaccine distribution | Oral vaccine distribution |
| | | Advertisements for eradication of rabies | Vaccination of all susceptible population against rabies | Awareness seminar for public school children | Awareness seminar for public school children | Awareness seminar for public school children | Awareness seminar for public school children |
| | | Hoardings and boardings erection | Oral vaccine distribution | | | | |
| Agencies | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA |
| | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | LSG | LSG | LSG | LSG | LSG | LSG | LSG |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies | Vaccination of all susceptible population against rabies |
| Activities | Oral vaccine distribution | Oral vaccine distribution | Oral vaccine distribution | Oral vaccine distribution | Oral vaccine distribution | Oral vaccine distribution | Oral vaccine distribution |
| | Awareness seminar for public school children | Awareness seminar for public school children | Awareness seminar for public school children | Awareness seminar for public school children | Awareness seminar for public school children | Awareness seminar for public school children | Awareness seminar for public school children |
| | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA | SPCA |
| Agencies | AHD | AHD | AHD | AHD | AHD | AHD | AHD |
| | LSG | LSG | LSG | LSG | LSG | LSG | LSG |
| | | | | | | | |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--------------------------------------|--|---|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Carp Seed Hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Site selection 2.land acquisition 3.construction of hatchery building 4. Evaluation | 1.construction of hatchery building 2.setting up of hatchery equipment and machines 3. Evaluation | 1..collection of brood fishes/mother fishes 2. Breedings 3.Larval rearing 4. Marketing 5. Evaluation | Hatchery Operation | Hatchery Operation | Hatchery Operation | Hatchery Operation |
| Agencies | 1-FFDA,KLM \ ADAK 2-Revenue Department. | 1-2- HED\ PWD . 3. Fisheries Department. | 1-4. FFDA,KLM \ ADAK 5. Fisheries Department. | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Hatchery Operation | Hatchery Operation | Hatchery Operation | Hatchery Operation | Hatchery Operation | Hatchery Operation | Hatchery Operation |
| Agencies | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM | Fisheries Department/ ADAK/FFDA, KLM |

| Sl.No. | Particulars | 2008 | 2009 | 2010 | Total |
|--------|---------------------------------|------|------|------|-------|
| 1 | Physical target (Unit) | 1 | | | 1 |
| 2 | Total outlay (in lakh) | 10 | 10 | 10 | 30 |
| a | Govt of India's Share (in lakh) | 5 | 10 | 10 | 25 |
| b | State's share (in lakh) | 5 | - | - | 5 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Carp seed rearing Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation |
| Agencies | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation | 1.site selection 2.farmer training 3.pond construction/ renovation 4.pond preparation and water culture 5.stocking 6.rearing 7.harvesting 8.marketing 9.evaluation |
| Agencies | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department | 1-2 - FFDA, KLM \ADAK 3-7 - Beneficiaries 8 - FFDA KLM \ADAK 9 - Fisheries Department |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | Physical target (Unit) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay (in Rs. Lakh) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 30 |
| 3 | Subsidy @ 25% (in Rs. Lakh) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 7.5 |
| 4 | Beneficiary's share (in Rs. Lakh) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 22.5 |
| 5 | Govt. of India's share (in Rs. Lakh) | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 5.62 |
| 6 | States share (in Rs. Lakh) | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 1.88 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-----------------------------------|---------------|---|--------------------------------------|--------------------------------------|--|--|--------------------------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Shrimp hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.site selection 2.land acquisition | construction of hatchery building | construction of hatchery building | installation water intake& purifying system algalculture facilities | Installation of aeration system & Generator system, Algal culture, Mother prawn collection, etc. | Inaguration and Hatchery functioning |
| Agencies | | 1 Fisheries Dpt. 2 Revenue Department. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | functioning | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| Sl No | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|-------|--------------------------------------|------|------|------|------|------|------|-------|
| 1 | Physical target (Unit) | 1 | | | | | | 1 |
| 2 | Total out lay (in Rs. Lakh) | 6 | 10 | 10 | 10 | 10 | 4 | 50 |
| 3 | Govt. of India's share (in Rs. Lakh) | - | 10 | 10 | 10 | 10 | - | 40 |
| 4 | Beneficiary's share (in Rs. Lakh) | 6 | - | - | - | - | 4 | 10 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---------------|---|--------------------------------------|--------------------------------------|--|---|--------------------------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Fresh Water Prawn hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | | | | | | | |
| Activities | | 1.site selection 2.land acquisition | construction of hatchery building | construction of hatchery building | installation water intake& purifying system algalculture facilities | Installation of aeration system & Generator system, Algal culture, Berried prawn collection, etc. | Inaguration and Hatchery functioning |
| Agencies | | 1 Fisheries Dpt. 2 Revenue Department. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | functioning | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| SI No | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|-------|--------------------------------------|------|------|------|------|------|------|-------|
| 1 | Physical target (Unit) | 1 | | | | | | 1 |
| 2 | Total out lay (in Rs. Lakh) | 6 | 10 | 10 | 10 | 10 | 4 | 50 |
| 3 | Govt. of India's share (in Rs. Lakh) | - | 10 | 10 | 10 | 10 | - | 40 |
| 4 | Beneficiary's share (in Rs. Lakh) | 6 | - | - | - | - | 4 | 10 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-------------------------------------|---------------|--|---|---|---|--|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Mud Crab hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.site selection 2.land acquisition | construction of hatchery building | construction of hatchery building | installation water intake& purifying system algaiculture facilities | Installation of aeration system & Generator system, Algal culture, Mother crab collection, etc. | Inaguration and Hatchery functioning |
| Agencies | | 1 Fisheries Dpt. 2 Revenue Department. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | functioning | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| Sl No | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|-------|--------------------------------------|------|------|------|------|------|------|-------|
| 1 | Physical target (Unit) | 1 | | | | | | 1 |
| 2 | Total out lay (in Rs. Lakh) | 6 | 10 | 10 | 10 | 10 | 4 | 50 |
| 3 | Govt. of India's share (in Rs. Lakh) | - | 10 | 10 | 10 | 10 | - | 40 |
| 4 | Beneficiary's share (in Rs. Lakh) | 6 | - | - | - | - | 4 | 10 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---------------|---|--------------------------------------|--------------------------------------|---|--|--------------------------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Marine & Brackish Water Fin Fish hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.site selection 2.land acquisition | construction of hatchery building | construction of hatchery building | installation water intake& purifying system algalculture facilities | Installation of aeration system & Generator system, Algal culture, Brood Fish collection, etc. | Inaguration and Hatchery functioning |
| Agencies | | 1 Fisheries Dpt. 2 Revenue Department. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries & Harbour Engineering Dpt. | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | functioning | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| Sl No | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|-------|--------------------------------------|------|------|------|------|------|------|-------|
| 1 | Physical target (Unit) | 1 | | | | | | 1 |
| 2 | Total out lay (in Rs. Lakh) | 6 | 10 | 10 | 10 | 10 | 4 | 50 |
| 3 | Govt. of India's share (in Rs. Lakh) | - | 10 | 10 | 10 | 10 | - | 40 |
| 4 | Beneficiary's share (in Rs. Lakh) | 6 | - | - | - | - | 4 | 10 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---------------|---|-------------------------------------|-------------------------------------|---|---|--------------------------------------|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Marine Ornamental Fish hatchery | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.site selection 2.land acquisition | construction of hatchery building | construction of hatchery building | installation water intake& purifying system algalculture facilities | Installation of aeration system & Generator system, Algal culture, Berried prawn collection, etc. | Inaguration and Hatchery functioning |
| Agencies | | 1 Fisheries Dpt. 2 Revenue Department. | Fisheries & Habour Engineering Dpt. | Fisheries & Habour Engineering Dpt. | Fisheries & Habour Engineering Dpt. | Fisheries & Habour Engineering Dpt. | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | functioning | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| Sl.No. | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|--------|--------------------------------------|------|------|------|------|------|------|-------|
| 1 | Physical target (unit) | 1 | | | | | | 1 |
| 2 | Total outlay (in Rs. Lakh) | 6 | 10 | 10 | 10 | 10 | 4 | 50 |
| 3 | Govt. of India's Share (in Rs. Lakh) | - | 10 | 10 | 10 | 10 | - | 40 |
| 4 | State's Share (in Rs. Lakh) | 6 | - | - | - | - | 4 | 10 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Larvivorous Fish Seed Production Centre | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Construction of hatchery building & tanks, installation water intake& purifying system, algalculture facilities | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries & Harbour Engineering Dpt. | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | functioning | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| Sl.No. | Particulars | 2008 | Total |
|--------|--|------|-------|
| 1 | Physical target (unit) | 1 | 1 |
| 2 | Total outlay (in Rs. Lakh) | 10 | 10 |
| 3 | District Panchayat Share (in Rs. Lakh) | 5 | 5 |
| 4 | Fisheries department's Share (in Rs. Lakh) | 5 | 5 |
| 5 | LSGI's Share | Land | |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :All Male Tilapia Seed production Centres | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | | | | | | | |
| Activities | Construction of hatchery building & tanks, installation water intake& purifying system, algalculture facilities | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries & Harbour Engineering Dpt. | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | functioning | functioning | functioning | functioning | functioning | functioning | functioning |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| Sl.No. | Particulars | 2008 | Total |
|--------|--|------|-------|
| 1 | Physical target (unit) | 1 | 1 |
| 2 | Total outlay (in Rs. Lakh) | 10 | 10 |
| 3 | LSGI's Share | 5 | 5 |
| 4 | Fisheries department's Share (in Rs. Lakh) | 5 | 5 |

[illegible][illegible]

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Paddy cum fish culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation |
| Agencies | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. Field preparation 5. culture practices (rotation of crops) 6. Harvesting 7. Marketing 8. Evaluation |
| Agencies | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt | 1&2. Fisheries Agri.Dpt. 3. FFDA KLM \ ADAK 4-7 Beneficiaries 8 Fisheries & Agri.Dpt |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (ha) | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 750 |
| 2 | Total outlay (in crore) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 15.0 |
| 3 | Total subsidy @ 20% (Rs. crore) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 3.0 |
| 4 | Govt. of India share @ 75% (Rs. crore) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 2.25 |
| 5 | State share @25% (Rs. Crore) | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.75 |

| Appendix 38.1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector: Fisheries | | | | | | | |
| Name of Proposal: Integrated pig cum fish culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. |
| Agencies | 1. Fisheries Deptt. FFDA/Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries & Fisheries Deptt. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Integrated pig cum fish culture. 6. Monitoring. |
| Agencies | 1. Fisheries Deptt. FFDA/Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries & Fisheries Deptt. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. | 1. Fisheries Dpt. & LSGI. 2. Revenue. 384 HED \ PWD 5 LSGI & Fisheries Department. |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (in ha) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 2 | Total out lay (in Rs. Lakh) | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 42 |
| 3 | Subsidy @ 20 % (in Rs. Lakh) | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 8.4 |
| 4 | Beneficiary's share/bank credit (in Es. Lakh) | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 33.6 |
| 5 | Govt. of India's share (in Rs. Lakh) | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 6.3 |
| 6 | States share (in Rs. Lakh) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 2.1 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Integrated duck cum fish culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. |
| Agencies | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated duck cum fish culture. 6. Monitoring. |
| Agencies | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (in ha) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 2 | Total out lay (in Rs. Lakh) | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 42 |
| 3 | Subsidy @ 20 % (in Rs. Lakh) | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 8.4 |
| 4 | Beneficiary's share/bank credit (in Es. Lakh) | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 33.6 |
| 5 | Govt. of India's share (in Rs. Lakh) | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 6.3 |
| 6 | States share (in Rs. Lakh) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 2.1 |

| Appendix 38-1 Proposal Phasing | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Name of Sector: Fisheries | | | | | | | | | | | | |
| Name of Proposal: Integrated Poultry cum fish culture | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | | | | |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | | | | | |
| Agencies | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | | | | |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of integrated poultry cum fish culture. 6. Monitoring. | | | | | |
| Agencies | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGI. 2. FFDA/ADAK. 3. Beneficiaries & BANK. 4. Beneficiaries & BANK. 5. Beneficiaries 6. Fisheries Dept. | | | | | |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (in ha) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 2 | Total outlay (in Rs. Lakh) | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 42 |
| 3 | Subsidy @ 20 % (in Rs. Lakh) | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 8.4 |
| 4 | Beneficiary's share/bank credit (in Rs. Lakh) | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 33.6 |
| 5 | Govt. of India's share (in Rs. Lakh) | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 6.3 |
| 6 | States share (in Rs. Lakh) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 2.1 |

| Appendix 3B-1 Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :All male Tilapia Culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation |
| Agencies | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation | 1.Identification of 20 ha water area 2.Technical survey 3.Farmers training 4.Farm construction /preparation 5.Scientific culture practices 6.Harvesting 7.marketing 8.Evaluation |
| Agencies | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. | 1-3 was executed by ADAK \ FFDA, KLM 4-7 Beneficiaries 8 Fisheries Department. |

| S/no. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (in ha) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 300 |
| 2 | Total outlay(in Rs.lakh) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 900 |
| 3 | Total subsidy @20%(inlakh) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 180 |
| 4 | Govt.of India share50%(inRs.lakh) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 120 |
| 5 | Statis share50% (inRs.lakh) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |
| 6 | Beneficiary's share/ bank credit (inRs.lakh) | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 720 |

[illegible][illegible]

| Appendix 38.1 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Renovation of Panchayat Ponds For Fish Culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation |
| Agencies | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation | 1. Selection of pond to be renovated 2. Plan & Estimate preparation 3. Tendering the Work 4. work Execution 5. monitoring of Work 6. stocking 7. scientific culture 8. Harvesting & marketing 10. Evaluation |
| Agencies | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. | 1. LSGI's & FFDA KLM/ADAK 2-4 LSGI's & PWD. 5. LSGI's - FisheriesDepartment 6-9. Beneficiary & FFDA, KLM/ADAK 10 LSGI's & Fisheries Dpt. |

| Sno. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target(in ha) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |
| 2 | Total outlay(in Rs.lakh) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 180 |
| 3 | LSGI's Share (inlakh) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 180 |

Appendix 38-1 Proposal Phasing

Name of Sector :Fisheries

Name of Proposal :Production Enhancement through Social Fisheries

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|---|---|---|---|---|---|---|
| Activities | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collect on of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation |
| Agencies | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4 LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4 LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4 LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4 LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4 LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4 LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4 LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation | 1. Site selection for stocking fish seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4.Stocking seeds 5.awarress to farmers 6.data collection 7. evaluation |
| Agencies | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4- LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4- LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4- LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4- LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4- LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4- LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3.FFDA KLM \ ADAK. 4- LSGIS & Public& Fisheries Dpt. 5-7. Fisheries Dpt. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical (No of seeds in lakh) | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 225 |
| 2 | Finance (in lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 3 | 100 % state share | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|--|---|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Production Enhancement through Reservoir Fisheries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Organisation of SHG's 2. Farmers training 3. Providing infrastructure to groups 4. collection of fish seeds 5. Transportation of fish seeds 6. Stocking seeds 7. Farming practices 8. Harvesting & Marketing | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation |
| Agencies | 1. Fisheries Dpt. & LSGI 2 & 6. FFDA KLMV \ ADAP 7- 8. Beneficiary group 9. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 2 & 3. FFDA KLMV \ ADAP 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation | 1. Stocking of seeds 2. Culture practice 3. Evaluation |
| Agencies | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt | 1 & 2. Beneficiaries 3. Fisheries Dpt. & Forest Dpt |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | Physical target (ha) | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 | 2560 |
| 2 | Total outlay (in crore) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 7.5 |
| 3 | Govt. of India share @ 75% (Rs.crore) | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 5.625 |
| 4 | State share @25% (Rs. Crore) | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 1.875 |

| Appendix 38-1 Proposal Phasing/Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector: Fisheries | | | | | | | |
| Name of Proposal : Open Water Ranching | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation |
| Agencies | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/prawn seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation |
| Agencies | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. FFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical (No of seeds in lakh) | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 225 |
| 2 | Finance (in lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 3 | 100 % state share | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |

| Appendix 38-1 Proposal Phasing/Proposal Phasing | | | | | | | |
|---|--|--|--|--|--|--|--|
| Name of Sector: Fisheries | | | | | | | |
| Name of Proposal: Sea Ranching | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation |
| Agencies | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation | 1. Site selection for stocking fish/shrimp seeds 2. collection of fish seeds 3. Transportation protection of fish seeds 4. Stocking seeds 5. awareness to farmers 6. data collection 7. evaluation |
| Agencies | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. | 1. Fisheries Dpt. 2&3. BFFDA KLM \ ADAK. 4. LSGIS & Public & Fisheries Dpt. 5-7. Fisheries Dpt. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical (No of seeds in lakh) | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 225 |
| 2 | Finance (in lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 3 | 100 % state share | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |

Appendix 38-I: Proposal Phasing/Proposal Phasing

| Name of Sector : Fisheries | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Proposal : Ornamental Fish culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation |
| Agencies | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation | 1. site selection 2. farmer training 3. setting up of ornamental unit 4. culturing of ornamental fishes - which includes breeding, larval, rearing, nursing 5. harvesting 6. marketing 7. evaluation |
| Agencies | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department | 1-2 FFDA KLM \ADAK 3-5 SHG'S \ Beneficiaries 6 SHG'S \ Beneficiaries \ MPEDA 7. Fisheries Department |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | Physical target (ha) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1800 |
| 2 | Total outlay (in crore) | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 3.7500 |
| 3 | Total subsidy @ 20% (Rs. crore) | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 1.8750 |
| 4 | Govt of India share @ 75% (Rs.crore) | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.9375 |
| 5 | State share @25% (Rs. Crore) | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.9375 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Shrimp farming | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation |
| Agencies | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation | 1. Site selection 2. Farmers training 3. Pond construction/ renovation 4. pond preparation for water culture 5. seed stocking 6. scientific culture practices 7. Harvesting 8. Marketing 9. Evaluation |
| Agencies | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. | 1&2- BFFDA KLM1 ADAK 3-8. Beneficiaries 9. Fisheries Department. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (ha) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1500 |
| 2 | Total outlay (in crore) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 45 |
| 3 | Total subsidy @ 20% (Rs. crore) | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 9.0 |
| 4 | Govt of India share @ 75% (Rs. crore) | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 6.75 |
| 5 | State share @25% (Rs. Crore) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 2.25 |

[illegible]

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Oyster farming | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation |
| Agencies | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation | 1.site selection 2. organisation of SHGs 3.farmers training 4. raft material collection 5.setting up of raft 6.spat collection 7.seeding 8.culture 9.harvesting 10.Evaluation |
| Agencies | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. | 1-3 BFFDA KLM \ ADAAK 4-9 Beneficiaries. 10. Fisheries Dpt. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | Physical target (ha) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1500 |
| 2 | Total outlay (in crore) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 2.25 |
| 3 | Total subsidy @ 50% (Rs. crore) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 1.125 |
| 4 | Govt of India share @ 50% (Rs.crore) | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.5625 |
| 5 | State share @ 50% (Rs. Crore) | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.0375 | 0.5625 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Fresh water Prawn farming | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation |
| Agencies | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation | 1. Identification of 50 Ha paddy field 2. technical survey 3. Farmers training 4. farm construction/rennovation 5. scientific prawn culture practices 6. Herrusting 7. Marketing 8. Evaluation |
| Agencies | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. | 1-3 FFDA, KLM\ADAK 4-7 Beneficiary group 9 Fisheries Dpt. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | Physical target (ha) | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 750 |
| 2 | Total outlay (in crore) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 22.5 |
| 3 | Total subsidy @ 50% (Rs. crore) | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 4.5 |
| 4 | Govt of India share @ 50% (Rs. crore) | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 3.375 |
| 5 | State share @ 50% (Rs. Crore) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 1.125 |

| Appendix 38-1 Proposal Phasing/Proposal Phasing | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | | |
| Name of Proposal : Cage Culture | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | |
| Activities | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | |
| Agencies | 1-3 BFFDA KLM VADAK 10 Beneficiaries. Fisheries Department. | 4-11 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 1-3 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 1-3 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 1-3 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 4-11 BFFDA KLM VADAK 10 Beneficiaries. Fisheries Department. | 4-11 BFFDA KLM VADAK 10 Beneficiaries. Fisheries Department. | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| Activities | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | 1.Site identification. 2. Fishermen SHGs formation 3.Training 4. collection of cage materials 5. construction of cages 6. installation of cages 7. stocking 8. scientific culture 9. harvesting 10. marketing 11. evaluation | |
| Agencies | 1-3 BFFDA KLM VADAK 10 Beneficiaries. Fisheries Department. | 4-11 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 1-3 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 1-3 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 1-3 BFFDA KLM VADAK 4-10 Beneficiaries. Fisheries Department. | 4-11 BFFDA KLM VADAK 10 Beneficiaries. Fisheries Department. | 4-11 BFFDA KLM VADAK 10 Beneficiaries. Fisheries Department. | |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | Physical target (ha) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1800 |
| 2 | Total outlay (in crore) | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 0.2500 | 3.7500 |
| 3 | Total subsidy @ 20% (Rs. crore) | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 0.1250 | 1.8750 |
| 4 | Govt of India share @ 75% (Rs.crore) | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.9375 |
| 5 | State share @25% (Rs. Crore) | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.0625 | 0.9375 |

| Appendix 38-1 Proposal PhasingProposal Phasing | | | | | | | | | | | | | | |
|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|
| Name of Sector :Fisheries | | | | | | | | | | | | | | |
| Name of Proposal : Mud crab farming | | | | | | | | | | | | | | |
| Year | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | |
| Activities | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site select or 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | |
| Agencies | 1-3 BFFDA KIMADAK 9 Beneficiaries Fisheries Dpt. | | 4-10 BFFDA KIMADAK 4-9 Beneficiaries 10 Fisheries Dpt. | | 1-3 BFFDA KIMADAK 4-9 Beneficiaries 10 Fisheries Dpt. | | 1-3 BFFDA KIMADAK 4-9 Beneficiaries 10 Fisheries Dpt. | | 1-3 BFFDA KIMADAK 4-9 Beneficiaries Fisheries Dpt. | | 4-10 BFFDA KIMADAK 9 Beneficiaries 10 Fisheries Dpt. | | 4-10 BFFDA KIMADAK 9 Beneficiaries Fisheries Dpt. | |
| Year | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | |
| Activities | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site selection 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | | 1.site select or 2. organisation of SHGs 3.farmers training 4. farm construction 5.collection of crab and water crabs 6stocking 7Scientific /culture 8. harvesting 9.marketing 10.Evaluation | |
| Agencies | 1-3 BFFDA KIMADAK 9 Beneficiaries Fisheries Dpt. | | 4-10 BFFDA KIMADAK 4-9 Beneficiaries 10 Fisheries Dpt. | | 1-3 BFFDA KIMADAK 4-9 Beneficiaries 10 Fisheries Dpt. | | 1-3 BFFDA KIMADAK 4-9 Beneficiaries 10 Fisheries Dpt. | | 1-3 BFFDA KIMADAK 4-9 Beneficiaries Fisheries Dpt. | | 4-10 BFFDA KIMADAK 9 Beneficiaries 10 Fisheries Dpt. | | 4-10 BFFDA KIMADAK 9 Beneficiaries Fisheries Dpt. | |

[illegible]

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Marine Pearl culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring |
| Agencies | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring | 1.site selection 2. organisation of SHGs 3. training 4. spat collection 5. Inoculation of nucleus 6.Ranching of spat back to sea 7.re collection of oysters 8 shuckling & pearl collection 9 marketing 10. Monitoring |
| Agencies | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. | 1&2 BFFDA KLM ADAK 3 BFFDA ADAK & CMFRI 5-9 Beneficiaries 10 Fisheries Dpt. |

| SI No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (units) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 50 |
| 2 | Total out lay (Rs .Lakh) | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 35 |
| 3 | subsidy@ 50% (Rs .Lakh) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 4 | State's Share (Rs .Lakh) | 1.5 | 0.5 | 0.5 | 1.5 | 0.5 | 0.5 | 1.5 | 0.5 | 0.5 | 1.5 | 0.5 | 0.5 | 1.5 | 0.5 | 0.5 | 12.5 |
| 5 | Govt.of India share (Rs .Lakh) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 7.5 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---------------------------------------|------|--|---|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Aqua culture Estate | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Development of ponds. 2.Development of lead production facilities. 3.Development of larval rearing facilities. 4. Development of grow out system. 5. Harvesting & Marketing 6.Development of cold storage facilities. 7. Development of pre processing facilities. 8.Development of value addition facilities. 9.Development of fresh feed production facilities. 10. Monitoring. | 1 Development of ponds. 2 Development of lead production facilities. 3 Development of larval rearing facilities. 4 Development of grow out system. 5 Harvesting & Marketing 6 Development of cold storage facilities. 7 Development of pre processing facilities. 8 Development of value addition facilities. 9 Development of fresh feed production facilities. 10. Monitoring. | | | | |
| Agencies | | 1 to 11 FFDA Kollam \ ADAK 12 Fisheries Dpt.& LSGIS. | 1 to 11 FFDA Kollam \ ADAK 12 Fisheries Dpt.& LSGIS. | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |
| | | | | | | | |

| Sl No | Particulars | 2009 | 2010 | Total |
|-------|--|------|------|-------|
| 1 | Physical Target (Unit) | 3 | 3 | 6 |
| 2 | Total out lay (in Rs Lakhs) | 90 | 90 | 180 |
| 3 | Department of fisheries - (In Rs Lakhs) | 45 | 45 | 90 |
| 4 | Concerned LSG (In rs Lakh) | 45 | 45 | 90 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Fresh water pearl culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation |
| Agencies | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation | 1.site selection 2. technical survey 3.formation of women SHGs 4. Training 5.Scientific culture 6.production of pearl 7. harvesting 8. marketing 9.Evaluation |
| Agencies | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. | 1-4 FFDA KLM / ADAK 5-8 Beneficiaries, 9 Fisheries Dpt. |

| Sl.No | Details | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|-------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1 | Number of units | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15.0 |
| 3 | Total subsidy | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 7.50 |
| 4 | Govt of India share | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 5.6250 |
| 5 | State share | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 1.8750 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|
| Name of Sector: Fisheries | | | | | | | |
| Name of Proposal : Sea weed culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation |
| Agencies | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation | 1. site selection 2. organisation of SHGs 3. farmers training 4. collection of the seedlings of sea weeds 5. preparation of raft 6. setting up of raft in the sea 7. culture & monitoring 8. harvesting & harvesting 9. Evaluation |
| Agencies | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. | 1. BFFDA KLM VADAK & CMFRI 2-4. BFFDA KLM VADAK 5-8. Beneficiary group 9. Fisheries Dpt. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | Physical target (ha) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 3 |
| 2 | Total outlay (in crore) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 67.5 |
| 3 | Total subsidy @ 50% (Rs. crore) | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 33.75 |
| 4 | Govt of India share @ 50% (Rs. crore) | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 16.88 |
| 5 | State share @ 50% (Rs. Crore) | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 16.88 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---------------------------------|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Clam Culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. |
| Agencies | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Preparation of field. 6.Clam culture. 7.Honest & Marketing. 8.Monitoring. |
| Agencies | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. | 1&2.Fisheries Dept.,BFFDA,kollam/ADAK and LSGI'S. 3.BFFDA , Kollam\ADAK. 4.SHG'S and Financial institution. 5- 7.SHG'S 8.Fisheries Dept. |

| Sno. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target(in ha) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay(in Rs.lakh) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 300 |
| 3 | Total subsidy @20%(inlakh) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 4 | Govt.of India share50%(inRs.lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 5 | Statis share50%(inRs.lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Spirulina Culture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. |
| Agencies | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. | 1.Identification & selection of SHG'S. 2.Training. 3.Development of infrastructure. 4.Spirulina culture. 5.Processing & Marketing. 6.Monitoring. |
| Agencies | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. | 1&2.Fisheries Dept.,FFDA,Kollam/ADAK 3-5.Beneficiary SHG 6.Fisheries Dept. |

| S/no. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target(in km) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay(in Rs.lakh) | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 225 |
| 3 | Subsidy@50% (in Rs. lakh) | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 12.5 |
| 4 | Fisheries Dept.'s Share (inlakhRs) | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 12.5 |

| Appendix 38.1 Proposal Phasing | | | | | | | |
|---|---|---|---|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Mussel/Oyster Spat Collection Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Identification & Selection of Beneficiaries. 2.Organization in to the form of SHG'S/ activity Group 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure. 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries. 2.Organization in to the form of SHG'S/ activity Group. 3.Training 4.Development of infrastructure. 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries. 2.Organization in to the form of SHG'S/ activity Group 3.Training 4.Development of infrastructure. 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring. |
| Agencies | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Identification & Selection of Beneficiaries. 2.Organization in to the form of SHG'S/ activity Group 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure. 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries. 2.Organization in to the form of SHG'S/ activity Group. 3.Training 4.Development of infrastructure. 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries. 2.Organization in to the form of SHG'S/ activity Group 3.Training 4.Development of infrastructure. 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring. | 1.Identification & Selection of Beneficiaries 2.Organization in to the form of SHG'S/ activity Group. 3.Training. 4.Development of infrastructure 5.Spat collection & supply. 6.Monitoring. |
| Agencies | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. | 1-3.Fisheries Dept.,BFFDA,Kollam/ADAK. 4&5.Beneficiary Group. 6.Fisheries Dept. |

| Sl No | Particular | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|-------|--|------|------|------|------|------|-------|
| 1 | Physical target(in km) | 1 | 1 | 1 | 1 | 1 | 5 |
| 2 | Total outlay(in Rs.lakh) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 1 |
| 3 | Dept. share as subsidy@ 50%(inRs.lakh) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| 4 | Beneficiary/Bank (inRs.lakh) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Marine Ornamental fish collection and Trade units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. |
| Agencies | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. | 1.Identification of Groups. 2.Training. 3.Credit linkage. 4.Development of infrastructure. 5.Ornamental Fish collection. 6.Trading. 7.Monitoring. |
| Agencies | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI | 1.Fisheries Dept. 2.BFFDA, Kollam / ADAK, CMFRI, MPEDD etc. 3.Beneficiary Group & bank. 4&5.Beneficiaries. 6.Fisheries Dept & CMFRI |

| S/no. | Particulars | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
|-------|-------------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target(units) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| 2 | Total outlay(in Rs.lakh) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |
| 3 | Statis share (inRs.lakh) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 20 |
| 4 | Beneficiary/Bank credit (inRs.lakh) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 80 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Aqua pet trade centers | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. |
| Agencies | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SH-G'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SH-G'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Training. 3. Development of infrastructure. 4. Bank credits. 5. Development of Aqua pet trade. 6. Monitoring. |
| Agencies | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SH-G'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SH-G'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. | 1. Fisheries Dept., FFDA, Kollam/ADAK and LSGL. 2. FFDA/ADAK. 3. SHG'S 4. SHG'S & BANK. 5. SHG'S 6. Fisheries Dept. |

| Sl No | Particulars | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (units) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay (in Rs. Lakh) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 300 |
| 3 | Subsidy @ 20 % (in Rs. Lakh) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |
| 4 | Beneficiary's share/bank credit (in Rs. Lakh) | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 240 |
| 5 | Govt. of India's share (in Rs. Lakh) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |
| 6 | States share (in Rs. Lakh) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 2.1 |

Appendix 38-1 Proposal Phasing

| Name of Sector :Fisheries | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Proposal :Development of deep sea fishing by diversification of existing fishing fleet | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation |
| Agencies | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 7. Fisheries department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing 6. Landing and marketing 7. Evaluation |
| Agencies | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-6. Beneficiaries 7. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 7. Fisheries department. |

| Sl.No | Details | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | Number of units | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 3 | Total subsidy | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 8 |
| 4 | Govt of India share | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 0.375 | 6 |
| 5 | State share | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 2 |

| Appendix 38.1 Proposal Phasing/Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Popularisation of Eco-friendly Gears for the Sustainable Fisheries by Providing Suitable Subsidy to Fishing Implements | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation |
| Agencies | 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of Fishing Implements 8.Disbursement of Fishing Implements 9. Evaluation |
| Agencies | 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. | 2 - 1. LSGI's 9. Fisheries Dpt.(Matsyabharan) & LSGI's. |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
|-------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (units) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1000 |
| | Cast Net | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1000 |
| | Gill Net Dinky | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |
| 2 | Total out lay (in Rs. Lakh) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 30 |
| 3 | Subsidy @ 20 % (in Rs. Lakh) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 15 |
| 4 | Beneficiary's share (in Rs. Lakh) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 15 |
| 5 | LSGIs share (in Rs. Lakh) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 15 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Game Fisheries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. | 1.Sensitization. 2.Identification & selection of beneficiaries . 3.Training. 4.Credit linkage. 5.Setting up of infrastructure facilities .6.Fish stocking& culture. 7.Running of the project. 8.Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt., KTDC&LSGIS. 3.KTDC&FFDAI, BFFDA,KLM. 4.Financial institution. 5-7.Beneficiaries. 8. KTDC & Fisheries Dpt. |

| Sl No. | Particulars | 2009 | 2010 | Total |
|--------|------------------------------|------|------|-------|
| 1 | Physical Target (unit) | 3 | 3 | 6 |
| 2 | Total outlay (in Rs. Lakh) | 15 | 15 | 30 |
| 3 | Credit linkage (in Rs. Lakh) | 12 | 12 | 24 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--------------------------------|--|----------------|---|----------------|----------------|----------------|-------------------------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Oceanarium | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Site selection & land acquisition, | | construction of oceanarium building & other works | | | | setting up of oceanarium |
| Agencies | Kollam corporation, Fisheries Dpt & Revenue Dpt. | | Fisheries Dpt., Foreign consultant & Harbour Engineering Department | | | | Fisheries Dpt. & Foreign consultant |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | completion of oceanarium & its inauguration | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning |
| Agencies | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. |

| Sl No. | Particulars | 2009 | 2010 | Total |
|--------|-----------------------------|------|------|-------|
| 1 | Physical Target (unit) | 3 | 3 | 6 |
| 2 | Total outlay (in Rs. Lakhs) | 15 | 15 | 30 |
| 3 | Credit linkage (in Rs.lakh) | 12 | 12 | 24 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|------------------------------------|------|------|--|---------------------------------|--|--|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Aqua Techno Park | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1.site selection 2.land acquisition 3.ground clearing 4.fendering the work 5.initial construction work | completion of construction work | maintenance of fresh water aquarium and fish breeding facilities | Lab electrification,plumping,aeration facilities. Inaguration & functioning of the project | |
| Agencies | | | 1.Fisheries Dpt. 2. Revenue Dpt 3-5 Fisheries Dpt. & HED.(FIRMA) | Fisheries dpt.& HED (FIRMA) | Fisheries dpt.& HED (FIRMA) | Fisneries dpt.& HED (Power Dpt.,water authority,FIRM&MDEDA) | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2010 | 2011 | 2012 | 2013 | Total |
|---------|---------------------------|------|------|------|------|-------|
| 1 | Total outlay (Rs in lakh) | 25 | 25 | 25 | 25 | 100 |
| 2 | State share(Rs in lakhs) | 25 | 25 | 25 | 25 | 100 |
| 3 | Kollam corporation | Land | | | | |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Deep Sea Fishing Tour | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation |
| Agencies | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation | 1.Application invitation 2.Avaling centre for restructuring 3. Bank loan 4. Reastructuring of the boats 5.Deep sea fishing tour 6. Evaluation |
| Agencies | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. | 1. Fisheries Department 2. Fisheries \ Industries \ Power \ PWD Departments. 3. Financial institution. 4-5. Beneficiaries 6. Fisheries department. |

| Sl. No. | Particulars | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
|---------|--|------|------|------|------|------|-------|
| 1 | Physical Target (Unit) | 2 | 2 | 2 | 2 | 2 | 10 |
| 2 | Total outlay (in lakh) | 10 | 10 | 10 | 10 | 10 | 50 |
| 3 | Subsidy @ of 20 % (Rs in lakhs) | 2 | 2 | 2 | 2 | 2 | 10 |
| 4 | Tourism dpt's share (Rs in lakhs) | 2 | 2 | 2 | 2 | 2 | 10 |
| | Beneficiary's share/ Bank credit (Rs in lakhs) | 8 | 8 | 8 | 8 | 8 | 40 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-------------------------------------|-------------------------------|-------------------------------|--|---|-------------------------------|-------------------------------|-------------------------------|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Fisheries Museum | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1. Construction of the building. 2. Monitoring. | 1. Procurement of glass vessels, chemicals and other equipments. 2. Setting up of fish museum. 3. Function of fisheries museum. 3. Monitoring. | Function of fisheries museum. | Function of fisheries museum. | Function of fisheries museum. |
| Agencies | | | 1. Fisheries Dpt. & HED 1 PWD. 2. Fisheries Dpt. | 1-3. Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Function of fisheries museum. | Function of fisheries museum. | Function of fisheries museum. | Function of fisheries museum. | Function of fisheries museum. | Function of fisheries museum. | Function of fisheries museum. |
| Agencies | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. | Fisheries Dpt. |

| Sl No. | Particulars | 2010 | 2011 | Total |
|--------|-----------------------------------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 6 | 4 | 10 |
| 2 | Fisheries Dpt. share (in Rs.lakh) | 6 | 4 | 10 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|--|--|--|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Ornamental Fish Shows | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Publicity of the Programme. 2.Obtaining permission for exhibition ground at Asramom. 3.Assuring the participaties of various Agencies . 4.Sting up of Panthal & Stall 5.Completion of all basic facilities. 6.Setting up of exhibitits in the stall. 7.Functioning 8 Evaluation | | 1.Publicity of the Programme. 2.Obtaining permission for exhibition ground at Asramom. 3.Assuring the participaties of various Agencies . 4.Sting up of Panthal & Stall 5.Completion of all basic facilities. 6.Setting up of exhibitits in the stall. 7.Functioning 8 Evaluation | | 1.Puclicity of the Programme. 2.Obtaining permission for exhibition ground at Asramom. 3.Assuring the participaties of various Agencies . 4.Sting up of Panthal & Stall 5.Completion of all basic facilities. 6.Setting up of exhibitits in the stall. 7.Functioning. 8 Evaluation | | 1.Puclicity of the Programme. 2.Obtaining permission for exhibition ground at Asramom. 3.Assuring the participaties of various Agencies . 4.Sting up of Panthal & Stall 5.Completion of all basic facilities. 6.Setting up of exhibitits in the stall. 7.Functioning. 8 Evaluation |
| Agencies | 1&7.Fisheries Dept. & District level ogranizing committee. 7. Fisheries Department | | 1&7.Fisheries Dept. & District level ogranizing committee. 7. Fisheries Department | | 1&7.Fisheries Dept. & District level ogranizing committee. 7. Fisheries Department | | 1&7.Fisheries Dept. & District level ogranizing committee. 7. Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | 1.Publicity of the Programme. 2.Obtaining permission for exhibition ground at Asramom. 3.Assuring the participaties of various Agencies . 4.Sting up of Panthal & Stall 5.Completion of all basic facilities. 6.Setting up of exhibitits in the stall. 7.Functioning 8 Evaluation | | 1.Publicity of the Programme. 2.Obtaining permission for exhibition ground at Asramom. 3.Assuring the participaties of various Agencies . 4.Sting up of Panthal & Stall 5.Completion of all basic facilities. 6.Setting up of exhibitits in the stall. 7.Functioning 8 Evaluation | | 1.Publicity of the Programme. 2.Obtaining permission for exhibition ground at Asramom. 3.Assuring the participaties of various Agencies . 4.Sting up of Pantha & Stall 5.Completon of all basic facilities. 6.Setting .p of exhibitits in the stall. 7.Functioning. 8 Evaluation | |
| Agencies | | 1&7.Fisheries Dept. & District level ogranizing committee. 7. Fisheries Dep[artment] | | 1&7.Fisheries Dept. & District level ogranizing committee. 7. Fisheries Dep[artment] | | 1&7.Fisheries Dept. & District level ogranizing committee. 7. Fisheries Dep[artment] | |

| S/no. | PARTICULARS | 2008 | 2009 | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 | Total |
|-------|-----------------------------------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target(in km) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 |
| 2 | Total outlay(in Rs.lakh) | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 240 |
| 3 | Fisheries Dept.'s Share(inlakhRs) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 80 |
| 4 | LSGI'S share(inRs.lakh) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 160 |

Appendix 38-1 Proposal Phasing

Name of Sector : Fisheries

Name of Proposal : Theera Vanam/Haritha theeram

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|--|--|--|------|------|------|------|
| Activities | 1.Sensitization. 2.Identification of area for Theeravanam. 3. Identification of area for rehabilitation. 4.Organizing NGO'S \ clubs. 5. Training. 6.Monitoring. | 1.Land acquisition. 2.Rhabilitation of inmates in nearly built houses. 3.clearance of 50m width area along the coast. 4.Setting up of nurseries. 5.Rearing of seed lings. 6.Partial planting of plants in the Theeravanam. 7.Monitoring. | 1.Completion of plantation. 2. Crop protection & rearing of plants. 3.Fencing, installation of boards etc. 4.Monitoring. | | | | |
| Agencies | 1.Fisheries & Forest Dpt. 2&3. Fisheries & Revenue Dpt 4.Fisneries & Forest Dpt. 5.Forest Dpt 6.Fisheries,Forest &Revenue Dpt | 1.Revenue Dpt. & LSGI,S. 2.Fisheries. HED \ PWD \ Nirmidhi & Revenue Dpt. 3. Fisheries,Forest&HED \ PWD. 4&6. Forest & NGO'S \ Volunteers 7.Forest,Fisheries,RevenueLSGI'S &HED \ PWD. | 1-3 Forest, Fisheries & NGO'S \ Volunteers. 4.Fisheries Dpt.,Forest Dpt.,LSGI'S,NGO'S \ Volunteers. | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| SI No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Total |
|--------|--------------------------------------|------|------|------|------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 50 | 200 | 20 | 10 | 10 | 10 | 300 |
| 2 | Govt. of India's share (in Rs. Lakh) | 50 | 200 | 20 | 10 | 10 | 10 | 300 |

| Appendix 33-1 Proposal Phasing | | | | | | | |
|--|---|---|--|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Enforcement of KMFR Act | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3 Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation |
| Agencies | 1-4. Fisheries Department; & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3 Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation | 1. Sea patrolling 2. Seizuring & Impounding 3. Adjudicating 4. charging the penalty 5. Evaluation |
| Agencies | 1-4. Fisheries Department; & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. | 1-4. Fisheries Department & Marine enforcement wing 5. Fisheries department. |

| SINO. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Total outlay(in Rs.lakh) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |
| 2 | Fisheries Dpt. share (in Rs. lakh) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |

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| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|------|--|--|--|--|--|------|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Establishment of Artificial Reef | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.site selection 2. awarness to fishermen 3. construction of reef materials 4. collection of reef enrichment materials. 5 transportation of reef materials to the site 6 installation of reef 7.monitoring and evaluvation | 1.site selection 2. awarness to fishermen 3. construction of reef materials 4. collection of reef enrichment materials. 5 transportation of reef materials to the site 6 installation of reef 7.monitoring and evaluvation | 1.site selection 2. awarness to fishermen 3. construction of reef materials 4. collection of reef enrichment materials. 5 transportation of reef materials to the site 6 installation of reef 7.monitoring and evaluvation | 1.site selection 2. awarness to fishermen 3. construction of reef materials 4. collection of reef enrichment materials. 5 transportation of reef materials to the site 6 installation of reef 7.monitoring and evaluvation | 1.site selection 2. awarness to fishermen 3. construction of reef materials 4. collection of reef enrichment materials. 5 transportation of reef materials to the site 6 installation of reef 7.monitoring and evaluvation | |
| Agencies | | 1&2 Fisheries Dpt. 3&4 HED, NGO'S, Fisheries Dpt. 5&6 HED, Fisheries, Fishermen & LSG'S 7 Fisheries Dpt. | 1&2 Fisheries Dpt. 3&4 HED, NGO'S, Fisheries Dpt. 5&6 HED, Fisheries, Fishermen & LSG'S 7 Fisheries Dpt. | 1&2 Fisheries Dpt. 3&4 HED, NGO'S, Fisheries Dpt. 5&6 HED, Fisheries, Fishermen & LSG'S 7 Fisheries Dpt. | 1&2 Fisheries Dpt. 3&4 HED, NGO'S, Fisheries Dpt. 5&6 HED, Fisheries, Fishermen & LSG'S 7 Fisheries Dpt. | 1&2 Fisheries Dpt. 3&4 HED, NGO'S, Fisheries Dpt. 5&6 HED, Fisheries, Fishermen & LSG'S 7 Fisheries Dpt. | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | Total |
|--------|------------------------------|------|------|------|------|------|-------|
| 1 | Physical target (unit) | 1 | 1 | 1 | 1 | 1 | 5 |
| 2 | Total out lay (in Rs. lakh) | 20 | 20 | 20 | 20 | 20 | 100 |
| 3 | State share (in Rs. lakh) | 20 | 20 | 20 | 20 | 20 | 100 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---------------------------------------|-------------------------------|--|---|--|-------------------------------|-------------------------------|-------------------------------|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Marine Bio Reserve | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Sensitization. 2.Demarcation of area. 3.Boundary separation. 4. Partial collection of FAD. 5.Monitoring. | 1.Feeam thuruthu land acquisition. 2.Construction of station house & other facilities. 3.Procurement of patrolling . 4.Completing FAD construction & collection of FAD. 5.Monitoring. | 1.Installation FAD in the proposed area. 2.Set up sign boards & bucyas. 3.Functioning of the Station 4.Patrolling. 5.Monitoring. | 1. Functioning of the Station | 1. Functioning of the Station | 1. Functioning of the Station |
| Agencies | | 1.Fisheries Dpt. 2&3.Fisheries & LSG'S. 4.Fisheries Dpt & HED. 6.Fisheries & LSG'S. | 1.Revenue & F sheries Dpt. 2.Fisheries & HED . 3. Fisheries Dpt. 4. Fisheries & HED. 7.Fisheries & Revenue Dpt. | 1&2. F sheries & HED. 3-5.Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Functioning of the Station | 1. Functioning of the Station | 1. Functioning of the Station | 1. Functioning of the Station | 1. Functioning of the Station | 1. Functioning of the Station | 1. Functioning of the Station |
| Agencies | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt | Fisheries Dpt |

| SI No. | Particulars | 2009 | 2010 | 2011 | Total |
|--------|--------------------------------------|------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 20 | 120 | 60 | 200 |
| 2 | Govt. of India's share (in Rs. Lakh) | 20 | 120 | 60 | 200 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector: Fisheries | | | | | | | |
| Name of Proposal: Enforcement of Inland Fisheries Act | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation |
| Agencies | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation | 1. Back water patrolling 2. Seizuring & Charging cases 3. Removal of illicit fishing implements 4. charging the penalty 5. Evaluation |
| Agencies | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. | 1-4. Fisheries Department & Back water patrolling wing 5. Fisheries department. |

| SINO. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Total outlay(in Rs.lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 2 | FisheriesDpt.share (in Rs.lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |

| Appendix 38-1 Proposal Phasing | | | | | | | | | | | | | | | | | |
|---|--|--|---|--|--|--|--|------|------|------|------|------|------|------|------|------|-------|
| Name of Sector : Fisheries | | | | | | | | | | | | | | | | | |
| Name of Proposal : Mangrove Afforestation | | | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | | | | | | | | | |
| Activities | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1 site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | | | | | | | | | | |
| Agencies | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | | | | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | | | | | | | | | |
| Activities | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1 site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | 1.site selection 2. Collection of mangrove seedlings 3.setting up of mangrove nurseries. 4. seeding of mangrooves 5.monitoring 6.Evaluation | | | | | | | | | | |
| Agencies | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | 1-5 Fisheries, FIRMA, Forest, LSGIS, NGOS & Public. 6 Fisheries & Forest Dpt | | | | | | | | | | |
| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| 1 | Physical target (ha) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay (in lakh) | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 200 |
| 3 | State share (in lakh) | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 200 |

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| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|--|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Fish Wealth Conservation through Removal of Stake Nets | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification of stake net owners. 2. Sensitization of the programme. 3. Agreement execution with stake owners. 4. Monitoring. | 1. Removal of stakes. 2. Releasing of Compensation 3. Monitoring. | | | | | |
| Agencies | 1. Fisheries Dpt. (Backwater patrolling using) 2. Fisheries Dpt. 3. Fisheries Dpt. & Beneficiaries 4. Fisheries Dpt. | 1. Fisheries Dpt. (Backwater patrolling using) & Beneficiaries 2.&3. Fisheries Dpt. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| SI No. | Particulars | 2008 | 2009 | Total |
|--------|-------------------------------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 5 | 445 | 450 |
| 2 | Central's share (in Rs. Lakh) | 5 | 445 | 450 |

| Appendix 38-I Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Replacement of Kayal Latrines | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation |
| Agencies | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Sensitisation 2. Application invitation 3.Agreement Execution with beneficiaries 3. Dismantling of existing kayal latrine 4. Construction of new latrine 5. Evaluation | | | | | | |
| Agencies | 1. Fisheries Department 2. Fisheries Departments & beneficiaries 3.& 4. Beneficiaries. 5. Fisheries department. | | | | | | |

| S/no. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Total |
|-------|-----------------------------------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (in Nos) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 10000 |
| 2 | Total outlay (in Rs.lakh) | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 800 |
| 3 | Beneficiaries Share (in lakh Rs.) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 400 |
| 4 | LSGI'S share(in Rs.lakh) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 400 |

Appendix 38-1 Proposal Phasing

Name of Sector : Fisheries

Name of Proposal : Dredging of Backwater

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|---|------|------|------|------|------|
| Activities | 1. Plan & estimate preparation 2. Work tendering 3. Work execution 4. Evaluation | 1. Work execution 2. Evaluation | | | | | |
| Agencies | 1. Fisheries Department & HED 2 & 3. HED & contractors. 4. Fisheries department. | 1. HED & contractors. 2. Fisheries department. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No. | Particulars | 2008 | 2009 | Total |
|--------|------------------------------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 250 | 250 | 500 |
| 2 | Central's share (in Rs.lakh) | 250 | 250 | 500 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|------|--|--|------|------|------|------|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Silvo-Fisheries at Ayiramthengu | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Renovation of ponds at govt fish farm Ayiramthengu 2.Mangrove breeding & rearing 3.Provide tourism facilities 4. functioning of the project 5.Harvesting& marketing etc 6. Angling activities Etc 7.monitoring | 1.Renovation of ponds at govt fish farm Ayiramthengu 2.Mangrove breeding & rearing 3.Provide tourism facilities 4. functioning of the project 5.Harvesting& marketing etc 6. Angling activities Etc 7.monitoring | | | | |
| Agencies | | Fisheries Dpt. & FIRMA | Fisheries Dpt. & FIRMA | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No | Particulars | 2009 | 2010 | Total |
|-------|-------------------------------|------|------|-------|
| 1 | Total out lay (in Rs . lakh) | 15 | 15 | 50 |
| 2 | State's Share (in Rs.lakh) | 15 | 15 | 30 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|------|---|--|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Scheme for Controlling the Little Cormorants Population to Prevent the Reduction of Fishery Wealth | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Sensitisation 2. Application invitation 3. Selection of labour group 4. Training 5. Providing infrastructure facilities 6. population reduction of birds 7. Verification & Recording 8. Release of incentives 9. Evaluation | 1. Population reduction of birds 2. Verification & Recording 3. Release of incentives 4. Evaluation | | | | |
| Agencies | | 1-5. Fisheries Department Labour group Fisheries department. | 6. 1. Labour group 2-4. Fisheries department. | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |
| | | | | | | | |

| Sl No. | Particulars | 2009 | 2010 | Total |
|--------|---------------------------------|-------|-------|-------|
| 1 | Physical Target (In Numbers) | 35000 | 35000 | 70000 |
| 2 | Total outlay (in Rs. Lakh) | 2 | 2 | 4 |
| 3 | FisheriesDpt.share (in Rs lakh) | 2 | 2 | 4 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|------|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Fish Sanctuary at Kulathupuzha | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Demarking the area of Ku athuppuzha river for fish sanctuary 2.sensitisation programme 3.Installation of notice board indicating different details of the sanctuary 4.Declaration of the area of the sanctuary 5.creation of a base station and functioning 6 Maintenance of the sanctuary 7 Evaluation | | | | | | |
| Agencies | 1-4.Fisheries Department & Forest department 5 Fisheries Department 6 & 7.Fisheries Department & Forest department | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Production | 2008 | 2009 | 2010 | 2011 | Total |
|---------|-------------------------------|------|------|------|------|-------|
| 1 | Total outlay (in lakh) | 5 | 10 | 8 | 2 | 25 |
| 2 | Govt Share of India (in lakh) | 5 | 10 | 8 | 2 | 25 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|--|---|----------------------|----------------------|----------------------|----------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Mahaseer Hatchery at Kulathupuzha | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Site selection 2.land acquisition 3 ground clearance 4. Evaluation | 1.Construction of hatchery tanks and installation of water circulation system 2. Evaluation | Inaguration and functioning of the Hatchery | Functioning | Functioning | Function ng | Functioning |
| Agencies | 1. Fisheries Department 2. Fisheries, Revenue Departments & LSGI. 3. PWD/HED. 4. Fisheries department. | 1. PWD/HED. 2. Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Functioning | Functioning | Functioning | Functioning | Functioning | Function ng | Functioning |
| Agencies | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department |

| Sl. No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|---------|-------------------------------|------|------|------|------|------|-------|
| 1 | Total outlay (in lakh) | 50 | 10 | 10 | 5 | 5 | 80 |
| 2 | Govt Share of India (in lakh) | - | 10 | 10 | 5 | 5 | 30 |
| 3 | State share (in lakh) | 50 | - | - | - | - | 50 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--------------------------------|--|--|--|--|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Pisci- Clubs | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitisation 2. Formation of Pisci-clubs 3. Setting up of aquariums 4. Activities of the pisci club 5. Evaluation | 1.Sensitisation 2. Formation of Pisci-clubs 3. Setting up of aquariums 4. Activities of the pisci club 5. Evaluation | 1.Sensitisation 2. Formation of Pisci-clubs 3. Setting up of aquariums 4. Activities of the pisci club 5. Evaluation | 1.Sensitisation 2. Formation of Pisci-clubs 3. Setting up of aquariums 4. Activities of the pisci club 5. Evaluation | | | |
| Agencies | 1. Fisheries Department 2. Fisheries& Education Departments. 3& 4. Pisci clubs &. Fisheries department 5. Fisheries department. | 1. Fisheries Department 2. Fisheries& Education Departments. 3& 4. Pisci clubs &. Fisheries department 5. Fisheries department. | 1. Fisheries Department 2. Fisheries& Education Departments. 3& 4. Pisci clubs &. Fisheries department 5. Fisheries department. | 1. Fisheries Department 2. Fisheries& Education Departments. 3& 4. Pisci clubs &. Fisheries department 5. Fisheries department. | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sno. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | Total |
|------|---------------------------|------|------|------|------|-------|
| 1 | Physical target (Units) | 50 | 50 | 50 | 50 | 200 |
| 2 | Total outlay (in Rs.lakh) | 1.25 | 1.25 | 1.25 | 1.25 | 4 |
| 3 | LSGI'S share (inRs.lakh) | 1.25 | 1.25 | 1.25 | 1.25 | 4 |

[illegible][illegible]

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|--|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Infrastructure for Thagassery Port | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Identification of land . 2. Land aquisition. | 1.Development of wa rfage. 2. Development of container handling facilities 3. Development of Offices & godowns 4.Development of electric & water connectivity. 5. Development of colc storage fecilities. 6.Development of drainage fecilities 7.functioning of the facilities . 8. Monitoring. | | | | | |
| Agencies | 1.Fisheries & Port Dpt. and LSGI 2. Revenue & Fisheries Dpt. | 1-6.FisheriesDpt.& HED 7-8.Fisheries Dpt.& Port Dpt. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No. | Particulars | 2008 | 2009 | 2010 | Total |
|--------|-------------------------------|------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 100 | 100 | 100 | 300 |
| 2 | Central's share (in Rs. Lakh) | 100 | 100 | 100 | 300 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Modernisation of Fishing Harbours | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Plan & Estimate 2. Work tendering 3. Agreement and execution | work execution according to plan & Estimate. (electrification, Drinking water, Drainage, disinfection, (common sanitation facilities) | | | | Functioning of the harbour | Functioning of the harbour |
| Agencies | 1-3 HED & Fisheries Department. | HED, Power Dpt., Water Authority & Fisheries Department. | | | | Fisheries Dpt & HED | Fisheries Dpt & HED |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Functioning of the harbour | Functioning of the harbour | Functioning of the harbour | Functioning of the harbour | Functioning of the harbour | Functioning of the harbour | Functioning of the harbour |
| Agencies | Fisheries Dpt & HED | Fisheries Dpt & HED | Fisheries Dpt & HED | Fisheries Dpt & HED | Fisheries Dpt & HED | Fisheries Dpt & HED | Fisheries Dpt & HED |

| Sl.No | Harbour | 2009 | 2010 | 2011 | 2012 | Total |
|--------|-------------------------------|------|------|------|------|-------|
| 1 | Neendakara | 25 | 25 | 25 | 25 | 100 |
| 2 | Thankassery | 25 | 25 | 25 | 25 | 100 |
| 3 | Azhakkal | 25 | 25 | 25 | 25 | 100 |
| Total | | 75 | 75 | 75 | 75 | 300 |
| | | | | | | |
| Sl.No. | Particulars | 2009 | 2010 | 2011 | 2012 | Total |
| 1 | Total outlay (in lakh) | 75 | 75 | 75 | 75 | 300 |
| 2 | Govt of India Share (in lakh) | 75 | 75 | 75 | 75 | 300 |

| Appendix 38-1: Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector: Fisheries | | | | | | | |
| Name of Proposal: Modernisation of Fish Pre-Processing Centers | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning |
| Agencies | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning | 1. Identification of the pond to be modernised 2. plan & estimate preparation 3. Availing credit 4. Construction works 5. Installation of other facilities 6. Functioning |
| Agencies | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries | 1. Fisheries Dpt. 2. HED, Fisheries Department & MPEDA. 3. Financial institution 4-6 Beneficiaries |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical Target (Unit) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 2 | Total Outlay (In lakh Rupees) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 3 | Subsidy @ 50 % (In lakh Rupees) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 4 | Mo FPI Share (In lakh Rupees) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 30 |
| 5 | MPEDA Share (In lakh Rupees) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 30 |
| 6 | State's Share (In lakh Rupees) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Depuration Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation |
| Agencies | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation | 1.site selection 2. organisation of SHGs 3.impart training 4. availing bank loan 5.asset creation 6.raw material procumrnts 7.depuration 8. packing 9.marketing 10.Evaluation |
| Agencies | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. | 1-3 Fisheries Dpt. ADAK. 4 Financial institution 5-9 Beneficiary group 10 Fisheries Dpt. |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (unit) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 2 | Total outlay (in lakh) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| 4 | Subsidy @ 40% (in lakh) | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 6 |
| 5 | State share (in lakh) | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 6 |

| Appendix 38-1 Proposal Phasing/Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Value Added Fish Products Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation |
| Agencies | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation | 1. identification / formationo of fisher women SHGs 2. Training 3.Asset creation 4. Raw material collection 5.Processing 6.Packing 7. Marketing 8.Evaluation |
| Agencies | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. | 1&2 Fisheries Dpt. 3-7 SAF & CIFT, HED 8 Fisheries Dpt. |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| 1 | Physical target (units) | 4+ PTC | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 +PTC |
| 2 | Total out lay (Rs .Lakh) | 8+ | 88 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 120+3C |
| 3 | Subsidt @ 50% (Rs. Lakh). | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |
| 4 | State Share (Rs .Lakh) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector: Fisheries | | | | | | | |
| Name of Proposal : Modernisation of Fish Markets | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning |
| Agencies | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning | 1. Market identification 2. plan & estimate 3. work tender 4. work execution 5. sanitation & drainage facilities 6. Drinking water facilities 7. inauguration 8. functioning |
| Agencies | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S | 1. Fisheries Dpt. & LSGI'S 2-5 Fisheries Dpt. & HED 6. Fisheries Dpt., HED & Water authority. 7. Fisheries & LSGI 8. LSGI'S |

| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (unit) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 2 | Total outlay (in crore) | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 750 |
| 3 | Total subsidy @ 50% (Rs. crore) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 375 |
| 4 | Govt of India share (in lakh) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 375 |

Appendix 38-1 Proposal Phasing

Name of Sector :Fisheries

Name of Proposal :Establishment of Cold Storage and Cold Chain

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|------|---|------|------|------|------|
| Activities | setting up of majour chilling/ cold storage faciliiti in thankasserry, neendakara and azheekkal | | setting up of mini chilling unit - one each at every panchayath | | | | |
| Agencies | Fisheries Dpt. & HED (Power & water Authority) | | Fisheries Dpt., ES&PS & HED. (Power & water authority) | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2009 | 2010 | 2011 | 2012 | Total |
|---------|---------------------------|------|------|------|------|-------|
| 1 | Total outlay (Rs in lakh) | 600 | 1000 | 1000 | 400 | 3000 |
| 2 | State share(Rs in lakhs) | 600 | 1000 | 1000 | 400 | 3000 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Fish Booths | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring |
| Agencies | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring. | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring. | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring. | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring. | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring. | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring. | 1.Sensitization. 2. Identification of Beneficiaries. 3. Training. 4.Setting up of bunk / booth. 5. Development of Infrastructure. 6.Function of booth. 7. Monitoring. |
| Agencies | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department | 1&3 Fisheries Dpt.,LSGIS Matsya Fed 4 Beneficiaries & Financial institution. 5&6 Beneficiaries & Matsya Fed. 7. Fisheries Department |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical Target (units) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1500 |
| 2 | Total outlay (in Rs Lakhs) | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 4500 |
| 3 | LSGIS/Fisheries share (in Rs Lakhs) | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 750 |
| 4 | Credit from Financial institutions | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 3750 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Economic Empowerment of Fisher Women SHG's through the Development of Micro enterprises | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. |
| Agencies | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. | 1.Sensitization. 2.Identification & selection of SHG'S. 3.Training. 4.Credit linkage. 5.Microenterprises. 6.Production & Marketing. 7.Monitoring. |
| Agencies | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. | 1.Fisheries Dept & SAF. 2&3.SAF 4.SHG'S, SAF & Financial institution. 5.SHG'S & SAF. 6.SHG'S 7.Fisheries Dept & Lead bank. |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|-------|---|------|------|------|------|------|-------|
| 1 | Physical target(in km) | 2 | 2 | 2 | 2 | 2 | 50 |
| 2 | Total outlay(in Rs.lakh) | 10 | 10 | 10 | 10 | 10 | 25 |
| 3 | Subsidy @ 50%as SAFS share (in Rslakh) | 5 | 5 | 5 | 5 | 2.5 | 12.5 |
| 4 | Beneficiary share /bank credit (in Rs lakh) | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 12.5 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Scheme for Providing Insulated Crates for Fish Vending | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collector of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation |
| Agencies | 1. LSGI's - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collector of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation | 1.Grama/Vard Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Collection of Beneficiary contribution 7. Procurement of insulated crate 8.Disbursement of insulated crate 9. Evaluation |
| Agencies | 1. LSGI's - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. | 1. LSGI's 2 - 9. Fisheries Dpt (Matsyabhan) & LSGI's. |

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| Sl No | Particulars | 2006 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
|-------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical Target (units) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 10000 |
| 2 | Total outlay (in Rs Lakhs) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |
| 3 | LSGIs share (in Rs Lakhs) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 50 |
| 4 | Beneficiaries share (In Rs. Lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 50 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|------|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Vehicle For the Fish Vending Women Group | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitisation 2.Application invitation 3. Physical verification 4.Selection & Approval of SHG's as beneficiaries 5. Publication of beneficiary list 6. Training 7. Credit linking 8.Procurement of assets 9. Functioning 10. Evaluation | | | | | | |
| Agencies | 1- 3. Matsya fed & Teap 4- 5. Fisheries Dpt., Matsya fed , Teap & LSGI's 6. Matsyafed 7-8. Matsyated & SHG's 9. SHG's 10. Fisheries Dpt. & Teap. | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2008 | Total |
|---------|--|------|-------|
| 1 | Physical Target (Units) | 10 | 10 |
| 2 | Total outlay (in lakh) | 30.9 | 30.9 |
| 3 | TEAP Share (Rs in lakhs) | | |
| 4 | Beneficiaries share /bank credit (In Rs. Lakh) | | |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|------|------|------|------|------|------|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Controlled Atmosphere Packing (CAP) Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Sensitisation 2. Application invitation 3. Physical verification 4. Selection & Approval of SHG's as beneficiaries 5. Publication of beneficiary list 6. Training 7. Credit linking 8. Procurement of assets 9. Functioning 10. Evaluation | | | | | | |
| Agencies | 1- 3. Matsya fed & Teap 4- 5. Fisheries Dpt., Matsya fed, Teap & LSGI's 6. Matsyafed 7-8. Matsyafed & SHG's 9. SHG's 10. Fisheries Dpt. & Teap. | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2008 | Total |
|---------|--------------------------|------|-------|
| 1 | Physical Target (Units) | 1 | 1 |
| 2 | Total outlay (in lakh) | 7.21 | 7.21 |
| 3 | TEAP Share (Rs in lakhs) | 7.21 | 7.21 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|------|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Cluster Production Centres | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Site identification 2.land aquisition 3. Plan & estimate preparation 4.Tendering the work 5. Work execution 6. Inaguration 7. Functioning 8. Evaluation | | | | | | |
| Agencies | 1- 2. LSGI, Fisheries Dpt., Revenue Dpt. HED & Teap 4- 5. HED & Contractor 6. LSGI, Fisheries Dpt, HED & Teap 7. LSGI 8. Fisheries Dpt. & Teap. | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2008 | Total |
|---------|--------------------------|------|-------|
| 1 | Physical Target (Units) | 1 | 1 |
| 2 | Total outlay (in lakh) | 39.5 | 39.5 |
| 3 | TEAP Share (Rs in lakhs) | 39.5 | 39.5 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|------|------|--|--|--|--|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Sea Food Restaurants | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1.Application invitation 2.Beneficiary selection 3. Training 4. Credit linkage 4. Creation of assets. 5.Providing Subsidy 6.Functioning 7. Evaluation | 1.Application invitation 2.Beneficiary selection 3. Training 4. Credit linkage 4. Creation of assets. 5.Providing Subsidy 6.Functioning 7. Evaluation | 1.Application invitation 2.Beneficiary selection 3. Training 4. Credit linkage 4. Creation of assets. 5.Providing Subsidy 6.Functioning 7. Evaluation | 1.Application invitation 2.Beneficiary selection 3. Training 4. Credit linkage 4. Creation of assets. 5.Providing Subsidy 6.Functioning 7. Evaluation | 1.Application invitation 2.Beneficiary selection 3. Training 4. Credit linkage 4. Creation of assets. 5.Providing Subsidy 6.Functioning 7. Evaluation |
| Agencies | | | 1& 3. KTDC & Fisheries Department 3 . Beneficiaries & Financial institution. 4. Beneficiaries 5. KTDC. 6. Beneficiaries 7. KTDC & Fisheries Department | 1& 3. KTDC & Fisheries Department 3 . Beneficiaries & Financial institution. 4. Beneficiaries 5. KTDC. 6. Beneficiaries 7. KTDC & Fisheries Department | 1& 3. KTDC & Fisheries Department 3 . Beneficiaries & Financial institution. 4. Beneficiaries 5. KTDC. 6. Beneficiaries 7. KTDC & Fisheries Department | 1& 3. KTDC & Fisheries Department 3 . Beneficiaries & Financial institution. 4. Beneficiaries 5. KTDC. 6. Beneficiaries 7. KTDC & Fisheries Department | 1& 3. KTDC & Fisheries Department 3 . Beneficiaries & Financial institution. 4. Beneficiaries 5. KTDC. 6. Beneficiaries 7. KTDC & Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|---------|-----------------------------------|------|------|------|------|------|-------|
| 1 | Physical Target (Units) | 2 | 2 | 2 | 2 | 2 | 10 |
| 2 | Total outlay (in lakh) | 10 | 10 | 10 | 10 | 10 | 50 |
| 3 | Subsidy @ of 40 % (Rs n lakhs) | 4 | 4 | 4 | 4 | 4 | 20 |
| 4 | Beneficiaries Share (Rs in lakhs) | 6 | 6 | 6 | 6 | 6 | 30 |
| 5 | Department Share (in Rs lakh) | 4 | 4 | 4 | 4 | 4 | 20 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|------|---|--|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Fish Meal Production Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Grama/ward Sabha preparation & Technical section 3. Application invitation & publication of beneficiary list 6. Training 8. Creation of assets 11. Evaluation | 2.Project 5.Verification 7 Credit linkage 9. Collection of raw materials 10. functioning | | | | |
| Agencies | | 1. LSGI's Dpt.(Matsyabhavan) & LSGI's 6.Fisheries Dpt, CIFT, LSGI &. SHG's 7. SHG's & Financial institution 8-10. SHG's 11. LSGI & Fisheries Dpt. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2009 | Total |
|---------|--|------|-------|
| 1 | Physical Target (Units) | 4 | 4 |
| 2 | Total outlay (in lakh) | 8 | 8 |
| 3 | LSGIs Share (Rs in lakhs) | 4 | 4 |
| 4 | Beneficiaries share /bank credit (In Rs. Lakh) | 4 | 4 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|--|------|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Fish Silage Production Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitisation 2.Application invitation 3. Physical verification 4.Selection & Approval of SHG's as beneficiaries 5. Publication of beneficiary list 6. Training 7. Credit linking 8.Procurement of assets 9. Functioning 10. Evaluation | | | | | | |
| Agencies | 1- 3. Fisheries Dpt, SAF & Teap 4- 5. Fisheries Dpt., SAF , Teap & LSGI's 6. SAF 7-8. SAF & SHG's 9. SHG's 10. Fisheries Dpt. & Teap. | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2008 | Total |
|---------|--|------|-------|
| 1 | Physical Target (Units) | 2 | 2 |
| 2 | Total outlay (in lakh) | 4 | 4 |
| 3 | TEAP Share (Rs in lakhs) | 3 | 3 |
| 4 | Beneficiaries share /bank credit (In Rs. Lakh) | 1 | 1 |

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| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|------|---|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Ready to Cook/Ready to Eat fish Product Making Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Grama/ward Sabha 2.Project preparation & Technical saction 3. Application invitation 5.Verification & publication of beneficiary list 6. Training 7 Credit linkage 8. Creation of assets 9. Collection of raw materials 10. functioning 11. Evaluation | | | | | |
| Agencies | | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's. 6. SAF/MATSYAFED, Fisheries Dpt, CIFT, LSGI &. SHG's 7. SHG's & Financial institution 8-10. SHG's 11. LSGI & Fisheries Dpt. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2009 | Total |
|---------|--|------|-------|
| 1 | Physical Target (Units) | 10 | 10 |
| 2 | Total outlay (in lakh) | 30 | 30 |
| 3 | LSGIs Share (Rs in lakhs) | 15 | 15 |
| 4 | Beneficiaries share /bank credit (In Rs. Lakh) | 15 | 15 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---------------------------------------|--|--|--|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Aqua/Fishery Stores | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Grama/ward Sabha 2.Project preparation & Technical saction 3. Application invitation 5.Verification & publication of beneficiary list 6. Training 7 Credit linkage 8. Creation of assets 9. Procurement of goods 10. functioning 11. Evaluation | 1.Grama/ward Sabha 2.Project preparation & Technical saction 3. Application invitation 5.Verification & publication of beneficiary list 6. Training 7 Credit linkage 8. Creation of assets 9. Procurement of goods 10. functioning 11. Evaluation | 1.Grama/ward Sabha 2.Project preparation & Technical saction 3. Application invitation 5.Verification & publication of beneficiary list 6. Training 7 Credit linkage 8. Creation of assets 9. Procurement of goods 10. functioning 11. Evaluation | | | | |
| Agencies | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's. 6 Fisheries Dpt, CIFT, LSGI & SHG's 7. SHG's & Financial institution 8-10. SHG's 11. LSGI & Fisheries Dpt. | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's. 6. Fisheries Dpt, CIFT, LSGI & SHG's 7. SHG's & Financial institution 8-10. SHG's 11. LSGI & Fisheries Dpt. | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's. 6. Fisheries Dpt, CIFT, LSGI & SHG's 7. SHG's & Financial institution 8-10. SHG's 11. LSGI & Fisheries Dpt. | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| SLNO | PARTICULARS | 2008 | 2009 | 2010 | Total |
|------|---------------------------|------|------|------|-------|
| 1 | Physical target(units) | 2 | 2 | 1 | 5 |
| 2 | Total outlay(in Rs.lakh) | 8 | 8 | 4 | 20 |
| 3 | Subsidy @ 20% (in Rslakh) | 4 | 4 | 2 | 10 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--------------------------------------|------|------|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Live Fish Markets | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1. Identification & selection of beneficiary group. 2. Training. 3. Space allocation in the public markets. 4. Development of infrastructure. 5. Bank credit. 6. Live fish marketing. 7. Monitoring. | 1. Identification & selection of beneficiary group. 2. Training. 3. Space allocation in the public markets. 4. Development of infrastructure. 5. Bank credit. 6. Live fish marketing. 7. Monitoring. | 1. Identification & selection of beneficiary group. 2. Training. 3. Space allocation in the public markets. 4. Development of infrastructure. 5. Bank credit. 6. Live fish marketing. 7. Monitoring. | 1. Identification & selection of beneficiary group. 2. Training. 3. Space allocation in the public markets. 4. Development of infrastructure. 5. Bank credit. 6. Live fish marketing. 7. Monitoring. | 1. Identification & selection of beneficiary group. 2. Training. 3. Space allocation in the public markets. 4. Development of infrastructure. 5. Bank credit. 6. Live fish marketing. 7. Monitoring. |
| Agencies | | | 1&2. Fisheries Dpt., Matsyafed FFDD, BFFDA, ADAK. 3. Concerned LSGI. 4. Beneficiary Group. 5. Beneficiary Group & Bank. 7. Beneficiary Group. 8. Fisheries Dpt. | 1&2. Fisheries Dpt., Matsyafed FFDD, BFFDA, ADAK. 3. Concerned LSGI. 4. Beneficiary Group. 5. Beneficiary Group & Bank. 7. Beneficiary Group. 8. Fisheries Dpt. | 1&2. Fisheries Dpt., Matsyafed FFDD, BFFDA, ADAK. 3. Concerned LSGI. 4. Beneficiary Group. 5. Beneficiary Group & Bank. 7. Beneficiary Group. 8. Fisheries Dpt. | 1&2. Fisheries Dpt., Matsyafed FFDD, BFFDA, ADAK. 3. Concerned LSGI. 4. Beneficiary Group. 5. Beneficiary Group & Bank. 7. Beneficiary Group. 8. Fisheries Dpt. | 1&2. Fisheries Dpt., Matsyafed FFDD, BFFDA, ADAK. 3. Concerned LSGI. 4. Beneficiary Group. 5. Beneficiary Group & Bank. 7. Beneficiary Group. 8. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| SLNO | PARTICULARS | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|------|----------------------------|------|------|------|------|------|-------|
| 1 | Physical target(in km) | 2 | 2 | 2 | 2 | 2 | 10 |
| 2 | Total outlay(in Rs.lakh) | 10 | 10 | 10 | 10 | 10 | 50 |
| 3 | Subsidy @ 20% (in Rs.lakh) | 2 | 2 | 2 | 2 | 2 | 10 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|---|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Matsya Vikjana Kendram | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Construction of the building. 2.Monitoring. | 1.Installation of equipments , Instruments& machineries for the function of MVK. 2. Function of MVK. 3.Monitoring. | | | | | |
| Agencies | 1.Fisheries Dpt. & HED \ PWD. 2.Fisheries Dpt. | 1-3. Fisheries Dpt. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No. | Particulars | 2008 | 2009 | Total |
|--------|-----------------------------------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 20 | 10 | 30 |
| 2 | Fisheries Dpt share (in Rs. Lakh) | 20 | 10 | 30 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|---|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Establishment of New Matsyabhavans and Infrastructure Facilities for the Exiting Matsyabhavans | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Allotment of fund from the Fisheries Dpt. 2. Disbursement of fund to LSGI 3. Project preparation & approval 4. Site selection 5. Acquisition 6. Construction of the building 7. Setting up of other infrastructures 8. Inguration & functioning. 9. Evaluation | 1. Allotment of fund from the Fisheries Dpt. 2. Disbursement of fund to LSGI 3. Project preparation & approval 4. Site selection 5. Acquisition 6. Construction of the building 7. Setting up of other infrastructures 8. Inguration & functioning. 9. Evaluation | | | | | |
| Agencies | 1. Fisheries Department 2-4. . Fisheries Dpt & LSGI.. 5. I SGI & Revenue 6.- 7. LSGI, HED/PWD 8. Fisheries department. 9. Fisheries Dpt. & LSGI | 1. Fisheries Department 2-4. . Fisheries Dpt & LSGI.. 5. I SGI & Revenue 6.- 7. LSGI, HED/PWD 8. Fisheries department. 9. Fisheries Dpt. & LSGI | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| SLNO | PARTICULARS | 2008 | 2009 | Total |
|------|------------------------------------|------|------|-------|
| 1 | Physical target(nos) | 8 | 7 | 15 |
| 2 | Total outlay(in Rs.lakh) | 24 | 21 | 45 |
| 3 | Dept.of Fisheries share(inRs.lakh) | 24 | 21 | 45 |
| 4 | LSGIs Share | land | | |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|------|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Model Demonstration Fish Farm | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Handing over the chira to the Fisheries Dpt. 2. Setting up of facilities 3. functioning 4. Evaluation | | | | | | |
| Agencies | 1. Mayyanad Grama panchayat 2-3. . Fisheries Dpt & FFDA.. 4. Fisheries Dpt. & LSGI | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No. | Particulars | 2009 | Total |
|--------|----------------------------------|------|-------|
| 1 | Physical target(nos) | 1 | 1 |
| 2 | Total outlay (in Rs. Lakh) | 5 | 5 |
| 3 | Fisheries Dpt share (in Rs.lakh) | 5 | 5 |
| 4 | LSGIs Share | Land | |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|----------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Establishment of Fisheries Research Laboratory | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1. construction of lab building 2. procurement of lab equipments, chemical & machineries 3. installation of the same machineries & its standardisation 4. inauguration 5 functioning | | | Functioning | Functioning | Functioning |
| Agencies | | 1. Fisheries Dpt. & HED. 2-4 Fisheries Dpt. 5 Fisheries Dpt. With technical support from CMPRI, CIFT, MPED A, ECA etc. | | | Fisheries Department | Fisheries Department | Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning |
| Agencies | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department |

| Sl.No. | Particulars | 2009 | 2010 | 2011 | Total |
|--------|-------------------------------|------|------|------|-------|
| 1 | Total outlay (in Rs lakh) | 5 | 5 | 5 | 15 |
| 2 | Govt of India Share (in lakh) | 5 | 5 | 5 | 15 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|----------------------|----------------------|---|-----------------------------------|----------------------|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Fish Quarantine and Inspection Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1.site selection 2.land acquisition, land clearance | construction of hatchery building | | purchasing lab equipments , machineries, chemicals etc. | Inaguration and functioning of the centre |
| Agencies | | | 1.FisheriesDpt. 2. Revenue Dpt. &HED | Fisheries Dpt.& HED. | | Fisheries Dpt. | Fisheries Dpt.LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning |
| Agencies | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department |

| Sl. No. | Particulars | 2010 | 2011 | 2012 | 2013 | Total |
|---------|----------------------------------|------|------|------|------|-------|
| 1 | Total outlay (in lakh) | 10 | 10 | 10 | 20 | 50 |
| 2 | Govt of India share(Rs in lakhs) | 10 | 10 | 10 | 10 | 40 |
| 3 | State share(Rs in lakhs) | - | - | - | 10 | 10 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|----------------------|----------------------|---|---|----------------------|----------------------|----------------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Strengthening of Matsyabhavans as Knowledge Centres for Fishermen in Coastal Villages | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1.Training of Matyabhavan officers. 2.Installation of computer & officer equipments in each Matsyabhavan. 3.Resourcee data collection and its display. 4.Functioning of the Knowledge centres. | 1.Training of Matyabhavan officers. 2.Installation of computer & officer equipments in each Matsyabhavan. 3.Resourcee data collection and its display. 4.Functioning of the Knowledge centres. | Functioning | Functioning | Functioning |
| Agencies | | | 1-4.Fisheries Dept., | 1-4.Fisheries Dept., | Fisheries Department | Fisheries Department | Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning |
| Agencies | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department | Fisheries Department |

| SLNO | PARTICULARS | 2008 | 2009 | 2010 | Total |
|------|------------------------------------|------|------|------|-------|
| 1 | Physical target (Units) | 6 | 7 | 7 | 20 |
| 2 | Total outlay(in Rs. akh) | 6 | 7 | 7 | 20 |
| 3 | Dept.of Fisheries share(inRs.lakh) | 6 | 7 | 7 | 20 |

| Appendix 38-1 Proposal PhasingProposal Phasing | | | | | | | |
|--|--|--|------|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Aqua Book Shelves | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Grama/ward Sabha 2.Project preparation & Technical section 3. . Creation of assets 4. Procurement of Fisheries Books & Periodicals 5. Setting up of Aqua book shelves 6. Functioning 7. Evaluation | 1.Grama/ward Sabha 2.Project preparation & Technical section 3. . Creation of assets 4. Procurement of Fisheries Books & Periodicals 5. Setting up of Aqua book shelves 6. Functioning 7. Evaluation | | | | | |
| Agencies | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's. 6. Fisheries Dpt, (Matsyabhavan) 7. LSGI & Fisheries Dpt. | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's. 6. Fisheries Dpt, (Matsyabhavan) 7. LSGI & Fisheries Dpt. | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| SLNO | PARTICULARS | 2008 | 2009 | 2010 | Total |
|------|------------------------------------|------|------|------|-------|
| 1 | Physical target (Units) | 6 | 7 | 7 | 20 |
| 2 | Total outlay(in Rs.lakh) | 6 | 7 | 7 | 20 |
| 3 | Dept.of Fisheries share(inRs.lakh) | 6 | 7 | 7 | 20 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---------------|---|---------------|---------------|---------------|---------------|---------------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Setting up of Feed Mills | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.site selection 2. training 3.Bank loan availing 4.creation of assets 5.collection of raw materials 6.production of pellet feeds 7.marketing 8.Evaluation | | Functioning | Functioning | Functioning | Functioning |
| Agencies | | 1&2 Fisheries Dpt. 3 Financial institution. 4-7 Beneficiaries. 8 Fisheries Dpt. | | Beneficiaries | Beneficiaries | Beneficiaries | Beneficiaries |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning | Functioning |
| Agencies | Beneficiaries | Beneficiaries | Beneficiaries | Beneficiaries | Beneficiaries | Beneficiaries | Beneficiaries |

| Sl. No. | Particulars | 2009 | 2010 | Total |
|---------|----------------------------------|------|------|-------|
| 1 | Total outlay(in lakh) | 5 | 5 | 10 |
| 2 | subsidy@20%(Rs in lakhs) | - | 2 | 2 |
| 3 | Govt of India share(Rs in lakhs) | - | 1.5 | 1.5 |
| 4 | State share (Rs in lakhs) | - | 0.5 | 0.5 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|------|--|--|--|--|--|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Establishment of Inland Fish Landing Centers | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Identification of spot for landing center. 2.Land aquring . 3. Construction of landing center. 4.Establishment of infra structure facilities like cold storages, electrification ,water supply,drainage etc. 5. Functioning of the landing centers. 6.Monitoring. | 1.Identification of spot for landing center. 2.Land aquring . 3. Construction of landing center. 4.Establishment of infra structure facilities like colc storages, electrification ,water supply,drainage etc. 5. Functioning of the landing centers. 6.Monitoring. | 1.Identification of spot for landing center. 2.Land aquring . 3. Construction of landing center. 4.Establishment of infra structure facilities like cold storages, electrification ,water supply,drainage etc. 5. Functioning of the landing centers. 6.Monitoring. | 1.Identification of spot for landing center. 2.Land aquring . 3. Construction of landing center. 4.Establishment of infra structure facilities like cold storages, electrification ,water supply,drainage etc. 5. Functioning of the landing centers. 6.Monitoring. | 1.Identification of spot for landing center. 2.Land aquring . 3. Construction of landing center. 4.Establishment of infra structure facilities like cold storages, electrification ,water supply,drainage etc. 5. Functioning of the landing centers. 6.Monitoring. | 1.Identification of spot for landing center. 2.Land aquring . 3. Construction of landing center. 4.Establishment of infra structure facilities like cold storages, electrification ,water supply,drainage etc. 5. Functioning of the landing centers. 6.Monitoring. |
| Agencies | | 1.Fisheries Dpt. & LSGI 2. Revenue Dpt. 3. Fisheries Dpt.& HED 4.FisheriesDpt.,LSGI,HED,P ower Dpt.,Water authority 5.Fisheries society & LSGI 6.Fisheries Dpt. | 1.Fisheries Dpt. & LSGI 2. Revenue Dpt. 3. Fisheries Dpt.& HED 4.FisheriesDpt.,LSGI,HED,P ower Dpt.,Water authority 5.Fisheries society & LSGI 6.Fisheries Dpt. | 1.Fisheries Dpt. & LSGI 2. Revenue Dpt. 3. Fisheries Dpt.& HED 4.FisheriesDpt.,LSGI,HED,P ower Dpt.,Water authority 5.Fisheries society & LSGI 6.Fisheries Dpt. | 1.Fisheries Dpt. & LSGI 2. Revenue Dpt. 3. Fisheries Dpt.& HED 4.FisheriesDpt.,LSGI,HED,P ower Dpt.,Water authority 5.Fisheries society & LSGI 6.Fisheries Dpt. | 1.Fisheries Dpt. & LSGI 2. Revenue Dpt. 3. Fisheries Dpt.& HED 4.FisheriesDpt.,LSGI,HED,P ower Dpt.,Water authority 5.Fisheries society & LSGI 6.Fisheries Dpt. | 1.Fisheries Dpt. & LSGI 2. Revenue Dpt. 3. Fisheries Dpt.& HED 4.FisheriesDpt.,LSGI,HED,P ower Dpt.,Water authority 5.Fisheries society & LSGI 6.Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No. | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | Total |
|--------|----------------------------------|------|------|------|------|------|-------|
| 1 | Physical Target(unit) | 2 | 2 | 2 | 2 | 2 | 10 |
| 2 | Total outlay (in Rs. Lakh) | 10 | 10 | 10 | 10 | 10 | 50 |
| 3 | LSG's share (in Rs.lakh) | 3 | 3 | 3 | 3 | 3 | 15 |
| 4 | Fisheries Dpt share (in Rs.lakh) | 7 | 7 | 7 | 7 | 7 | 35 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|------|------|---|---|---|---|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Establishment of Boat Berthing Facilities | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1.Identification of spot. 2. Preparation of plan& Estimate. 3. Tendering the work. 4. Completion of work. 5. Running of the Boat berthing facilities. 6. Management & Maintance. 7. Monitoring. | 1.Identification of spot. 2. Preparation of plan& Estimate. 3. Tendering the work. 4. Completion of work. 5. Running of the Boat berthing facilities. 6. Management & Maintance. 7. Monitoring. | 1.Identification of spot. 2. Preparation of plan& Estimate. 3. Tendering the work. 4. Completion of work. 5. Running of the Boat berthing facilities. 6. Management & Maintance. 7. Monitoring. | 1.Identification of spot. 2. Preparation of plan& Estimate. 3. Tendering the work. 4. Completion of work. 5. Running of the Boat berthing facilities. 6. Management & Maintance. 7. Monitoring. | |
| Agencies | | | 1.Fisheries Dpt. & HED. 2&3. HED. 4. HED& Contractor. 5.HED,Fisheries Dpt. & Fishermen society. 6. HED & Fishermen society 7. Fishermen Dpt. | 1.Fisheries Dpt. & HED. 2&3. HED. 4. HED& Contractor. 5.HED,Fisheries Dpt. & Fishermen society. 6. HED & Fishermen society 7. Fishermen Dpt. | 1.Fisheries Dpt. & HED. 2&3. HED. 4. HED& Contractor. 5.HED,Fisheries Dpt. & Fishermen society. 6. HED & Fishermen society 7. Fishermen Dpt. | 1.Fisheries Dpt. & HED. 2&3. HED. 4. HED& Contractor. 5.HED,Fisheries Dpt. & Fishermen society. 6. HED & Fishermen society 7. Fishermen Dpt. | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No. | Particulars | 2010 | 2011 | 2012 | 2013 | Total |
|--------|-----------------------------|------|------|------|------|-------|
| 1 | Total outlay (in Rs. lakh) | 5 | 5 | 5 | 5 | 20 |
| 2 | Central share (in Rs. lakh) | 5 | 5 | 5 | 5 | 20 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|------------------------------------|------|------|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Net Mending Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1.Grama/ward Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Identification of site 7. Land aquisition for CFC 8. Construction of CFC 9. Disbursement of Subsidy 10. Functioning 11. Evaluation | 1.Grama/ward Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Identification of site 7. Land aquisition for CFC 8. Construction of CFC 9. Disbursement of Subsidy 10. Functioning 11. Evaluation | 1.Grama/ward Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Identification of site 7. Land aquisition for CFC 8. Construction of CFC 9. Disbursement of Subsidy 10. Functioning 11. Evaluation | 1.Grama/ward Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Identification of site 7. Land aquisition for CFC 8. Construction of CFC 9. Disbursement of Subsidy 10. Functioning 11. Evaluation | 1.Grama/ward Sabha 2.Project preparation & Technical section 3. Application invitation 5.Verification & publication of beneficiary list 6. Identification of site 7. Land aquisition for CFC 8. Construction of CFC 9. Disbursement of Subsidy 10. Functioning 11. Evaluation |
| Agencies | | | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's 6- 7. Revenue, Fisheries Dpt.(Matsyabhavan) & LSGI's 8. HED/PWD/LSGI 9. Fisheries Dpt. (Matsyabhavan) & LSGI's 10. SHG's 11. LSGI & Fisheries Dpt. | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's 6- 7. Revenue, Fisheries Dpt.(Matsyabhavan) & LSGI's 8. HED/PWD/LSGI 9. Fisheries Dpt. (Matsyabhavan) & LSGI's 10. SHG's 11. LSGI & Fisheries Dpt. | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's 6- 7. Revenue, Fisheries Dpt.(Matsyabhavan) & LSGI's 8. HED/PWD/LSGI 9. Fisheries Dpt. (Matsyabhavan) & LSGI's 10. SHG's 11. LSGI & Fisheries Dpt. | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's 6- 7. Revenue, Fisheries Dpt.(Matsyabhavan) & LSGI's 8. HED/PWD/LSGI 9. Fisheries Dpt. (Matsyabhavan) & LSGI's 10. SHG's 11. LSGI & Fisheries Dpt. | 1. LSGI's 2 - 5. Fisheries Dpt.(Matsyabhavan) & LSGI's 6- 7. Revenue, Fisheries Dpt.(Matsyabhavan) & LSGI's 8. HED/PWD/LSGI 9. Fisheries Dpt. (Matsyabhavan) & LSGI's 10. SHG's 11. LSGI & Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl. No. | Particulars | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|---------|------------------------------|------|------|------|------|------|-------|
| 1 | Physical Target (Units) | 4 | 4 | 4 | 4 | 4 | 20 |
| 2 | Common facility Center SHG's | 20 | 20 | 20 | 20 | 20 | 100 |
| 3 | Total outlay (in lakh) | 24 | 24 | 24 | 24 | 24 | 120 |
| 4 | LSGIs Share (in Rs lakh) | 24 | 24 | 24 | 24 | 24 | 120 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|-----------------------------------|--|--|---|---|--|---|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Fisheries Roads | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.identification of roads to be constructed. 2.Land acquisition. 3.Clearness of site. 4. Development of roads 5. Monitoring | 1.identification of roads to be constructed. 2.Land acquisition. 3.Clearness of site. 4. Development of roads 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring | 1.identification of roads to be constructed. 2.Land acquisition. 3.Clearness of site. 4. Development of roads. 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring | 1.identification of roads to be constructed. 2.Land acquisition. 3.Clearness of site. 4. Development of roads. 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring |
| Agencies | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring. | 1.identification of roads to be constructed. 2.Land acquisition 3.Clearness of site. 4. Development of roads. 5. Monitoring. |
| Agencies | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department. | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department. | 1.Fisheries Dpt. & LSGI 2.Revenue. 3&4. HED \ PWD 5.LSGI & Fisheries Department |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | Physical target(in km) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | Total outlay(in Rs.lakh) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| 3 | Fisheries Dpt.share (in Rs.lakh) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| 4 | LSGI'S | Land | | | | | | | | | | | | | | |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Establishment of Guide Lights | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Construction of guide lights. 2.Electrification and lighting. 3. Commissioning. 4. Functions | 1.Construction of guide lights. 2.Electrification and lighting. 3. Commissioning. 4. Functions | 1.Construction of guide lights. 2.Electrification and lighting. 3. Commissioning. 4. Functions | 1.Construction of guide lights. 2.Electrification and lighting. 3. Commissioning. 4. Functions | 1.Construction of guide lights. 2.Electrification and lighting. 3. Commissioning. 4. Functions | 1.Construction of guide lights. 2.Electrification and lighting. 3. Commissioning. 4. Functions | 1.Construction of guide lights. 2.Electrification and lighting. 3. Commissioning. 4. Functions |
| Agencies | 1.HED 2.KELTRON 3&4.Fisheries dept & HED. | 1.HED 2.KELTRON 3&4.Fisheries dept & HED. | 1.HED 2.KELTRON 3&4.Fisheries dept & HED. | 1.HED 2.KELTRON 3&4.Fisheries dept & HED. | 1.HED 2.KELTRON 3&4.Fisheries dept & HED. | 1.HED 2.KELTRON 3&4.Fisheries dept & HED. | 1.HED 2.KELTRON 3&4.Fisheries dept & HED. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl.No | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|-------|--------------------------|------|------|------|------|------|------|-------|
| 1 | Physical target(units) | 1 | | 2 | 2 | 2 | 2 | 9 |
| 2 | Total outlay(in Rs.lakh) | 5 | 5 | 10 | 10 | 10 | 10 | 50 |
| 3 | Dpt.share(inRs.lakh) | 5 | 5 | 10 | 10 | 10 | 10 | 50 |

Appendix 38-1 Proposal Phasing

[illegible][illegible]

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Proposal for Providing Land to Landless Fishermen | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. |
| Agencies | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. | 1. Identification & selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3. Identification of land. 4. Aquisition of land. 5. Releasing of land to beneficiaries. 6. Monitoring. |
| Agencies | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. | 1. Fisheries Dpt. 2. Fisheries Dpt. & Beneficiaries 3. Fisheries Dpt. & Revenue Dpt. 4. Revenue Dpt. 5. Fisheries Dpt. |

| Sl No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|--------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physcial target (units) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 3000 |
| 2 | Total layout (in Rs.lakh) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 2250 |
| 3 | State's share (in Rs.lakh) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 2250 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Scheme for Providing Assistance to Fishermen House Renovation | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7. Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7. Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7. Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7. Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7. Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7. Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7. Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. |

| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------|---|---|---|---|---|---|--|
| Activities | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selector of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Executon of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of renovation works. 8.Stage verification & reporting. 9. Monitrcing. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. | 1. dentification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of renovation works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of renovation works. 8.Stage verification & reporting. 9. Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. |

| Sl No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|--------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physcial target (units) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 3000 |
| 2 | Total outlay (in Rs.lakh) | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 1200 |
| 3 | Beneficiary's (in Rs.lakh) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 600 |
| 4 | Dpt.'s share (in Rs.lakh) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 600 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Scheme for Providing Sanitation Facilities to Fishermen Houses | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasirg of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasirg of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Mon toring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries |

| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------|---|--|--|--|--|--|--|
| Activities | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of frst installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment . 4.Construction of latrins stages. 5. Stage verification . 6.Releasing of second installment. 7.Completion of latrins . 8.Stage verification . 9. Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries |

| Sl No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|--------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physcial target (units) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 6000 |
| 2 | Total layout (in Rs.lakh) | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 1200 |
| 3 | State's share (in Rs.lakh) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 900 |
| 4 | Beneficiary's share(in Rs.lakh) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 300 |

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| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|--|---|---|---|--|--|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Scheme for Fishermen House Electrification | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries 3.Releasing of first instalment of Assistance. 4.Execution of electrificai on works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance 7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries 3.FisheriesDpt. 4.Beneficiaries 5. Matsya bhavan. 6.Fisheries Dpt 7. Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5. Matsya bhavan. 6.Fisheries Dpt 7. Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries 3.FisheriesDpt. 4.Beneficiaries 5. Matsya bhavan. 6.Fisheries Dpt 7. Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5. Matsya bhavan. 6.Fisheries Dpt 7. Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5. Matsya bhavan. 6.Fisheries Dpt. 7. Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5. Matsya bhavan. 6.Fisheries Dpt. 7. Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5. Matsya bhavan. 6.Fisheries Dpt. 7. Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. |

| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------|---|---|---|---|---|---|--|
| Activities | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance .7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance .7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance .7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance .7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance .7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance. 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance .7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. | 1. Identification & Selection of Beneficiaries. 2. Agrument execution with Beneficiaries. 3.Releasing of first installment of Assistance 4.Execution of electrification works. 5. Stage verification & reporting. 6.Releasing of second installment of Assistance .7.Completion of electrification works. 8.Stage verification & reporting. 9. Monitoring. |
| Agencies | 1 Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1 Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1 Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1 Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1 Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1 Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. | 1 Fisheries Dpt 2. Fisheries Dpt.& Beneficiaries. 3.FisheriesDpt. 4.Beneficiaries 5.Matsya bhavan. 6.Fisheries Dpt. 7.Beneficiaries. 8.Matsyabhavan. 9.Fisheries Dpt. |

| Sl No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (units) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 3000 |
| 2 | Total outlay (in Rs.laks) | 16 | 16 | 16 | 15 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 15 | 16 | 16 | 240 |
| 3 | Beneficiary's share (in Rs.laks) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 120 |
| 4 | Dpt. Share (in Rs.laks) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 120 |

Appendix 38-1 Proposal Phasing

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Roof top Rain water Harvesting For Fisher House Holds | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4.Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4.Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4.Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4.Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4.Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4.Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4.Beneficiaries. 5.Fisheries Dpt. |

| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------|---|---|---|---|---|---|---|
| Activities | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. | 1.Identification & selection of Beneficiaries. 2.Agrument execution with Beneficiaries. 3. Procurment of ISI standard building materials. 4.Establishment of roof top rain water harvesting system. 5.Monitoring. |
| Agencies | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4. Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4. Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4. Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4. Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4. Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4. Beneficiaries. 5.Fisheries Dpt. | 1.Fisheries Dpt. 2. Fisheries Dpt.& Beneficiaries. 3&4. Beneficiaries. 5.Fisheries Dpt. |

| Sl No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|--------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physcial target (units) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 6000 |
| 2 | Total layout (in Rs.lakh) | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 1200 |
| 3 | State's share (in Rs.lakh) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 900 |
| 4 | Beneficiary's share(in Rs.lakh) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 300 |

Appendix 38-1 Proposal Phasing

| Name of Sector :Fisheries | | | | | | | | | | | | | | | | | |
|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Name of Proposal :Saving Cum Relief Scheme | | | | | | | | | | | | | | | | | |
| Year | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | | | |
| Activities | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. |
| | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. |
| | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | |
| | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | |
| | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | |
| Agencies | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. |
| | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. |
| | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. |
| | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt |
| | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt |
| Year | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | | | | |
| Activities | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. | 1.Selection of beneficiaries. |
| | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. | 2.Collection of beneficiaries share. |
| | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | 3.Contribution of Govt's share. | |
| | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | 4.Disbursement of installments. | |
| | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | 5.Monitoring. | |
| Agencies | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. | 1&2.Matsyabhavan. |
| | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. | 3.FisheriesDpt. |
| | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. | 4.Matsyabhavan. |
| | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt |
| | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt | 5.Fisheries Dpt |
| Sl.No | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| 1 | Physical target: (Numbers) | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | 22000 | -- |
| 2 | Total outlay(in Rs.lakh) | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 3900 |
| 3 | Statis share(inRs.lakh) | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 975 |
| 4 | Central share (in Rs. Lakh) | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 975 |
| 5 | Berefciaries share (in Rs lakh) | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 1950 |

Appendix 38-1 Proposal Phasing

Name of Sector :Fisheries

Name of Proposal :Sea Rescue Squad

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|---|--|--|--|--|--|--|
| Activities | 1.Procurement of 70' OAL patroll & rescue boat. 2. Selection of squad members. 3. Training. 4.Monitoring. | 1.Installation of modern equipments to the patroll boat. 2. Function of the squad. 3.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. |
| Agencies | 1.Fisheries Dpt. 2&3.Fisheries Dpt. & Navy. 4.Fisheries Dpt. | 1-3. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. | 1.Patrolling & sea rescue operation. 2.Monitoring. |
| Agencies | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. | 1&2. Fisheries Dpt. |

| Sl No. | Particulars | 2009 | 2010 | 2011 | Total |
|--------|----------------------------------|------|------|------|-------|
| 1 | Total outlay (in Rs. Lakh) | 20 | 15 | 15 | 50 |
| 2 | Fisheries Dpt share (in Rs.lakh) | 20 | 15 | 15 | 50 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Educational Concession to Fisher Folk | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. |
| Agencies | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. | 1. Issue of fishing certificate. 2. Raising of application. 3. Verification of the application. 4. Allotting the fund. 5. Disbursement of the grant. 6. Monitoring. |
| Agencies | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. | 1. Kerala fishermen welfare fund board. 2. Educational institution. 3 & 4. % of DDF. 5. Educational institutions. 6. Fisheries Dept. |

| Sl.No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|--------|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (Numbers) | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | -- |
| 2 | Total outlay (in Rs.lakh) | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 1350 |
| 3 | Statis share (in Rs.lakh) | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 1350 |

4250

| Appendix 38-1 Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Free Ration to The Fishermen of Mechanized Boats and Allied Worker at the Fishing Harbours During Trawl Ban Period | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. |
| Agencies | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. | 1.Identification & selection of beneficiaries. 2.Preporation of the beneficiary list& forwarded to the office of the DSO. 3.Supply of free ration. 4.Monitoring. |
| Agencies | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. | 1.Office of the DDF& Matsyabhavan. 2.Office of the DDF. 3.Office of the DSO & ration supply outlet. 4.Fisheries Dept.& Civil supply Dept. |

| SINO. | PARTICULARS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Total outlay(In Rs.lakh) | 8 | 8 | 8 | 8 | 3 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 3 | 8 | 120 |
| 2 | FisheriesDpt.share (inRslakh) | 8 | 8 | 8 | 8 | 3 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 3 | 8 | 120 |

| Appendix 38-1 Proposal Phasing/Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Kerosene Subsidy For Fishing | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring |
| Agencies | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring | 1.Sensitization & Application for the 2.Physical verification of the fishing implements, 3. Identification & selection of beneficiaries, 4.Distribution of the kerosene, 5.Monitoring |
| Agencies | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. | 1.Office of DCF, Kollam, 2.Malappuram, 3.Beneficiaries & bank, 4.Office of DCF, Kollam, 5.Fisheries Dept. |

| SNo | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-----|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (thousand) | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | |
| 2 | Total budget (in Rs.lakh) | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 3840 |
| 3 | Carry over (in Rs.lakh) | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 3840 |

| Appendix 38-I Proposal Phasing | | | | | | | |
|--|--|---|--|---|---|---|--|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Fishermen Development Roboto on HSD OII | | | | | | | |
| Activities | 1.Identification & selection of beneficiaries 2.Physical verification of the claim 3.Opening of the Account 4.Disbursement of the subsidy. 5.Monitoring. | 1.Identification & selection.2 Physical verification. 3.Disbursement of subsidy. 4.Monitoring. | 1 Identification & selection. 2 Physical verification. 3 Disbursement of subsidy. 4.Monitoring. | 1 Identification & selection. 2.Physical verification 3 Disbursement of subsidy. 4 Monitoring | 1. identification & selection. 2. Physical verification 3. Disbursement of subsidy 4. Monitoring. | 1 Identification & selection. 2. Physical verification 3 Disbursement of subsidy. 4 Monitoring. | 1 Identification & selection. 2 Physical verification. 3 Disbursement of subsidy. 4.Monitoring. |
| Agencies | 1.Office of DDF,Kollam. 2.Matsyabhavan. 3.Beneficiaries & bank. 4.Office of DDF, Kollam 5.Fisheries Dept. | 1.% of DDF Kollam 2.Matsyabhavan. 3.% of the DDF, Kollam 4.Fisheries Dept. | 1 % of DDF Kollam. 2 Matsyabhavan. 3 % of the DDF, Kollam. 4 Fisheries Dept. | 1 % of DDF,Kollam. 2 Matsyabhavan. 3 % of the DDF, Kollam. 4 Fisheries Dept. | 1.% of DDF,Kollam 2. Matsyabhavan. 3.% of the DDF, Kollam. 4. Fisheries Dept. | 1 % of DDF,Kollam 2 Matsyabhavan 3 % of the DDF, Kollam. 4 Fisheries Dept.. | 1 % of DDF Kollam. 2 Matsyabhavan. 3 % of the DDF, Kollam. 4 Fisheries Dept.. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Identification & selection 2.Physical verification. 3.Disbursement of subsidy 4.Monitoring. | 1.Identification & selection.2 Physical verification. 3.Disbursement of subsidy. 4.Monitoring. | 1 Identification & selection. 2 Physical verification. 3 Disbursement of subsidy. 4.Monitoring. | 1 Identification & selection. 2.Physical verification 3 Disbursement of subsidy. 4 Monitoring | 1. identification & selection. 2. Physical verification 3. Disbursement of subsidy 4. Monitoring. | 1 Identification & selection. 2. Physical verification 3 Disbursement of subsidy. 4 Monitoring. | 1 Identification & selection. 2 Physical verification. 3 Disbursement of subsidy. 4.Monitoring. |
| Agencies | 1.% of DDF Kollam. 2.Matsyabhavan. 3.% of the DDF, Kollam. 4.Fisheries Dept. | 1.% of DDF Kollam 2.Matsyabhavan. 3.% of the DDF, Kollam 4.Fisheries Dept. | 1 % of DDF Kollam. 2 Matsyabhavan. 3 % of the DDF, Kollam. 4 Fisheries Dept. | 1 % of DDF,Kollam. 2 Matsyabhavan. 3 % of the DDF, Kollam. 4 Fisheries Dept. | 1.% of DDF,Kollam 2. Matsyabhavan. 3.% of the DDF, Kollam. 4. Fisheries Dept. | 1 % of DDF,Kollam 2 Matsyabhavan 3 % of the DDF, Kollam. 4 Fisheries Dept.. | 1 % of DDF Kollam. 2 Matsyabhavan. 3 % of the DDF, Kollam. 4 Fisheries Dept.. |

| Sino. | Particulars | 2004 | 2009 | 2014 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (Nos) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | |
| 2 | Total outlay(in Rs.lacs) | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 1125 |
| 3 | Govt of India 80%(in Rs.lacs) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 800 |
| 4 | State share 20% (in Rs.lacs) | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 225 |

[illegible]

| Sl No. | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|--------|-----------------------------|------|------|------|------|------|-------|
| 1 | Physical target (units) | 200 | 200 | 200 | 200 | 200 | 1000 |
| 2 | Total outlay (in Rs. lakh) | 32 | 32 | 32 | 32 | 32 | 160 |
| 3 | State's share (in Rs. lakh) | 8 | 8 | 8 | 8 | 8 | 40 |
| 4 | Beneficiary (in Rs. akh) | 24 | 24 | 24 | 24 | 24 | 120 |

| Appendix 38-1 Proposal Phasing | | | | | | | |
|---|------|---|---|------|------|------|------|
| Name of Sector :Fisheries | | | | | | | |
| Name of Proposal :Scheme for Providing Solar Lamps to MPC's | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1.Identification & selection of beneficiaries. 2.Physical verification of the claim 3.Opening of the Account 4.Disbursement of the subsidy. 5.Monitoring. | 1.Identification & selection. 2.Physical classification 3 Disbursement of subsidy 4 Monitoring. | | | | |
| Agencies | | 1.Office of CDF,kollam 2.Matsyabhavans. 3.Beneficiaries & bank 4.Office of CDF, kollam. 5.Fisheries Dept. | 1.Office of CDF,kollam. 2 Matsyabhavans. 3 Office of CDF, kollam. 4 Fisheries Dept. | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Sl No. | Particulars | 2009 | 2010 | Total |
|--------|---------------------------------|------|------|-------|
| 1 | Physical Target (unit) | 500 | 500 | 1000 |
| 2 | Cost outlay (in Rs. Lakh) | 20 | 20 | 40 |
| 3 | State's share (in Rs. Lakh) | 10 | 10 | 20 |
| 4 | Beneficiary share (in Rs. Lakh) | 10 | 10 | 20 |

| Appendix 38-1 Proposal Phasing/Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Providing GPS And Wireless Sets To The Small Mechanised Fishing Vessel | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring |
| Agencies | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | 1 Sensitization 2 certification & selection of beneficiaries 3 Training 4 credit linkage 5 Release of GPS & Ws 6 installation of GPS & Ws 7 Functioning 8 monitoring | | | |
| Agencies | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | 1-3 Fisheries Dept 4 Beneficiaries & bank 5 Fisheries Dept 6-7 Beneficiary 8 Fisheries Dept | | | |

| S/no | Particulars | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
|------|--|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target(Units) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1000 |
| 2 | Total outlay(in Rs.lakh) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 1500 |
| 3 | Beneficiary share / bank credit (in Rs.lakh) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1000 |
| 4 | Govt. of India's share(in Rs.lakh) | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 300 |
| 5 | State's share(in Rs.lakh) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 200 |

Appendix 38-1 Proposal Phasing

| Name of Sector : Fisheries | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Proposal : Scheme for Providing Assistance to Fishermen for Treatment of Fatal Diseases | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation |
| Agencies | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation | 1.Receipt of Application 2.Medical verification 3. Treatment 4. Reimbursement of medical expenses to hospital 5. Evaluation |
| Agencies | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board | 1. Kerala Fishermen Welfare Fund Board & 2& 3. Health Dpt. & 4& 5. Kerala Fishermen Welfare Fund Board |

| Sl no | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (Nos) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 150 |
| 2 | Total outlay (in Rs.akh) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |
| 3 | KFWFB share (in Rs.lakh) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 60 |

| Appendix 38-1 Proposal Phasing/Proposal Phasing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Name of Sector : Fisheries | | | | | | | |
| Name of Proposal : Fishermen Old Age Pension | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation |
| Agencies | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation | 1.Receipt of Application 2.Physical verification 3. approval & allotment 4. Disbursement of Pension 5. Evaluation |
| Agencies | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board | 1-5. Kerala Fishermen Welfare Fund Board |

| Sl no | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (Nos) | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 12000 |
| 2 | Total outlay (in Rs. lakh) | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 1305 |
| 3 | KFWFB share (in Rs. lakh) | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 1305 |

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

| Sr no | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1 | Physical target: (Nos) | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | /50000 |
| 2 | Total ordinary (in Rs. lakh) | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | Q |
| 3 | (FRR) share (in Rs.lakh) | r | s | t | u | v | w | x | y | z | A | B | C | D | E | F | G |

| Appendix 38-1 Proposal PhasingProposal Phasing | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Name of Sector :Fisheries | | | | | | | | | | | | | | |
| Name of Proposal :Providing Subsidy to Suitable Components of Fishing Gear | | | | | | | | | | | | | | |
| Year | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | |
| Activities | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | |
| Agencies | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 2 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 3 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 4 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 5 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 6 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 7 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | |
| Year | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | |
| Activities | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | | 1.Registration of Fishermen as a member in co-operative society 2. Receipt of Application 3. Procurement of fishing implements / Physical verification 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | |
| Agencies | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 2 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 3 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 4 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 5 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 6 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | | 7 & 2. Matsyafed 3. Beneficiaries & Societies 4-7. Matsyafed | |

| Appendix III-1 Proposal Phasing/Proposal Phasing | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|------------|---|---|---|---|---|---|---|--|
| Name of Sector: Fisheries | | | | | | | | | | | | | | | | |
| Name of Proposal : Scheme for Modernisation of Country Craft | | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| Activities | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | Activities | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | 1.Registration of fishermen as a member in cooperative society 2. Receipt of Application 3. Procurement of CBM's & MP's 4. Physical verification 5. Approval & allotment 6. Disbursement of Subsidy 7. Evaluation | |
| Agencies | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | Agencies | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | 1 & 2. Matsyafed 3. Beneficiaries & Societies 4. Matsyafed | |

| Sl no | Particulars | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | Physical target (Nos) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 375 |
| 2 | Total outlay (in Rs.lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |
| 3 | Matsyafed share (in Rs.lakh) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 75 |

| Appendix 39-1 | | | | | | | |
|---|---|--|--|--|--|---|---|
| Phasing of Proposals | | | | | | | |
| Name of Sector : Industries & Co-operation | | | | | | | |
| Name of Proposal : 2.2 Fish processing Industries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification of beneficiaries in Kollam Corporation and Neendakara | 1. Identification of beneficiaries in Chavara, Alappad & Karunagapally 2. Identification of land & project formulation in Kollam Corporation and Neendakara | 1. Identification of land & project formulation in Chavara, Alappad & Karunagapally 2. Execution of the projects in Kollam Corporation and Neendakara | 1. Execution of the projects in Chavara, Alappad & Karunagapally 2. Market Development in Kollam Corporation and Neendakara | 1. Market Development in Chavara, Alappad & Karunagapally 2. Expansion in Kollam Corporation and Neendakara | 1. Expansion in Chavara, Alappad & Karunagapally 2. Modernization in Kollam Corporation and Neendakara | 1. Modernization in Chavara, Alappad & Karunagapally 2. Diversification in Kollam Corporation and Neendakara |
| Agencies | 1. Social Welfare, SC/ST, Industries | 1. Social Welfare, SC/ST, Industries 2. Jilla Panchayat, DIC | 1. Jilla Panchayat, DIC 2. DIC, District Panchayat, KSEB, KSPCB, Banks | 1. D.C., District Panchayat, KSEB, KSPCB, Banks 2. Private agencies | Private agencies | Private agencies | Private agencies |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Diversification in Kollam Corporation, Neendakara, Chavara, Alappad & Karunagapally | Diversification in Kollam Corporation, Neendakara, Chavara, Alappad & Karunagapally | Diversification in Kollam Corporation, Neendakara, Chavara, Alappad & Karunagapally | Diversification in Kollam Corporation, Neendakara, Chavara, Alappad & Karunagapally | Diversification in Kollam Corporation, Neendakara, Chavara, Alappad & Karunagapally | Diversification in Kollam Corporation, Neendakara, Chavara, Alappad & Karunagapally | Diversification in Kollam Corporation, Neendakara, Chavara, Alappad & Karunagapally |
| Agencies | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|--|-------------------------------|-----------------------------|------|------|------|------|
| Name of Proposal : 2.3 Dairy Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | | | | | | | |
| Activities | Identification of beneficiaries & Site selection | Implementation of the project | Forward Integration | | | | |
| Agencies | Dairy Development Department, Local Body | Beneficiaries & Banks | KSEB, Banks & Beneficiaries | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|---|---------------------------------|---|--------------------------|-----------------------|---|------|------|
| Name of Proposal : 2.4 Milk Processing unit with chilling plant | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | | | | | | | |
| Activities | Identification of land | Arrangement of funds | Construction of Building | Purchase of machinery | Getting clearances and commissioning of the units | | |
| Agencies | Local Body, DIC, Other Agencies | Local Bodies, Banks, Financial Institutions & Banks | Private Parties | Beneficiaries | KSPCB, KSEB, Health Department etc. | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|---|--------------------------------|-------------------------------|------|------|------|------|------|
| Name of Proposal : 2.5 Food Processing Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Selection of beneficiaries | Implementation of the project | | | | | |
| Agencies | DIC, Kudumbasree, Local Bcdies | KSEB, Local Self Government | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|--|--------------------|--------------------|-------------------|-------------------|------|
| Name of Proposal : 2.6 Flour mills and Curry powder manufacturing units. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of beneficiaries and project implementation | Identification of Beneficiaries and project implementation | Market Development | Market Development | Unit Expansion | Unit Expansion | |
| Agencies | DIC LSGLs Banks private parties | DIC LSGLs Banks private parties | Unit owners DIC | Unit owners DIC | Unit owners Banks | Unit owners Banks | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|---|--|-------------------------------|------------------------|------|------|------|
| Name of Proposal : 3.1 Mechanized coir manufacturing units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Site identification & Purchase of land/ Beneficiaries selection | Construction of Building & Purchase of machinery | Implementation of the project | Diversification | | | |
| Agencies | Panchayat/ Municipality, Private Agencies | Banks, Local Bodies, Private Agencies | KSEB, Banks, KSPCB, Others | Banks, Private parties | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| | | | | | | | |
|--|---|---|--|------|------|------|------|
| Name of Sector : Industries & Co-operation | | | | | | | |
| Name of Proposal : 3.2 Handloom Industry Innovation Centre | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Site selection of Arrangement of funds | Construction of Building | Equipment Purchase, Installation & Commissioning | | | | |
| Agencies | Handloom & Textiles Department | HL&T Department, Private Parties, Others | HL&T Department, KSEB, Others | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|---|-----------------------------------|--------------------------|--|------|------|------|
| Name of Proposal : 3.3 Clay Based Industry at Chathannur | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Selection of Site & Beneficiaries | Funds Mobilization | Construction of Building | Installation of Equipment Commissioning | | | |
| Agencies | Soil Conservation, Mining & Geology Departments | L.S.G/Government, Private Parties | Private Parties | Beneficiaries | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|--|-----------------------------|------------------------------------|---------------------------|------|------|------|
| Name of Proposal : 3.4 Value Added Cashew Kernel Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of site with Building (own/ rented) | Arrangement of funds | Purchase of Machinery & Equipments | Commissioning of the Unit | | | |
| Agencies | DIC, CAPEX Cashew Development Corporation etc. | Banks Beneficiaries, others | Beneficiaries | Beneficiaries, KSEB etc. | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |
| | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|---------------------------------|--|--------------------------------------|--------------------------|---|------|------|
| Name of Proposal : 3.5 Handloom Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of suitable site | Selection of Beneficiaries | Mobilization of funds | Construction of Building | Purchase of machinery, installation & Commissioning | | |
| Agencies | Local Bodies | DIC, Social Welfare, SC/ST Local Body etc. | Local Bodies, Private Parties, Banks | Private parties | KSEB, KSPCB, Beneficiaries | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|---|------------------------|-------------------------------|----------------------|------|------|------|
| Name of Proposal : 3.6 Manufacturing of Bamboo based products and Handicrafts items. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of Locations by Piravanthur, Kulathupuzha, Thenmala & Aryankavu panchayats | Establishment of Units | Diversification of activities | Market Development | | | |
| Agencies | LSGIs DIC | LSGIs DIC | LSGIs Beneficiaries | DIC Beneficiaries | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|---|------------------------|--|------|------|------|
| Name of Proposal : 3.7 Development of existing industries. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of 3 units each in Elampalloor, Kallada East, West & Perayam panchayats | Identification of machinaries for Technology upgradation. | Arrangement of funds | Implementation of modernisation Programme. | | | |
| Agencies | LSGIs | DIC DIC | Beneficiaries Banks | Beneficiaries | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|---|--------------------------|---|---|------|------|------|
| Name of Proposal : 3.8 Development of existing industries & starting of Micro Enterprises. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of 50 beneficiaries for training | Commencement of training | Continuation of training for other members. | Implementation of Revival Programmes & starting of new units. | | | |
| Agencies | LSGIs DIC | LSGIs DIC | LSGIs DIC | DIC Beneficiaries | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|---|---|------|------|------|------|
| Name of Proposal : 4.1 Public medical centre & Bio Medical Industries. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of location in Chathannoor Panchayat with the assistance of Health Department | Arrangement of funds through District Panchayat | Implementation of the Medical centre & Bio Medical Industries | | | | |
| Agencies | LSGI DIC Health Department | LSGI DIC Health Department | LSGI DIC Health Department | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|---|---|---|---|---|------|------|------|
| Name of Proposal : 4.2 Ayurvedic Medicine manufacturing Unit. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of a suitable building by Punalur Municipality | Arrangement of funds through District Panchayat/ LSGI | Selection of employees & implementation | Implementation & commencement of commercial production. | | | |
| Agencies | LSGI DIC | LSGI Banks Beneficiary | Beneficiary | LSGI Beneficiary | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|---|------------------------------------|--|------|------|------|------|
| Name of Proposal : 5.1 IT Park at Paravur | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of site and construction of Building | Construction of Building continues | Purchase of equipments & implementation of the project | | | | |
| Agencies | Paravur Municipality Land use Board | Paravur Municipality | KSEB, Local Body, Banks, Private Parties | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|---|---------------------------------------|---|------|------|------|------|------|
| Name of Proposal : 5.2 Entrepreneurship Development Training Centre, DIC Compound, Kollam | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Construction of Building | Purchase & Installation of related equipments & Commissioning | | | | | |
| Agencies | District Panchayat / Private Agencies | District Panchayat | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|------------------------------------|--|---------------------------------|---------------------------------|---------------------------------|------------------|------------------|
| Name of Proposal :6.1 Revival of Premo Pipe Factory, Chavara | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Revival Project Report preparation | Consultation with Govt. & Financial Institutions for funds | Feasibility Study | Implementation of the scheme | Implementation of the scheme | Brand Building | Brand Building |
| Agencies | Private/Government Agencies | Government, Bank | Private/Government Institutions | Company & Irrigation Department | Company & Irrigation Department | Private Agencies | Private Agencies |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|-------------------------|------|------|------|------|------|
| Name of Proposal : 6.3 Revival of Pompsy Biscuit manufacturing unit. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Commencement of discussion by DIC with the unit. | Re opening of the unit. | | | | | |
| Agencies | DIC Beneficiary | Beneficiary | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|------------------------------------|--------------------|------------------------------------|------|------|------|
| Name of Proposal : 6.4 Revival of Parvathy Mills | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Discussion with Parvathy Mills & NTC for the revival programme | Detailed study by an expert agency | Preparation of DPR | Implementation of Revival Package. | | | |
| Agencies | DIC District Panchayat | NTC | Consultant | Consultant NTC | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|---|--|--|--|-------------------------------------|------|------|------|
| Name of Proposal : 6.5 Revival of Other Closed & Defunct Industries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of 2.5 potentially viable closed units in Alappad, Panmana, Chavara, Kulasekharapuram & Oachira panchayats. | Preparation of RPR for Individual units. | Arrangement of funds through LSGIs through LSGIs/DIC/National Banks. | Implementation of Revival Programme | | | |
| Agencies | LSGIs DIC | Beneficiary DIC | t6 | Beneficiary | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|---------------------------|------|------|------|------|------|
| Name of Proposal : 7.1 Entrepreneurship Training & Employment Exchange | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Electrification Furnishing, Equipment purchase etc. | Inaugurate | | | | | |
| Agencies | DIC District panchayat | DIC District panchayat | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|---|--------------------------------|-------------|------|------|------|
| Name of Proposal : 7.2 Tool Room Training Centre | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Follow up action GOK & GOI by QUETCOS for the approval of the Project submitted. | Approval of the proposal & implementation of the Training centre. | | | | | |
| Agencies | DIC Quet Cos | GOK GOI Quet Cos | Beneficiary LSGIs DIC Banks | Beneficiary | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|--|-----------------------------|--------------------------|--|--|------------------|----------------|----------------|
| Name of Proposal : 8.1 Toy Manufacturing | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Site selection | Construction of Building | Selection of Beneficiaries | Fund sourcing, Purchase of Machinery & Implementation of Schemes | Market expansion | Brand building | Unit expansion |
| Agencies | Local Bodies / Private land | Local Body | Social Welfare Department, DIC, Local Body | Banks, KSEB , Financial Institutions & others | Promoters | Promoters | Promoters |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|---|----------------------------------|----------------------------------|--|------------------------------|---|------|------|
| Name of Proposal : 8.2 Mini Industrial Estate, Nedungolam | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Acquisition of land from society | Acquisition of land from society | Arrangements of funds | Construction of ten sheds | Allotment of sheds & Commissioning of units | | |
| Agencies | Local Body | Local Body | District Panchayat, Paravur Municipality Banks | Private Parties / Local Body | DIC, Local Body/ District Panchayat | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|---|------------------------------------|---------------------------------------|--|------------------------------------|------|------|------|
| Name of Proposal : 8.3 Coir manufacturing Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of land | Identification of beneficiaries | Arrangement of funds & execution | Execution & Commissioning of units | | | |
| Agencies | Local Bodies / Coir Project Office | DIC, Social welfare, SC/ST Department | Coir project office, SC/ST Development Departments & Banks | Beneficiaries | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| | | | | | | | |
|---|---------------------------------|-----------------------|-------------------------------|------|------|------|------|
| Name of Sector : Industries & Co-operation | | | | | | | |
| Name of Proposal : 8.4 Light Engineering Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of Beneficiaries | Mobilization of funds | Implementation of the project | | | | |
| Agencies | DIC, Local Body | Banks, Beneficiaries | Beneficiaries | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries & Co-operation | | | | | | | |
|---|--|--|------|------|------|------|------|
| Name of Proposal : 8.5 Straw Picture & Screw pine Products Manufacturing Unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of location and beneficiaries | implementation of the project | | | | | |
| Agencies | DIC, Local Body, Handicrafts department | Banks, Tourism Department and other Agencies | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|---|---------------------------------|----------------------|------|------|------|
| Name of Proposal : 8.6 Note Book Manufacturing Units | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of Location in Funalur Municipality | preparation of DPR and arrangement of funds | Implementation of the proposal. | Expansion programme. | | | |
| Agencies | LSGI DIC | Beneficiary LSGI Bank DIC | Beneficiary | Beneficiary bank DIC | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|----------------------------|--|--|--|------|------|------|
| Name of Proposal : 8.7 School Bag manufacturing unit | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of Location | Identification of beneficiaries & preparation of DPR | Arrangement of funds through LSGs & Commercial Banks | Establishment of school bag manufacturing units. | | | |
| Agencies | LSGIs DIC | LSGIs DIC Consultant | Beneficiaries LSGIs DIC Banks | Beneficiary | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|--|--|------|------|------|------|------|
| Name of Proposal : 8.8 Wood based Industries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of location & Beneficiaries | Implementation | | | | | |
| Agencies | LSGIs DIC | DIC Banks beneficiaries DFO, PCB, KSEB | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|-----------------------------|--------------------|------------------------|------------------------|------|------|------|
| Name of Proposal : 8.9 Rubber wood Treatment Plant | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of Land | Sanction of funds | Implementation | Implementation | | | |
| Agencies | Pathanapuram panchayat, DIC | District Panchayat | DIC District Panchayat | DIC District panchayat | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|---|----------------------------|----------------------------|----------------------------------|------|------|------|------|
| Name of Proposal : 8.10 Rubber based Industries | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Selection of Beneficiaries | Selection of Beneficiaries | Implementation and commissioning | | | | |
| Agencies | DIC LSGIs | DIC LSGIs | Beneficiaries | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|-----------------------------------|---|---|---------------------------|--------------------------------|------|------|------|
| Name of Proposal : 8.11 Food Park | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Selection of sites and private partners | Selection of sites and private partners | Construction of Food Park | Production starts in Food Park | | | |
| Agencies | | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Name of Sector : Industries | | | | | | | |
|--|----------------------------|--|---|---|--|------|------|
| Name of Proposal : 8.12 Development of existing clusters | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of clusters | Selection of assistance for first year | Selection of assistance for Second year | Selection of assistance for Fourth year | Selection of assistance for Fifth year | | |
| Agencies | DIC District panchayat | DIC District panchayat | DIC District panchayat | DIC District panchayat | DIC District panchayat | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | | | | | | | |
|---|-------------------------------|-----|--------------|----------|---------|--------------------------|-------|-------------|---------|---------|---------------------|-----|---------------------|
| Name of the Sector: Health | | | | | | | | | | | | | |
| 2.1.1 District Hospital (Allopathy) | | | | | | | | | | | | | |
| DISTRICT HOSPITAL, KOLLAM | | | | | | | | | | | | | |
| SL.N o. | No. Of Beds | 750 | | | SL. No. | OFFICE | | | | SL.N o. | Leprosy | | |
| 1 | Hospital Superintendent | 1 | 50000x1x12 | 600000 | 1 | L.S. | 1 | 20000x1x12 | 300000 | 1 | Treatment Organizer | 2 | 10000x2x12 300000 |
| 2 | PRO | 3 | 15000x3x12 | 500000 | 2 | J.S. | 4 | 15000x4x12 | 800000 | 2 | ALO | 1 | 15000x1x12 200000 |
| 3 | Receptionist | 4 | 10000x4x12 | 600000 | 3 | UDC/LDC | 16 | 10000x16x12 | 2000000 | 3 | NMS | 2 | 12000x2x12 300000 |
| 4 | Causality Civil Surgeon | 2 | 30000x2x12 | 800000 | 4 | Peon | 4 | 5000x4x12 | 400000 | 4 | Counsellors | 2 | 10000x2x12 300000 |
| 5 | Assistant Surgeon | 8 | 20000x8x12 | 2000000 | 5 | Medical Record Librarian | 2 | 10000x2x12 | 300000 | | House Keeping | | |
| 6 | Police Surgeon | 1 | 35000x1x12 | 450000 | 6 | Computer Assistant | 4 | 7000x4x12 | 400000 | 1 | H.S. | 1 | 15000x1x12 200000 |
| 7 | Assistant Surgeon | 40 | 20000x40x12 | 10000000 | 7 | Computer Operator | 5 | 7000x5x12 | 500000 | 2 | H.I | 2 | 10000x2x12 300000 |
| 8 | Civil Surgeon | 22 | 30000x22x12 | 8500000 | 6 | Data Manager | 1 | 10000x1x12 | 100000 | 3 | J.HI | 4 | 8000x4x12 400000 |
| 9 | Specialty –Cardiologist | 2 | 35000x2x12 | 900000 | 7 | Accountant | 1 | 7000x1x12 | 100000 | | Pharmacy | | |
| 10 | Specialty –Pathologist | 2 | 35000x2x12 | 900000 | 8 | Computer technician | 1 | 7000x1x12 | 100000 | 1 | Store Superintend | 1 | 15000x1x12 200000 |
| 11 | Specialty –Dental Surgeon | 3 | 20000x3x12 | 800000 | 1 | Technician | 5 | 7000x5x12 | 500000 | 2 | PSK | 2 | 10000x2x12 300000 |
| 12 | Specialty –Ophthalmic Surgeon | 1 | 35000x1x12 | 450000 | 2 | Nursing Assistant | 3 | 8000x3x12 | 300000 | 3 | Pharmacist | 10 | 8000x10x12 1000000 |
| 13 | Sonologist | 1 | 35000x1x12 | 450000 | 3 | H.A. Grade II | 2 | 7000x2x12 | 200000 | 4 | Dietitian | 4 | 10000x4x12 600000 |
| 14 | Radiologist | 1 | 35000x1x12 | 450000 | | | X-Ray | | | 5 | Cook | 4 | 7000x4x12 400000 |
| 15 | Staff Nurse | 187 | 10000x187x12 | 30000000 | 1 | Radiologist | 1 | 30000x1x12 | 400000 | | | PMR | |
| 16 | Head Nurse | 69 | 15000x69x12 | 150000 | 2 | Radiographer | 5 | 10000x5x12 | 700000 | 1 | Physiotherapist | 1 | 10000x5x12 700000 |
| 17 | Nursing Officer | 1 | 20000x1x12 | 300000 | 3 | H.A. Grade II | 1 | 7000x1x12 | 100000 | 3 | Cobbler | 3 | 5000x3x12 200000 |
| 18 | Nursing Superintendent Gr.I | 4 | 20000x4x12 | 1200000 | 4 | Nursing Assistant | 1 | 8000x1x12 | 100000 | 4 | Foreman | 1 | 10000x1x12 150000 |
| 19 | Nursing Superintendent Gr.II | 6 | 20000x6x12 | 1500000 | | Whole Body Scan | | | | 5 | Plumber | 3 | 8000x3x12 300000 |
| 20 | Nursing Assistant | 150 | 8000x150x12 | 17500000 | 1 | Sonologist | 1 | 35000x1x12 | 500000 | 6 | Electrician | 3 | 8000x3x12 300000 |
| 21 | H.A. Grade I | 50 | 7000x50x12 | 5000000 | 2 | Technician | 4 | 10000x4x12 | 600000 | 7 | Lift Operator | 6 | 5000x6x12 400000 |
| 22 | H.A. Grade II | 90 | 7000x90x12 | 8000000 | 3 | H.A. Grade II | 3 | 7000x3x12 | 300000 | | Security Service | | |
| 23 | P.T.S | 20 | 5000x20x12 | 1500000 | 4 | Nursing Assistant | 1 | 8000x1x12 | 100000 | | Security Officer | 1 | 15000x1x12 200000 |
| 24 | Mortuary Attender | 4 | 8000x4x12 | 400000 | | Cardiology Unit | | | | | Security guard | 10 | 10000x10x12 1500000 |
| 25 | Driver | 4 | 8000x4x12 | 400000 | 1 | ECG Technician | 4 | 10000x4x12 | 600000 | | | | |
| 26 | Lab Assistant | 1 | 7000x1x12 | 100000 | 2 | H.A. Grade 1 | 1 | 7000x4x12 | 100000 | | | | |
| 27 | Lab Technician | 12 | 10000x12x12 | 1500000 | 3 | H.A. Grade 2 | 3 | 7000x3x12 | 300000 | | Dental | | |

| Sl.N o. | No. Of Beds | 750 | | | Sl. No. | OFFICE | | | | Sl.N o. | Leprosy | | | |
|---------|--------------|-----|------------|--------|---------|-------------------------|---|-------------|--------|---------|--------------------|---|------------|--------|
| 28 | SSO | 1 | 15000x1x12 | 200000 | | Ophthalmology Unit | | | | 1 | Dental hygienist | 4 | 7000x4 x12 | 400000 |
| 29 | JSO | 1 | 12000x1x12 | 150000 | 1 | Ophthalmic Assistant | 6 | 10000x6 x12 | 600000 | 2 | Dental Mechanic | 4 | 7000x4 x12 | 400000 |
| 30 | Clerk-UDC | 1 | 10000x1x12 | 150000 | 2 | Camp Coordinator(Senior | 1 | 15000x1 x12 | 200000 | | Skin and V.D. | | | |
| 31 | Clerk-LDC | 1 | 10000x1x12 | 150000 | | | | | | 1 | V.D. Social worker | 2 | 7000x2 x12 | 200000 |
| 32 | Peon | 1 | 5000x1x12 | 100000 | | | | | | | | | | |
| 33 | H.A Grade I | 1 | 7000x1x12 | 100000 | | | | | | | | | | |
| 34 | H.A Grade II | 4 | 7000x4x12 | 400000 | | | | | | | | | | |

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| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | | | | | | | |
|---|--|---|---|---|---|---|---|--|--|--|--|--|--|
| Name of the Sector: Health | | | | | | | | | | | | | |
| 2.1.1 District Hospital (Allopathy) | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | | | | | | |
| Activity | Construction of building in progress. Sanction from govt. for increasing bed strength to 750. & Post creation of staff | Construction of building in progress | Purchase of furniture equipments | Purchase of furniture equipments | Allotment of Bed, furnishing sanction for Post creation, increasing staff strength according to Gen.Hosp level. | Allotment of bed for essential unit like cardiology& sanction for Post creation & increase in staff strength. | Allotment of bed for essential unit like cardiology& sanction for Post creation & increase in staff strength. | | | | | | |
| Agencies | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | | | | | |
| Activity | Allotment of bed for essential unit like cardiology&sanction for Post creation & increase in staff strength | Posting of staff for newly started units. Recurring exp. for installing equipments | Purchase of medicines, installing equipments, recruiting staff recurring expenditure. | Purchase of medicines, installing equipments, recruiting staff recurring expenditure. | Maintenance of building & equipments recurring expenditure. | Maintenance of building & equipments recurring expenditure | Maintenance of building & equipments recurring expenditure | | | | | | |
| Agencies | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | Financial Insti., MLA / MP fund, Jilla Panchayat, NUHM fund & Govt. fund, KSEB, KWA | | | | | | |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | | | |
|---|-------------------------------|-----|-------------|----------|--------|----------------------|---|------------|----------|
| Name of the Sector: Health | | | | | | | | | |
| 2.1.2 District Hospital (Allopathy) | | | | | | | | | |
| VICTORIA HOSPITAL, KOLLAM | | | | | | | | | |
| Sl. No. | No. Of Beds | 450 | | | | House Keeping | | | |
| 1 | Hospital Superindendent | 1 | 40000x1x12 | 500000 | 1 | H.S. | 1 | 15000x1x12 | 200000 |
| 2 | PRO | 1 | 15000x1x12 | 200000 | 2 | H.I. | 2 | 10000x2x12 | 300000 |
| 3 | Receptionist | 4 | 10000x4x12 | 600000 | 3 | JHI | 4 | 8000x4x12 | 400000 |
| ADMINISTRATION | | | | | PPUnit | | | | |
| 1 | Lay Secretary | 1 | 20000x1x12 | 300000 | 1 | LHI | 1 | 10000x1x12 | 150000 |
| 2 | J.S. | 4 | 15000x4x12 | 800000 | 2 | HI | 1 | 10000x12x1 | 150000 |
| 3 | UDC/LDC | 12 | 10000x12x12 | 1800000 | 3 | JPHN | 4 | 8000x4x12 | 400000 |
| 4 | Peon | 4 | 5000x4x12 | 400000 | 4 | JHI | 4 | 8000x4x12 | 400000 |
| 5 | C.A. | 1 | 15000x1x12 | 200000 | 5 | Nursing Assistant | 1 | 8000x1x12 | 100000 |
| 6 | Medical Record Librarian | 2 | 10000x2x12 | 300000 | 6 | H.A. Grade II | 1 | 7000x1x12 | 100000 |
| 7 | Computer operator | 2 | 7000x2x12 | 200000 | 7 | Lift Operator | 4 | 5000x4x12 | 300000 |
| 8 | Computer Assistant | 2 | 7000x2x12 | 200000 | 8 | Plumber | 2 | 8000x2x12 | 200000 |
| Security Services | | | | | 9 | Electrician | 2 | 8000x2x12 | 200000 |
| | | | | | 10 | Telephone Operator | 4 | 8000x4x12 | 400000 |
| 1 | Security Officer | 1 | 15000x1x12 | 200000 | 11 | laundry Operator | 6 | 7000x6x12 | 504000 |
| 2 | Security Guard | 10 | 10000x10x12 | 1500000 | 12 | Incenarator Operator | 2 | 7000x2x12 | 200000 |
| | | | | | | | | TOTAL | 57300000 |
| Medical Store | | | | | | | | | |
| 1 | PSK | 2 | 10000x2x12 | 300000 | | | | | |
| 2 | Pharmacist | 6 | 8000x6x12 | 700000 | | | | | |
| 3 | Driver | 2 | 8000x2x12 | 200000 | | | | | |
| USS | | | | | | | | | |
| 1 | Sonologist | 1 | 35000x1x12 | 450000 | | | | | |
| 2 | Technician | 3 | 10000x3x12 | 400000 | | | | | |
| Doctors | | | | | | | | | |
| 1 | Civil Surgeon | 14 | 30000x14x12 | 6000000 | | | | | |
| 2 | Causality Civil Surgeon | 6 | 30000x6x12 | 3000000 | | | | | |
| 3 | Assistant Surgeon | 28 | 20000x28x12 | 7000000 | | | | | |
| 4 | Assistant Surgeon-Causality | 14 | 20000x14x12 | 3500000 | | | | | |
| 5 | Neonatologist | 1 | 35000x1x12 | 450000 | | | | | |
| 6 | Nursing Super indent Grade I | 1 | 20000x1x12 | 300000 | | | | | |
| 7 | Nursing Super indent Grade II | 3 | 20000x3x12 | 500000 | | | | | |
| 8 | Head Nurse | 25 | 15000x25x12 | 4700000 | | | | | |
| 9 | Staff Nurse | 81 | 10000x81x12 | 10000000 | | | | | |
| 10 | Nursing Assistant | 50 | 8000x50x12 | 5000000 | | | | | |
| 11 | H.A. Grade 1 | 20 | 7000x20x12 | 1800000 | | | | | |
| 12 | H.A. Grade 2 | 50 | 7000x50x12 | 4500000 | | | | | |
| 13 | PTS | 8 | 5000x8x12 | 500000 | | | | | |
| 14 | Lab Technician | 4 | 10000x4x12 | 500000 | | | | | |
| 15 | Dietitian | 2 | 10000x2x12 | 300000 | | | | | |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|--------------------------|---------------------|-----------------|-------------------------|---------------------|-----------------|---------------------|
| Name of the Sector: Health | | | | | | | |
| 2.1.3 THQH Kottarakara Karunagappally and Sasthamcotta | | | | | | | |
| Sl. No. | Category | Requirement | Salary of staff | Total cost (Approx).Rs. | Requirement | Salary of staff | Total cost (Approx) |
| | | THQH Kottarakara | | | THQH Karunagappally | | |
| | | Employment expected | | | Employment expected | | |
| 1 | Superintendent | 1 | 40000x1x12 | 500000 | 1 | 40000x1x12 | 500000 |
| 2 | Public relation Officer | 1 | 15000x1x12 | 200000 | 1 | 15000x1x12 | 200000 |
| 3 | Receptionist | 3 | 10000x3x1x12 | 400000 | 3 | 10000x3x1x12 | 400000 |
| Casualty | | | | | | | |
| Security wing | | | | | | | |
| 4 | Security Officer | 1 | 10000x1x1x12 | 150000 | 1 | 10000x1x1x12 | 150000 |
| 5 | Security guard | 1 | 5000x1x12 | 100000 | 1 | 5000x1x12 | 100000 |
| | Office | | | | | | |
| 6 | Lay Secretary | 1 | 15000x1x12 | 200000 | 1 | 15000x1x12 | 200000 |
| 7 | Junior Supdt | 4 | 12500x4x12 | 600000 | 4 | 12500x4x12 | 600000 |
| 8 | LDC/UDC | 8 | 10000x8x12 | 960000 | 8 | 10000x8x12 | 960000 |
| 9 | Computer Operator | 2 | 10000x2x12 | 300000 | 2 | 10000x2x12 | 300000 |
| 10 | Computer Asst | 2 | 10000x2x12 | 300000 | 2 | 10000x2x12 | 300000 |
| 11 | Peon | 3 | 5000x2x12 | 150000 | 3 | 5000x2x12 | 150000 |
| 12 | Medical Record Librarian | 1 | 12000x1x12 | 144000 | 1 | 12000x1x12 | 144000 |
| 13 | Ambulance Driver | 2(PPU-1) | 8000x2x12 | 200000 | 2 | 8000x2x12 | 200000 |
| Laboratory | | | | | | | |
| 14 | Pathologist | 1 | 30000x1x12 | 400000 | 1 | 30000x1x12 | 400000 |
| 15 | Technician | 6 | 8000x6x12 | 600000 | 6 | 8000x6x12 | 600000 |
| 16 | Lab Asst | 1 | 8000x1x12 | 100000 | 1 | 8000x1x12 | 100000 |
| 17 | Nursing Asst | 3 | 8000x3x12 | 300000 | 3 | 8000x3x12 | 300000 |
| 18 | Hosp Attendant Gr 2 | 2 | 7000x2x12 | 175000 | 2 | 7000x2x12 | 175000 |
| 19 | PTS | 1 | 5000x1x12 | 70000 | 1 | 5000x1x12 | 70000 |
| 20 | USS- Sonologist | 1 | 30000x1x12 | 400000 | 1 | 30000x1x12 | 400000 |
| 21 | Technician | 3 | 8000x3x12 | 300000 | 3 | 8000x3x12 | 300000 |
| 22 | X-ray technician | 2 | 8000x2x12 | 200000 | 2 | 8000x2x12 | 200000 |
| Pharmacy | | | | | | | |
| 23 | Pharmacy & Store keeper | 1 | 10000x1x12 | 150000 | 1 | 10000x1x12 | 150000 |
| 24 | Pharmacist | 6 | 8000x6x12 | 600000 | 6 | 8000x6x12 | 600000 |
| 25 | Refractionist | 3 | 8000x3x12 | 300000 | 3 | 8000x3x12 | 300000 |

| | | | | | | | | |
|--|----------------------------|-----------------|--------------|-----------------|-----|--------------|------------------|----|
| 26 | Dental surgeon | 1 | 20000x1x12 | 300000 | 1 | 20000x1x12 | 300000 | 34 |
| 27 | Dental Hygenist | 3 | 20000x3x12 | 900000 | 3 | 20000x3x12 | 900000 | |
| 28 | Dental Mechanic | 3 | 10000x3x12 | 400000 | 3 | 10000x3x12 | 400000 | 35 |
| Physical Medicine | | | | | | | | |
| 29 | Physiatrist | 1 | 20000x1x12 | 300000 | 1 | 20000x1x12 | 300000 | 36 |
| 30 | Physiotherapist | 3 | 10000x3x12 | 400000 | 3 | 10000x3x12 | 400000 | |
| 31 | Nursing Asst | 1 | 8000x1x12 | 100000 | 1 | 8000x1x12 | 100000 | |
| 32 | Hosp attendant gr2 | 1 | 7000x1x12 | 100000 | 1 | 7000x1x12 | 100000 | 37 |
| Casualty & Trauma care unit | | | | | | | | |
| 33 | Medical Officer | 8 (C.S-7,A.S-1) | 30000x7x12 | 2600000 | 8 | 30000x7x12 | 2600000 | 38 |
| | | | 20000x1x12 | 300000 | | 20000x1x12 | 300000 | |
| Doctors | | | | | | | | |
| 34 | Civil Surgeon | 8 | 30000x8x12 | 2500000 | 8 | 30000x8x12 | 2500000 | 39 |
| 35 | Assistant Surgeon | 14 | 20000x14x12 | 4200000 | 14 | 20000x14x12 | 4200000 | |
| 36 | Nursing Supdt gr1 | 1 | 15000x1x12 | 200000 | 1 | 15000x1x12 | 200000 | 40 |
| 37 | Nursing Supdt gr2 | 3 | 15000x3x12 | 600000 | 3 | 15000x3x12 | 600000 | |
| 38 | Head nurse | 40 | 12500x40x12 | 7500000 | 40 | 12500x40x12 | 7500000 | 41 |
| 39 | Staff nurse | 125 | 10000x125x12 | 15000000 | 125 | 10000x125x12 | 15000000 | |
| 40 | Nursing Assistant | 30 | 8000x30x12 | 3000000 | 30 | 8000x30x12 | 3000000 | |
| 41 | Hosp attendant gr1 | 10 | 7000x10x12 | 900000 | 10 | 7000x10x12 | 900000 | 42 |
| 42 | Hosp attendant gr2 | 20 | 7000x20x12 | 1800000 | 20 | 7000x20x12 | 1800000 | |
| 43 | PTS | 10 | 5000x10x12 | 700000 | 10 | 5000x10x12 | 700000 | 43 |
| P.P.Unit | | | | | | | | |
| 44 | Lady Health Inspector | 1 | 10000x1x12 | 150000 | 1 | 10000x1x12 | 150000 | 44 |
| 45 | Health Inspector | 1 | 10000x1x12 | 150000 | 1 | 10000x1x12 | 150000 | |
| 46 | Junior Public Health Nurse | 2 | 8000x2x12 | 200000 | 2 | 8000x2x12 | 200000 | |
| 47 | Junior Health Inspector | 2 | 8000x2x12 | 200000 | 2 | 8000x2x12 | 200000 | 45 |
| 48 | Nursing Assistant | 1 | 8000x1x12 | 100000 | 1 | 8000x1x12 | 100000 | |
| 49 | Hosp attendant gr2 | 1 | 7000x1x12 | 100000 | 1 | 7000x1x12 | 100000 | 46 |
| 50 | VCTC Counsellor | 2 | 10000x1x1x12 | 300000 | 2 | 10000x1x1x12 | 300000 | |
| House keeping | | | | | | | | |
| 51 | H.S. | 1 | 15000x1x12 | 200000 | 1 | 15000x1x12 | 200000 | 47 |
| 52 | H.I | 1 | 10000x1x12 | 150000 | 1 | 10000x1x12 | 150000 | |
| 53 | JHI | 2 | 8000x2x12 | 200000 | 2 | 8000x2x12 | 200000 | 48 |
| | TOTAL | | | 51349000 | | | 51349000 | |
| | GRAND TOTAL | | | | | | 102698000 | 49 |

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| Sl. No. | Category | Requirement | Salary of staff | Total cost(Approx).Rs. |
|------------------------------------|--------------------------|-------------|-----------------|------------------------|
| THQH Sasthamcotta | | | | |
| Employment expected by 2021 | | | | |
| 1 | Superintendent | 1 | 40000x1x12 | 500000 |
| 2 | Public relation Officer | 1 | 15000x1x12 | 200000 |
| 3 | Receptionist | 3 | 10000x3x1x12 | 400000 |
| | Security wing | | | |
| 4 | Security Officer | 1 | 10000x1x1x12 | 150000 |
| 5 | Security guard | 1 | 5000x1x12 | 100000 |
| | Office | | | |
| 6 | Lay Secretary | 1 | 15000x1x12 | 200000 |
| 7 | Junior Supdt | 4 | 12500x4x12 | 600000 |
| 8 | LDC/UDC | 8 | 10000x8x12 | 960000 |
| 9 | Computer Operator | 2 | 10000x2x12 | 300000 |
| 10 | Computer Asst | 2 | 10000x2x12 | 300000 |
| 11 | Peon | 3 | 5000x2x12 | 150000 |
| 12 | Medical Record Librarian | 1 | 12000x1x12 | 144000 |
| 13 | Ambulance Driver | 2 | 8000x2x12 | 200000 |
| | Laboratory | | | |
| 14 | Pathologist | 1 | 30000x1x12 | 400000 |
| 15 | Technician | 6 | 8000x6x12 | 600000 |
| 16 | Lab Asst | 1 | 8000x1x12 | 100000 |
| 17 | Nursing Asst | 3 | 8000x3x12 | 300000 |
| 18 | Hosp Attendant Gr 2 | 2 | 7000x2x12 | 175000 |
| 19 | PTS | 1 | 5000x1x12 | 70000 |
| 20 | USS- Sonologist | 1 | 30000x1x12 | 400000 |
| 21 | Technician | 3 | 8000x3x12 | 300000 |
| 22 | X-ray technician | 2 | 8000x2x12 | 200000 |
| | Pharmacy | | | |
| 23 | Pharmacy& Store keeper | 1 | 10000x1x12 | 150000 |
| 24 | Pharmacist | 6 | 8000x6x12 | 600000 |
| 25 | Refractionist | 3 | 8000x3x12 | 300000 |
| 26 | Dental surgeon | 1 | 20000x1x12 | 300000 |
| 27 | Dental Hygenist | 3 | 20000x3x12 | 900000 |
| 28 | Dental Mechanic | 3 | 10000x3x12 | 400000 |
| | Physical Medicine | | | |
| 29 | Physiatrist | 1 | 20000x1x12 | 300000 |
| 30 | Physiotherapist | 3 | 10000x3x12 | 400000 |
| 31 | Nursing Asst | 1 | 8000x1x12 | 100000 |
| 32 | Hosp attendant gr2 | 1 | 7000x1x12 | 100000 |
| | Casuality | | | |
| 33 | Medical Officer | 8 | 30000x7x12 | 2600000 |
| | | | 20000x1x12 | 300000 |
| | Doctors | | | |

| | | | | |
|----|----------------------------|-----|--------------|-----------------|
| 34 | Civil Surgeon | 8 | 30000x8x12 | 2500000 |
| 35 | Assistant Surgeon | 14 | 20000x14x12 | 4200000 |
| 36 | Nursing Supdt gr1 | 1 | 15000x1x12 | 200000 |
| 37 | Nursing Supdt gr2 | 3 | 15000x3x12 | 600000 |
| 38 | Head nurse | 40 | 12500x40x12 | 7500000 |
| 39 | Staff nurse | 125 | 10000x125x12 | 15000000 |
| 40 | Nursing Assistant | 30 | 8000x30x12 | 3000000 |
| 41 | Hosp attendant gr1 | 10 | 7000x10x12 | 900000 |
| 42 | Hosp attendant gr2 | 20 | 7000x20x12 | 1800000 |
| 43 | PTS | 10 | 5000x10x12 | 700000 |
| | P.P.Unit | | | |
| 44 | Lady Health Inspector | 1 | 10000x1x12 | 150000 |
| 45 | Health Inspector | 1 | 10000x1x12 | 150000 |
| 46 | Junior Public Health Nurse | 2 | 8000x2x12 | 200000 |
| 47 | Junior Health Inspector | 2 | 8000x2x12 | 200000 |
| 48 | Nursing Assistant | 1 | 8000x1x12 | 100000 |
| 49 | Hosp attendant gr2 | 1 | 7000x1x12 | 100000 |
| 50 | VCTC Counsellor | 2 | 10000x1x1x12 | 300000 |
| | House keeping | | | |
| 51 | H.S. | 1 | 15000x1x12 | 200000 |
| 52 | H.I | 1 | 10000x1x12 | 150000 |
| 53 | JHI | 2 | 8000x2x12 | 200000 |
| | TOTAL | | | 51349000 |

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| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | |
|---|-------------|---------------------------|
| Name of the Sector: Health | | |
| 2.1.4 Government Hospital | | |
| G.H.Nedumpana | | |
| Doctors | | Budget |
| Superintendent | 1 | 35000 |
| Speciality- | | |
| Gynaecologist | 2 | 35000 x 2 x 12 = 840000 |
| Surgeon | 2 | 35000 x 2 x 12 = 840000 |
| Medicine | 2 | 35000 x 2 x 12 = 840000 |
| Paediatrician | 2 | 35000 x 2 x 12 = 840000 |
| Assistant Surgeon | 8 | 20000 x 8 x 12 = 2000000 |
| Office : | | |
| J.S | 4 | 15000 x 4 x 12 = 800000 |
| UDC/LDC | 6 | 10000 x 6 x 12 = 720000 |
| Peon | 1 | 5000 x 1 x 12 = 60000 |
| | 2 | |
| Driver | (Ambulance) | 8000 x 2 x 12 = 192000 |
| Nursing Supdt gr 2 | 1 | 20000 x 1 x 12 = 240000 |
| Head nurse | 20 | 15000 x 20 x 12 = 3600000 |
| Staff nurse | 45 | 10000 x 45 x 12 = 5400000 |
| Nursing Asst | 30 | 7000 x 30 x 12 = 2520000 |
| H.A Grade 1 | 10 | 7000 x 10 x 12 = 840000 |
| H.A Gr 2 | 20 | 7000 x 20 x 12 = 1680000 |
| PTS | 4 | 5000 x 4 x 12 = 240000 |
| Lab Tech | 3 | 10000 x 3 x 12 = 360000 |
| X-ray technician | 2 | 7000 x 2 x 12 = 168000 |
| ECG technician | 2 | 10000 x 2 x 12 = 240000 |
| Radiographer | 2 | 10000 x 2 x 12 = 240000 |
| Pharmacy | | |
| Pharmacy & Store keeper | 1 | 10000 x 1 x 12 = 120000 |
| Pharmacist | 4 | 8000 x 4 x 12 = 384000 |
| Security | | |
| Security guard | 1 | 10000 x 1 x 12 = 120000 |
| Plumber | 1 | 8000 x 1 x 12 = 96000 |
| Electrician | 1 | 8000 x 1 x 12 = 96000 |
| | TOTAL | 70883000 |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | |
|---|-------------|---------------------------|
| Name of the Sector: Health | | |
| 2.1.5 Community Health Centres (Kadakkal & Nedungolam) | | |
| CHC KADAKKAL-STATUS-Raised to 250 Beds (Now 150 Beds and 350 IPs) | | |
| Doctors | | Budget |
| Superintendent | 1 | 35000 x 1 x 12 = 420000 |
| Speciality- | | |
| Gynaecologist | 2 | 35000 x 2 x 12 = 840000 |
| Surgeon | 2 | 35000 x 2 x 12 = 840000 |
| Medicine | 2 | 35000 x 2 x 12 = 840000 |
| Paeditrician | 2 | 35000 x 2 x 12 = 840000 |
| Casualty M.O's (24 hrs) | 8 (A.S) | 20000 x 8 x 12 = 2000000 |
| Office : | | |
| J.S | 4 | 15000 x 4 x 12 = 800000 |
| UDC/LDC | 6 | 10000 x 6 x 12 = 720000 |
| Peon | 1 | 5000 x 1 x 12 = 60000 |
| | 2 | |
| Driver | (Ambulance) | 8000 x 2 x 12 = 192000 |
| Nursing Supdt gr 2 | 1 | 20000 x 1 x 12 = 240000 |
| Head nurse | 20 | 15000 x 20 x 12 = 3600000 |
| Staff nurse | 45 | 10000 x 45 x 12 = 5400000 |
| Nursing Asst | 30 | 7000 x 30 x 12 = 2520000 |
| H.A Grade 1 | 10 | 7000 x 10 x 12 = 840000 |
| H.A Gr 2 | 20 | 7000 x 20 x 12 = 1680000 |
| PTS | 4 | 5000 x 4 x 12 = 240000 |
| Lab Tech | 3 | 10000 x 3 x 12 = 360000 |
| X-ray technician | 2 | 7000 x 2 x 12 = 168000 |
| ECG technician | 2 | 10000 x 2 x 12 = 240000 |
| Radiographer | 2 | 10000 x 2 x 12 = 240000 |
| Pharmacy | | |
| Pharmacy & Store keeper | 1 | 10000 x 1 x 12 = 120000 |
| | | |
| | | |
| | | |
| Pharmacist | 4 | 8000 x 4 x 12 = 384000 |
| Security | | |
| Security guard | 1 | 10000 x 1 x 12 = 120000 |
| Plumber | 1 | 8000 x 1 x 12 = 96000 |
| Electrician | 1 | 8000 x 1 x 12 = 96000 |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | |
|---|-----------------------|-------------------------|
| Name of the Sector: Health | | |
| 2.1.6 Block Primary Health Centre | | |
| SLNO. | Name of Panchayat | I. P. Facility Required |
| 1 | Kulathupuzha | PHC Kulathupuzha |
| 2 | Arancavu | |
| 3 | Thenmala | |
| 4 | Kulakkada | |
| 5 | Melila | |
| 6 | Mylom | PHC Kulakkada |
| 7 | Vettikavala | |
| 8 | Vilakudy | |
| 9 | Thalavoor | |
| 10 | Pattazhy | |
| 11 | Pattazhy Vadakkekkara | CHC Pathanapuram |
| 12 | Alaymon | CHC Anchal |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|---|---|---|---|--------------------------------------|--------------------------------------|--------------------------------------|
| Name of the Sector: Health | | | | | | | |
| 3.3.1 District Medical Office (ISM), Kollam | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Acquire 25 cents land from D.A.H. Kollam. | Construction of Ground floor & first floor, purchase of vehicle | Creation of post infrastructure facilities. Technical staff for Dist. Medical Store, Computer facilities. | Construction of second floor for training of staff & doctors. | Infrastructure facilities | Creation of post | Creation of post |
| | Construction of 3 storied building (500 sq.m) | Rs.1.25 cr | Rs.50 lakhs | 75 lakhs | Audio visuals | Maintenance | Maintenance |
| | | | | | Internet | Vehicle for District Store | Rs.30 lakhs |
| | | | | | Video Conferencing facilities. | Rs.30 lakhs | |
| | | | | | Rs.10 lakhs | | |
| Agencies | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, |
| | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Creation of post | Creation of post | Creation of post | Creation of post | Creation of post | Creation of post | Creation of post |
| | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance |
| | Rs.30 lakhs | Rs.30 lakhs | Rs.30 lakhs | Rs.30 lakhs | Rs.30 lakhs | Rs.30 lakhs | Rs.30 lakhs |
| Agencies | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, |
| | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA |

| Staff Requirement by 2021 | | | |
|-----------------------------|----------------------------|----------------------------|----------------------------|
| Technical Staff | | | |
| District Medical Officer –1 | | | |
| Audit & Inspection | Health Programme | Administration | District Store |
| Deputy D.M.O. | Deputy D.M.O. | Deputy D.M.O. | Deputy D.M.O. |
| | Chief Medical Officer - 01 | Chief Medical Officer - 01 | Chief Medical Officer – 01 |
| | Medical Officer - 03 | Medical Officer - 03 | Medical Officer - 03 |
| | Mass Media Officer - 01 | | |
| Administrative Staff | | | |
| Accounts Officer | 1 | Data entry Operator | 3 |
| Administrative Assistant | 1 | Storekeeper | 2 |
| P.R.O. | 1 | Peon | 6 |
| Senior Superintendent | 6 | Driver | 2 |
| Junior Superintendent | 10 | Electrician | 1 |
| Accountant | 1 | Plumber | 1 |
| U.D.Clerk | 16 | Gardiner | 1 |
| L.D.clerk | 32 | Watchman | 2 |

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| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|---|--|--------------------------------------|--------------------------------------|--|--------------------------------------|--|
| Name of the Sector: Health | | | | | | | |
| 3.3.2 District Ayurveda Hospital, Kollam | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Upgraded to 100 bed. | Sanction of new speciality Netra | Upgraded to 150 bed | New speciality Kayachikitsa | Sanction of post | Building of 150 sq.m | Upgraded to 200 bed Infrastructure facilities for Operation Theatre and Ultra Sound Scan and creation of post. |
| | Construction of 300 sq.m building. | sanction of post for 100 bed | building of 150 sq.m. | X-ray unit | Infrastructure facilities for new building and New speciality Prasochi Thantra | Mini Operation Theatre | Rs.1.5 crore |
| | Rs.1.25 cr | nfrastructure facilities Panchakarma equipments. | Vehicles | clinical lab Canteen | Rs.50 lakhs | Ultra sound scan | |
| | | Rs.50 lakhs | Rs.50 lakhs | 300 sq.m building for Staff Quarters | | Rs.1.5 crore | |
| | Construction of five storied building (1800 sq.m) | | | Rs.1 crore | | | |
| Agencies | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, |
| | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Upgraded to 250 bed | Creation of post | Creation of post | Creation of post | Creation of post | Creation of post | Creation of post |
| | New speciality Balachikitsa 300 sq.m building | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance |
| | Pay Ward 50 rooms | Geriatric centre and Yoga Therapy | Upgraded to 300 bed | Upgraded to 350 bed | Upgraded to 400 bed | Upgraded to 500 bed | Upgraded to 600 bed |
| | Rs.1.5 crore | Rs.50 lakhs | New speciality Visha Chikitsa | 300 sq.m building | Pay Ward 50 rooms | Rs.50 lakhs | Rs.50 lakhs |
| | | | Rs.60 lakhs | New speciality | Rs.75 lakhs | | |
| | | | | Swastha Writtha | | | |
| | | | | Rs.1.5 crore | | | |
| Agencies | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, | Govt. of Kerala, |
| | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA | Dept. of I.S.M.,LSGI, PWD, KSEB, KWA |

| Staff Requirement by 2021 | | | |
|-----------------------------------|-----|-----------------------------|---|
| Technical Staff | | Administrative Staff | |
| Hospital Superintendent | 1 | Lay Secretary cum Treasurer | 1 |
| Chief Medical Officer | 6 | Jr. Supdt/Head Clerk | 2 |
| Senior Medical Officer | 12 | Accountant | 2 |
| Medical Officer | 30 | U.D.Clerk | 5 |
| Specialist Medical Officer | 10 | L.D.Clerk | 5 |
| Pharmacist | 24 | Typist | 2 |
| Store Superintendent | 2 | Peon | 2 |
| Pathologist | 1 | Driver | 2 |
| Radiologist | 2 | Plumber | 2 |
| Lab Technician | 2 | Electrician | 2 |
| Lab Assistant | 2 | Gardner | 1 |
| Nursing Supdt. | 6 | Security/Watchman | 4 |
| Nurse | 120 | | |
| X-ray Technician | 2 | | |
| X-ray Assistant | 2 | | |
| Nursing Assistant | 60 | | |
| Masseur | 28 | | |
| Dietician | 1 | | |
| Optometrist | 1 | | |
| Sanitation Worker/F.W.S./Attender | 32 | | |

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| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | |
|---|---------------|-----------------------|-----|-----------------------|-----|
| Name of the Sector: Health | | | | | |
| 3.5 Development proposals in view of up-gradation of existing Government Ayurveda hospitals | | | | | |
| Institutions | Existing beds | Required beds on 2011 | | Required beds on 2021 | |
| District Ayurveda Hospital, Kollam | 50 | General | 250 | General | 500 |
| | | Specialty | 150 | Specialty | 300 |
| | | Total | 400 | Total | 800 |
| Government Ayurveda Hospital, Paravoor | 30 | General | 50 | General | 100 |
| | | Specialty | 50 | Specialty | 100 |
| | | Total | 100 | Total | 200 |
| Government Ayurveda Hospital, Thalavoor | 30 | General | 50 | General | 100 |
| | | Specialty | 50 | Specialty | 100 |
| | | Total | 100 | Total | 200 |
| Government Ayurveda Hospital, Ayoor | 30 | General | 50 | General | 100 |
| | | Specialty | 50 | Specialty | 100 |
| | | Total | 100 | Total | 200 |
| Government Ayurveda Hospital, Nedumpana | 10 | General | 50 | General | 75 |
| | | Specialty | 50 | Specialty | 75 |
| | | Total | 100 | Total | 150 |
| Government Ayurveda Hospital, Poruvazhy | 10 | General | 50 | General | 75 |
| | | Specialty | 50 | Specialty | 75 |
| | | Total | 100 | Total | 150 |
| Government Ayurveda Hospital, Karunagappally | 10 | General | 50 | General | 75 |
| | | Specialty | 50 | Specialty | 75 |
| | | Total | 100 | Total | 150 |
| Government Ayurveda Hospital, Iverkala | 10 | General | 50 | General | 75 |
| | | Specialty | 50 | Specialty | 75 |
| | | Total | 100 | Total | 150 |
| Government Ayurveda Hospital, Kottarakkara | 10 | General | 50 | General | 75 |
| | | Specialty | 50 | Specialty | 75 |
| | | Total | 50 | Total | 150 |
| Up gradation of Government Ayurveda Dispensary, Kannanalloor | NIL | General | 30 | General | 50 |
| Existing Dispensaries into Hospitals | | | | | |
| Government Ayurveda Dispensary, Kottamkara | | General | 30 | General | 50 |
| Kuzhikkalidavaka | | General | 30 | General | 50 |
| Chavara | | General | 30 | General | 50 |
| Thrikkadavoor | | General | 30 | General | 50 |
| Srayikkadu | | General | 30 | General | 50 |
| Vadakkevila | | General | 30 | General | 50 |
| Up gradation, Existing Dispensaries into Hospitals in Tribal Areas | | | | | |
| Government Ayurveda Dispensary, Thenmala | NIL | General | 100 | General | 150 |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | |
|---|--------------------------------------|---|
| Name of the Sector: Health | | |
| 4.1.1.1. Taluk/Urban Head Quarters Homoeo Hospital | | |
| Superintendent - | 3 | |
| CMO | 3 | |
| RMO - | 3 | |
| MO - | 10 x 3(including mobile unit) | |
| Radiologist | 1 x 3 | |
| X Ray Tech | 1 x 3 | |
| Lab Tech | 1 x 3 | |
| Nurses | 12 x 3 | |
| Pharmacist | 3 x 3 charge of store and mobile) | |
| Nursing Assistant | 13 x 3(3 for mobile unit) | |
| Attender | 6 x 3 | |
| Watchmen/Security | 3 x 3 | |
| Cook | 2 x 3 | |
| Cleaner | 4 x 3 | |
| Lay secretary | 1 x 3 | |
| LDC | 1 x 3 | |
| Typist/Computer Operator | 1 x 3 | |
| Peon | 1 x 3 | |
| Sweeper | 4 x 3 | |
| X' Ray assist | 2 x 3 | |
| Lab Asst | 3 x 3 | |
| Lab Attender | 3 x 3 | |
| Driver | 2 x 3 | |
| | | |
| Priority 1 | Priority 2 | Priority 3 |
| 2008 | 2009 | 2010 |
| Kottarakkara Taluk, at Kottarakkara. | Kunnathur Taluk at Sasthamicollah | Paravur Municipality at Paravur/Urban. |

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Appendix 40 - 1 Staff Requirements and Phasing of Proposals

| Name of the Sector: Health | | | | | | | |
|--|--|--|---|--|--|--|--|
| 4.1.1.1. Taluk/Urban Head Quarters Homoeo Hospital | | | | | | | |
| Y | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| ACT | C – P-1 | Pur of land in P-1, | CB in P-1 Pur of Land in P-2 | F in P1, CB in | F in P2, CB in P3, M & RE in P-1, 2 and 3. Pro | F in P-3, M & RE in P-1, 2 and 3. Pro and fun -of Lab in P-3. Pur of vehicle | M & RE P-1, 2,3,Pur of Vehicle in P-3. MA in P-2 CB of new block and staff quarters in P-1 |
| | | C in P2, RE in P-1 | C in P-3, RE in P-1 and P2. | P-2, Pur of land in P3, RE in P1, 2 & 3. Pro and | And fun of | P-2 M A in P-1. | |
| | | | | Fun of lab | lab in P-2.Pur of vehicle in P-1 | | |
| | | | | in P – 1. | | | |
| AGEN | Govt: of Kerala, Dept:of Homoeo, Govt: Co-op& | Govt: of Kerala, Dept:of Homoeo Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeo Govt: Co-op& | Govt: of Kerala, Dept:of Homoeo, Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeo Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeo Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeo, Govt: Co-op& |
| | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies |
| | LSGI, NGO'S etc. | LSGI, NGO'S etc. | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S |
| | | | PWD, KSEB, KWA | PWD, KSEB, KWA | PWD, KSEB, KWA | PWD, KSEB, KWA | PWD, KSEB, KWA |
| | | | Etc. | Etc. | Etc.. | Etc.. | Etc. |
| | | | | | | | |
| Y | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| A | CB | CB of new block & staff | | | | | M & RE in all. MA in P-1, 2&3. |
| C | of new block& | Quarters in P-3 | F-NB in P-3 Pur- of Ambulance in P-2. | M & RE in all | M&RE in all. | M& RE in all., MO- in P3. MA in P-1&2. | |
| T | Staff quarters in P-2, F- of New block in P-1 | F- NB in P-2Pur- of Ambulance in P-1. | M & RE in all. Pro and fun- of X-ray Scan unit in P-1 | Pur of Ambulance in | Pur- and fun- of X-ray, | | |
| | M&RE in | M&RE in all. | | P-3, Pro- and fun - X-ray and scan unit in P-2. MO- in P-1 | Scan unit in P-3. MO- in P-2.MA in P-1. | | |
| | P-1, 2,3, MA in P-3 | | | | | | |
| A | Govt: of Kerala, Dept:of Homoeopathy, Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeopathy, Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeopathy, Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeopathy, Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeopathy, Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeopathy, Govt:,Co-op& | Govt: of Kerala, Dept:of Homoeopathy, Govt:,Co-op& |
| G | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies | Private agencies |
| E | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S | LSGI, NGO'S |
| N | PWD, KSEB, KWA, | PWD, KSEB, KWA | PWD, KSEB, KWA etc. | PWD, KSEB, KWA etc. | PWD, KSEB, KWA | PWD, KSEB, KWA etc. | PWD, KSEB, KWA |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | |
|---|----------------------------------|
| Name of the Sector: Health | |
| 4.1.1.2. Community Homoeo Hospital | |
| Superintendent | 1 x 9 |
| CMO | 1 x 9 |
| RMO - | 1 x 9 |
| MO - | 4x9 (including mobile unit) |
| Nurses | 6 x 9 |
| Pharmacist | 3x9 (charge of store and mobile) |
| Nursing Assistant | 6 x9 (3 for mobile unit) |
| Attender | 3 x 9 |
| Watchmen | 3 x 9 |
| Cook | 2 x 9 |
| Cleaner | 2 x 9 |
| UDC | 1 x 9 |
| Lab Techno | 1 x 9 |
| Lab Asst | 2 x 9 |
| Peon | 1 x 3 |
| Sweeper | 3 x 9 |
| Lab Attend | 1 x 9 |
| Driver | 2 x 9 |

| Priority -1 | P-2 | P-3 | P-4 |
|---------------------------|----------------------------------|-----------------------------------|---------------------------------|
| 2008 | 2009 | 2010 | 2011 |
| Anchal | Kadakkal (Chadayamangalam block) | Chavara | Oachira (Oachira block) |
| (Anchal block) | Myanadu | (Chavara block) | Vettikavala (Vettikavala block) |
| Chittumala (west kallada) | | Chathannur | |
| Chittumala block | | (Ithikara Block) | |
| | | Anchalummood (Anchalummood block) | |

| Appendix 40 - I Staff Requirements and Phasing of Proposals | | | | | | | |
|---|--|--|--|--|---|---|--|
| Name of the Sector: Health | | | | | | | |
| 4.1.1.2. Community Homoeo Hospital | | | | | | | |
| Y | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| ACT | Commencement in P-1 | Purchase of land P-1, Commencement in P-2, Recurring expense in P-1 | Purchase of land P-2, Commencement in P-3, Recurring expense in P-1&2, Construction in P-1. | Purchase of land P-3, Commencement in P-4, Recurring expense in P-1,2&3 Construction in P-2.Furnishing &Lab in P-1. | Purchase of land P-4, Recurring expense in P-1,2&3 Construction in P-3.Furnishing & Lab in P-2. MA – in P-1. | Construction in P-4. Recurring expense in P-1,2,3&4. Purchase of vehicle in P-1.Furnishing &Lab in P-3. MA in P-2. | Recurring expense in P-1,2,3&4. Purchase of vehicle in P-2.Furnishing & Lab in P-4. MA- in P-3. |
| Age | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies LSGI, NGO'S etc. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies LSGI, NGO'S etc. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies LSGI, NGO'S PWD, KSEB, KWA, etc.. |
| Y | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Act | Recurring expense in P-1,2,3&4. Purchase of vehicle in P-3.Staff quarter and New block in P-1. MA in P – 4. | Recurring expense in P-1, 2,3&4. Purchase of vehicle in P-4.Staff quarter and new block in P-2.Furnish in New block in P-1 .. | Recurring expense in P-1, 2,3 & 4. Staff quarter and New block –in P-3. Furnish in new block in P-2 P- of Ambulance in P-1. | Recurring expense in P-1, 2,3&4. Staff quarter and New block in P-4, F- in NB in P-3, Pu-Ambulance in P-2. MA in P1, P2, P3,P4 Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. | Recurring expense in P1, 2,3 and 4 F- in NB in P-4. Pu-Ambulance in P-3. MA in P-1, 2,3 and P4. | Recurring expenditure P 1,2,3,4. Pu-Ambulance in P-4, MA – P1, 2,3 and 4. | Recurring expense in P 1,2,3,4., MA-P1,2,3 and 4. |
| Age | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. | Govt. of Kerala, Dept of Homoeopathy, Govt; Co-op& Private agencies, LSGI, NGO'S PWD, KSEB, KWA, etc.. |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | |
|---|------------------------------|--------------|--------------|
| Name of the Sector: Health | | | |
| 4.1.1.3. Government Homoeo Dispensaries | | | |
| Name of Post | No: required | | |
| Chief Medical Officer/Medical Officer | 41 x 2 (one for mobile unit) | | |
| Pharmacist | 41 x 1 | | |
| Nursing Assistant/Attender | 41 x 2(one for mobile unit) | | |
| Clerk | 41 | | |
| Sweeper | 41 | | |
| Field worker | 41 x 2 | | |
| | | | |
| Priority (P) 1 | P -2 | P-3 | P-4 |
| 2008 | 2009 | 2010 | 2011 |
| Koluthupuzha | Sooranad South | West Kallada | Thazhava |
| Alayamon | Poruvazhi | Ummannor | Mynagappally |
| Thenmala | Eroor | Vettikavala | Mylam |
| Mandroe Thuruthu | Karavaloar | Thalavoor | Vilakudi |
| Neendakkara | Aryankavu | Veliyam | Anchal |
| Chirakkara | Kareepara | Neduvathoor | Pooyappally |
| Chithara | Kundara | Thrikkaruva | Ezhukone |
| Kumil | Thrikkaadavoor | Elampalloor | East Kallada |
| Velinelloor | Ettiva | Chavara | Mayyanadu |
| Nilamal | Panayam | Perinadu | Kadakkal |

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| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|---|--|---|---|--|--|---|
| Name of the Sector: Health | | | | | | | |
| 4.1.1.3. Government Homoeo Dispensaries | | | | | | | |
| Y | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Act | C- in P-1 | Purchase of land in P-1, C in P-2, recurring expenditure in P-1 | Construction of building in P-1, Purchase of land in P-2, Commencement in P-3, Recurring expenditure in P-1 and 2 | Furnishing P-1 Construction of building in P-2, Purchase of land in P-3, Commencement in P-4, Recurring expenditure in P-1 and 2, 3 | Furnishing P-2 Construction of building in P-3 Purchase of land in P-4, Recurring expenditure in P-1 and 2, 3, MA – in P-1 | Furnishing P-3 Construction of building in P-4, recurring expenditure in P-1,2,3 and 4 Maintenance expenditure P-1 | Furnishing in P-4, Maintaining recurring expenditure in P-1, 2, 3&4. |
| | | | | | | MA in P-2 | MA – P-3. |
| Age | Government of Kerala, Department of Homoeopathy, LSGI | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, PWD, KSEB, KWA | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, PWD, | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, PWD, KSEB, KWA | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO |
| Y | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Act | Functioning of mobile unit in P-1, recurring/Maintaining expense in P-1, 2,3 and 4 MA in P-4. | Functioning of mobile unit in P-2 recurring/Maintaining expense in P-1, 2,3 and 4 Modernization of P-1. | Functioning of mobile unit in P-3 recurring/Maintaining expense in P-1, 2,3 and 4 Modernization in P-2 | Functioning of mobile unit in P-4 recurring/Maintaining expense in P-1, 2,3 and 4 Modernization in P-3 | Recurring/Maintaining expense in P-1, 2,3 and 4 Modernization in P-4, MA in P-1, 2,3 and P-4. | Recurring/Maintaining expense in P-1, 2,3 and 4, MA – in P-1,2,3 and 4. | Recurring/Maintaining expense in P-1, 2,3 and 4, MA in P-1, 2,3 and 4. |
| Age | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, NRHM | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, NRHM. | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, NRHM | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, NRHM | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, NRHM | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO | Government of Kerala, Department of Homoeopathy, LSGI, Govt, Co-operative and private agencies, NGO, NRHM |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | |
|---|---------------------------------|-------------------------------|------------------------------------|--------------------|--------------------------|
| Name of the Sector: Health | | | | | |
| 4.1.2.1. District Medical Office Technical Medical Staff | | | | | |
| District Medical Officer-1 | | | | | |
| Administration | Medical Epidemic and exhibition | School Health | District Store | CME Training | Research and Development |
| Deputy DMO | Deputy DMO | Deputy DMO | Deputy DMO | Deputy DMO | Deputy DMO |
| 1 | 1 | 1 | 1 | 1 | 1 |
| | SUPT/CMO-1 | SUPT/CMO-5 | SUPT/CMO | SUPT/CMO | SUPT/CMO |
| | Medical Officer - 5 | Medical Officer - 50 | Technician (Medical equipments) -1 | Medical Officer -5 | Medical Officer -15 |
| | Pharmacist-5 | Pharmacist-5 | Pharmacist -2 | ----- | ----- |
| | Nursing Assistant/Attender-5 | Attender/ Nursing assistant-5 | Attender/Nursing Assistant -2 | | |
| Mass Media Officer 1, shall work for district medical office as a whole | | | | | |
| Field workers: 2000 Persons for data collection etc | | | | | |

| Administrative Staff | |
|-----------------------------|----|
| Administrative Assistant: 1 | |
| P.R.O: | 1 |
| Senior Superintendent: | 3 |
| Junior Superintendent | 3 |
| UDC | 16 |
| LDC | 32 |
| Data entry Operator | 7 |
| Peon: | 7 |
| Computer Programmer: | 1 |
| Store Keeper: | 2 |
| Driver | 7 |
| Sweeper | 5 |
| Electrician | 1 |
| Plumber | 1 |
| Gardiner | 1 |
| Watchman | 3 |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|---|--|--|--|--|---|---|
| Name of the Sector: Health | | | | | | | |
| 4.1.2.1. District Medical Office Technical Medical Staff | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Purchase of land | Construction of building Purchase of Vehicle for school health Programme. | Interior decoration, Purchase of fur | Creation and sanction of post | Purchase of medicine, Materials required for store and exhibition unit, Vehicle for Medical camp wing Maintain and recurring expenditure | Purchase of audio visual equipments, | Furnishing of Auditorium |
| | Purchase of vehicle for DMC, recurring and Marinating Expenditure | Recurring and Marinating expenditure | nature etc., Marinating an recurring expenditure | shifting to new building providing IT Communication | | Public addressing System etc. Vehicle for store, Maintain and recurring expenditure | Marinating and recurring expenditure, Vehicle for research unit |
| | | | | Facilities, Maintaing and recurring expenditure | | | |
| Agencies | Govt. of Kerala, Dept of Homeopathy, LSGI, Corporation, NGO's | Govt of Kerala Department of Homeopathy, LSGI, Corporation, PWD, KSEB, KWA. | Govt of Kerala, Department of Homeopathy, LSG, Corporation, PWD, KSEB, KWA. | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, PWD, KSEB, KWA. | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, PWD, KSEB, KWA. | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, PWD, KSEB, KWA. | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, PWD, KSEB, KWA. |
| | | Govt co-operative and private agencies & NGO's | Govt co-operative and private agencies & NGO's | Govt co-operative and private agencies & NGO's | Govt co-operative and private agencies & NGO's | Govt co-operative and private agencies & NGO's | Govt co-operative and private agencies & NGO's |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance (building and equipments) recurring expenditure, Vehicle for administration | Vehicle for CME Training, Maintenance (building and equipments) recurring Expenditure, | Maintenance (building and equipments) recurring Expenditure, MA of all the wings | Maintenance (building and equipments) recurring expenditure, MA - of all the wings. Purchase of land for medicinal plant cultivation | Maintenance (building and equipments) recurring expenditure, MA- of all the wing plant cultivation. | Maintenance (building and equipments) recurring expenditure, MA of all the wing | Maintenance (building and equipments) recurring expenditure, |
| Agencies | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, Govt co-operative and private agencies NGO's | Govt of Kerala Department of Homeopathy, LSGI, Corporation, Govt co-operative and private agencies NGO's | Govt of Kerala, Department of Homeopathy, LSG, Corporation, Govt co-operative and private agencies NGO's | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, Govt co-operative and private agencies NGO's | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, Govt co-operative and private agencies NGO's | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, Govt co-operative and private agencies NGO's | Govt of Kerala, Department of Homeopathy, LSGI, Corporation, Govt co-operative and private agencies NGO's |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | |
|---|--|------|-----------------------------|---------|
| Name of the Sector: Health | | | | |
| 4.1.2.2 District Homoeo Hospital, Kollam. | | | | |
| | | 2007 | 2008 to 2021 | |
| | Bed strength | 25 | 100 (General and Specialty) | 50+ 25 |
| | Staff pattern | | | |
| 1 | Superintendent | Nil | 1 | |
| 2 | Chief Medical Officer | 1 | 8 | 1 |
| 3 | Medical Officer(including specialty clinics) | 1 | 8 x 3 | +1 x 3 |
| 4 | Resident Medical officer | 1 | 1 | 1 |
| 5 | Pathologist | Nil | 1 | |
| 6 | Radiologist | Nil | 1 | |
| 7 | Nursing Superintendent | Nil | 1 | |
| 8 | Nurse | 3 | 8 x 3 | +5 x 3 |
| 9 | Nursing assistant | 2 | 8 x 3 | +5 x 3 |
| | | | | |
| 10 | X-Ray Tch | Nil | 1 | |
| 11 | X-ray Asst | Nil | 3 | |
| 12 | Pharmacist | 1 | 4 +5 (specialty) | 2 |
| 13 | Attender | Nil | 8 x 3 | + 5 x 3 |
| 14 | Dietician | Nil | 1 | |
| 15 | Lay secretary | Nil | 1 | |
| 16 | Upper Division Clerk | Nil | 2 | |
| 17 | Lower Division clerk | 1 | 3 | 1 |
| 18 | Typist/Computer operator | Nil | 1 | 1 |
| 19 | Peon | Nil | 1 | 1 |
| 20 | Cleaner | 1 | 4 x 3 | 2 x 3 |
| 21 | Cook | 1 | 4 | 1 |
| 22 | Helper | Nil | 1 | 1 |
| 23 | Sweeper | 1 | 4 x 3 | + 2x 3 |
| 24 | Watchman/Security | Nil | 3 | 3 |
| 25 | Driver | Nil | 2 | |
| 26 | Lab Tech | Nil | 1 | |
| 27 | Lab Attender | Nil | 2 | |
| 28 | Clinical psychologist | Nil | | 1 |
| 29 | Psychiatric health workers | | | 5 |

Appendix 40 - 1 Staff Requirements and Phasing of Proposals

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|--|--|---|--|---|--|--|
| Name of the Sector: Health | | | | | | | |
| 4.1.2.2 District Homoeo Hospital, Kollam. | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Sanction of 50 beds with post, function of lab. Purchase of copying machine, Purchase of generator. Maintaining an recurring expenditure | Purchase of Vehicle for mobile unit. Maintaining cost recurring expenditure. | Purchase of Ambulance, construction of new block. Maintaining and recurring expenditure, construction of | Purchase of furniture | Providing staff | Purchase of | Maintaining and recurring expenditure, Purchase of land for Mental health |
| | | Providing I.T - and communication facilities | new block to accommodate Specialty OP. | sanction of 25 beds and post. Maintaining and recurring expenditure. | Quarters, Purchase and functioning of X-ray unit, Maintaining and recurring expenditure. | Equipments and functioning of U.S. Unit. | MA |
| | | | | | | Maintaining and recurring expenditure. | |
| Agencies | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. KSEB, PWD, KWA | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Construction of building, Maintenance and recurring expenditure. Functioning of canteen. Specialty clinic 1 | Furnishing of new | Maintaining and recurring expenditure, communication and I.T facilities in building | Maintenance and recurring expenditure | Construction of Pay ward, Maintenance and recurring expenditure. | Furnishing of pay ward | Maintenance and recurring expenditure. |
| | | building, sanction of bed and pcs., Maintaining and recurring expenditure | Specialty clinic 3 | Modernization, | Specialty clinic 5, MA | Maintenance and recurring expenditure | MA |
| | | Specialty clinic 2 | | Purchase of CT scan and latest | | MA | |
| | | | | Diagnostic instrument.. | | | |
| | | | | Specialty clinic 4 | | | |
| Agencies | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | |
|---|------------|--|
| Name of the Sector: Health | | |
| 4.1.2.3. Taluk Head Quarter Homoeo Hospital | | |
| | 2007 | 2008 to 2021 |
| Bed Strength | 25 | 50+ |
| Superintendent - | Nil | 1 x 2 |
| CMO | 2 | 1 x 2 |
| RMO - | Nil | 1 x 2 |
| MO - | 2 | 10 x 2 (including mobile unit) |
| Nurses | 5 | 12 x 2 |
| Pharmacist | 2 | 3 x 2 (including charge of store and mobile) |
| Nursing Assistant | 3 | 13 x 2 (one for mobile unit) |
| Attender | 2 | 6 x 2 |
| Watchmen | Nil | 3 x 2 |
| Cook | 2 | 2 x 2 |
| Cleaner | 2 | 4 x 2 |
| Lay secretary | Nil | 1 x 2 |
| LDC | 2 | 1 x 2 |
| Typist/Computer Operator | Nil | 1 x 2 |
| Peon | Nil | 1 x 2 |
| Sweeper | 2 | 4 x 2 |
| Lab Techani | Nil | 3 x 2 |
| Lab Asst | Nil | 3 x 2 |
| Lab Attender | Nil | 3 x 2 |
| X' Ray Tech | Nil | 3 x 2 |
| Radiologist | Nil | 1 x 2 |
| Driver | Nil | 3 x 5 |
| | | |
| Priority 1 | Priority 2 | |
| 2008 | 2009 | |
| Karunagapally | Punalur | |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|--|--|--|--|--|---|--|
| Name of the Sector: Health | | | | | | | |
| 4.1.2.3. Taluk Head Quarter Homoeo Hospital | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Purchase of land and construction of building in P-1, maintenance and recurring expenditure in P-1 and 2 | Furnishing in P-1, Sanction & creation of post in P-2, Purchase of Land P-2 | Provision of Communication and I.T facilities in P1 construction of building | Purchase of Vehicle in P1 | Provision of communication and I.T facilities in P2. | Sanction and | Sanction and Function of X ray unit in P2 |
| | | Maintaining expenditure in P1 and P2 | P2 Recurring and maintains | Furnishing in P2 Sanction & creation of post in P-2 | Purchase of vehicle in P2 and | function of ap | |
| | | | | Sanction and function of Lab in P1, maintenance and recurring expenditure | maintenance and recurring expenditure in P1&2. Provision of generator & purchase of copying machine in P1 | in P2 Provision of generator & purchase of copying machine in P2 maintenance and recurring expenditure. Sanction and functioning of X ray unit in P1. | |
| Agencies | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's.PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's.PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's.PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's.PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's.PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's.PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's.PWD, KSEB, KWA. |
| | | Agencies, NGO's.PWD, KSEB, KWA. | Agencies, NGO's.PWD, KSEB, KWA. | Agencies, NGO's.PWD, KSEB, KWA. | Agencies, NGO's.PWD, KSEB, KWA. | Agencies, NGO's.PWD, KSEB, KWA. | Agencies, NGO's.PWD, KSEB, KWA. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Provision of staff quarters in P2, construction of new block 25 bed in P1. Maintenance and recurring expenditure | Construction of New block 25 bed in P2 | Furnishing of new block in | Sanction and provision of Ultra sound Scanner in P1&P2. maintenance and recurring expenditure. | Maintenance and recurring expenditure modernization of P1 MA in P-1&2. | Maintenance and recurring expenditure modernization of P2.MA in P-1&2. | Maintenance and recurring expenditure .MA in P-1&2. |
| | | Furnishing of new block in P1 | P2 sanction of post in P1 and P2. Maintenance and recurring expenditure | | | | |
| | | Maintenance and recurring expenditure | | | | | |
| Agencies | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's. PWD, KSEB, KWA. |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | |
|---|-------------------------------|--|
| Name of the Sector: Health | | |
| 4.1.2.4 Government Homoeo Dispensary | | |
| Name of Post | No: required | |
| Chief Medical Officer/Medical Officer | 37 x 2 (one for mobile unit) | |
| Pharmacist | 37 x 1 | |
| Nursing Assistant/Attender | 37 x 2 (one for mobile unit) | |
| Clerk | 37 | |
| Sweeper | 37 | |
| Field worker | 37 x 2 | |

| Priority 1 | Priority 2 | Priority 3 |
|------------------|-------------------------|------------------|
| 2008 | 2009 | 2003 |
| Oachira | Alappad | Chandanathope |
| Mullumala | Kunnathur | Chadayamangalam |
| Paravur | Thekumbhagh m | Eravipuram |
| Chathannur | Pattazhy Vadakkekara | Elamadu |
| Polayathode | | Edamulakkal |
| Vadekkevila | | Kalluvathukkal |
| Adichanalloor | | Kulakkada |
| Sasthamcottah | | Kottarakkara |
| Thrikkovilvattom | | Karunagappally |
| Thevalakkara | | Melilla |
| Poothakkulam | | Nedumpana |
| | | Uliakovil |
| | | Thodiyur |
| | | Pathanapuram |
| | | Pattazhy |
| | | Panmana |
| | | Piravanthur |
| | | Kulasekharapuram |
| | | Piravanthur |
| | | Padappakkara |
| | | Sooranad North |
| | | Pavithraswaram |

| Appendix 40 - 1 Staff Requirements and Phasing of Proposals | | | | | | | |
|---|---|---|---|---|--|---|---|
| Name of the Sector: Health | | | | | | | |
| 4.1.2.4 Government Homoeo Dispensary | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Purchase of land in P1 construction building in P2 Providing I.T communication facilities in P3 maintenance and recurring expenditure in P1,2and 3. | Construction of building in P1. | Furnishing in | I.T communication facilities in P1 sanction of post in P2 in purchase of vehicle in P3. Maintenance and recurring expenditure | Purchase of vehicle in P2 sanction of post in P1 modernization in P3 recurring and Maintenance expenditure | Purchase of vehicle in P1 modernization in P2 recurring and maintenance expenditure | Modernisation in P3, recurring and maintenance expenditure MA in P-1 & 2. |
| | | Furnishing in P2. Provision for drinking water and LPG connection, other facilities etc in P3 recurring and maintenance expenditure in P1, 2,3. | P communication | | | | |
| | | | I.T. facilities in P2 sanction of post in P3 | | | | |
| | | | Maintenance and recurring expenditure in P1,P2 and P3 | | | | |
| Agencies | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private |
| | Agencies, NGO's, PWD, KSEB, KWA. | Agencies, NGO's, PWD, KSEB, KWA. | Agencies, NGO's, PWD, KSEB, KWA. | Agencies, NGO's, PWD, KSEB, KWA. | Agencies, NGO's, PWD, KSEB, KWA. | Agencies, NGO's, PWD, KSEB, KWA. | Agencies, NGO's, PWD, KSEB, KWA. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance and recurring expenditure MA in P-1,2&3 | Maintenance and recurring expenditure MA in P-1,2&3. | Maintenance and recurring expenditure MA in P-1,2&3. | Maintenance and recurring expenditure MA in P-1,2&3. | Maintenance and recurring expenditure MA in P-1,2&3. | Maintenance and recurring expenditure MA in P-1,2&3. | Maintenance and recurring expenditure MA in P-1,2&3. |
| Agencies | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's., | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's., | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's., | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's., | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's., | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's., | Govt. of Kerala, Dept of Homoeopathy, LSGI, Govt co-operative and Private Agencies, NGO's., |

Appendix 41-1 Proposal Phasing

Name of Sector : Drinking water and Sanitation

Name of Proposal : 2.1 Improvement of Ground Water Sources

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|--|--|---|---|--|--|---|
| Activities | | 1. Tube well construction in Thrikkovilvatom 2. Maintenance in Existing areas | 1. Tube well construction in Perinadu and Panayam 2. Maintenance in Existing areas | 1. Tube well construction in Thrikkaruva and Thrikkadavoor Maintenance in Existing areas | 1. Tube well construction in Sooranadu North and Kottamkara and Thodiyur 2. Maintenance in Existing areas | 1. Tube well construction in Munroe thuruth, K.S. puram and Poothakkulam 2. Maintenance in Existing areas | 1. Tube well construction in Thevalakkara and Thekkumbhagam and Mynagapally 2. Maintenance in Existing areas |
| Agencies | | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Tube well construction in Sooranadu South, Poruvazhy and Thazhava 2. Maintenance in Existing areas | 1. Tube well construction in Kollam Corporation, Paravur Municipality and Chathannur 2. Maintenance in Existing areas | 1. Maintenance in Existing areas | 1. Maintenance in Existing areas | 1. Maintenance in Existing areas | 1. Maintenance in Existing areas | 1. Maintenance in Existing areas |
| Agencies | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA | Ground water Dept., KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|---|---|---|--|---|---|---|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project-Construction of check dams and dams across rivers | | | | | | | |
| Implementation Period-2013 to 2019 | | | | | | | |
| Project cost-Rs 2300Lakhs | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activity | | Investigation, EIA studies, awareness camp etc. in priority area | 1. Preparation of DPR/DER, Land acquisition in priority area 2. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in priority area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas |
| Agencies involved | | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activity | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | 1. Construction of check dams/ Reservoirs in other area 2. Preparation of DPR/DER, Land acquisition in other area 3. Investigation, EIA studies, awareness camp etc. in other areas | Operation and Maintenance | Operation and Maintenance |
| Agencies involved | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|----------------------|----------------------|---|---|--|--|--|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project- Construction of Rainwater Harvesting units | | | | | | | |
| Implementation Period-2013-2018 | | | | | | | |
| Project cost-Rs50Lakhs | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activity | | | Selection of Beneficiary, Design of Unit, awareness camp etc. | Selection of Beneficiary, Design of Unit, awareness camp etc. | Construction of Rain water Harvesting Unit, Training to the beneficiary. | Construction of Rain water Harvesting Unit, Training to the beneficiary. | Construction of Rain water Harvesting Unit, Training to the beneficiary. |
| Agencies involved | | | | | LSGD/Kerala Water Authority/Dist. Panchayat. | LSGD/Kerala Water Authority/Dist. Panchayat. | LSGD/Kerala Water Authority/Dist. Panchayat. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activity | O&M, Quality testing | C&M, Quality testing | O&M, Quality testing | O&M, Quality testing | O&M, Quality testing | O&M, Quality testing | O&M, Quality testing |
| Agencies involved | Beneficiary | Beneficiary | Beneficiary | Beneficiary | Beneficiary | Beneficiary | Beneficiary |

Appendix 41-1 Proposal Phasing

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|------|------|--|--|--|--|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project- Development for Non conventional water sources | | | | | | | |
| Implementation Period-2019-2021 | | | | | | | |
| Project cost-Rs. 50 Lakhs | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activity | | | | Investigation, EIA studies, awareness camp etc. | Investigation, EIA studies, awareness camp etc. | Investigation, EIA studies, awareness camp etc. | Investigation, EIA studies, awareness camp etc. |
| Agencies involved | | | | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. | KWA/ Irrigation Dept./ Jilla Pt./ Soil. Conservation Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activity | | | | | | | |
| Agencies | | | | | | | |

Appendix 41-1 Proposal Phasing

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Source Improveemnt, Edamulakkal | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Survey and soil testing | Design, sanction and construction wier across lthikkara river near Peringalloor Pump house.Amount Rs. 12 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---|--|--|--|---|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Extension of pipe line, Kadakkal | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 4500 meters of 90 mm to 50 mm size PVC pipe at Swamimukku - Mukkuner - Palakkal. Amount of Rs. 10 lakhs | 3000 meters of 75 mm to 50 mm PVC pipe at Indavila - Erattakulam - Eruttupacha area. Amount of Rs. 7 lakhs | 5000 meters of 75 mm to 50 mm PVC pipe at Karakkadu - Kodinjam - Pongumala Nellipally - Valupacha amount of Rs. 12 lakhs | 5000 meters of 110 mm to 50 mm PVC pipe at Kariyam - Edathara - Kunnumpuram - Karavaram - Cheeppumukku area amount of Rs. 14 lakhs | 4000 meters of 90 mm to 50 mm PVC pipe at Kadakkal Town - Kumbalam - Kottappuram - Vanchikonam - Kuttikkadu - Pochayil areas amount of Rs. 12 lakhs | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---|---|---------------------------|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Extension of pipe line, Kummil | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 2500 meters of 110 mm to 50 mm PVC pipe at various places of Kummil Panchayat amount of Rs. 9 lakhs | 2500 meters of 110 mm to 50 mm PVC pipe at various places of Kummil Panchayat amount of Rs. 9 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|---------------------------|---|---|---------------------------|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Extension of pipe line, Chithara | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 2500 metres of 110 mm to 50 mm PVC pipe at various places of Chithara Panchayat amount of Rs. 9 lakhs | 2500 metres of 110 mm to 50 mm PVC pipe at various places of Chithara Panchayat amount of Rs. 9 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Extension of pipe line, Nilamel | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 4000 metres of 90 mm to 50 mm PVC pipe at various places of Nilamel Panchayat amount of Rs. 11 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---------------------------|--|--|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Rehabilitation and replacing the damaged pipe, Kadakkal | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | Design, sanction and replacing the damaged 2500 metres of AC distribution cum transmission main along the Nilamel Madathara road by laying 200 mm to 300 mm size AC Class 15 pipe. Amount Rs. 25 lakhs | Design, sanction and replacing the damaged 2500 metres of AC distribution cum transmission main along the Nilamel Madathara road by laying 200 mm to 300 mm size AC Class 15 pipe. Amount Rs. 25 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | | | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Construction of OHSR , Kadakkal | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Land acquisition | Design, sanction and construction of 2 lakh litre capacity over head service reservoir at Kottappuaram including interconnection work with the transmission main and distribution lines. Amount Rs. 30 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | | Revenue | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|--|--|---|--|--|--|--|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Augmentation of Water Supply Scheme to Chithara and Adjoining Panchayat | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Replacing the damaged 4020 metres of 400 mm Premo pipe with 350 mm DI Pipe from Raw water pump house to Sivankunnu. Amount 207 lakhs | Replacing the damaged 1380 metres of 400 mm Premo pipe with 350 mm DI Pipe from Sivankunnu to Water treatment plant. Amount 71.95 lakhs | Supply and erection of 3 Nos of 110 HP VT pump set with all Accessories at raw water pump house amount Rs. 52.80 lakhs | Supply and erection of 3 Nos of 100 HP CF pump set with all accessories at Booster pump house amount Rs. 21.60 lakhs | Standardization of electrical substation at raw water pump house and booster pump house Amount Rs. 78.43 lakhs | Renovation of water treatment plant by extending and replacing filter medias and rectifying leakages etc amount Rs. 25 lakhs |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Source improvement by constructing a check dam at Kulathupuzha river near Mylamcode pump house Amount Rs. 25 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|---------------------------|--|--|--|--|--|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Extension of pipe line - Elamadu | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Elamadu Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Elamadu Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Elamadu Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Elamadu Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Elamadu Panchayat amount of Rs. 22 lakhs | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|---------------------------|--|--|--|--|--|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Extension of pipe line - Ummannoor | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Ummannoor Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Ummannoor Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Ummannoor Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Ummannoor Panchayat amount of Rs. 22 lakhs | 10000 metrs of 110 mm to 50 mm PVC pipe at various places of Ummannoor Panchayat amount of Rs. 22 lakhs | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---------------------------|---|---------------------------|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Source Improvement, Chadayamangalam | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Survey and soil testing | Design, sanction and construction of Gallery and baby well in Ithikkara river near Poonkode Pump house. Amount Rs. 10 lakhs | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance | Operating and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|-------------------------|---------------------------|---|-------------------------|---|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Augmentation of BAWSS to Kundara and adjoining Panchayaths in Ezhukone Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1) Project Identification | 2) Detailed Engineering Report 3) Administrative sanction 4) Technical sanction | 5) Execution of works | 5) Execution of Works 6) Commissioning | Operation & Maintenance |
| Agencies | | | 1) KWA | 2) KWA 3) GOK 4) KWA | 5) KWA | 5) KWA 6) KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|--|--------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal | | Augmentation of RWSS to Ezhukone- Ehukone GP | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1)Source Augmentation by Bore well 2)Relacement of Pumpsets | 3)Replacement of damaged pipes | Operation & Maintenance | & Operation Maintenance | & Operation Maintenance | & Operation Maintenance |
| Agencies | | 1) KWA/ GWD 2)KWA | 3)KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|---|--------------------------------|--|---|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal | | Augmentation of ARWSS to kulakkada and pavithreswaram panchayaths- Kulakkada GP | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1) Project area identification | 2)Detailed Engineeing Report 3)Administatine sanction 4) Tehnical sanction | 5) Execution of Works 6) Commissioning | Operation & Maintenance | & Operation Maintenance |
| Agencies | | | 1)KWA/ | 2)KWA 3)GOK 4) KWA | 5)KWA 6)KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|---------------------------|--|-------------------------|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal: Improvements to Existing Wter Supply schemes in Neduvathoor Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1) Project Identification | 2) Detailed Engineeing Report 3) Administatine sanction 4) Tehnical sanction | 5) Execution of project | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | | 1) KWA | 2) KWA 3) GOK 4) KWA | 5) KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|---------------------------|---------------------------|--|-------------------------|---|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Mini water Supply schemes in Neduvathoor Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | 1) Project Identification | 1) Project Identification | 2) Detailed Engineeing Report 3) Administatine sanction 4) Tehnical sanction | 5) Execution of works | 5) Execution of Works 6) Commissioning | Operation & Maintenance |
| Agencies | | 1) KWA | 1) KWA | 2) KWA 3) GOK 4) KWA | 5) KWA | 5) KWA 6) KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|-------------------------|---|---|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project : Augmentation of Water supply scheme to Meenad and Adjoining villages in Pocyappally Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1) Project area Identification 2) Detailed Engineering Report 3) Administrative sanction 4) Technical sanction | 5) Execution of Works 6) Commissioning | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | | | 1) KWA/ 2) KWA 3) GOK 4) KWA | 5) KWA 6) KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|-------------------------|---------------------------|---|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project : Rehabilitation of RWSS to Velinallor | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1) Project Identification | 2) Detailed Engineering Report 3) Administrative sanction 4) Technical sanction | 5) Execution of Works | 5) Execution of Works | 6) Commissioning |
| Agencies | | | 1) KWA | 2) KWA 3) GOK 4) KWA | 5) KWA | 5) KWA | 6) KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|-------------------------|-------------------------|---|---|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Augmentation of Water supply scheme to Meenad and Adjoining villages in Veliyam Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | 1) Project area Identification 2) Detailed Engineering Report 3) Administrative sanction 4) Technical sanction | 5) Execution of Works 6) Commissioning | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | | | 1) KWA/ 2) KWA 3) GOK 4) KWA | 5) KWA 6) KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|------|--|--|---|--|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Thrkkovilvatom - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works 1 and 2 will be completed in all respect with in 7months from 4/2009 to 10/2009. | The works 5 will be completed with in 6months from 4/2010 to 9/2010. | The works 3 will be completed with in 6months from 4/2011 to 9/2011. | The works 4 will be completed with in 5months from 4/2012 to 8/2012. | | |
| | | | | The works 6 will be completed with in 4 months from 4/2011 to 7/2011. | The works 7 will be completed with in one year from 1/2012 to 12/2012. | | |
| Agencies | | | | KWA | KWA | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|------|--|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Kottiyam - Perayam - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works 1 to 5 will be completed with in 7months from 4/2009 to 10/2009. | | | | | |
| Agencies | | KWA | KWA | KWA | KWA | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | KWA | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|---|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Mayyanad - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works 1 to 3 will be completed and commissioning with in 7 months from 4/2009 to 10/2009. | | | | | |
| Agencies | | KWA | KWA | KWA | KWA | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|--|--|--|---|--|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Kottankara - Improvements | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works, 1, 2 will be completed with in 7 months from 4/2009 to 10/2009. | The works, 5 and 6 will be completed with in 4 months from 4/2010 to 7/2010. | The works, 3, 7 will be completed with in 6 months from 6/2011 to 9/2011. | The works, 8 will be completed with in 4 months from 4/2012 to 7/2012. | | |
| Agencies | | KWA | KWA | KWA | KWA | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | The works, 4 will be completed with in 5 months from 4/2015 to 8/2015. | The works 10 will be completed with in 6 months from 1/2016 to 5/2016. | The works 5 will be completed with in 4 months from 4/2017 to 7/2017. | | | | |
| | The works, 9 will be completed with in 1 year from 1/2015 to 12/2015. | | | | | | |
| Agencies | | | KWA | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|---|--|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Manroe Island - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works will be completed with in 6 months from 5/2009 to 10/2009. | | | | | |
| Agencies | | KWA | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | The works will be completed with in 4 months from 5/2015 to 8/2015. | | | | | | |
| Agencies | KWA | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|--|------|------|---|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Thrikkaruva - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works will be completed with in 6 months from 5/2009 to 10/2009. | | | The works will be completed with in 4 months from 5/2012 to 8/2012. | | |
| Agencies | | KWA | | | KWA | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | KWA | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|--|--|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Perinadu - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works will be completed with in 4 months from 7/2009 to 10/2009. | | | | | |
| Agencies | | KWA | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | The works will be completed with in 4 months from 7/2015 to 10/2015. | | | | | | |
| Agencies | KWA | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|------|------|------|---|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Panayam - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | | | The works will be completed with in 6 months from 4/2012 to 9/2012. | | |
| Agencies | | | | | KWA | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | KWA | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|--|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Thrikkadavoor - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works 1 will be completed with in 6 months from 4/2009 to 9/2009 and the work 2 will be completed with in one year from 4/2009 to 3/2010 | | | | | |
| Agencies | | KWA | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | The works 3 will be completed with in 6 months from 4/2016 to 9/2016 | | | | | |
| Agencies | | KWA | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|--|--|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : UWSS to Paravoor - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works 1 to 3 will be completed with in 5 months from 4/2009 to 8/2009. | The works 4 to 6 will be completed with in 9 months from 4/2010 to 12/2009 and in work 7 will be completed with in 4 months form 4/2010 to 7/2010. | | | | |
| Agencies | | KWA | KWA | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|--|--|--|------|---|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Adichanalloor - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works will be completed with in 9 months from 4/2009 to 12/2009. | | | | The works will be completed with in 4 months from 4/2013 to 7/2013. | |
| Agencies | | KWA | | | | KWA | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | Stacking of well 6m dia, 10m depth from 4/2017 to 12/2017. | Will stacking constructing pump house, supply and erection of 60 HP VT pump set. | | | |
| Agencies | | | KWA | KWA | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|--|--|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Chathanoor - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works will be completed with in 6 months | | | | | |
| Agencies | | KWA | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | The work will b completed with in 9 months from 4/2015 to 12/2015. | | | | | | |
| Agencies | KWA | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|------|--|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Kalakkodu - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works will be completed with in 9 months from 4/2009 to 12/2009. | | | | | |
| Agencies | | KWA | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|------|--|------|------|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Nedungolam - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works will be completed with in 9 months from 4/2009 to 12/2009. | | | | | |
| Agencies | | KWA | | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | KWA | KWA | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|------|---|--|---|------|------|------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : RWSS to Kalluvathukkal, Parippally - Improvements - | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | The works 1 to 3 will be completed with in 9 months from 4/2009 to 12/2009 and the work 4 will be completed with in 7 months from 4/2009 to 10/2009 | The works 5 & 6 will be completed with in 7 months from 4/2010 to 10/2010. | | | | |
| Agencies | | KWA | KWA | | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | stacking of well 6m dia, 10m depth from 4/2017 to 12/2017. | Well stacking construction of pump house supply and erection of 75mm VT pump set. | | | |
| Agencies | | | KWA | KWA | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | |
|---|---|---|----------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | |
| Name of Scheme: Conservation of Sasthamcotta Lake | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Project cost in lakhs(Total) |
| Activities | Resurvey and demarkation of boundary stones and planting of boundary stones | Demarkation of boundary stones, detailed contour survey and preparation of projects | Implementation | Implementation | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | |
| Project cost in lakhs | 20 | 20 | 1240 | 1467 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2756 |
| Agencies | KWA | | | | | | | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | | |
|---|---------------------------|--|---|---------------------------|---|---------------------------|--|--|--|--|---------------------------|---------------------------|---------------------------|--|--------------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | | |
| Name of proposal: Water supply scheme to Poruvazhy Panchayaths (Project based on Tube well and Surface water) | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs (Total) |
| Activities | Operation And Maintenance | Investigation, preparation of DER for improvent work | . Construction of over head tanks and extension of lines, | Operation And Maintenance | Construction and commissioning of three nos of Tube wells. Replacing 10 hp/ 15 hp pump sets | Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | extension of lines Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | extension of lines Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. | |
| Project cost in lakhs | 1 | 25 | 90 | 2 | 10 | 2 | 2 | 5 | 5 | 10 | 2 | 2 | 2 | 15 | 173 |
| Agencies | KWA | | | | | | | | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | | |
|---|---------------------------|--|--|---|--|---|---------------------------|---------------------------|---|--|---------------------------|---|---------------------------|--|--------------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | | |
| Name of proposal: water supply scheme to Sooranadu North Panchayaths (Project based on Tube well) | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs (Total) |
| Activities | Operation And Maintenance | Investigation, preparation of DER for improvent work | Construction and commissioning of two nos of Tube wells Replacing 10 hp/ 15 hp pump sets | extension of lines, Operation And Maintenance | Operation And Maintenance, improvement works | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. | |
| Project cost in lakhs | 2 | 2 | 25 | 50 | 55 | 5 | 1 | 1 | 4 | 4 | 1 | 2 | 1 | 1 | 154 |

Appendix 41-1 Proposal Phasing

Name of Sector : Drinking water and Sanitation

Name of proposal: New proposal for Construction of 4MLD Treatment Plant, Modification works at Intake includes Infiltration Gallery and other Apportance. (Project based on Surface water and tube well)

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs (Total) |
|------------|------|--|--|--|--|---|---------------------------|---|---------------------------|--|---|---------------------------|---------------------------|---|-------------------------------|
| Activities | | Detailed Investigation, preparation of DER for 4MLD Treatment plant Repair and maintenanc existing scheme. Installation of electrochlorinator. | Construction of Infiltration Gallery,. Construction of OHSR and pumping main at Nilakkal | Construction of 4 mld WTP and other related Structures | Operation And Maintenance, Installation of higher capacity pump sets | Operation and Maintenance and installation of new pump sets | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibiity study and Preparation of new Augmentation Project. | |
| Agencies | KWA | 25 | 50 | 117 | 2 | 10 | 2 | 5 | 2 | 3 | 5 | 2 | 2 | 1 | 226 |

Appendix 41-1 Proposal Phasing

Name of Sector : Drinking water and Sanitation

Name of proposal: Water supply scheme to Mynagappally Panchayaths (Project based on Tube well and Surface water)

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs (Total) |
|-----------------------|------|--|---------------------------|--|---------------------------|---|---------------------------|--|---|--|---------------------------|---|---------------------------|--|--------------------------------|
| Activities | | Investigation, preparation of DER for improvement work laying of pumping main. Installation of pump sets at existing Sump at old WTP. Hooking up activities, finishing the project ready for commissioning | Operation And Maintenance | Replacing of existing 10 to 15 HP pump sets in Various pump houses | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. | |
| Project cost in lakhs | | 110 | 2 | 10 | 2 | 5 | 2 | 5 | 2 | 5 | 2 | 4 | 2 | 1 | 152 |

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | | |
|---|------|---|--|---|---------------------------|---|---------------------------|---------------------------|---|--|---|---------------------------|---------------------------|--|-------------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | | |
| Name of proposal: . water supply scheme to Sasthamcotta, (Project based on Surface water) | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs (Total) |
| Activities | | Renovation of existing OHSR at Bharanikavu, Replacing damaged HDPE/AC Pipelines, extension of lines | , Renovation of 22 MLD Treatment plant. Achieving additional 20 lpcd by increasing pumping hours from 16 hrs to 24 hrs and by utilising the full capacity plant of 22 mld and increasing the number of pumps and laying new pumping mains, Improvements in Sasthamcotta, Replacing damaged HDPE/AC Pipelines, extension of lines | Hooking up activities, Painting , Installation of pumps and its accessories finishing the project ready for commissioning | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. | |
| Project cost in lakhs | | 20 | 100 | 15 | 3 | 20 | 3 | 3 | 22 | 30 | 21 | 3 | 3 | 2 | 245 |
| Agencies | KWA | | | | | | | | | | | | | | |

Appendix 41-1 Proposal Phasing

Name of Sector : Drinking water and Sanitation

Name of proposal: . Comprehensive water supply scheme to Sooranadu South (Project based on Surface water and tube well)

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs (Total) |
|-----------------------|------|--|---|--|---------------------------|---------------------------|---|---------------------------|---|--|---|---------------------------|---------------------------|--|--------------------------------|
| Activities | | Investigation, preparation of DER constructing sump cum pump house , overhead tank pumping main, Renovation of 22 MLD Treatment plant Achieving additional 20 lpcd by increasing pumping hours from 16 hrs to 24 hrs and by utilising the full capacity plant of 22 mld and increasing the number of pumps and laying new pumping mains, | Constructing sump cum pump house, overhead tank pumping main, Renovation of 22 MLD Treatment plant. Achieving additional 20 lpcd by increasing pumping hours from 16 hrs to 24 hrs and by utilising the full capacity plant of 22 mld and increasing the number of pumps and laying new pumping mains | Hooking up activities, Painting, Installation of pumps and its accessories finishing the project ready for commissioning | Operation And Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | extension of lines. Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | extension of lines. Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. | |
| Project cost in lakhs | | 10 | 120 | 10 | 2 | 2 | 10 | 2 | 12 | 10 | 10 | 2 | | 1 | 191 |
| Agencies | KWA | | | | | | | | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | |
|--|------|---|---|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|---------------------------|---------------------------|---------------------------|--|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | |
| Name of proposal: Comprehensive water supply scheme to Thevalakkara Panchayath | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | Preliminary survey and Project preparation, Design, Detailed Engineering report . Flow chart, | Addition of 20 lpcd by increasing pumping hours from 16 hrs to 24 hrs and by utilising the full capacity of 22 mld plant ,Replacing damaged HDPE/AC Pipelines, extension of lines | Construction of 5 Nos of new tube wells and extension of lines .Hooking up activities,, construction of iron removal plants for treating tube well water Installation of pumps and its accessories finishing the project ready for commissioning | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. |
| Project cost in lakhs | | 80 | 20 | 150 | 3 | 3 | 3 | 3 | 22 | 15 | 21 | 3 | 3 | 3 |
| Agencies | KWA | | | | | | | | | | | | | |

Appendix 41-1 Proposal Phasing

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | | |
|---|------|---|---|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|---------------------------|---------------------------|---------------------------|--|-----------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | | |
| Name of proposal: Comprehensive water supply scheme to Thekkumbhagam Panchayath | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs |
| Activities | | Preliminary survey and Project preparation, Design, Detailed Engineering report . Flow chart, | Addition of 20 lpcd by increasing pumping hours from 16 hrs to 24 hrs and by utilising the full capacity of 22 mld plant ,Replacing damaged HDPE/AC Pipelines, extension of lines | Construction of 3 Nos of new tube wells and, extension of lines Hooking up activities, . construction of iron removal plants for treating tube well water Installation of pumps and its accessories finishing the project ready for commissioning | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. | |
| Project cost in lakhs | | 48 | 20 | 80 | 3 | 3 | 3 | 3 | 15 | 10 | 15 | 3 | 3 | 3 | 209 |
| Agencies | KWA | | | | | | | | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | | |
|--|------|--|---|---------------------------|---------------------------|---------------------------|---|--|---|--|---------------------------|---------------------------|---------------------------|---|-----------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | | |
| Name of proposal: New proposal for water supply scheme to Thazhava Panchayaths | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs |
| Activities | | Investigation and preparation of DER and Operation and Maintenance | Construction of weir open well cum pump house etc | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance and construction of tube wells | extension of lines, Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project | |
| Project Cost in lakhs | | 100 | 153 | 3 | 3 | 3 | 10 | 35 | 20 | 10 | 3 | 3 | 3 | 3 | 349 |
| Agencies | KWA | | | | | | | | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | | | | | | | | | |
|---|------|---|--------------------------|---------------------------------|------------------------------------|--------------------------|---|--------------------------|---|--|--------------------------|--------------------------|--------------------------|--|-----------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | | |
| Name of proposal: New proposal for water supply scheme to Thociyoor Panchayaths | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs |
| Activities | | Detailed investigation and preparatio of DER and Operation and Mantanence | Operation And Mantanence | Construction of tube wells 3Nos | installation of iron removal plant | Operation And Mantanence | extension of lines, Operation And Maintenance | Operation And Mantanence | extension of lines, Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | Operation And Mantanence | Operation And Mantanence | Operation And Mantanence | Feasibility study and Preparation of new Augmentation Project. | |
| Project cost in lakhs | | 3 | 3 | 60 | 55 | 3 | 10 | 3 | 25 | 15 | 3 | 3 | 3 | 3 | 189 |
| Agencies | KWA | | | | | | | | | | | | | | |

Appendix 41-1 Proposal Phasing

Name of Sector : Drinking water and Sanitation

Name of proposal: New proposal for water supply scheme to Kulasekharapuram Panchayath

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs |
|-----------------------|------|---|---|---------------------------------|------------------------------------|---------------------------|---|---------------------------|---|---|---------------------------|---------------------------|---------------------------|---|-----------------------|
| Activities | | Detailed investigation and preparation of DER and Operation And Maintenance | Laying of new 300 mm DI pipe line from WTP at Ochira to Puthantheruvu | Construction of 2Nos tube wells | Installation of iron removal plant | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance and Preventive Mantanance | Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project | |
| Project cost in lakhs | | 3 | 253 | 60 | 45 | 3 | 10 | 3 | 25 | 10 | 3 | 3 | 3 | 3 | 424 |
| Agencies | KWA | | | | | | | | | | | | | | |

Appendix 41-1 Proposal Phasing

| Name of Sector : Drinking water and Sanitation | | | | | | | | | | | | | | | |
|--|--|--|---|---|---------------------------|---|---------------------------|---------------------------|---|--|---|---------------------------|---------------------------|--|--------------------------------|
| Name of proposal: water supply scheme to West Kallada (Project based on Surface water) | | | | | | | | | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Project cost in lakhs (Total) |
| Activities | Preliminary survey and Project preparation, Design, Detailed Engineering report, Flow chart, Detailed report . Flow chart, | Preliminary survey and Project preparation, Design, Detailed Engineering report, Flow chart, Detailed survey, Renovation of 22 MLD Treatment plant. Achieving additional 20 lpcd by increasing pumping hours from 16 hrs to 24 hrs and by utilising the full capacity plant of 22 mld and increasing the number of pumps and laying new pumping mains, Improvements in West new pumping mains, Kallada ,Replacing damaged HDPE/AC Pipelines, Sasthamoola ,Replacing extension of lines, damaged HDPE/AC Improvements in West Pipelines, extension of lines | Renovation of existing CHSR at Karalimukku, Renovation of 22 MLD Treatment plant. Achieving additional 20 lpcd by increasing pumping hours from 16 hrs to 24 hrs and by utilising the full capacity plant of 22 mld and increasing the number of pumps and laying new pumping mains, Improvements in West Kallada ,Replacing damaged HDPE/AC Pipelines, extension of lines, Sasthamoola ,Replacing extension of lines, damaged HDPE/AC Improvements in West Kallada | Hocking up activities, Painting Installation of pumps and its accessories finishing the project ready for commissioning | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance and Preventive Maintenance | extension of lines, Operation And Maintenance | Operation And Maintenance | Operation And Maintenance | Feasibility study and Preparation of new Augmentation Project. | 351 |
| Project cost in lakhs | 2 | 35 | 200 | 25 | 3 | 20 | 3 | 3 | 20 | 10 | 22 | 3 | 3 | 2 | |
| Agencies | KWA | | | | | | | | | | | | | | |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|-------------------------|---|---|-------------------------|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : ARP-ARWSS TO PATHANAPURAM GRAMA PANCHAYATH | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1.Laying W.S Distribution PVC Pipe Line 50 mm to 160 mm for 20 km | 1.Laying W.S Distribution PVC Pipe Line 50 mm to 160 mm for 20 km | Commissioning | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|---|--|---------------------------|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : ARP- ARWSS TO THENMALA TO THENMALA PANCHAYATH | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1.Laying Distribution line 4 km 2. Replacing Distribution Line | 1.Laying Distribution Line 4 km 2. Erecting Pumpset | Commissioning & Operation | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|--|---|--|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : ARP- ARWSS TO ARYANKAVU GARAMA PANCHAYATH | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1.Site Selection 2.Land Acquisition | 1.Boosting station construction 2.Gravity Main 3. Replacing distribution Line | 1. Construction of G.L Reservoir 2.Pumping main 3.Erecting Pumpset | Commissioning | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|-------------------------|---|---|-------------------------|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : W.S.S. to Vilakkudi in Vilakudy Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1.Construction of well & pump house 2.OH Tank construction | 1.Laying Distribution Line 2.Laying Pumping Main 3.Erecting Pumpset | Commissioning | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|---|---|-------------------------|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : W.S.S. to Piravanthoor in Piravanthoor Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1.Constructio of well & pump house 2.OH Tank constuction | 1.Laying Distribution Line 2.Laying Pumping Main 3.Erecting Pumpset | Commissioning | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|--|--|---|-------------------------|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : U.W.S.S. to Punalur Municipality-source improvement | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1.Estimate 2.Replacing 500 m R.C.C line | 1.Relying 500 m R.C.C line 2.Laying new line 500m | 1.Laying new line 500m 2.Erecting pump & motor | Commissioning | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|-------------------------|---|--|---|---|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Water supply scheme to THALAVOOR PANCHAYATH | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1. Site selection 2. Land Acquisition 3. Estimate | 1. Construction of well cum pump house | 1. Construction of OH reservoir 2. Laying pumping main | 1. Laying Distribution System 2. Erecting Pump & Mortors | Commissioning | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|-------------------------|---|--|---|---|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal : Water supply scheme to Pattazhy Grama Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1. Site selection 2. Land Acquisition 3. Estimate | 1. Construction of well cum pump house | 1. Construction of OH reservoir 2. Laying pumping main | 1. Laying Distribution Line 2. Erecting Pump & Mortors | Commissioning | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|-------------------------|---|--|---|---|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal :Water supply scheme to Pattazhy Vadakkekkara Grama Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1. Site selection 2. Land Acquisition 3. Estimate | 1. Construction of well cum pump house | 1. Laying pumping main 2. Construction of OH reservoir | 1. Laying Distribution System 2. Erecting Pump & Mortors | Commissioning | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|-------------------------|---|--|--|---|-------------------------|-------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal :Water supply scheme to Karavalloor Grama Panchayath | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Proposal | 1. Site selection 2. Land Acquisition 3. Estimate | 1. Construction of well cum pump house | 1. Laying pumping main 2. Construction of O.H reservoir | 1. Laying Distribution System 2. Erecting Pump & Mortors | Commissioning | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance | Operation & Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|---------------------------|--|--|-----------------------------------|---------------------------|---------------------------|---------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Proposal :RWSS to Vettikkavala Panchayat – Augmentation Works | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Preparation of DER, Tendering Process etc. | Laying Transmission main, pumping main & distribution lines. | Commissioning of the whole scheme | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance |
| Agencies | | KWA | KWA | KWA | KWA | KWA | KWA |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance |
| Agencies | KWA | KWA | KWA | KWA | KWA | KWA | KWA |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|--|---|--|--|--|--|--|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project- Proposals for Sewerage System | | | | | | | |
| Implementation Period- 2009 - 2012 | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activity | | 1. Investigation and EIA studies 2. Preparation of DPR/DER | 1. Land acquisition and implementation | 1. Implementation | 1. Commissioning | Operation and Maintenance | Operation and Maintenance |
| Agencies involved | | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activity | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance |
| Agencies involved | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. | LSGI/Kerala Water Authority/Dist. Panchayat. |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|--|----------------------|----------------------|----------------------|--|--|--|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project- Construction of O&M Laboratory | | | | | | | |
| Implementation Period-2012 -2016 | | | | | | | |
| Project cost-Rs. 1000 Lakhs | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activity | | | | | Design of Unit Selection of site, Acquisition of land , awareness camp etc. | Design of Unit Selection of site, Acquisition of land , awareness camp etc. | Construction and establishing of the laboratory., Training to the community/officers |
| Agencies involved | | | | | KWA/LSGD | KWA/LSGD | KWA/LSGD |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activity | Construction and establishing of the laboratory., Training to the community/officers | O&M, Quality testing | O&M, Quality testing | O&M, Quality testing | O&M, Quality testing | O&M, Quality testing | O&M, Quality testing |
| Agencies involved | KWA/LSGD | KWA/LSGD | KWA/LSGD | KWA/LSGD | KWA/LSGD | KWA/LSGD | KWA/LSGD |

| Appendix 41-1 Proposal Phasing | | | | | | | |
|---|---|---|---|---|---------------------------------|---------------------------------|---------------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project- Construction of pipe bridge over railway track | | | | | | | |
| Implementation Period-2013-2018 | | | | | | | |
| Project cost-Rs340Lakhs | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activity | | | | | | Investigation, Design | Investigation, Design |
| Agencies involved | | | | | | Kerala Water Authority | Kerala Water Authority |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activity | Preparation of DPR/DER, Land acquisition, sanctions | Preparation of DPR/DER, Land acquisition, sanctions | Construction of pipe bridge at Oachara, Erezha and Krishnapuram | Construction of pipe bridge at Oachara, Erezha and Krishnapuram | Operation and Maintenance | Operation and Maintenance | Operation and Maintenance |
| Agencies involved | Kerala Water Authority/ Railway/ Revenue Dept. | Kerala Water Authority/ Railway/ Revenue Dept. | Kerala Water Authority/ Railway | Kerala Water Authority/ Railway | Kerala Water Authority/ Railway | Kerala Water Authority/ Railway | Kerala Water Authority/ Railway |

| Appendix 41-2 | | |
|---|---|-------------------|
| Costing of Proposals | | |
| 3.12 Augmentation BAWSS to Kundara and adjoining Grama Panchayats and Augmentation of RWSS in Ezhukone Grama Panchayat | | |
| Sl.No | Components | Cost in Rs. Lakhs |
| 1 | Augmentation of BAWSS to Kundara and Adjoining Grama Panchayats | 100 |
| 2 | Augmentation of RWSS to Ezhukone | 75 |
| 3.13 Augmentation of ARWSS to Kulakkada and Pavithreswaram in Kulakkada Grama Panchayat | | |
| Sl.No | Components | Cost in Rs. Lakhs |
| 1 | Extension of Distribution line for a Length of 64 Km using PVC pipes of diameter varies from 110 mm to 50 mm size | 160 |
| 3.14 Augmentation BAWSS to Kundara and adjoining Grama Panchayats, Improvements to existing schemes and Proposal for Mini water supply scheme for Neduvathoor Grama Panchayat | | |
| Sl.No | Components | Cost in Rs. Lakhs |
| 1 | Augmentation of BAWSS to Kundara and Adjoining Grama Panchayat s | 125 |
| 2 | Improvements to existing water supply schemes | 65 |
| 3 | Mini Water supply schemes 4 Nos | 110 |
| 3.15 Augmentation of JBIC assisted Water supply scheme to Meenad and adjoining Villages (Kerala Water Supply Proposal) for Pooyapally Grama Panchayat | | |
| Sl.No | Components | Cost in Rs. Lakhs |
| 1 | Extension of pipe line for a Length of 80 Km using PVC pipes of size varying from 140 mm to 50 mm | 200 |
| 3.16 Augmentation of RWSS to Velinalloor Grama Panchayat | | |
| Sl.No | Components | Cost in Rs. Lakhs |
| 1 | Rehabilitation and Augmentation of RWSS to Velinalloor | 1000 |
| 3.17 Augmentation of JBIC assisted Water supply scheme to Meenad and adjoining Villages (Kerala Water Supply Proposal) for Veliyam Grama Panchayat | | |
| Sl.No | Components | Cost in Rs. Lakhs |
| 1 | Extension of transmission main , construction of Sump and providing on line Pumping mechanism – 8 schemes | 80 |
| 2 | Extension of pipe line for a Length of 60 Km using PVC pipes of size varying from 110 mm to 50 mm | 150 |

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| 3.18 RWSS to Thrikkovilvattom Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | |
|--|-----------------|
| i) Replacing the damaged 150mm AC distribution line from OH tanks at Kureepally and Mukhathala | |
| 160 mm PVC (6kg/cm ²) - 3000 mts. | Rs. 20.00 lakhs |
| ii) Drilling new tube well at Kalluvettamkuzhy and its commissioning | Rs. 10.00 lakhs |
| iii) Drilling new tube well at OHSR Mukhathala and its commissioning | Rs. 10.00 lakhs |
| iv) RWSS to Thrikkovilvattom - Improvements | |
| Replacing the damaged 80/100mm AC pipes at various places in the Grama Panchayat (75mm & 90mm PVC lines - 3000 mts.) | Rs. 15.00 lakhs |
| v) Drilling new tube well at Kannanalloor South pump house and its commissioning | Rs. 10.00 lakhs |
| vi) RWSS to Thrikkovilvattom - Improvements - Supply and erection of submersible pump sets at Thattarkonam, Kaniyanthode, Murahari, Kannanalloor (S) and Vettilathayam Pump houses. | Rs. 10.00 lakhs |
| vii) RWSS to Thrikkovilvattom - Constructing an OH tank at Thrikkovilvattom having capacity 2.50 lakhs liters. | Rs. 30.00 lakhs |
| Total Rs. 40.00 lakhs. | |
| 3.19 RWSS to Kottiyam - Perayam in Mayyanadu (Part), Adichanallur (Part) and Thrikkovilvattom (Part) Grama Panchayats- Source Improvement and Rehabilitation | |
| i) RWSS to Kottiyam - Perayam - Improvements - supply and erection of 15 HP submersible pump set | Rs. 3.00 lakhs |
| ii) RWSS to Kottiyam - Perayam - Replacing the old and damaged 150mm AC and 80mm AC distribution line from Anakuzhy Pump House (160mm PVC (6kg/cm ²) - 1000 mts. (90mm PVC (6kg/cm ²) - 1000 mts.) | Rs. 13.00 lakhs |
| iii) RWSS to Kottiyam - Perayam - Improvements - Drilling a new tube well, Construction of pump house and supply and erection of submersible pump set at Anakuzhy. | Rs. 12.00 lakhs |
| iv) RWSS to Kottiyam - Perayam - Improvements - Supply and erection of 20 HP VT pump set at Chooralpoika. | Rs. 5.00 lakhs |
| v) RWSS to Kottiyam - Perayam - Drilling a new tube well at Perayam pump house site and its commissioning | Rs. 12.00 lakhs |
| Total Rs. 42.00 lakhs. | |
| 3.20 RWSS to Mayyanad Grama Panchayat – Source Improvement and Extension of Pipe line | |
| i) Extension of pipe line at various locations in Mayyanad Grama Panchayat - 5000 m | Rs. 20.00 lakhs |
| ii) Drilling a new tube well at Mayyanad old pump house site and its commissioning | Rs. 12.00 lakhs |
| iii) Drilling a new tube well at Padanilam Pump house site and its commissioning including supply and erection of pump set | Rs. 12.00 lakhs |
| Total Rs. 44.00 lakhs. | |

| | | |
|---|-----------------|----|
| 3.21 RWSS to Kottamkara Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | | 34 |
| i) Drilling a new tube well at Kollassery and its commissioning | Rs. 12.00 lakhs | |
| ii) Drilling a new tube well at Peroor, Construction of pump house & supply and erection of submersible pump set | Rs.15.00 lakhs | 35 |
| iii) Drilling a new tube well at Mundenchira - construction of pump house and supply and erection of submersible pump set | Rs. 15.00 lakhs | 36 |
| iv) Drilling a new tube well at Meenakshivilasam - construction of pump house and supply and erection of submersible pump set | Rs. 15.00 lakhs | 37 |
| v) Drilling a new tube well at Pandarakulam and its commissioning including supply and erection of pump set | Rs. 15.00 lakhs | 38 |
| vi) Replacing the old 200mm AC distribution line from over head service reservoir at Mampuzha - 200m PVC - 1000m | Rs. 10.00 lakhs | 39 |
| vii) Extension of pipe line at various location in Kottamkara Grama Panchayat 50mm to 90mm PVC - 3000 m | Rs. 15.00 lakhs | 40 |
| viii) Drilling a new tube well at Mekkon and its commissioning | Rs. 10.00 lakhs | |
| ix) Constructing an OHSR at Kottamkara - having capacity 2.50 lakhs ltrs. | Rs. 30.00 lakhs | |
| x) Laying pumping main and distribution line | Rs. 10.00 lakhs | |
| Total Rs. 147.00 lakhs. | | |
| 3.22 RWSS to Munroe Island Grama Panchayat – Source Improvement and Rehabilitation | | 41 |
| i) RWSS to Munroe Island - Improvements - Drilling new tube well, construction of pump house, supply and erection of submersible pump set | Rs. 10.00 lakhs | 42 |
| ii) RWSS to Munroe Island - Replacing the damaged and old pipe lines for a length of 3 km. | Rs. 10.00 lakhs | 43 |
| Total Rs. 20.00 lakhs. | | |
| 3.23 RWSS to Thrikkaruva Grama Panchayat – Source Improvement and Rehabilitation | | |
| i) RWSS to Thrikkaruva - Improvements - Replacing old and damaged 80mm AC pipe line by using 90mm PVC pipe including line extension for a length 2000 m | Rs. 8.00 lakhs | 44 |
| ii) RWSS to Thrikkaruva - Improvements - Drilling new Tube well at Prakkulam and replacing the damaged pipe lines for a length 2 km | Rs. 10.00 lakhs | 45 |
| Total Rs. 18.00 lakhs | | 46 |
| 3.24 RWSS to Perinadu Grama Panchayat – Source Improvement and Rehabilitation | | |
| i) RWSS to Perinadu - Improvements - Replacing old and damaged 80mm/100mm AC pipe by using 90mm PVC pipe line for a length - 1500m. | Rs. 6.00 lakhs | 47 |
| ii) RWSS to Perinadu - Improvements - Drilling new Tube well at Charumoodu and Vellimon and replacing old and damaged pipe line - 5 km | Rs. 20.00 lakhs | 48 |
| Total Rs. 26.00 lakhs. | | 49 |

| 3.25 RWSS to Panayam Grama Panchayat – Source Improvement and Extension of Pipe line | |
|---|------------------|
| i) RWSS to Panayam - Improvements - | |
| Drilling new tube well at Chittayam and | |
| Chemmakadu (old) and line extension | |
| for a length of - 6 km. | Rs. |
| 3.26 RWSS to Thrikkadavoor Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | |
| i) RWSS to Thrikkadavoor - Improvements - | |
| Replacing old and damaged 80mm/100mm | |
| AC pipe by using PVC pipes. | |
| (90mm PVC - 2000m) | Rs. 8.00 lakhs |
| ii) RWSS to Thrikkadavoor - Improvements - | |
| Construction of 2.00 lakh liters capacity | |
| OHSR at Anchalumoodu. | Rs. 25.00 lakhs |
| iii) RWSS to Thrikkadavoor - Improvements - | |
| Drilling new tube well at Mathilil and | |
| Neeravil and replacing the damaged | |
| pipe line for a length of 5 km. | Rs. 22.00 lakhs |
| Total Rs. 55.00 lakhs. | |
| 3.27 RWSS to Paravoor Municipality – Source Improvement, Rehabilitation and Extension of Pipe line | |
| i) Supply and erection of pump sets | |
| with all accessories for the existing | |
| tube wells at Melppalam, Punchirakkulam, | |
| Municipal Bus stand and Sasthanada | |
| Pump House | Rs. 8.50 lakhs |
| ii) Replacing of old damaged existing | |
| 80mm AC pipe lines by using 90mm | |
| & 75mm PVC pipe line 1500 m | |
| from Perumpuzha to Paravila junction. | |
| 2000m from Ollal Railway station to | |
| Munnazhimukku. | Rs. 10.25 lakhs |
| iii) Drilling new tube wells, construction of | |
| pump house, supply and erection of pump set | |
| laying pumping main and distribution lines | |
| near Kochalumoodu, Koonayil. | Rs. 15.00 lakhs |
| iii) Drilling new tube wells, construction of | |
| pump house, supply and erection of pump set | |
| laying pumping main and distribution lines near Parayilkavu, | |
| Koonayil | Rs. 12.00 lakhs |
| iv) Drilling new tube wells, construction of | |
| pump house, supply and erection of pump set | |
| laying pumping main and distribution lines near Vinayakar | |
| junction | Rs. 18.00 lakhs |
| v) Drilling new tube wells, construction of | |
| pump house, supply and erection of pump set | |
| laying pumping main and distribution lines, Improvement - Rectification | |
| Punchirakkulam Pump house | Rs. 1.00 lakhs |
| Total Rs. 64.75 lakhs. | |
| 3.28 RWSS to Adichanalloor Grama Panchayat– Source Improvement and Rehabilitation | |
| i) Construction of new well cum pump house | |
| with 6mm dia, 10m depth and supply and | |
| erection of 60 HP VT pump set with all | |
| accessories | Rs. 100.00 lakhs |
| ii) Renovation of existing infiltration gallery | |
| and repacking of filter media. | Rs. 5.00 lakhs |
| iii) Supply and erection of new 60 HP VT | |
| pump set with all accessories. | Rs. 18.00 lakhs |
| Total Rs. 123.00 lakhs | |

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|---|--------------------------|----|
| 3.29 RWSS to Chathannoor Grama Panchayat– Source Improvement and Rehabilitation | | 34 |
| i) Construction OHSR at Kattachal of capacity 2.50 lakhs liters. | Rs.30.00 lakhs | |
| ii) Supply and erection of 60 HP VT pump set with all accessories | Rs. 20.00 lakhs | 35 |
| iii) Replacement of old, damaged 150mm, 100mm & 80mm AC pipe lines with 60mm to 90mm PVC pipe lines | Rs. 13.00 lakhs | |
| Total Rs. 63.00 lakhs | | 36 |
| 3.30 RWSS to Poothakulam Grama Panchayat– Source Improvement and Extension of Pipe line | | |
| i) Drilling new tube well at EMS colony and Perumkulam Vayal with construction of pump house, laying new pumping main and distribution work, supply and erection of pump set etc. | Rs. 36.50 lakhs | 37 |
| | | 38 |
| 3.31 RWSS to Chirakkara Grama Panchayat– Source Improvement and Extension of Pipe line | | |
| i) Drilling tube wells, construction of pump house, laying pumping main and distribution, supply and erection of pump set etc. (near Parayil Jn.) | Rs.19.00 lakhs | 39 |
| | | 40 |
| 3.32 RWSS to Kalluvathukkal Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | | |
| i) Rectification of existing OHSR of capacity 4.50 lakhs ltrs. | Rs. 18.00 lakhs | |
| ii) Supply and erection of 75 HP VT pump set with all accessories | Rs. 20.00 lakhs | |
| iii) Replacing of old damaged CI & AC pipe lines with 160mm to 90 mm PVC pipe line (Pumping main & distribution) | Rs. 30.00 lakhs | |
| Total Rs.68.00 lakhs | | 42 |
| 3.33 Proposal for Conservation of Sasthamcotta Lake | | |
| 1) Construction of bund with pre cast pile and slabs etc Peripheral length of the lake and road 30 km | | |
| Rs 50lakhs/KM 45 lakhs*30 | Rs 1650 lakhs | 43 |
| 2) Construction of waste water /storm water drainage with sedimentation and screening arrangements | Rs 750 lakhs | |
| 3) Afforestation - | Rs 100 lakhs | 44 |
| 4). Improvement of sanitation facilities for the surrounding area - | Rs 200 Lakhs | |
| 5). Cost of motor boat and jeep | Rs 11 Lakhs | |
| 6).Preparation of DR including survey etc | Rs 25 lakhs | 45 |
| 7) Peripheral fencing and making watching Arrangement 30Km | Rs 20 lakhs | |
| Total Rs.2756 lakhs | | 46 |
| 3.46 ARP- ARWSS to Pathanapuram Grama Panchayat –Extension of Pipe line | | |
| Laying 50mm to 160 mm PVC pipe line (Distribution) for 40k.m | Total Rs. 1 crore | |
| | | |
| 3.47 ARP- ARWSS to Thenmala Grama Panchayat – Source Improvement | | 47 |
| 1. Replacing Distribution line | Rs. 4 lakhs | |
| 2. Laying distribution (new) Line various dia PVC pipes 8 Km | Rs. 20 lakhs | |
| 3. 50 H.P.V.T pump sets | Rs. 8 lakhs | 48 |
| Total Rs. 32 Lakhs | | |

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|---|--------------|
| 3.48 ARP- ARWSS to Ariyamkavu Grama Panchayat – Source Improvement and Extension of Pipe line | |
| 1) Boosting pump house (Sump cum pump house) | Rs.10 Lakhs |
| 2) Pumping main 2 km | Rs.8 Lakhs |
| 3) Transmission main 1 km | Rs.3 Lakhs |
| 4) G.L. Reservoir, 30,000 Ltr capacity | Rs..2Lakhs |
| 5) Pump and motor | Rs.6 Lakhs |
| 6) Distribution line 5 Km | Rs.12 Lakhs |
| 7) Replacement of existing distribution line | Rs.5Lakhs |
| 8) Land acquisition | Rs.10 Lakhs |
| Total Rs. 56 Lakhs | |
| 3.49 R.W.S.S. to Vilakkudi Grama Panchayat – Source Improvement and Extension of Pipe line | |
| 1 An O.H. Reservoir with a capacity of 1.25 lakh Ltr | Rs. 10 Lakhs |
| 2 Construction of well cum pump house | Rs. 50 Lakhs |
| 3 Laying pumping main | Rs. 15 Lakhs |
| 4) Erecting pump and motor | Rs. 10 Lakhs |
| 5) Laying distribution lines | Rs. 30 Lakhs |
| Total = Rs. 115 Lakhs | |
| 3.50 R.W.S.S. to Piravanthoor Grama Panchayat –Extension of Pipe line | |
| 1) An O.H. Tank with a capacity of 1 lakh litre for | Rs. 8 lakhs |
| 2) Laying pumping main | Rs. 6 lakhs |
| 3) Erecting pump and motor | Rs. 4 lakhs |
| 4) Replacing distribution line | Rs. 2 lakhs |
| 5) Providing distribution (new) line 5 km | Rs. 10 lakhs |
| 6) Providing street fountain | Rs. 01 lakhs |
| Total Rs. 31 lakhs | |
| 3.51 U.W.S.S. to Punalur Municipality – Source Improvement and Extension of Pipe line | |
| 1) An O.H. Reservoir with a capacity of 1.25 lakh Ltr | Rs. 10 Lakhs |
| 2) Construction of well cum pump house | Rs. 50 Lakhs |
| 3) Laying pumping main | Rs. 15 Lakhs |
| 4) Erecting pump and motor | Rs. 10 Lakhs |
| 5) Laying distribution lines | Rs. 30 Lakhs |
| Total Rs. 115 Lakhs | |
| 3.52 WSS to Thalavoor Grama Panchayat – New Proposal | |
| 1. 6m Dia well and pump house | Rs. 50 lakhs |
| 2. Pumping main | Rs. 25 lakhs |
| 3. O.H. Reservoir | Rs. 25 lakhs |
| 4. Distribution system | Rs. 30 lakhs |
| 5. Pump and motor | Rs.25 lakhs |
| Total 155 lakhs | |
| 3.53 WSS to Pattazhy Grama Panchayat – Source Improvement and Extension of Pipe line | |
| 1. 6m Dia well and a pump house | Rs. 50 lakhs |
| 2. Pumping motor | Rs. 20 lakhs |
| 3. O.H. Reservoir | Rs. 25 lakhs |
| 4. Distribution system | Rs. 25 lakhs |
| 5. Pump and motor | Rs. 20 lakhs |
| Total 140 lakhs | |
| 3.54 WSS to Pattazhy Vadakkekara Grama Panchayat – Source Improvement and Extension of Pipe line | |
| 1. 6m Dia well and pump house | Rs. 50 lakhs |
| 2. Pumping main | Rs. 15 lakhs |
| 3. O.H. Reservoir | Rs. 20 lakhs |
| 4. Distribution system | Rs. 20 lakhs |
| 5. Pump and motor | Rs. 20 lakhs |
| Total 125 lakhs | |

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| 3.55 WSS to Karavalloor Grama Panchayat – New Proposal | |
|--|--------------|
| 1. 6 m dia. well and pump house | Rs. 60 lakhs |
| 2. Pumping main | Rs. 25 lakhs |
| 3. O.H, Reservoir | Rs.30 lakhs |
| 4. Distribution system | Rs.30 lakhs |
| 5. Pump and motor | Rs.25 lakhs |
| Total Rs. 170 lakhs | |

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| 3.56 R W S S to Vettikkavala Grama Panchayat-Augmentation works | |
|---|-----------------|
| Transmission main from OH Tank at Pachilakunnu to existing sump at Anchanamkuzhy. 8500 m. | |
| 250mm DI K-9 Pipe 4000m @ Rs. 3500/m | Rs.1,40,00,000 |
| 200 mm DI K-9 do 4500m @ Rs. 3000/m | Rs. 1,35,00,000 |
| Pumping main from existing sump to GLSR at Kaduvapara | |
| 200 mm DI K-9 Pipe 1500 m @ Rs. 3000/m | Rs. 45,00,000 |
| DISTRIBUTION LINES (15Km of various sizes of PVC pipes) | |
| Relaying 160mm PVC (6Kg) pipe 3 Km @ Rs. 575/m | Rs.17,25,000 |
| -Do- 110 PVC 5 Km @ Rs. 340/m | 17,00,000 |
| -Do- 90 PVC 3 Km @ Rs. 250/m | 7,50,000 |
| -Do- 75 PVC 4 Km @ Rs. 200/m | 8,80,000 |
| Road Restoration charges | Rs.2,00,000 |
| Street tap with fountain post 50 No. @ Rs. 2000/E | Rs.2,00,000 |
| Supply and erecting of 50 HP VT Pump set 1 No. L.S | Rs.4,00,000 |
| Contingencies L.S | Rs.2,15,000 |
| Maintenance of the existing sump and GLSR L.S | Rs.10,00,000 |
| Total Rs 390 lakhs | |

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| Appendix 41-1 Proposal Phasing | | | | | | | |
|--|--------------------------------|------------|--------|----------------|-----------------------------|--|-----------------------------------|
| Name of Sector : Drinking water and Sanitation | | | | | | | |
| Name of Project- Proposals for Sewerage System | | | | | | | |
| Sl. No. | Name of LSGIs | Population | | Area in Sq. KM | Proposed Plant Capacity MLD | Proposed cost in Lakhs including sewer lines | Period of Implementation in years |
| | | 2001 | 2021 | | | | |
| I | MULTI FUNCTIONAL ZONE I Order | | | | | | |
| 1 | Kollam Corporation | 361560 | 389422 | 57.763 | 12 | 5163 | 3 |
| 2 | Kottamkara | 35513 | 42239 | 8.964 | 0.6 | 240 | 3 |
| 3 | Thrikkovilvattom | 53195 | 64000 | 20.112 | 0.75 | 300 | 3 |
| 4 | Neendakara | 17060 | 18465 | 5.576 | 0.35 | 140 | 3 |
| 5 | Elampallur | 36749 | 39447 | 16.643 | 0.5 | 200 | 3 |
| 6 | Panayam | 24752 | 26569 | 10.54 | 0.4 | 160 | 3 |
| 7 | Mayyanadu | 47148 | 52286 | 17.674 | 0.75 | 300 | 3 |
| II | MULTI FUNCTIONAL ZONE II Order | | | | | | |
| 1 | Punalur | 47235 | 50875 | 34.482 | 1 | 400 | 3 |
| 2 | Kottarakkara | 29765 | 29107 | 17.56 | 0.5 | 200 | 3 |
| 3 | Karunagapally | 46716 | 49585 | 17.895 | 0.75 | 300 | 3 |
| 4 | Anchal | 31543 | 33859 | 24.76 | 0.5 | 200 | 3 |
| 5 | Chathannur | 51679 | 57866 | 33.651 | 0.75 | 300 | 3 |

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| Appendix 42-3 PROJECT PROPOSAL PHASING | | |
|--|---|------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: NH-A (NH220) : Kollam - Theni road | | |
| Year | Activities | Agencies |
| 2010 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project from NHAI | 2. NHAI |
| 2011 | 1. Land Acquisition | 1. Revenue Department |
| | 2. Technical Sanction of Project | 2. NHAI |
| | 3. Tendering | 3. NHAI |
| 2012 | 1. Award of contract | 1. NHAI |
| | 2. Execution of Agreement | 2. NHAI and contractor |
| | 3. Site clearing along acquired land | 3. NHAI and Contractor |
| 2013 | 1. Road formation | 1. NHAI and contractor |
| | 2. Site clearing along acquired land | |
| | 3. Pavement construction | |
| 2014 | 1. Site clearing along acquired land | 1. NHAI and contractor |
| | 2. Road formation | |
| | 3. Pavement construction | |
| 2015 | 1. Site clearing along acquired land | 1. NHAI and contractor |
| | 2. Road formation | |
| | 3. Pavement construction | |
| 2016 | 1. Site clearing along acquired land | 1. NHAI and contractor |
| | 2. Road formation | |
| | 3. Pavement construction | |
| 2017 | 1. Site clearing along acquired land | 1. NHAI and contractor |
| | 2. Road formation | |
| | 3. Pavement construction | |
| | 4. Pavement markings | |
| 2018 | 1. Site clearing along acquired land | 1. NHAI and contractor |
| | 2. Road formation | |
| | 3. Pavement construction | |
| | 4. Pavement markings | |
| 2019 | 1. Site clearing along acquired land | 1. NHAI and contractor |
| | 2. Road formation | |
| | 3. Pavement construction | |
| | 4. Pavement markings | |
| 2020 | 1. Site clearing along acquired land | 1. NHAI and contractor |
| | 2. Road formation | |
| | 3. Pavement construction | |
| | 4. Pavement markings | |
| 2021 | 1. Road formation | 1. NHAI and contractor |
| | 2. Pavement construction | |
| | 3. Pavement markings | |
| | 4. Installation of other Road furniture | |
| | 5. Inauguration of completed project | 2. NHAI/Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|--|--|----------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SH-A : Nilamel - Ayoor - Kottarakkara - Kulakkada road | | |
| Year | Activities | Agencies |
| 2007 | 1. Work on widening, geometric improvements and strengthening (on going) | KSTP |
| 2008 | 1. Work on widening, geometric improvements and strengthening (on going) | KSTP |
| 2009 | 1. Work on widening, geometric improvements and strengthening (on going) | KSTP |
| 2010 | 1. Widening, geometric improvements and strengthening | KSTP |
| 2011 | 1. Widening, geometric improvements and strengthening | KSTP |
| 2012 | 1. Widening, geometric improvements and strengthening | KSTP |

| PROJECT PROPOSAL PHASING | | |
|---|---|-----------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SH-B : Ayoor – Anchal – Punalur – Pathanapuram road | | |
| Year | Activities | Agencies |
| 2007 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD/KSTP |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD/KSTP |
| | 3. Land acquisition | 3. Revenue Department |
| 2008 | 1. Tendering and execution of agreement | 1. Kerala PWD/KSTP |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD/KSTP and contractor |
| 2009 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/KSTP and contractor |
| 2010 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/KSTP and contractor |
| 2011 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/KSTP and contractor |
| | 2. Pavement markings | 2. Kerala PWD/KSTP and contractor |
| 2012 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD/KSTP and contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD/KSTP |

| PROJECT PROPOSAL PHASING | | |
|---|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SH-C : Pariappally – Nilamel – Madathara road | | |
| Year | Activities | Agencies |
| 2012 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2013 | 1. Tendering and execution of agreement | 1. Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and contractor |
| 2014 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| 2015 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| 2016 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | 2. Pavement markings | 2. Kerala PWD and contractor |
| 2017 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD and contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|---|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SH-D : Kulathupuzha – Madathara – Chithara road | | |
| Year | Activities | Agencies |
| 2012 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2013 | 1. Tendering and execution of agreement | 1. Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and contractor |
| 2014 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| 2015 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | | |
| 2016 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | 2. Pavement markings | 2. Kerala PWD and contractor |
| 2017 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD and contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|--|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SH-E : Bharanikkavu - Adoor road | | |
| Year | Activities | Agencies |
| 2012 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2013 | 1. Tendering and execution of agreement | 1. Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and contractor |
| 2014 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| 2015 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | | |
| 2016 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | 2. Pavement markings | 2. Kerala PWD and contractor |
| 2017 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD and contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|---|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: PR-A: Tangassery Harbour – Paravoor – Chathannur road | | |
| Year | Activities | Agencies |
| 2007 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2008 | 1. Tendering and Execution of Agreement | 1. Kerala PWD and Contractor |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and Contractor |
| 2009 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Road Formation | 2. Kerala PWD and Contractor |
| | 3. Widening, Geometric improvements and strengthening works | 3. Kerala PWD and Contractor |
| 2010 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Road Formation | 2. Kerala PWD and Contractor |
| | 3. Widening, Geometric improvements and strengthening works | 3. Kerala PWD and Contractor |
| 2011 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Road Formation | 2. Kerala PWD and Contractor |
| | 3. Widening, Geometric improvements and strengthening works | 3. Kerala PWD and Contractor |
| 2012 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Road Formation | 2. Kerala PWD and Contractor |
| | 3. Widening, Geometric improvements and strengthening works | 3. Kerala PWD and Contractor |
| 2013 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Road Formation | 2. Kerala PWD and Contractor |
| | 3. Widening, Geometric improvements and strengthening works | 3. Kerala PWD and Contractor |
| 2014 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and Contractor |
| 2015 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and Contractor |
| 2016 | 1. Coastal Protection Works | 1. Kerala PWD and Contractor |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and Contractor |
| | 3. Pavement Protection works | 3. Kerala PWD and Contractor |
| 2017 | 1. Pavement Protection works | 1. Kerala PWD and Contractor |
| | 2. Pavement markings and other Road Furniture | 2. Kerala PWD and Contractor |
| | 3. Commissioning of the Project | 3. Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|--|---|-----------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: PR-B : Chathannur – Velinalloor – Ayoor road | | |
| Year | Activities | Agencies |
| 2007 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2008 | 1. Tendering and execution of agreement | 1. Kerala PWD/KSTP |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD/KSTP and Contractor |
| 2009 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/KSTP and Contractor |
| 2010 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/KSTP and Contractor |
| 2011 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/KSTP and Contractor |
| 2012 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD/KSTP and Contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD/KSTP |

| PROJECT PROPOSAL PHASING | | |
|---|---|------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: PR-C : Kottiyam – Kannanalloor – Kundara – Bharanikkavu – Karunagappally road | | |
| Year | Activities | Agencies |
| 2007 | 1. Investigation and Detailed Project Preparation | 1. KSTP |
| | 2. Approval of Project and Technical Sanction | 2. KSTP |
| | 3. Land acquisition | 3. Revenue Department |
| 2008 | 1. Tendering and execution of agreement | 1. KSTP |
| | 2. Widening, Geometric improvements and strengthening works | 2. KSTP and Contractor |
| 2009 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP and Contractor |
| 2010 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP and Contractor |
| 2011 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP and Contractor |
| 2012 | 1. Pavement markings and installation of other road furniture | 1. KSTP and Contractor |
| | 2. Commissioning of the Project | 2. KSTP |

| PROJECT PROPOSAL PHASING | | |
|--|---|-----------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SR-A : Chavara – Sasthamcotta road | | |
| Year | Activities | Agencies |
| 2012 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD/LSGD |
| | 2. Approval of Project and Technical Sanction | 1. Kerala PWD/LSGD |
| | 3. Land acquisition | 3. Revenue Department |
| 2013 | 1. Tendering and execution of agreement | 1. Kerala PWD/LSGD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD/LSGD and contractor |
| 2014 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/LSGD and contractor |
| | | |
| 2015 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/LSGD and contractor |
| | | |
| 2016 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD/LSGD and contractor |
| | 2. Pavement markings | 1. Kerala PWD/LSGD and contractor |
| 2017 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD/LSGD and contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD/LSGD |

| PROJECT PROPOSAL PHASING | | |
|---|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SR-B : Paravur - Varkala road | | |
| Year | Activities | Agencies |
| 2007 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2008 | 1. Tendering and execution of agreement | 1. Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and Contractor |
| 2009 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2010 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2011 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2012 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD and Contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|--|---|-----------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SR-C : Paravur - Parippally road | | |
| Year | Activities | Agencies |
| 2007 | 1. Investigation and Detailed Project Preparation | 1. LSGD/Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. LSGD/Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2008 | 1. Tendering and execution of agreement | 1. LSGD/Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. LSGD/Kerala PWD and Contractor |
| 2009 | 1. Widening, Geometric improvements and strengthening works | 1. LSGD/Kerala PWD and Contractor |
| 2010 | 1. Widening, Geometric improvements and strengthening works | 1. LSGD/Kerala PWD and Contractor |
| 2011 | 1. Widening, Geometric improvements and strengthening works | 1. LSGD/Kerala PWD and Contractor |
| 2012 | 1. Pavement markings and installation of other road furniture | 1. LSGD/Kerala PWD and Contractor |
| | 2. Commissioning of the Project | 2. LSGD/Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|---|---|------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SR-D : Kannanallur – Pooyappally – Ayoor road | | |
| Year | Activities | Agencies |
| 2012 | 1. Investigation and Detailed Project Preparation | 1. KSTP |
| | 2. Approval of Project and Technical Sanction | 2. KSTP |
| | 3. Land acquisition | 3. Revenue Department |
| 2013 | 1. Tendering and execution of agreement | 1. KSTP |
| | 2. Widening, Geometric improvements and strengthening works | 2. KSTP and contractor |
| 2014 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP and contractor |
| | | |
| 2015 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP and contractor |
| | | |
| 2016 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP and contractor |
| | 2. Pavement markings | 2. KSTP and contractor |
| 2017 | 1. Pavement markings and installation of other road furniture | 1. KSTP and contractor |
| | 2. Commissioning of the Project | 2. KSTP |

| PROJECT PROPOSAL PHASING | | |
|--|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: SR-E : Kadakkal – Anchal – Chengamanadu road | | |
| Year | Activities | Agencies |
| 2012 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2013 | 1. Tendering and execution of agreement | 1. Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and contractor |
| 2014 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | | |
| 2015 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | | |
| 2016 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and contractor |
| | 2. Pavement markings | 2. Kerala PWD and contractor |
| 2017 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD and contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|--|---|-----------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: TR-A : Bharanikkavu – Kottarakkara – Pooyappally – Kurisummoodu Jn. Road | | |
| Year | Activities | Agencies |
| 2012 | 1. Investigation and Detailed Project Preparation | 1. KSTP/Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. KSTP/Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2013 | 1. Tendering and execution of agreement | 1. KSTP/Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. KSTP/Kerala PWD and contractor |
| 2014 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP/Kerala PWD and contractor |
| | | |
| 2015 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP/Kerala PWD and contractor |
| | | |
| 2016 | 1. Widening, Geometric improvements and strengthening works | 1. KSTP/Kerala PWD and contractor |
| | 2. Pavement markings | 2. KSTP/Kerala PWD and contractor |
| 2017 | 1. Pavement markings and installation of other road furniture | 1. KSTP/Kerala PWD and contractor |
| | 2. Commissioning of the Project | 2. KSTP/Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|--|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: TR-B : Kottarakkara – Mylom – Pattazhy – Pathanapuram road | | |
| Year | Activities | Agencies |
| 2007 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2008 | 1. Tendering and execution of agreement | 1. Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and Contractor |
| 2009 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2010 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2011 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2012 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD and Contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD |

| PROJECT PROPOSAL PHASING | | |
|--|---|------------------------------|
| Name of Sector: Infrastructure | | |
| Name of Proposal: TR-C : Anchal – Kulathupuzha – Thenmala road | | |
| Year | Activities | Agencies |
| 2017 | 1. Investigation and Detailed Project Preparation | 1. Kerala PWD |
| | 2. Approval of Project and Technical Sanction | 2. Kerala PWD |
| | 3. Land acquisition | 3. Revenue Department |
| 2018 | 1. Tendering and execution of agreement | 1. Kerala PWD |
| | 2. Widening, Geometric improvements and strengthening works | 2. Kerala PWD and Contractor |
| 2019 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2020 | 1. Widening, Geometric improvements and strengthening works | 1. Kerala PWD and Contractor |
| 2021 | 1. Pavement markings and installation of other road furniture | 1. Kerala PWD and Contractor |
| | 2. Commissioning of the Project | 2. Kerala PWD |

| Appendix 43 A Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 2.1. New Fish Sanctuary at Kulathupuzha | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Area identification 2. Survey Report preparation 3. Management Plan preparation 4. Report submission to Central Govt. via Regional CCF and State Govt. | 1. Sanctioning by Central Govt. 2. Declaration by State Govt. | Sanctuary opened to public | Maintanance | Maintanance | Maintanance | Maintanance |
| Agencies | 1. Kerala Forest Research Institute (KFRI), Peechi, Thrissur 2. KFRI 3. Forest Dept. 4. Forest Dept. | 1. Ministry of Forest and Environment 2. State Govt. | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintanance | Maintanance | Maintanance | Maintanance | Maintanance | Maintanance | Maintanance |
| Agencies | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs |

| Appendix 43 A Proposal Phasing | | | | | | | |
|---|--|---|---|---|---|---|---|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 2.3. New Bird Sanctuary at Karali, Kandanchira and Polachira | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Area identification 2. Survey Report preparation 3. Management Plan preparation 4. Report submission to Central Govt. via Regional CCF and State Govt. | 1. Sanct oning by Central Govt. 2. Declaration by State Govt. | Sanctuary opened to public | Maintenance | Maintenance | Maintenance | Maintenance |
| Agencies | 1. Kerala Forest Research Institute (KFR), Peechi, Thrissur 2. KFR 3. Forest Dept. 4. Forest Dept. | 1. Ministry of Forest and Environment 2. State Govt. | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance | Maintenance |
| Agencies | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs |

| Appendix 43 A Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 2.4 Development of Mangrove areas | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Area identification 2. Identification of site specific species 3. Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. |
| Agencies | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. | Planting 1000 nos. |
| Agencies | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs | 1. Forest Dept. with financial support from LSGIs |

| Appendix 43 A Proposal Phasing | | | | | | | |
|---|--|--|--|--|--|--|--|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 2.6 Prevention of Forest Fire through people's participation | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children | 1. Awareness programmes among local people 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting |
| Agencies | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting | 1. Awareness programmes among local people 2. Involving VSS 3. Awareness programme for school children 4. Introducing advanced technology for fire fighting |
| Agencies | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. |

| Appendix 43 A Proposal Phasing | | | | | | | |
|---|---|--|--|--|--|--|--|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal :2.7 Consolidation of Forest Boundaries for Protection and Management of Forests | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification of area where there is no established boundary 2. Erection of cairns 3. Improvements in existing structures if partially damaged 4. GIS documentation of disputed areas in order to provide basic data in future | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged |
| Agencies | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged | 1. Erection of cairns 2. Improvements in existing structures if partially damaged |
| Agencies | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. |

| Appendix 43 A Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 2.9 Reversion of leased out Forest area | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification suitable sites for afforestation 2. Raising of funds by the LSGI | 1. Commencement of Planting operations in selected sites | 1. Maintenance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area |
| Agencies | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area | 1. Commencement of Planting operations in selected sites 2. Maintatance of Planted area |
| Agencies | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI |

Appendix 43 A Proposal Phasing

Name of Sector : Forest

Name of Proposal :3.2 Proposals for Greening Non Forest land - Private Holdings

[illegible]

| Appendix 43 A Proposal Phasing | | | | | | | |
|--|---|---|---|---|---|---|---|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 3.3 River Bank Management | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species | 1. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area |
| Agencies | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area | 1. Identification of River bank sites vulnerable land slides 2. Stabilising the sites with soil binding species 3. Maintenance of stabilised area |
| Agencies | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI | Forest Dept. and LSGI |

Appendix 43 A Proposal Phasing

| Appendix 43 A Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 4.1 Alternate species of timber for furniture | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing |
| Agencies | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing | 1. Awareness to school children 2. Promotion of local entrepreneurs in inferior timber processing |
| Agencies | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. |

| Appendix 43 A Proposal Phasing | | | | | | | |
|--|--|--|--|--|--|--|--|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal :4.4 Raising Medicinal plants Nurseries and Plantations | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc |
| Agencies | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc | 1. Rejuvenation of existing ex-situ conservation plots 2. Improvements are recommended for the existing Sajeevini vanam 3. Awareness programme for Kudumbasrees, farmers units school children etc |
| Agencies | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. | Forest Dept. and Education Dept. |

| Appendix 43 A Proposal Phasing | | | | | | | |
|--|---|---|---|---|--|---|---|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 4.5 Multiplication and Propagation of trees | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | | | | 1. Commencement of Microbial technology Park 2. Production of seedlings to the tune of 1 lakh | 1. Distribution of seedlings from Microbial technology Park | 1. Distribution of seedlings from Microbial technology Park |
| Agencies | | | | | 1. Agriculture Dept. 2. Forest Dept. | Forest Dept. | Forest Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Distribution of seedlings from Microbial technology Park | 1. Distribution of seedlings from Microbial technology Park | 1. Distribution of seedlings from Microbial technology Park | 1. Distribution of seedlings from Microbial technology Park | 1. Distribution of seedlings from Microbial technology Park | 1. Distribution of seedlings from Microbial technology Park | 1. Distribution of seedlings from Microbial technology Park |
| Agencies | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. |

| Appendix 43 A Proposal Phasing | | | | | | | |
|---|--|---|--|--|--|--|--|
| Name of Sector : Forest | | | | | | | |
| Name of Proposal : 4.7 Improving the Productivity of the Existing Plantations | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Soil test in Mannarapara Range 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation | 1. Soil test in Pathanapuram Range 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation 4. Application with the aid of fertigation in already started Range | 1. Soil test in Shenduruni Sanctuary 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation 4. Application with the aid of fertigation in already started Ranges | 1. Soil test in Achankovil Range 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation 4. Application with the aid of fertigation in already started Ranges | 1. Soil test in Ariyankavu Range 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation 4. Application with the aid of fertigation in already started Ranges | 1. Soil test in Thenmala Range 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation 4. Application with the aid of fertigation in already started Ranges | 1. Soil test in Kulathupuzha Range 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation 4. Application with the aid of fertigation in already started Ranges |
| Agencies | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | 1. Soil test in Anchal Range 2. Preparing the correct mixture according to the requirement of the species 3. Application with the aid of fertigation 4. Application with the aid of fertigation in already started Ranges | 1. Application with the aid of fertigation in all Ranges | 1. Application with the aid of fertigation in all Ranges | 1. Application with the aid of fertigation in all Ranges | 1. Application with the aid of fertigation in all Ranges | 1. Application with the aid of fertigation in all Ranges | 1. Application with the aid of fertigation in all Ranges |
| Agencies | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. | Forest Dept. |

| Appendix 43 B - 1 | | | | |
|------------------------------|--------------------|-------------|----------------|---------------------|
| Name of Sector : Environment | | | | |
| Mangrove details in Kollam | | | | |
| Sl. No | Panchayath | Area (Acre) | Lake portion | Status of land |
| 1 | Panayam | 1 | Kandachira | Govt. |
| 2 | Perayam | 2 | Ashtamudi | Private |
| | | 10 | Ashtamudi | Central Govt. |
| | | 2 | Ashtamudi | Private |
| | | 2 | Ashtamudi Lake | Govt. |
| | | 8 | Ashtamudi | Govt. |
| | | 1 | Ashtamudi | Private |
| 3 | Mandrothuruth | 10 | Ashtamudi | Private |
| | | 0.05 | Ashtamudi | Private |
| 4 | Kollam Corporation | 5 | Ashtamudi | Govt. |
| 5 | Kollam Corporation | 0.5 | Paravoor | Private |
| 6 | Karunagappally | 1.5 | Kayamkulam | Private |
| 7 | Alappad Panchayath | 2 | Kayamkulam | Private |
| | | 2 | Kayamkulam | Private |
| | | 5 | Kayamkulam | Alappadu Panchayath |
| 8 | Ochira | 10 | Kayamkulam | Govt. |

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Appendix 43B-2

| Appendix 43B-2 | | | | | | |
|--|--------------------------------------|----------------|-----------------------|--------------|-------------------|--|
| Name of Sector : Environment | | | | | | |
| Name of Proposal : List of Sacred Groves to be conserved in Kollam | | | | | | |
| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
| I. Ithikkara Block | | | | | | |
| 1 | Kemecathu pazhaya Kavu | Kalakodu | Poothakkulam | 0.12 | Devaswom Trust | vep.J. Athi, Teak, Kanjiram, Accasia, Perumaram, Pala, Nelli, Manjamathi, Koovalam, Chadanam and climbers |
| 2 | Mylakkal Kavu | Kongal | Paravoor Municipality | 0.026 | Family Trust | Kanjiram, E anji, Cherru, Pala, N ara, manjadi and climbers |
| 3 | Sarppakkavu | Kayicaducheri | Adichanalloor | 0.16 | Family Trust | Pine, Mavu, Cherru, Panachi, Koovalam and climbers |
| 4 | Vezhappally Kavu | Adichanalloor | Adichanalloor | 0.1 | Family Trust | Kanjiram, Aranthal, Poovam, pala, cherra and climbers |
| 5 | Kacujathi Kavu | Koonayi | Paravoor Municipality | 0.04 | Temple Trust | Pala, Cashew, Mavu,Puli, Manjaaruti |
| 6 | Mudiyoar Kavu | Pazhangalam | Nedumpana panchayath | 0.024 | Family Trust | Marotti, Cherru, Vatta, Elenji and climbers |
| 7 | Chevaru Kavu | Varinjam | Kalluvathukka | 0.06 | Temple Trust | Kanjiram, Tharni, Pala, Maruthy, Vatta, Manjunathy, Rubber, Cashew, Anjily and climbers |
| 8 | Mannancheril Kavu | Perayam | Thrikkovilvattom | 0.1 | Temple Trust | |
| 9 | Kelangara Durga temple kavu | Thezhathucheri | Ithikkara | 0.26 | Temple Trust | Aranthal, Kanjiram, Pazhakotta, Karinthakara, Koovalam, Chandanam, Elenji, Panachi, Ambezham, Manjadi, Pongu |
| 10 | Arekkonam kavu | Pazhangalam | Nedupana | 0.04 | Temple Trust | Kalampotty, Marotti, Kanjiram, Pala, Anjili, Peral, Chandanam and climbers |
| 11 | Thiru pazhangalam Sastha temple Kavu | Pazhangalam | Nedupana | 1 | Temple Trust | Panachi, Manjapurna, Pongu, Karimarom, Arayal, venkotta, Ponnappine, chooral, marotti, pana, cherru, mazhamaram, Anjily, Kanjiram etc. |
| 12 | Theechethuveetti Family Kavu | Adichanalloor | Adichanalloor | 0.212 | Family Trust | Pala, Kanjiram, Vatta, Subeul, Kannikonna, Vayana and climbers |
| 13 | Family Kavu | Pallimon | Nedupana | 0.072 | Family Trust | Vayana, Pala, Kanjiram, Anjili, Bamboo, Vatta etc. |
| II. Mukhathala Block | | | | | | |
| 14 | Cesaruvila Sarpa Kavu | Thezhuthala | Thricovilvattom | 0.1 | Family Trust | Charu, Kanjiram |
| 15 | Indiyappan Kavu | Ayethil | Kollam Corp. | 1.2 | Family Trust | Charu, Anjily, Koovalam, Oothlam, Manjadi, Palm, Kanjiram, climbers |

| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|---------------------------|----------------------------------|--------------------------|---------------|--------------|---|---|
| 16 | Mannancherry Bhagavathi temple | Thezhuthala | Thiruvilvam | 0.1 | Family Trust | Teak, elavu, Chenu, Kanjiram |
| 17 | Pacinjareveetil Surppakavu | Valathungal | Kollam Corp. | 0.16 | Family trust | Karinjetu, kambakom, Oothi, Cashew, veepu |
| 18 | Melott Kavu | Perumpuzha | Elampalloor | 0.2 | Temple trust | Charu, Kanjiram, Njerinjil, Panachi, Pala, Manjakadambu, Anjili climbers |
| 19 | Kacappal Kavu | Kadappaikkada | Kollam Corp. | 0.26 | Family trust | Pene, Charu, Koovalam, Anjily, Manchadui, Veppu, Climbers |
| 20 | Idamannara kavu | Naduvilakkara | Thiruvilvetom | 0.16 | Temple trust | Pala, Cashewnut, Plavu, Mavu |
| 21 | Mailanchoodathu devi temple kavu | Palimukku | Kollam Corp. | 0.1 | Temple trust | Vallakom, Charu, Njara, Maruthi, etc |
| 22 | Veliyathottathu kavu | Eravipuram | Kollam Corp. | 0.48 | Temple trust | baniyan tree, Vallakom, Anjily, Pala, Kanikonna, Mahagoni, Plavu, Mavu, Veppu, Koovalam, Sandal |
| 23 | Kulathur kavu | Mukhathala | Thiruvilvetom | 0.28 | Temple trust | Pala, Cashewnut, Plavu, Mavu, Kanjiram, Konna |
| 24 | valathungal kavu | Valathungal | Kollam Corp. | 1 | family trust | Karinjetu, Veppu, Charu, Sandal, Elanji, Kambakom, Njara, Pathimugham, Raktha chandanam, Oothalam |
| 25 | Allumood family kavu | Thekkumkara | Myyanadu | 0.088 | Allumood dev temple kavu | Sandal, Elanji, Baniyan tree |
| 26 | Kevadi kavu | Mundakkal | Kollam Corp. | 0.36 | Family Trust | Kanjiram, Pala, Elanji, Sandal, Climbers |
| 27 | kalerikavu | Valathungal | Kollam Corp. | 0.64 | Kalarikavu smarka samithy | |
| 28 | Elampalloor devaswom kavu | Elampalloor, Kuncara | Elampalloor | 0.26 | Devaswom trust | Nelli, Vatta, Elanji, Sandal, Kanikonna, Pala, Kanjiram, Baniyan tree |
| 29 | Elampalloor kavu | Elampalloor, Kuncara | Elampalloor | 0.34 | Family trust | Puli Vatta, Perumaram, teak, Manjakadabu, Kanikonna |
| 30 | Lekshmi narayan Temple kavu | Valathungal | Kollam Corp. | 0.524 | Temple trust | Anjily, Mavu |
| III. Chavara Block | | | | | | |
| 31 | Thezhathathil | Near Palazhiyil Junction | Panmana | 0.2 | Family trust, Vadakkadathu Kudumba vaka | Pana, Charu, Pongue, Kanjiram, Punna, Kulamavu< Vallithattu, Njara |
| 32 | Theudayamkottu | Koozhankulam Jn. | Thevalakkara | 0.3 | Family Trust | Anjili, Kulamavu, Cane etc |
| 33 | Anilzhikathu Kavu | Near Panmana Asramom | Panmana | 0.15 | Family Trust | Anjili, Vayana, Charu, Kulamavu |
| 34 | Pelliyadiyil Kavu | Near Kunnel Jn. | Thevalakkara | 0.2 | Family Trust | Anjili, Vayana |

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| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|-------------------------|------------------------------------|----------------------------------|---------------------|--------------|---|---|
| 35 | Edavanathu Kavu | Near Koozhakulam Jn | Thevalakkara | 0.2 | Family Trust | Anjili, Chooru , Manjadi, Maruthi, Valikkettu, Tharu, Vayana etc. |
| 36 | Paithodil Kavu | Near Azhakathu vedu | Thekkumbhagom | 0.4 | Family Trust | Puli, Anjili, Kulamavu, Plavu, Kanjeeram, Pale etc |
| 37 | Manayil kavu | Near Panmana Asramom | Panmana | 0.4 | Family Trust | Anjili, Elanji, Vayana, Charu, Kulamavu, Chooral, Kanjiram etc |
| 38 | Keruvazhathu Kavu | Near Sivanandapuram Temple | Panmana | 0.276 | Family Trust | Anjily, Elanj, Cashew, Vayana, Kulamavu, Pine, Kanjiram |
| 39 | Kavunada Padijattathil Kavu | Back side of SBT, Chavara branch | Chavara | 0.2 | NSS Karayogam No.2352, Cherusseri Bhagom & Family Trust | Anjily, Kulamavu, cane etc. |
| 40 | Mukkonathu kavu | Vadakkumthala | Panmana | 0.32 | Family trust | Anjili, Vayana, Kulamavu, Mango trees, peral, Chooral |
| 41 | Mampuzha temple kavu | Mulleckal | Thevalakkara | 0.15 | Temple trust | Anjily, Elanj, Elavu, Konne, Punna, Pine etc |
| 42 | Chevarackal kavu | Vadakkumthala | Vadakkumthala | 0.16 | Family trust | Anjili, Pine, Kulamavu, Chooral, Vazhanna |
| 43 | Kallumpurathu kavu | Near Kottamkulangalara temple | Chavara | 0.04 | Family trust | Anjily, Araya, Elanji |
| 44 | Serppa kavu | Panmana | Panmana | 0.92 | Family trust | |
| 45 | Madathil Kavu | Near Suoramanya Swamy temple | Panmana | 0.09 | Family Trust | Anjily, Charu, Pine, Kulamavu, Cane |
| 46 | Thekkumvila Family kavu | Thekkum Bhagom | Thkkumbagom | 1.36 | Family trust | Anjily, Araya, Elanji, Mango |
| 47 | Cheppathil Kavu (Kolluvila Kavu) | Near creesentr Junction | Chavara | 0.276 | Family Trust | Anjili, Cheruppunne, Kulamavu, Charu, Chooral, Mavu, Araya, etc. |
| IV. Ochira Block | | | | | | |
| 48 | Thennala kavu | Thennala | Karunagappally | 0.072 | Family trust | Anjili, Mavu, Pine, Vayana, Karinjotta, Porkaranti, Asokam, Maruthi, Myle, Kanjiram, Araya |
| 49 | Thekkevittoor kavu | Maruthoor Kulangara | Karunagappally | 0.022 | Family trust | Njara, Elanj, Anjili, Cairn, charu, Kulamavu, Vatta |
| 50 | Govirca kavu | Maruthoor Kulangara | Maruthoor Kulangara | 0.016 | Family | Araya, Pena, Elanji, Maruthi, Cane, Charu |
| 51 | Kotheril kavu | Edakulangara | Thodiyoor | 0.024 | Family trust | Kanjiram, Maruthi, Mavu, Vayana, Kanjiram, Elippa |
| 52 | Thevar kavu | Karunagappally KSRTC | Karunagappally | 0.4 | NSS Karayogam Administrative Trust | Edana, Maruthi, Marotti, Kanjiram, Asokam, Favizhamuth, Araya, Plavu, Mavu, Chembakam, Koovalam, Anjily |
| 53 | Muthalappallil kavu | Kotiampallil | Ochira | | Family trust | |

| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|---------------------------------|--------------------------------------|-----------------|------------------|--------------|-------------------|---|
| 54 | Ezhavettather kavu | Alumoodia | | 0.44 | Family trust | |
| 55 | Family kavu | Thekkumkara | Thazhva | 0.074 | Family trust | |
| 56 | Veliyaveetti kavu | Vadakkum | Thazhav | 1.2 | Temple trust | |
| 57 | Alazhal hu kavu | Panmana | panmana | 0.15 | Family trust | |
| 58 | Veliyavestel Deargu devi temple kavu | Vadakkumneri | Thazhavu | 0.6 | Temple trust | |
| 59 | Kerevazhath kavu | Vadakkumthala | Thazhave | | Family trust | |
| 60 | Cherukara kavu | Manappally | Thazhava | 0.176 | Family trust | |
| V. Karunaggappally Block | | | | | | |
| 61 | Vitikkavu madan Neca | Vetikkottu. Ela | Mynagappally | 15cent | Temple trust | Kanjiram, A., Pine |
| 62 | Velloorathu Kavu | Muzhangoci | Thodiyoor | 0.18 | Temple trust | Vayana, Cairn, Kanjiram, Anjili, Pongu, Chempunna, Maruthi |
| 63 | Vishnu Kavu | Adinadu | Kulasekharan | 0.2 | Family trust | Marotti, Pine, Araya, Pana, Charu, Kulamavu, Anjili, Elanji, Vetti, Vayana, Mavu |
| 64 | Kannamathu kavu | Varuvia | Klappara | 0.04 | Family trust | Charu, Pongu, Cairn, Panacha, Elanji |
| 65 | Mucharath kavu | Manappally | Thazhava | 0.06 | Family trust | Elanji, Anjily, Koovalam, Pine, Kulamavu, Vayana |
| 66 | Vazhayil kavu | Adinadu | Kulasekharapuram | 0.04 | Temple trust | Kanjiram, Pana, Anjili, Elanji, Koovalam, |
| 67 | Velasseril Kavu | Pavumba | Thazhava | | Temple trust | |
| 68 | Ayyankoickal kavu | Adinadu | Kulasekharapuram | 0.2 | Family Trust | Anjili, Vallabham, Pongu, Charu, Karinjotta, Njara |
| 69 | Plavannoor kavu | Kadalloor | Thazhava | 0.4 | Temple trust | Anjily, Kudampuli, Punne, Peral, Araya, Charu, Vayana, Karinjotta, Elippra, Njara, Choorai, Pine etc. |
| 70 | Madannada kavu | Vetikkad | Mynagappally | | Temple trust | |
| 71 | Cheppathil Kavu | Matathara | Thazhava | | Family trust | |
| 72 | Veinthamangalam kavu | Thazhava | Thazhava | 0.112 | Family trust | Anjili, Chempunra, Elanji, Bamboc, Cairn, Peral, Vayana, Kanjiram, Charu, Nagadarti, Poriyal |

| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|-------------------------------|-----------------------------------|----------------------------|------------------|--------------|-------------------|--|
| 73 | Manayil kavu | Manayilmuri | Parmana | 0.2 | Family trust | |
| 74 | Neduntharayil kavu | Kadathur | Kulasekharapuram | 0.12 | Temple trust | Cairn, Anjili, Cherupunna, Teak, Marotti, Elanji, Vatta, Vayana, Edana, Kudampuli, Pala, Charu |
| 75 | Mundappalil kavu | Thekkumuri | Thazhava | 0.12 | Family trust | |
| 76 | Mudilethu kavu | 1Km from Aramathumacom Jn | Thazhava | 0.04 | Family trust | Anjili, Elanji, Pana, Vayana, Cairn, Peral, Pale |
| 77 | Venkattakkal Kavu | Near Klappana AVHS | Thazhava | 0.0*2 | Family trust | Charu, Pongu, Elanji, Thetti, Cairn, Cherupunna, Pine |
| 78 | Venkottackal kavu | Near Klappana AVHS | Thazhava | 0.0*2 | Family trust | Charu, Pongu, Anjily, Elenji, Thetti, Cairn, Marotti |
| 79 | Ualloorethu kavu | Muzhangodi | Thodiyoor | 0.18 | Family trust | |
| 80 | Moorthiambalam kavu | Kadathur | Thazhava | 0.4 | Family trust | Charu, Pana, Anjili, Vatta, Cira, Edana, Marotti |
| 81 | Moorthiambalam kavu | Kadathur | Thazhava | 0.4 | Family trust | Charu, Pana, Anjili, Vatta, Cira, Edana, Marotti |
| 82 | Kalluvila kavu | Kumbala | Mynagappally | 0.2*2 | Temple trust | |
| 83 | Thazhoor kavu | Pavumba | pavumba | 0.6 | Temple trust | |
| 84 | Pulippurathu kavu | Ivarkalu | puthanambalam | 0.22 | Family trust | |
| 85 | Kaleekkal kavu | Vadakum mairi | Thazhava | 0.172 | Family | |
| 86 | Attoor kavu | Kadathoor | Thazhava | 0.4 | Family Trust | Cherupunna, Anjili, Marotti, Cairn, Njaval, Charu, Kudampuli |
| 87 | Padinjattathil Kavu | Cherusseri | Karunagappally | 0.152 | Family | |
| 88 | Thekkemuri kavu, Thekkedathu kavu | Thekkemuri East | Thazhava | 0.036 | Family | |
| VI. Sasthamkotta Block | | | | | | |
| 89 | Nadayil Thekkathil Kavu | Kumarachira | Sooranadu South | 0.032 | Family Trust | Kulamavu, Vetta, Panacha, Elanji, Pongu, Vayana, Kanjiram, Kuzhatti |
| 90 | Kulasseril Kavu | Pallimuri, Ambalathumbagam | Poruvazhi | 0.56 | Temple Trust | Vellapine, Undapine, Cheru, Anjili, Pala, Chooral |
| 91 | Patheerayyathu Kavu | Ambalathumbagam | Poruvazhi | 0.028 | Family Trust | Panacha, kanjiram, Vellapine, Anjily, Chooral and climbers |
| 92 | Kadoothra Kavu | Koikkal Bagam West kallada | West Kallada | 0.12 | Family Trust | Marotti, Kanjiram, Elanji, Vellapine, Chooral, Thondy, Teak, Perumaram, Pana, Vayana |

| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|------------------------------|--|--|-----------------|--------------|-------------------|--|
| 93 | Muttathu Kavu | Naduvilakara | West Kallada | 0.02 | Family Trust | Anjily, manchadi, Panacha, Vayana, Perumaraom, Charu, Kanjiram, and Climbers |
| 94 | Vecakkedathu kavu | K dangeyam Naduvil | Sooranad South | 0.12 | Family Trust | Elanj, Coconut tree |
| 95 | Thattakkattu kavu | Thirukunnapuzha | Sooranad | 0.1 | Family Trust | Plavu, Anjily, Pana, Vayana, Vetti, Mula, Bedam |
| 96 | Thannikkal kavu | Ayikunnam | South Sooranad | 0.4 | temple Trust | Kanjiram, Elanj, Thondy, Panacha, kanikonna, Nervallay |
| 97 | Mannoor kavu | Muthupilakkadu | Sasthemcotta | 0.75 | Family Trust | Vellapine, Cheru, Manchadi, Chooral, Anjili, Thondy, Elarji and Medicinal Plants |
| 98 | Kollakkal kavu | Manakkara | Sasthemcotta | 0.2 | Family Trust | Pana, Uravu, anjily, Kanjiram, Manchadi, Chooralm Chamatha |
| 99 | Nedumpurathu kavu | Karalimukku | West Kallada | 0.4 | Family Trust | Anjily, Plavu, Thekku, Vatta, Kanjiram |
| 100 | Mamachan kavu | Near West Kallada Panchayath office (Avalivanadam) | West Kallada | 0.2 | Family Trust | Panacha, Uthy, Anjily, Perumaram, Kanjiram, Kanikonna, Vallbhom, Vayana, Cane |
| 101 | Azhakiyakavu | Sooranadu | Sooranadu North | 1 | Family Trust | Vellapine, Cheru, Vayana, Uthy, Anjily, Climbers, Chooral, and medicinal plants |
| 102 | Puthusseri kavu | Panapoetti | Sasthemcotta | 0.12 | Family Trust | Anjily, Cheru, Vayana, Vatta |
| 103 | Mathirampally kavu | Athottuva | West Kallada | 0.056 | Family Trust | Panacha, Uthy, kanjiram, Cheru, Anjily, Chooral and medicinal plants |
| 104 | Velangattu kavu | Padinjatin muri | North Sooranadu | 0.08 | Family Trust | Vellapine, Charu, Cane, Anjily, Climbers |
| 105 | CherekoneVayalil Bhacra kali temple kavu | Cherekone | Kunnathoor | 0.2 | Temple Trust | Pana, Kanjiram,Vellapine, Anjili, Vatta, Jthy, Therakom, Porivatti, Climbers, and Vallkanjiram |
| 106 | Eruvila kavu | Sooranadu North -Padinjattu K zhekku | Sooranadu north | 0.12 | Family Trust | Vellapine, Uravu, Anjily, Plavu, Elanj, Manchadi, Pana |
| 107 | Pappanadu kavu | Padinjat nmury | Kunnathoor | 0.02 | Family Trust | vellapine, uravu, Vatta, Manchadi, Pana, Chooral and climbers |
| 108 | Karingalil Malanaca Kavu | Atayadi | Soorandu North | 0.2 | Temple Trust | Vellapine, Panacha, Anjily, Manchadi, Vayana, Cheru, Pana and Climbers |
| 109 | Ilathu kavu | Sooranadu Edappanayam | North Sooranadu | 0.028 | Temple trust | Vellapine, Panacha, Anjily, Manchadi, Pana, Kulamavu, Mula and Climbers |
| VII. Chittumala Block | | | | | | |
| 110 | Pencheril Kavu | Thekkemuri | East kallada | 0.04 | Family Trust | Marotti, Anjili, Koovalam, Kilimaram, Marjadi, Kannikonna |
| 111 | Chegavalli Kavu | East Kallada LPS Jn. | East Kallada | 0.124 | Family Trust | Pala, Vayana, Asokam, Vetta, Plavu, Mavu, Vayana, Karun |
| 112 | Kenniazhikathu Kavu | Thekkemuri Pazhayar | East kallada | 0.072 | Kavu Trust | Kanjiram, Vallikonna |

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| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|--------|-----------------------------------|---------------------------|--------------------|--------------|-----------------------------|--|
| 113 | Paruvathu-uthil Kavu | Kayikkalmuri | East kallada | 0.12 | Temple Trust | Kanjiram, Uthy, Vetta, Plavu, Elanji, Mavu, Ceshew, pana, Vayana, Asocam |
| 114 | Ambithodu Kavu | East Kallada | East kallada | 0.186 | Family Trust | |
| 115 | Madan Kavu | Chittumala- Kcduvila road | East Kallada | 2 | Purampokke | Anjili, Vatta, Kanjiram |
| 116 | Marangattu Kavu | Vilimangalam | Manjerathuruthu | 0.57 | Family Trust | Mavu, Kanjiram, Anjili, Thondy, Vetta, Kulemavu, Vayana, Cherumaraom, Enja, Pulathi, kanjiravalli |
| 117 | Paramparu Kavu | Chirakkonam vellimon | Perinadu | 0.168 | Temple Trust | Pala, Njer chil, kanjiram, Kannikonna, Pala, Mavu, Vatta |
| 118 | Kumbenkattu kavu | Pampalil | Parayam | 0.04 | Family Trust | Kanjiram, Mavu, Parangi, Koovalam, Perumaram, climbers and etc |
| 119 | Kurthakkal Kavu | Perumon | Parayam Ward I | 0.064 | Family Trust | Thanni, Charu, Anjily, Vallabhom, Manjadi, choondapana, Parangi, Vatta, Palamarom, manjakambu, Kanjiram, Perumaram, Pullathi |
| 120 | Ayiravilli Kavu | Kuzhiyam | Parayam Ward VI | 0.188 | Temple Trust | Perumarom, Edethe, Karimaram, Vetta, Mylanchi, kalaravalli, Kanjiravalli, enja, |
| 121 | Edathundil Kavu | Chemmekkad | Parayam Ward IV | 0.4 | Family Trust | mahagoni, Vayana, Teak, Manjakavu, Kanjiram, Anjili, Mavu, Vetta, Parangi, Vayana, |
| 122 | Mulakkal Kavu | Parayam | Parayam Ward XI | 0.04 | Family Trust | Koovalam, Kanjiram, Manjakambu, Mylanchi, Uthy, Kanjiramvalli, Kurinvalli |
| 123 | Chettimana kavu | Chathinamkulam | Parayam Ward VI | 0.08 | Family Trust | Kanjiram, Mavu, Pire, Plavu, Vayana, uthy |
| 124 | Madathil Kavu | Pampalil | Parayam Ward IX | 0.064 | Temple Trust | Peral, Anjili, Perumarom, Choondapana, Pulathi |
| 125 | Moorthivila Kavu | Perumon | Parayam Ward II | 0.25 | Sree Ramakrishna Seva Trust | Kanjiram, Pala, Kannikonna, Anjili, Chanji |
| 126 | Parappurathu kavu | Perayam | Perayam Ward IV | 0.04 | Family Trust | Puli, Elanji, Kanjiram, Pala, Manjakadambu, Manjadi, Choondapana, Sandal Kanjiram, etc |
| 127 | Eerathu kavu | Perayam | Perayam | 0.008 | Temple Trust | Pongu, Aranamaram |
| 128 | Mullasseril kavu | Mulavana | Perayam | 0.064 | Temple Trust | Anjili, Vayana, Pala, Pana, Vetta, Kanjiram |
| 129 | Nalloor Kavu | Kanjiracodu | Kundara Panchayath | 0.1 | Family Trust | Elanji, Kanjiram, Manchadi, Kulamavu, Chru, Pullathi |
| 130 | Thettikunnu mahadevan temple Kavu | Kanjiracodu | Kundara Panchayath | 0.48 | Temple Trust | Arayal, Teak, Maruthi, Peral |
| 131 | Pillaveetil Kavu | Kanjiracodu | Kundara Panchayath | 0.1 | Family Trust | Kanjiram, Elanji, Karimthekara, karimaram, Manchadi, Choondapana, Maruthi, Pala, etc |
| 132 | Puthuveetil kavu | Mulavana | Kundara Panchayath | 0.3 | Temple Trust | Anjili, Sandal, Kulemavu, Kanjiram, Choondapana, Vetti, Jthy, Puna, |
| 133 | Moorthi Kavu | Mulavana | Perayam | 0.064 | Trust | Choondapana, Plavu, Kanjiram, |

| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|---------------------------|---|-------------------|-----------------|--------------|---------------------------|---|
| 134 | Pulippra sarppa kavu | Pulippra | Kundara IV | 0.18 | NSS mKarayogam Trust | Anjily, Teak, Vetta, Kanjiram |
| 135 | Paingavelil Kavu | Pazhayattin-muri | East kallada | | Family Trust | |
| 136 | Govt. Purempokku Land | East Kallada | East kallada | 2 | | |
| VIII. Anchalumoodu | | | | | | |
| 137 | Thonipurakkal Bhagavathi Kavu | Neeravil | Thr kkadavoor | 0.02 | Thonipurakka temple Trust | Athy, uthy, Arayal, Peral, Poriyal, Pongu, Anjily, Nelly, Pana, Charu, Amozham, Pala, Manjady, Chooral, Climbers |
| 138 | Poothakulam siva temple kavu | Pattathanam | Kollam Corp. | 0.02 | Family Trust | Arayal, Elanji, Vallabham, Pongu, sandal, Pine, Anjily, Mavu, Plavu, Wood Climbers |
| 139 | Pathoor Sri. Mecanada temple Kavu | Pattathanam | Kollam Corp. | 0.053 | Temple Trust | Elanj, Veppu, V.Pine, Maruthy, Njara, Pongu, Arayal, Thondy, Anjily, Woody climbers |
| 140 | Chembakkulam Kavu | Kailumthazham | Kollam Corp. | 0.02 | Ayyappan | Pala, Sandal, Mavu, Teak, Matti, Vatta, Manjekanambu |
| 141 | Manamel Kavu | Puthenthura | Neendakara | 0.2 | Muralledheran | Arayal, Peral, Elanji, Anjily, Charu, Pana, Koovalam, Pala, Chooral, Woody Climbers |
| 142 | Nelluvila Kavu | Kureepuzha | Thr kkadavoor | 0.3 | Temple Trust | Koovalam, Kanjiram, Charu, Uthi, Vayana, teak, Plavu, Arayal, Vatta, Manjady, Pongu, Marjakambu, woody climbers |
| 143 | Mundakkal Bhadrakali temple kavu | Mundakkal | Kollam Corp. | 0.36 | Temple Trust | Elanj, Njara, Pala, Uthy, Vallbhom, Vety, Kanikonna, Charu, Myla, V. Pine, Maruthy, Pana, Manjady, Kanjiram, Anjily, Woody climbers |
| 144 | Vanchipuzha Kavu | Kureepuzha | Thr kkadavoor | 0.72 | Keekkolil family trust | Pala, Charu, Peral, Vallabham, Kanala, Pongu, Anjily, Manjady, Uthy, Njara, Manjakadambu, Vatte, Kanikonna, Climbers |
| 145 | Valiyazhikathu Bhadrakali temple kavu | Ashtamudi | Thr kkadavoor | 0.1 | Temple Trust | Njara, Koovalam, Vallabham, Kanjiram, Pana, Uthy, Pazhu, Maruthy, Climbers |
| 146 | Mukkarathil Kavu | Kavanad | Kollam Corp. | 0.052 | Mukkarathil family Trust | Kanjiram, Kanikonna, Veppu, Maruthy, Kulamavu, Vatta, Koovalam, vayana vetty |
| 147 | Sankara Narayana Moorthi temple Kavu | Mangad | Kollam Corp. | 0.32 | Temple Trust | Peral, Arayal, Sandal, Charu, Elanji, Edana, Vayana, Thanni, Koovalam, Kanikonna, Anjily, Manjady, Plavu, Pana, Chooral, Climbers |
| 148 | Edavanadu Family Kavu | Mathilil | Thr kkadavoor | 0.3 | Family Trust | Elanj, Kanjiram, Pana, Climbers |
| 149 | Palackattu Yogeeswara Swami temple Kavu | Kureepuzha | Thr kkadavoor | 0.02 | Temple Trust | Arayal, Manjady, Plavu, Manjakadambu, Anjily, Vetta climbers |
| 150 | Pandonnel kavu | Kureepuzha | Thr kkadavoor | 0.075 | Temple trust | Arayal Muthu vergai, uthy |
| 151 | Paingavelil Kavu | Ancha umoodu | Thr kkadavoor | 0.2 | Family Trust | Kanjiram, Koovala, Anjily, Mavu, Vetty, V. Pine, Pana, Plavu, Pulivaka, Climbers |
| 152 | Puthen Purakkal Kavu | Manayil Kulangara | Kollam Corp. | 0.06 | Family Trust | Pala, Kudampuli, Vallabham, Vetti, Climbers |
| 153 | Chozhattua Devaswom Kavu | Sakthikulangara | Sakthikulangara | 0.032 | Devaswom Trust | |

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| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|------------------------------|--------------------------------|---------------------|----------------|--------------|-------------------|---|
| 154 | Pandannil Durga Kavu | Kureepuzha | Thrikkadavoor | 0.075 | Temple Trust | |
| I. Kottarakara Block | | | | | | |
| 155 | Pellockonam NagaRaja kavu | Maruthanappally | Pooyappally | 0.36 | Temple trust: | Arayal, Pele, rcha, Kanjiram |
| 156 | Perumon Bhagavathy temple kavu | Maruthanappally | Pooyappally | 0.24 | Temple trust: | Arayal, Pele, rcha, Kanjiram, Pullangi |
| 157 | Thundazhikethu Moorthy Kavu | Veliyam | Veliyam | 0.12 | Temple trust: | Pullangi, Vatta, Badam, Karikonna |
| 158 | Pekkode Moorthy Kavu | Edaikkidom | Kareepra | 0.14 | Family Trust | Kanjiram, Koovalam, Banji, Kasumavu, Kenjevu, |
| 159 | Dherma Sastha Temple kavu | Edaikkidom | Kareepra | 0.2 | Temple trust: | Chccoral, Pine, Arali, Elanji |
| 160 | Vecakkathil Kavu | Vakkanadu | Kareepra | 0.024 | Family Trust | Parakottakka, Manjakadampu, Arayal |
| 161 | Muttathuveli kavu | Erumpanganadu | Ezhukor | 0.2 | Family Trust | Mottal, Marotti, Pala, Pana, Vayana, Charu, uhi |
| 162 | Moorthy Kavu | Poovartora Kizhakku | Mylam | 0.08 | Temple trust: | Anjili, Kanjiram, Aana:thondy |
| 163 | Penamkunnil Moorthy Kavu | Poovartora Kizhakku | Mylam | 0.024 | Family Trust | Anjili, Marotti, Poovan |
| 164 | Mannarakizhakkathil Kavu | Pallikkal East | Mylam | 0.048 | Family Trust | Therakam, Kanjiram, vava, Anjili, Perumarom Plavu, Ethy |
| II. Vettikavala Block | | | | | | |
| 165 | sree Durgadevi temple kavu | Vayakkal | Ummannore | 0.18 | Temple Trust | Pana, Uthy, Vaha, Thondi, Vetty, vatta, Pala |
| 166 | Kucumba Kavu | Pavithreswaram | Pavithreswaram | 0.16 | Family Trust | Charu, Anjily, Pala, Punra, Maruthy, Kanjiram |
| 167 | Marangattu Sarppa Kavu | Pavithreswaram | Pavithreswaram | 0.269 | Family Trust | Maruthy, Charu, Uthy, Mavu, Mya |
| 168 | Sree Nagaraja Kavu | Pavithreswaram | Pavithreswaram | 0.16 | Family Trust | Maruthy, Charu, Anjily, Pana |
| 169 | Ozhyl Appooppan Kavu | Vayakkal | Ummannore | 0.04 | Temple Trust | Anjily, Uthy, Vaha, Thondi, Vetty, Valla, Plavu |
| 170 | Cherukara Thekkathil Kavu | Karikayattom | Vettikavala | 0.008 | Family Trust | Anjily, Valla, Elavu |
| 171 | Erakkulathu Kavu | Melilla | Melilla | 0.04 | Temple Trust | Charu, Kulamavu, Anjily, kanjiram, Vallu |
| 172 | Chekkottu kavu | Enchackadu | Mylam | 0.032 | Family Trust | Anjily, Maruthy, Vayana, Pana, Vennil |

| Sl. No | Name of Kavu | Locality | Panchayath | Area (in ha) | Ownership details | Species available |
|----------------------------------|-------------------------------|----------------------|--------------|--------------|---------------------------|---|
| 173 | Erakkulathu kavu | Melila Kizhakke Kavu | Melila | 0.1 | Family Trust | Charu, Kulamavu, Anjili, Kanjiram |
| III. Anchal Block | | | | | | |
| 174 | Malathil kavu | Vademon | Anchal | 0.12 | Family Trust | Kanjiram, Marotty, Pana, Anjily, Charu |
| 175 | SreeKrishna Swamy Temple kavu | Vademon | Anchal | 0.16 | Temple Trust | Kambakam, Thanni, Maruthy |
| 176 | Puthu Nagoora Kavu | Thinkal karikkom | Kulathupuzha | 0.14 | Temple Trust | Maruthi, Pala |
| 177 | Pullengiyodu Moothy kavu | Pullangiyodu | Alayamon | 0.08 | Family Trust | Poovam, Kanikonna, Pana, Mulluverga, pully vaha, Maruthy |
| 178 | Kokkotu moorthy Kavu | Agasthyakkode | Anchal | 0.12 | Family Trust | Motal, Poovam, Marotty, elavu, Kanjiram, |
| IV. Chadayamangalam Block | | | | | | |
| 179 | Ayiraval Temple Kavu | Malapperur | Ittiva | 0.16 | Ayiraval Temple comm ttee | Charu, Vatta, Kashumavu, Pala, maruthy, Karimaram, Anjily, Elipca |
| 180 | Vettikkavu Negareja Kavu | Malapperur | Ittiva | 0.01 | Family Trust | Vetty, Gulmohar, Chembakam, Alu |
| V. Pathanapuram Block | | | | | | |
| 181 | Muthan kavu | Kudayam | Pathanapuram | 0.028 | Family Trust | Pala, Rubber, Pullanji |

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| Appendix 43B-3 Phasing of Proposals | | | | | | |
|---|-------------------------|-------------------------|-------------------------|-------------------------|---------------|--|
| Name of Sector : Environment | | | | | | |
| Name of Proposal : Prevention of direct discharge of waste water through public drains of Kollam Corporation | | | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 01.01.09 to 30.06.09 | 01.07.09 to 31.12.09 | 2010-----2021 | |
| Proposal preparation | | | | | | |
| 30% Completion of works | | | | | | |
| 100% Completion of works | | | | | | |
| Operation and maintenance | | | | | | |

| Appendix 43B-3 Phasing of Proposals | | | | | | |
|---|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------|--|
| Name of Sector : Environment | | | | | | |
| Name of Proposal : Providing effluent treatment plants for Sea food pre-processing plants (peeling sheds) | | | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 01.01.09 to 30.06.09 | 01.07.09 to 31.12.09 | 2010----- ----- 2021 | |
| Plan preparation | | | | | | |
| Approval | | | | | | |
| Providing effluent/solid waste treatment system | | | | | | |
| Operation and maintenance | | | | | | |

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| Appendix 43B-3 Phasing of Proposals | | | | | | |
|---|----------------------|----------------------|------|------|------|----------------|
| Name of Sector : Environment | | | | | | |
| Name of Proposal : Conversion of hanging toilets to eco san toilets/bio toilets | | | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 2009 | 2010 | 2011 | 2012 -----2021 |
| Plan preparation | | | | | | |
| Approval | | | | | | |
| Construction of bio/eco san toilets | | | | | | |
| Operation and maintenance | | | | | | |

| Appendix 43B-3 Phasing of Proposals | | | | | |
|---|----------------------|----------------------|------|------|---------------|
| Name of Sector : Environment | | | | | |
| Name of Proposal : Water quality monitoring of Ashtamudi Lake | | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 2009 | 2010 | 2011-----2021 |
| Planning & purchase of chemicals, glass wares etc. | | | | | |
| Monitoring | | | | | |

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| Appendix 43B-3 Phasing of Proposals | | | | | | |
|--|-------------------------|-------------------------|------|------|------|---------------|
| Name of Sector : Environment | | | | | | |
| Name of Proposal : Modernization of Coconut husk retting units | | | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 2009 | 2010 | 2011 | 2012-----2021 |
| Planning & Approval | | | | | | |
| Land procurement | | | | | | |
| 1 st stage of implementation of modernisation | | | | | | |
| Completion of modernisation | | | | | | |

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Appendix 43B-3 Phasing of Proposals

Name of Sector : Environment

Name of Proposal : Providing municipal solid waste treatment facilities

| Activity | Period | | | | | | | |
|---------------------------|----------|----------|----------|-------------|------|------|------|--------------|
| | 01.01.08 | 31.03.08 | 01.07.08 | to 31.12.08 | 2009 | 2010 | 2011 | 2012----2021 |
| | to | to | | | | | | |
| | 31.03.08 | 30.06.08 | | | | | | |
| Planning | | | | | | | | |
| | | | | | | | | |
| Approval | | | | | | | | |
| | | | | | | | | |
| Awareness | | | | | | | | |
| | | | | | | | | |
| Construction of land fill | | | | | | | | |
| | | | | | | | | |
| Operation and maintenance | | | | | | | | |
| | | | | | | | | |

Appendix 43B-3 Phasing of Proposals

Name of Sector : Environment

Name of Proposal : Construction of fencing along the boundary of Sasthamcottta Lake

| Activity | 01.01.08 | 01.07.08 | 01.01.09 | 01.07.09 | 2010 | 2011 | 2012----2021 |
|------------------------------|-------------|-------------|-------------|-------------|------|------|--------------|
| | to 30.06.08 | to 31.12.08 | to 30.06.09 | to 31.12.09 | | | |
| Proposal planning & approval | | | | | | | |
| | | | | | | | |
| Barbed wire fencing | | | | | | | |
| | | | | | | | |
| Natural hedge fencing | | | | | | | |
| | | | | | | | |
| Operation and maintenance | | | | | | | |
| | | | | | | | |

| Appendix 43B-3 Phasing of Proposals | | | | |
|--|-------------------------|-------------------------|------|-------------------|
| Name of Sector : Environment | | | | |
| Name of Proposal : Ground water recharging | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 2009 | 2012---- -2021 |
| Proposal planning & approval | | | | |
| 1 st stage implementation | | | | |
| Completion of implementation | | | | |

| Appendix 43B-3 Phasing of Proposals | | | |
|---|------|------|------------------------|
| Name of Sector : Environment | | | |
| Name of Proposal : Coastal Zone Regulations | | | |
| Activity | 2008 | 2009 | 2010----- -----2021 |
| Demarcation of High Tide Lines | | | |
| Implementation | | | |

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| Appendix 43B-3 Phasing of Proposals | | | | | |
|--|------|------|------|------|---------------|
| Name of Sector : Environment | | | | | |
| Name of Proposal : Paravur Kayal | | | | | |
| Activity | 2008 | 2009 | 2010 | 2011 | 2012-----2021 |
| Procurement of land for installing modern husk retting units | | | | | |
| Replacement of hanging toilets | | | | | |
| Modernization of husk retting units | | | | | |
| Replacement of 2 stroke engine by 4 stroke engine | | | | | |

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| Appendix 43B-3 Phasing of Proposals | | | | | |
|---|------|------|------|------|-------------------|
| Name of Sector : Environment | | | | | |
| Name of Proposal : Edava-Nadayara Kayal | | | | | |
| Activity | 2008 | 2009 | 2010 | 2011 | 2012----- 2021 |
| Replacement of hanging toilets | | | | | |
| | | | | | |
| Modernization of husk retting units | | | | | |
| | | | | | |
| Pollution abatement studies and implementation of control measures in the area of the lake where traditional retting is carried out | | | | | |
| | | | | | |

| Appendix 43B-3 Phasing of Proposals | | | | |
|---|-------------------------|-------------------------|------|------------------------|
| Name of Sector : Environment | | | | |
| Name of Proposal : Conservation and Regeneration of Mangroves | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 2009 | 2010----- -----2021 |
| Proposal & planning | | | | |
| | | | | |
| Planting of Seedlings | | | | |
| | | | | |
| Nurturing and development of mangroves | | | | |
| | | | | |

| Appendix 43B-3 Phasing of Proposals | | | | | | | | |
|--|-------------------------|-------------------------|-------------------------|-------------------------|------|------|------|-------------------|
| Name of Sector : Environment | | | | | | | | |
| Name of Proposal : Air pollution from Cashew factories | | | | | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 01.01.09 to 30.06.09 | 01.07.09 to 31.12.09 | 2010 | 2011 | 2012 | 2013----- 2021 |
| Planning & Design | | | | | | | | |
| Approval | | | | | | | | |
| Starting modification works | | | | | | | | |
| Completion of works | | | | | | | | |
| Operation and maintenance | | | | | | | | |

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| Appendix 43B-3 Phasing of Proposals | | | | | | | | |
|--|----------|----------|----------|----------|------|------|------|-----------|
| Name of Sector : Environment | | | | | | | | |
| Name of Proposal : Modernization of brick manufacturing units by providing pucca hood system with chimney and exhaust fan. | | | | | | | | |
| Activity | Period | | | | | | | |
| | 01.01.08 | 31.04.08 | 01.07.08 | 01.10.08 | 2009 | 2010 | 2011 | 2012----- |
| | to | to | to | to | | | | 2021 |
| | 31.03.08 | 30.06.08 | 30.09.08 | 31.12.08 | | | | |
| Planning & Design | | | | | | | | |
| | | | | | | | | |
| Approval | | | | | | | | |
| | | | | | | | | |
| Modernisation – In plant studies | | | | | | | | |
| | | | | | | | | |
| Modernisation works-20% completed | | | | | | | | |
| | | | | | | | | |
| Modernization works-100% completed | | | | | | | | |
| | | | | | | | | |
| Operation & Maintenance | | | | | | | | |
| | | | | | | | | |

| Appendix 43B-3 Phasing of Proposals | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------------------|
| Name of Sector : Environment | | | | | | | | | | | |
| Name of Proposal : Abatement of Noise pollution | | | | | | | | | | | |
| Activity | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018---- 2021 |
| Phasing out of old vehicles | | | | | | | | | | | |
| | | | | | | | | | | | |
| Strict adherence to the laying standards | | | | | | | | | | | |
| | | | | | | | | | | | |
| Change over of diesel and petrol engine to electric engines | | | | | | | | | | | |
| | | | | | | | | | | | |
| Revamping traffic system | | | | | | | | | | | |
| | | | | | | | | | | | |
| Construction of upper roads | | | | | | | | | | | |
| | | | | | | | | | | | |
| Regulation of honking of horns | | | | | | | | | | | |
| | | | | | | | | | | | |
| Providing insulations, window shielding etc to buildings and hospitals. | | | | | | | | | | | |
| | | | | | | | | | | | |
| Regulation of amplifiers and loud speakers | | | | | | | | | | | |
| | | | | | | | | | | | |
| Awareness programmes | | | | | | | | | | | |
| | | | | | | | | | | | |

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| Appendix 43B-3 Phasing of Proposals | | | | | | | |
|---|------|------|------|------------|------|------|------------|
| Name of Sector : Environment | | | | | | | |
| Name of Proposal : Controlling Land Pollution | | | | | | | |
| Activity | 2008 | 2009 | 2010 | 2011--2015 | 2016 | 2017 | 2018--2021 |
| Construction of southern canal | | | | | | | |
| | | | | | | | |
| Modification of ETP of KMML | | | | | | | |
| | | | | | | | |
| Testing of soil and water samples | | | | | | | |
| | | | | | | | |
| Soil quality rectification works | | | | | | | |
| | | | | | | | |
| 100% achievement of results | | | | | | | |
| | | | | | | | |

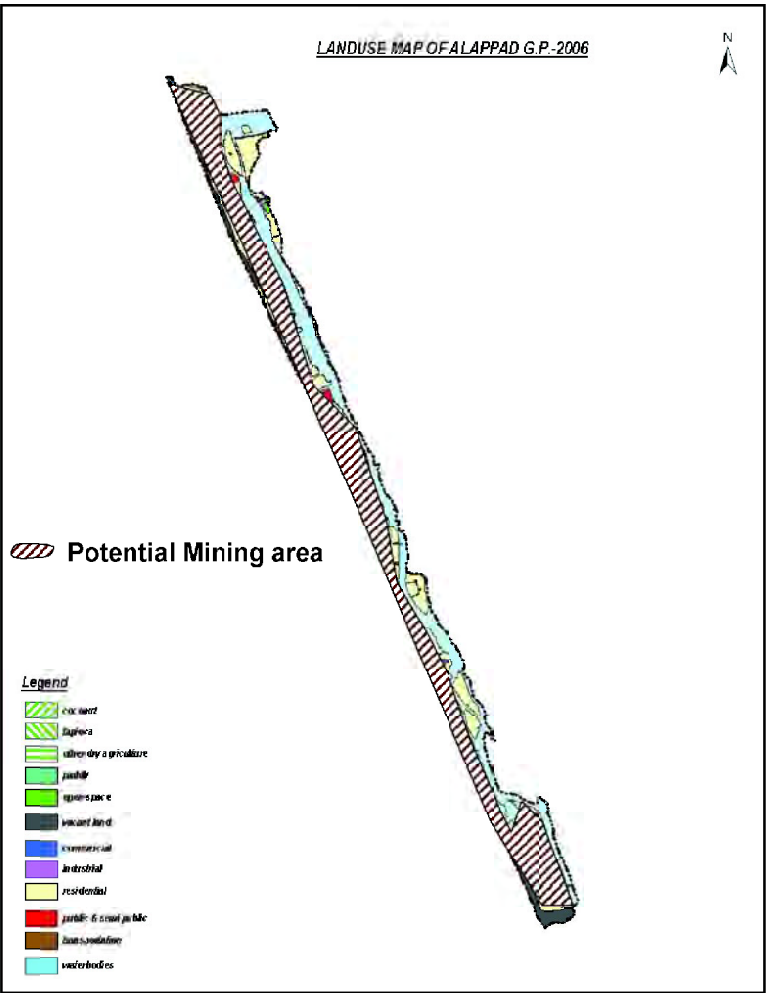
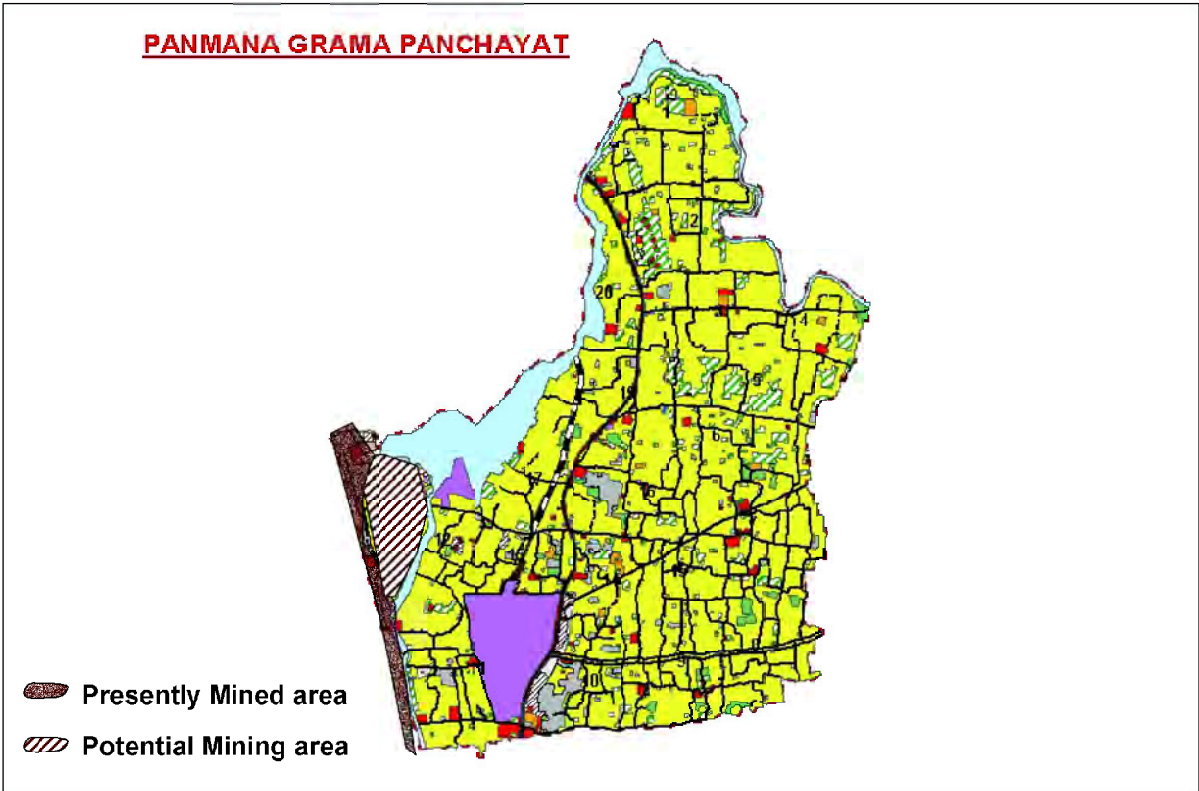
| Appendix 43B-3 Phasing of Proposals | | | | | | | |
|---|-------------------------|----------------------|------|------|------|------|--------------------|
| Name of Sector : Environment | | | | | | | |
| Name of Proposal : Municipal Solid Waste Management In Kollam Corporation | | | | | | | |
| Activity | 01.01.08 to 30.06.08 | 01.07.08 to 31.12.08 | 2009 | 2010 | 2011 | 2012 | 2013----- -2021 |
| Planning | | | | | | | |
| Approval | | | | | | | |
| Awareness | | | | | | | |
| Construction of land fill | | | | | | | |
| Installing 1 st stage size reduction /conversion units of bio degradables to gas /fertilizer/electricity | 1 st stage | | | | | | |
| | 2 nd stage | | | | | | |
| Operation & Maintenance | | | | | | | |

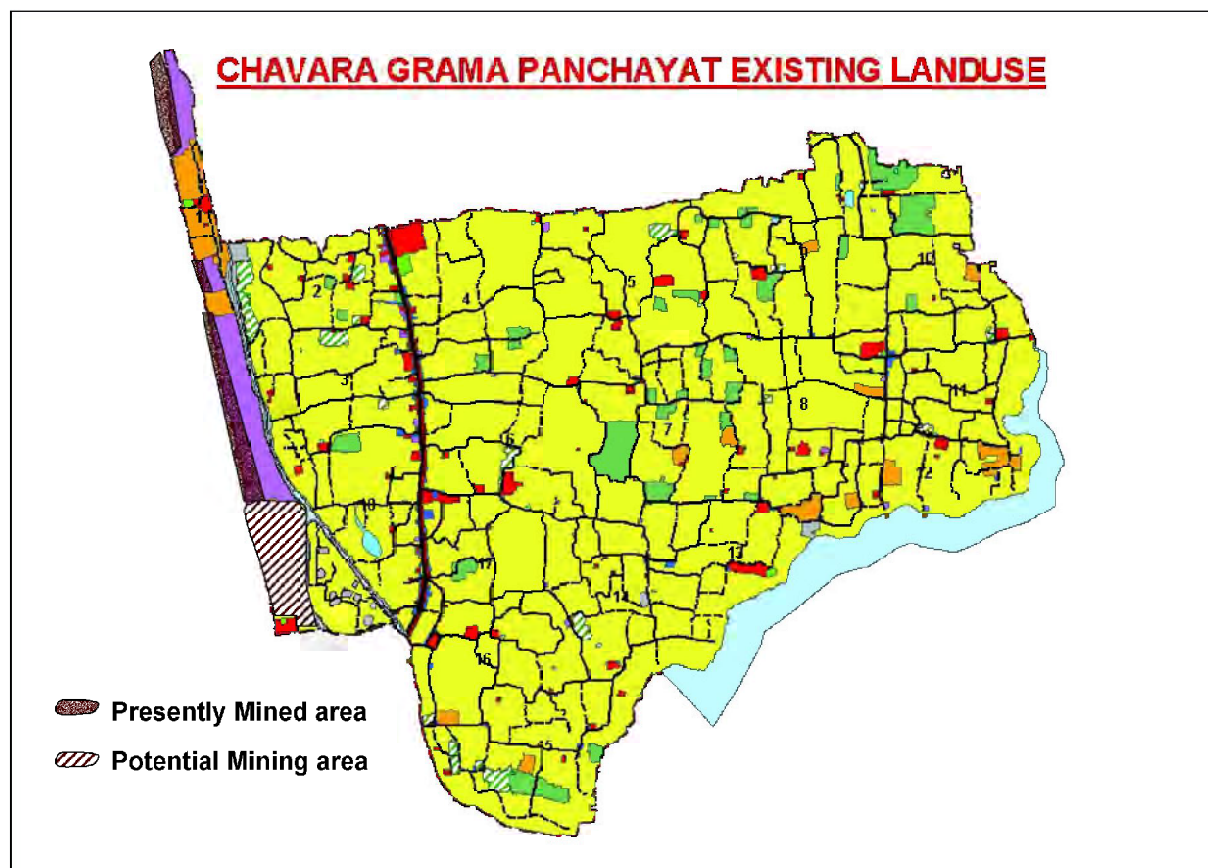
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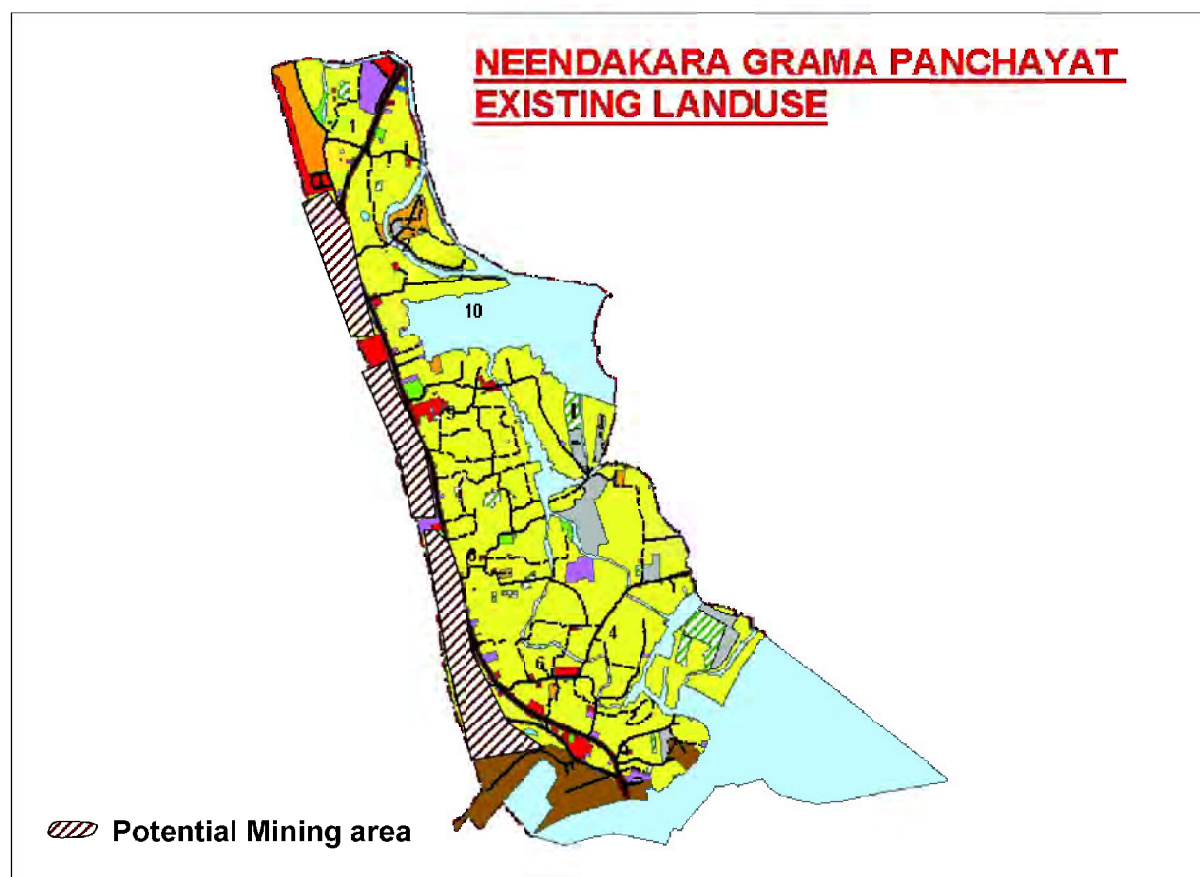
Appendix 43B-3 Phasing of Proposals

| Appendix 43B-3 Phasing of Proposals | | | | | | | | | | |
|--|----------------------|----------------------|------|------|------|------|------|------|------|--------------|
| Name of Sector : Environment | | | | | | | | | | |
| Name of Proposal : Municipal Solid waste management in other LSGIs | | | | | | | | | | |
| Activity | 2008 | | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016----2021 |
| | 1 st half | 2 rd half | | | | | | | | |
| Planning and approval | | | | | | | | | | |
| | | | | | | | | | | |
| Awareness | | | | | | | | | | |
| | | | | | | | | | | |
| Identification of land | | | | | | | | | | |
| | | | | | | | | | | |
| Construction of land fill | | | | | | | | | | |
| | | | | | | | | | | |
| Construction of size reduction /conversion units of bio degradable into gas/compost/ electricity | | | | | | | | | | |
| | | | | | | | | | | |
| Operation & maintenance | | | | | | | | | | |
| | | | | | | | | | | |





43C



| Appendix 43C-2 Phasing of Proposals | | | | | | | |
|--|---|--|--|---|--|------------------------------------|------------------------------------|
| Name of Sector : Mining and Geology | | | | | | | |
| Name of Proposal :Extraction of Mineral Sand | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | | | | | | | |
| Activities | Steps to notify the lands bearing Mineral sand | Shifting of inhabitants to neighbouring LSGIs | EIA study | Mining of Mineral sands from even blocks and beach washings in the odd blocks | Reclamation of the already mined areas | Mining and Reclamation processes | Mining and Reclamation processes |
| Agencies | Revenue Dept. | Revenue Dept | Mining and Geology and RRL | Lessee/Mining and Geology | Lessee | Lessee/Mining and Geology | Lessee/Mining and Geology |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Mining and Reclamation processes and new resource depositional study in the already mined areas | Mining and Reclamation processes and EIA study | Mining and Reclamation processes Quantification of the new resource availability | Mining and Reclamation processes | Mining and Reclamation processes | Mining and Reclamation processes | Mining and Reclamation processes |
| Agencies | Lessee/Mining and Geology | Lessee, Mining and Geology and RRL | Lessee, Mining and Geology and RRL | Lessee, Mining and Geology and RRL | Lessee, Mining and Geology and RRL | Lessee, Mining and Geology and RRL | Lessee, Mining and Geology and RRL |

| Appendix 43C-2 Phasing of Proposals | | | | | | | |
|--|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of Sector : Mining and Geology | | | | | | | |
| Name of Proposal :Extraction of China clay | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of clay bearing zones and EIA study | Resource estimation | Extraction of clay | Extraction of clay | Extraction of clay | Extraction of clay | Extraction of clay |
| Agencies | Mining and Geology a | Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Extraction of clay, EIA study | Extraction of clay | Extraction of clay | Extraction of clay | Extraction of clay | Extraction of clay | Extraction of clay |
| Agencies | Lessee, Mining and Geology, RRL | Lessee, Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology | Lessee, Mining and Geology |

| Appendix 43C-2 Phasing of Proposals | | | | | | | |
|--|--------------------------------------|--------------------------------------|--|--|---|-----------------------|-----------------------|
| Name of Sector : Mining and Geology | | | | | | | |
| Name of Proposal :Extraction of Ordinary sand from Thenmala dam area | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of sand bearing zones | Identification of sand bearing zones | EIA Study, Study on sediment inflow and out flow | EIA Study, Study on sediment inflow and out flow | Fixation of kadavus and sediment budgeting for each kadavus | Extraction of sand | Extraction of sand |
| Agencies | CWRDM and Forest Dept. | CWRDM and Forest Dept. | RRL, CWRDM, Mining and Geology | RRL, CWRDM, Mining and Geology | Mining and Geology and local body | Forest and local body | Forest and local body |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Extraction of sand | Extraction of sand | Extraction of sand , EIA study | Extraction of sand | Extraction of sand | Extraction of sand | Extraction of sand |
| Agencies | Forest and local body | Forest and local body | Forest and local body, CWRDM, RRL | Forest and local body | Forest and local body | Forest and local body | Forest and local body |

| Appendix 44-1 Phasing of Proposals | | | | | |
|--|-----------------------------------|--|---|---|--|
| Name of Sector: Education | | | | | |
| Name of Proposal: 2.2 Arts and Science Colleges in the Central and Eastern parts | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 |
| Activities | 1. Land Acquisition, Kottarakkara | 1. Land Acquisition, Punalur 2. Building Construction, Kottarakkara | 1. Land Acquisition, Kulathupuzha, Ochira 2. Building Construction, Punalur 3. infrastructure and Estt., Kottarakkara | 1. Land Acquisition, Kulathupuzha, Ochira 3. infrastructure and Estt., Punalur | 1. infrastructure and Estt., Kulathupuzha, Ochira, Punalur |
| Agencies | Govt., Jilla Panchayath, LSGI | Govt., Jilla Panchayath, LSGI | Govt., Jilla Panchayath, Grama Panchayat | | |

| Appendix 44-1 Phasing of Proposals | | | | |
|---|--|------|------|------|
| Name of Sector: Education | | | | |
| Name of Proposal: 2.3 Literacy Mission Programme (Non-formal education) | | | | |
| Year | 2008 | 2009 | 2010 | 2011 |
| Activities | Building and Esst., Azheekkal, Cheriazheekkal, Achenkovil | | | |
| Agencies | Jilla/Grama Panchayath, Water Authority, KSEB, Edn. Department, Social Welfare | | | |

| Appendix 44-1 Phasing of Proposals | | | | | |
|---|--|--|--|------|------|
| Name of Sector: Education | | | | | |
| Name of Proposal: 3.1 Independent Pre-primary Education | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 |
| Activities | Land Acquisition, Building Construction and Estt. | Land Acquisition, Building Construction and Estt. | Land Acquisition, Building Construction and Estt. | | |
| Agencies | Jilla/Grama Panchayath, Edn. Department, Social Welfare, Health, PHED/KSEB | Jilla/Grama Panchayath, Edn. Department, Social Welfare, Health, PHED/KSEB | Jilla/Grama Panchayath, Edn. Department, Social Welfare, Health, PHED/KSEB | | |

| Appendix 44-1 Phasing of Proposals | | | | | |
|---|--|--|--|------|------|
| Name of Sector: Education | | | | | |
| Name of Proposal: 3.2 Training Programmes to Teachers | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 |
| Activities | Land Acquisition, Kottarakkara (Kottarakkara DIET or adjacent places) | Building Construction | | | |
| Agencies | Jilla/Grama Panchayath, KSEB, PWD, Water authority, Gen. Edn. Department | Jilla/Grama Panchayath, KSEB, PWD, Water authority, Gen. Edn. Department | Jilla/Grama Panchayath, KSEB, PWD, Water authority, Gen. Edn. Department | | |

| Appendix 44-1 Phasing of Proposals | | | |
|--|---|------|------|
| Name of Sector: Education | | | |
| Name of Proposal: 3.3 Incentives to students and Parent Counseling | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | School level activities | | |
| Agencies | Jilla/Grama Panchayath, Edn. Department, Health | | |

| Appendix 44-1 Phasing of Proposals | | | |
|--|---|---------------------------------|----------------------------|
| Name of Sector: Education | | | |
| Name of Proposal: 3.4 Continuing Education through Local Libraries | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | Providing building, vacanat buildings of Panchayat or Government schools. All Panchayaths in Kollam | All Panchayaths in Kottarakkara | All Panchayaths in Punalur |
| Agencies | Jilla/Grama Panchayath, Water authority, KSEB, Education Department, Social Welfare Department | | |

| Appendix 44-1 Phasing of Proposals | | | |
|--|--|------|------|
| Name of Sector: Education | | | |
| Name of Proposal: 4.1 Government Nursing College | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | Govt. Girls HS Kottarakkara. (School building available) | | |
| Agencies | Jilla/Grama Panchayath, Water authority, KSEB, Education Department, | | |

| Appendix 44-1 Phasing of Proposals | | | |
|--|--|--|--|
| Name of Sector: Education | | | |
| Name of Proposal: 4.2 Medical college in Government Sector | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | 1. Land Kottarakkara/Punalur Boarder | 1. Land Kottarakkara/Punalur Boarder 2. Building construction | 1. Land Kottarakkara/Punalur Boarder 2. Building construction 3. Infrastructure 4. Establishment |
| Agencies | Jilla/Grama Panchayath, Health Department, PWD, Water authority, KSEB, Education Department, Higher Education Department | Jilla/Grama Panchayath, Health Department, PWD, Water authority, KSEB, Education Department, Higher Education Department | Jilla/Grama Panchayath, Health Department, PWD, Water authority, KSEB, Education Department, Higher Education Department |

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| Appendix 44-1 Phasing of Proposals | | | |
|--|---|---|---|
| Name of Sector: Education | | | |
| Name of Proposal: 4.3 Law College in Government Sector | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | 1. Land acquisition Kollam Corporation | 1. Land acquisition Kollam Corporation 2. Building construction | 1. Infrastructure and establishment |
| Agencies | Jilla/Grama Panchayath, Health, PWD, Water authority, KSEB, Social Welfare Department | Jilla/Grama Panchayath, Health, PWD, Water authority, KSEB, Social Welfare Department | Jilla/Grama Panchayath, Health, PWD, Water authority, KSEB, Social Welfare Department |

| Appendix 44-1 Phasing of Proposals | | | |
|---|--|--|--|
| Name of Sector: Education | | | |
| Name of Proposal: 4.4 Engineering Colleges in Government Sector | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | Land requisition Kottarakkara and Punalur Municipality | 1. Building construction 2. Infrastructure | To start Engineering College |
| Agencies | Government, Jilla/Grama Panchayath, PWD, Water authority, KSEB, Education Department, Technical Education Department | Government, Jilla/Grama Panchayath, PWD, Water authority, KSEB, Education Department, Technical Education Department | Government, Jilla/Grama Panchayath, PWD, Water authority, KSEB, Education Department, Technical Education Department |

| Appendix 44-1 Phasing of Proposals | | | |
|--|---|---|---|
| Name of Sector: Education | | | |
| Name of Proposal: 5.1 Fisheries Research institute | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | Land acquisition Valiazheekkal or Cheriazheekkal | Building, Lab construction | Infrastructure and start Establishment |
| Agencies | Jilla/Grama Panchayath, Water authority, KSEB, PWD, Fisheries, Technical Education Department | Jilla/Grama Panchayath, Water authority, KSEB, PWD, Fisheries, Technical Education Department | Jilla/Grama Panchayath, Water authority, KSEB, PWD, Fisheries, Technical Education Department |

| Appendix 44-1 Phasing of Proposals | | | |
|--|---|-----------------------|---------------------------------|
| Name of Sector: Education | | | |
| Name of Proposal: 5.2 Tourism Study Centre | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | Provide land | Building construction | Infrastructure and start centre |
| Agencies | Jilla/Grama Panchayath, Forest Department, Water authority, KSEB, Irrigation Department, Tourism Department | | |

| Appendix 44-1 Phasing of Proposals | | | |
|--|--|--|--|
| Name of Sector: Education | | | |
| Name of Proposal: 5.3 Institute of Mining Technology | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | Provide land at Chavara/ Karunagappally | Building construction | Infrastructure facilities to start |
| Agencies | Government, Jilla/Grama Panchayath, Soil Conservation Department, PWD Water authority, KSEB, Fisheries Department, Marine Department | Government, Jilla/Grama Panchayath, Soil Conservation Department, PWD Water authority, KSEB, Fisheries Department, Marine Department | Government, Jilla/Grama Panchayath, Soil Conservation Department, PWD Water authority, KSEB, Fisheries Department, Marine Department |

| Appendix 44-1 Phasing of Proposals | | | |
|---|--|--|--|
| Name of Sector: Education | | | |
| Name of Proposal: 5.4 Forest Research Institute | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | Forest land acquire at Thenmala | Building construction | Infrastructure facilities and start |
| Agencies | Government, Jilla/Grama Panchayath, Forest Department, PHED, KSEB, | Government, Jilla/Grama Panchayath, Forest Department, PHED, KSEB, | Government, Jilla/Grama Panchayath, Forest Department, PHED, KSEB, |

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| Appendix 44-1 Phasing of Proposals | | | | |
|--|---|---|---|--|
| Name of Sector: Education | | | | |
| Name of Proposal: 6.1 Improvement in Vocational Higher Secondary Education | | | | |
| Year | 2008 | 2009 | 2010 | 2011 |
| Activities | I. Land Acquisition Kottarakkara Punalur 4 VHSE/8 ITC/TTC | I. Land Acquisition Kottarakkara Punalur 4 VHSE/8 TTI/TTC II. Building & Estt: (4.8) | I. Land Acquisition Kottarakkara Punalur 2 VHSE/4 TTI/TTC II. Building & Estt: (4.8) | I. Building Estt: (2,4) |
| Agencies | Govt. Jilla Panchayath Grama Panchayath | Govt. Jilla/Grama Panchayath PWD Water authority KSEB Technical Edn./Edn. | Govt. Jilla/Grama Panchayath PWD Water authority KSEB Technical Edn./Edn. | Govt. Jilla/Grama Panchayath PWD Water authority KSEB Technical Edn./Edn. |

| Appendix 44-1 Phasing of Proposals | | | |
|--|---|----------|---------------------------------|
| Name of Sector: Education | | | |
| Name of Proposal: 7.1 Global level Education | | | |
| Year | 2008 | 2009 | 2010 |
| Activities | To promote such venture Government can give land free of cost in Kottarakkara or Punalur Boarder | Building | Infrastructure and start centre |
| Agencies | Government, Jilla/Grama Panchayath, Gulf Malayalee Association, Technical support of KSEB, PWD Education Department, Tourism Department | | |

| Appendix 45-1 Thrust LSGIs | | | |
|-------------------------------------|----------------------------------|--------------------------------|-------------------------------|
| Thrust I A Multi Functional Zone | Thrust I B (CI Range 146-178) | Thrust 2 (CI Range 112-145) | Thrust 2 (CI Range 58-111) |
| Kollam Corporation | Ezhukone | Ummannur | Perinadu |
| Neendakara | Elamadu | Panmana | Panayam |
| Thrikkadavoor | Veliyam | Kadakkal | Pattazhy vadakkekara |
| Kottamkara | Kareepra | Karavallur | Chithara |
| Elampalloor | Aryankavu | Kulathupuzha | Thekkumbhagom |
| Thrikkovilvattom | Neduvathur | Yeroor | East Kallada |
| Mayyanadu | Pooyappally | Pathanapuram | Mylom |
| Punalur | Vilakudy | Paravoor | Sooranadu North |
| Kottarakkara | Kundara | Thenmala | Mantrothuruthu |
| Karunagappally | Kulasekharapuram | Thevalakkara | Thrikkaruva |
| Anchal | Thazhava | Melila | Sooranadu south |
| Chathanloor | Alayamon | Thalavoor | Clappana |
| Chirakkara | Edamulakkal | Nilamel | Poruvazhy |
| | Poothakkulam | Chavara | Mynagappally |
| | | Velinalloor | Oachira |
| | | Kulakkada | Nedumpna |
| | | West Kallada | Piravanthoor |
| | | Vettikkavala | Adichanallor |
| | | Alappad | Kalluvathukkal |
| | | Thodiyoor | |
| | | Perayam | |
| | | Sasthamcotta | |
| | | Ittiva | |
| | | Pattazhy | |
| | | Kunnathur | |
| | | Pavithreswaram | |
| | | Chadayamangalam | |

| Appendix 42-2 Phasing of activities based on Thrust LSGIs | | | | |
|---|--------------------|--|--|--|
| SI. No. | PARAMETER | THRUST IA and THRUST IB | THRUST 2 | THRUST 3 |
| 1 | Having Land | Building with all facilities by 2009 | Building with all facilities by 2010 | Building with all facilities by 2012 |
| 2 | Having No Land | Land by 2010 | Land by 2017 | Land by 2019 |
| 3 | Having No Land | Building by 2015 | Building by 2017 | Building by 2019 |
| 4 | Having No Building | Building with all facilities by 2015 | Building with all facilities by 2018 | Building with all facilities by 2021 |
| 5 | Having Building | Child Friendly Toilet, Water Supply and Power Facility and Compound Wall by 2012 | Child Friendly Toilet, Water Supply and Power Facility and Compound Wall by 2010 | Child Friendly Toilet, Water Supply and Power Facility and Compound Wall by 2011 |
| 6 | Having Building | Outdoor Playing Materials by 2012 | Outdoor Playing Materials by 2015 | Outdoor Playing Materials by 2017 |

Appendix 45-2 Fund Requirements

| I Thrust IA | | | | | | | | | | | | | | | |
|---|--------------------|------------|----------------|----------|-----------------------|--------|----------------|--------|----------------|---------|----------------|---------|----------------|---------|-------------|
| 1 Building with all facilities for AWCs having own land by 2009 | | | | | | | | | | | | | | | |
| Sl.No. | LSGs | | Building | | Ch/Id Friendly Toilet | | Water Supply | | Compound Wall | | Play Materials | | Others | | |
| | | No. of AWC | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Kollam Corporation | 15 | 450000 | 6750000 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 50000 | 750000 | 100000 | 1500000 | |
| 2 | Neendakara | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 3 | Thrikkadavoor | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 4 | Kottamkara | 5 | 450000 | 2250000 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 50000 | 250000 | 100000 | 500000 | |
| 5 | Elampalloor | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 6 | Thrikkovilvattom | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 7 | Mayyanadu | 5 | 450000 | 2250000 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 50000 | 250000 | 100000 | 500000 | |
| 8 | Punalur | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 9 | Kottarakkara | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 10 | Karunagappally | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 11 | Anchal | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 12 | Chathannoor | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 13 | Chirakkara | | | | | | | | | | | | | | |
| | | | | 15750000 | | 525000 | | 525000 | | 2450000 | | 1750000 | | 3500000 | 24500000 |

Appendix 45-2 Fund Requirements

| I | Thrust IB | | | | | | | | | | | | | | |
|-------|---|------------|----------------|----------|-----------------------|--------|----------------|--------|----------------|---------|----------------|---------|----------------|---------|-------------|
| 1 | Building with all facilities for AWCs having own land by 2009 | | | | | | | | | | | | | | |
| Sl.No | LSGs | | Building | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Play Materials | | Others | | |
| | | No. of AWC | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Ezhukone | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 2 | Elamadu | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 3 | Veliyam | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 4 | Kareepra | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 5 | Aryankavu | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 6 | Neduvathur | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 7 | Pooypappally | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 8 | Vilakudy | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 9 | Kundara | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 10 | Kulasekharapuram | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 11 | Thazhava | 7 | 450000 | 3150000 | 15000 | 105000 | 15000 | 105000 | 70000 | 490000 | 50000 | 350000 | 100000 | 700000 | |
| 12 | Alayamon | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 13 | Edamakkal | 4 | 450000 | 1800000 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 50000 | 200000 | 100000 | 400000 | |
| 14 | Poothakkulam | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| | | | | 11250000 | | 375000 | | 375000 | | 1750000 | | 1250000 | | 2500000 | 17500000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | | | | | |
|---|-----------------|------------|----------------|----------|----------------|--------|----------------|--------|----------------|---------|----------------|---------|----------------|---------|-------------|
| Thrust 2 | | | | | | | | | | | | | | | |
| Building with all facilities for AWCs having own land by 2010 | | | | | | | | | | | | | | | |
| Sl. No. | LSGs | No. of AWC | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Ummannur | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 2 | Parmana | 4 | 450000 | 1800000 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 50000 | 200000 | 100000 | 400000 | |
| 3 | Kadakkal | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 4 | Kumil | | | | | | | | | | | | | | |
| 5 | Karavalloor | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 6 | Kuathupuzha | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 7 | Yercor | 5 | 450000 | 2250000 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 50000 | 250000 | 100000 | 500000 | |
| 8 | Fatharapuram | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 9 | Paravoor | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 10 | Thenmala | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 11 | Thevalakkara | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 12 | Melilla | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 13 | Thalavocr | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 14 | Nilamel | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 15 | Chavara | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 16 | Velina loor | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 17 | Kulakkada | 5 | 450000 | 2250000 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 50000 | 250000 | 100000 | 500000 | |
| 18 | West Kallada | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 19 | Vettikkavala | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 20 | Alappad | 4 | 450000 | 1800000 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 50000 | 200000 | 100000 | 400000 | |
| 21 | Thodiyocr | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 22 | Perayem | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 23 | Sasthamcotta | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 24 | Ittira | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 25 | Pattazhy | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 26 | Kunnathur | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 27 | Pavithreswaram | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 28 | Chadayamangalam | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| | | | | 15300000 | | 510000 | | 510000 | | 2380000 | | 1700000 | | 3400000 | 23800000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | | | | | |
|---|----------------------|------------|----------------|---------|-----------------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|---------|-------------|
| Thrust 3 | | | | | | | | | | | | | | | |
| Building with all facilities for AWCs having own land by 2012 | | | | | | | | | | | | | | | |
| S.No | LSGs | | Building | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Play Materials | | Others | | |
| | | No. of AWC | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Perinadu | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 2 | Panayam | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 3 | Pattazhy vadakkakara | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 4 | Chithara | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 5 | Thekkumbhagam | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 6 | East Kallada | 3 | 450000 | 1350000 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 7 | Mylom | 1 | 450000 | 450000 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 8 | Sooranadu North | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 9 | Mantrothuruthu | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 10 | Thrikkaruve | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 11 | Sooranadu south | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 12 | Clappana | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 13 | Poruvazhy | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 14 | Mynagappally | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 15 | Oachira | 2 | 450000 | 900000 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 16 | Nedumpana | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 17 | Piravanthoor | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 18 | Adchanallor | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 19 | Kalluvathukkal | 0 | 450000 | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| | | | | 6300000 | | 210000 | | 210000 | | 980000 | | 700000 | | 1400000 | 9800000 |

| Appendix 45-2 Fund Requirements | | | | | |
|---------------------------------|---|---------------------------------|-------------|-------------------------|------------------|
| 2 | Thrust I A | | | | |
| | Purchase of land for Aws having no land by 2010 | | | | |
| Sl.N o. | LSGs | No. of AWC having no land | Land needed | Value of land / cent | Total |
| 1 | Kollam Corporation | 219 | 3 | 150000 | 98550000 |
| 2 | Neendakara | 9 | 3 | 100000 | 2700000 |
| 3 | Thrikkadavoor | 11 | 3 | 50000 | 1650000 |
| 4 | Kottamkara | 20 | 3 | 25000 | 1600000 |
| 5 | Elampalloor | 24 | 3 | 50000 | 3600000 |
| 6 | Thrikkovilvattom | 22 | 3 | 50000 | 3300000 |
| 7 | Mayyanadu | 32 | 3 | 25000 | 2400000 |
| 8 | Punalur | 41 | 3 | 75000 | 9225000 |
| 9 | Kottarakkara | 22 | 3 | 50000 | 3300000 |
| 10 | Karunagappally | 19 | 3 | 100000 | 5700000 |
| 11 | Anchal | 7 | 3 | 25000 | 525000 |
| 12 | Chathanoor | 8 | 3 | 50000 | 1200000 |
| | | | | | 133650000 |

| Appendix 45-2 Fund Requirements | | | | | |
|---------------------------------|---|---------------------------------|-----------------------------|-------------------------|-----------------|
| 2 | Thrust I B | | | | |
| | Purchase of land for Aws having no land by 2010 | | | | |
| Sl.N o. | LSGs | No. of AWC having no land | Land needed (in cent) | Value of land / cent | Total |
| 1 | Ezhukone | 20 | 3 | 25000 | 1500000 |
| 2 | Elamadu | 16 | 3 | 25000 | 1200000 |
| 3 | Veliyam | 23 | 3 | 25000 | 1725000 |
| 4 | Kareepra | 18 | 3 | 25000 | 1350000 |
| 5 | Aryankavu | 12 | 3 | 25000 | 900000 |
| 6 | Neduvathur | 18 | 3 | 25000 | 1350000 |
| 7 | Pooyappally | 18 | 3 | 25000 | 1350000 |
| 8 | Vilakudy | 18 | 3 | 25000 | 1350000 |
| 9 | Kundara | 15 | 3 | 25000 | 1125000 |
| 10 | Kulasekharapuram | 9 | 3 | 25000 | 675000 |
| 11 | Thazhava | 27 | 3 | 25000 | 2025000 |
| 12 | Alayamon | 11 | 3 | 25000 | 825000 |
| 13 | Edamulakkal | 13 | 3 | 25000 | 975000 |
| 14 | Poothakkulam | 6 | 3 | 25000 | 450000 |
| | | | | | 16800000 |

| Appendix 45-2 Fund Requirements | | | | | |
|---------------------------------|---|---------------------------|-------------|----------------------|-----------------|
| 2 | Thrust 2 | | | | |
| | Purchase of land for Aws having no land by 2017 | | | | |
| Sl.No. | LSGs | No. of AWC having no land | Land needed | Value of land / cent | Total |
| 1 | Ummannur | 11 | 3 | 25000 | 825000 |
| 2 | Panmana | 20 | 3 | 25000 | 1500000 |
| 3 | Kadakkal | 29 | 3 | 25000 | 2175000 |
| 4 | Karavalloor | 10 | 3 | 25000 | 750000 |
| 5 | Kulathupuzha | 12 | 3 | 25000 | 900000 |
| 6 | Yeroor | 11 | 3 | 25000 | 825000 |
| 7 | Pathanapuram | 14 | 3 | 25000 | 1050000 |
| 8 | Paravoor | 11 | 3 | 25000 | 825000 |
| 9 | Thenmala | 8 | 3 | 25000 | 600000 |
| 10 | Thevalakkara | 17 | 3 | 25000 | 1275000 |
| 11 | Melila | 7 | 3 | 25000 | 525000 |
| 12 | Thalavoor | 16 | 3 | 25000 | 1200000 |
| 13 | Nilamel | 9 | 3 | 25000 | 675000 |
| 14 | Chavara | 15 | 3 | 25000 | 1125000 |
| 15 | Velinalloor | 19 | 3 | 25000 | 1425000 |
| 16 | Kulakkada | 6 | 3 | 25000 | 450000 |
| 17 | West Kallada | 7 | 3 | 25000 | 525000 |
| 18 | Vettikkavala | 8 | 3 | 25000 | 600000 |
| 19 | Alappad | 1 | 3 | 25000 | 75000 |
| 20 | Thodiyoar | 2 | 3 | 25000 | 150000 |
| 21 | Perayam | 7 | 3 | 25000 | 525000 |
| 22 | Sasthamcotta | 5 | 3 | 25000 | 375000 |
| 23 | Ittira | 14 | 3 | 25000 | 1050000 |
| 24 | Pattazhy | 3 | 3 | 25000 | 225000 |
| 25 | Kunnathur | 5 | 3 | 25000 | 375000 |
| 26 | Pavithreswaram | 4 | 3 | 25000 | 300000 |
| 27 | Chadayamangalam | 9 | 3 | 25000 | 675000 |
| | | | | | 21000000 |

| Appendix 45-2 Fund Requirements | | | | | |
|---------------------------------|---|---------------------------|-------------|----------------------|----------------|
| 2 | Thrust 3 | | | | |
| | Purchase of land for Aws having no land by 2019 | | | | |
| Sl.No. | LSGs | No. of AWC having no land | Land needed | Value of land / cent | Total |
| 1 | Perinadu | 9 | 3 | 25000 | 675000 |
| 2 | Panayam | 6 | 3 | 25000 | 450000 |
| 3 | Pattazhy vadakkekara | 2 | 3 | 25000 | 150000 |
| 4 | Chithara | 14 | 3 | 25000 | 1050000 |
| 5 | Thekkumbhagom | 4 | 3 | 25000 | 300000 |
| 6 | East Kallada | 4 | 3 | 25000 | 300000 |
| 7 | Mylom | 9 | 3 | 25000 | 675000 |
| 8 | Sooranadu North | 4 | 3 | 25000 | 300000 |
| 9 | Mantrothuruthu | 2 | 3 | 25000 | 150000 |
| 10 | Thrikkaruva | 0 | 3 | 25000 | 0 |
| 11 | Sooranadu south | 3 | 3 | 25000 | 225000 |
| 12 | Clappana | 1 | 3 | 25000 | 75000 |
| 13 | Poruvazhy | 2 | 3 | 25000 | 150000 |
| 14 | Mynagappally | 0 | 3 | 25000 | 0 |
| 15 | Oachira | 3 | 3 | 25000 | 225000 |
| 16 | Nedumpana | 10 | 3 | 25000 | 750000 |
| 17 | Piravanthoor | 10 | 3 | 25000 | 750000 |
| 18 | Adichanallor | 6 | 3 | 25000 | 450000 |
| 19 | Kalluvathukkal | 8 | 3 | 25000 | 600000 |
| | | | | | 7275000 |

| Appendix 45-2 Fund Requirements | | | | |
|---------------------------------|--------------------|--|----------------|------------------|
| 3 | Thrust 1 A | | | |
| | | Building for AWCs having land by 2015 | | |
| Sl.No. | LSGs | No. of AWC having land but no building | Amount per AWC | Total |
| 1 | Kollam Corporation | 219 | 450000 | 98550000 |
| 2 | Neendakara | 9 | 450000 | 4050000 |
| 3 | Thrikkadavoor | 11 | 450000 | 4950000 |
| 4 | Kottamkara | 20 | 450000 | 9000000 |
| 5 | Elampalloor | 24 | 450000 | 10800000 |
| 6 | Thrikkovilvattom | 22 | 450000 | 9900000 |
| 7 | Mayyanadu | 32 | 450000 | 14400000 |
| 8 | Punalur | 41 | 450000 | 18450000 |
| 9 | Kottarakkara | 22 | 450000 | 9900000 |
| 10 | Karunagappally | 19 | 450000 | 8550000 |
| 11 | Anchal | 7 | 450000 | 3150000 |
| 12 | Chathanoor | 8 | 450000 | 3600000 |
| | | | | 195300000 |

| Appendix 45-2 Fund Requirements | | | | |
|---------------------------------|------------------|--|----------------|------------------|
| 3 | Thrust 1B | | | |
| | | Building for AWCs having land by 2015 | | |
| Sl.No. | LSGs | No. of AWC having land but no building | Amount per AWC | Total |
| 1 | Ezhukone | 20 | 450000 | 9000000 |
| 2 | Elamadu | 16 | 450000 | 7200000 |
| 3 | Veliyam | 23 | 450000 | 10350000 |
| 4 | Kareepra | 18 | 450000 | 8100000 |
| 5 | Aryankavu | 12 | 450000 | 5400000 |
| 6 | Neduvathur | 18 | 450000 | 8100000 |
| 7 | Pooypally | 18 | 450000 | 8100000 |
| 8 | Vilakudy | 18 | 450000 | 8100000 |
| 9 | Kundara | 15 | 450000 | 6750000 |
| 10 | Kulasekharapuram | 9 | 450000 | 4050000 |
| 11 | Thazhava | 27 | 450000 | 12150000 |
| 12 | Alayamon | 11 | 450000 | 4950000 |
| 13 | Edamulakkal | 13 | 450000 | 5850000 |
| 14 | Poothakkulam | 6 | 450000 | 2700000 |
| | | | | 100800000 |

| Appendix 45-2 Fund Requirements | | | | |
|---------------------------------|-----------------|--|----------------|------------------|
| 3 | Thrust 2 | | | |
| | | Building for Aws having land by 2017 | | |
| Sl.N o. | LSGs | No. of AWC having land but no building | Amount per AWC | Total |
| 1 | Ummannur | 11 | 450000 | 4950000 |
| 2 | Panmana | 20 | 450000 | 9000000 |
| 3 | Kadakkal | 29 | 450000 | 13050000 |
| 4 | Karavallor | 10 | 450000 | 4500000 |
| 5 | Kulathupuzha | 12 | 450000 | 5400000 |
| 6 | Yeroor | 11 | 450000 | 4950000 |
| 7 | Pathanapuram | 14 | 450000 | 6300000 |
| 8 | Paravoor | 11 | 450000 | 4950000 |
| 9 | Thenmala | 8 | 450000 | 3600000 |
| 10 | Thevalakkara | 17 | 450000 | 7650000 |
| 11 | Melila | 7 | 450000 | 3150000 |
| 12 | Thalavoor | 16 | 450000 | 7200000 |
| 13 | Nilamel | 9 | 450000 | 4050000 |
| 14 | Chavara | 15 | 450000 | 6750000 |
| 15 | Velinalloor | 19 | 450000 | 8550000 |
| 16 | Kulakkada | 6 | 450000 | 2700000 |
| 17 | West Kallada | 7 | 450000 | 3150000 |
| 18 | Vettikkavala | 8 | 450000 | 3600000 |
| 19 | Alappad | 1 | 450000 | 450000 |
| 20 | Thodiyoor | 2 | 450000 | 900000 |
| 21 | Perayam | 7 | 450000 | 3150000 |
| 22 | Sasthamcotta | 5 | 450000 | 2250000 |
| 23 | Ittira | 14 | 450000 | 6300000 |
| 24 | Pattazhy | 3 | 450000 | 1350000 |
| 25 | Kunnathur | 5 | 450000 | 2250000 |
| 26 | Pavithreswaram | 4 | 450000 | 1800000 |
| 27 | Chadayamangalam | 9 | 450000 | 4050000 |
| | | | | 126000000 |

| Appendix 45-2 Fund Requirements | | | | |
|---------------------------------|----------------------|--|----------------|-----------------|
| 3 | Thrust 3 | | | |
| | | Building for Aws having land by 2019 | | |
| Sl.N o. | LSGs | No. of AWC having land but no building | Amount per AWC | Total |
| 1 | Perinadu | 9 | 450000 | 4050000 |
| 2 | Panayam | 6 | 450000 | 2700000 |
| 3 | Pattazhy vadakkekara | 2 | 450000 | 900000 |
| 4 | Chithara | 14 | 450000 | 6300000 |
| 5 | Thekkumbhagom | 4 | 450000 | 1800000 |
| 6 | East Kallada | 4 | 450000 | 1800000 |
| 7 | Mylom | 9 | 450000 | 4050000 |
| 8 | Sooranadu North | 4 | 450000 | 1800000 |
| 9 | Manthoruruthu | 2 | 450000 | 900000 |
| 10 | Thirikkaruva | 0 | 450000 | 0 |
| 11 | Sooranadu south | 3 | 450000 | 1350000 |
| 12 | Clappana | 1 | 450000 | 450000 |
| 13 | Poruvazhy | 2 | 450000 | 900000 |
| 14 | Mynagappally | 0 | 450000 | 0 |
| 15 | Oachira | 3 | 450000 | 1350000 |
| 16 | Nedumpana | 10 | 450000 | 4500000 |
| 17 | Piravanthoor | 10 | 450000 | 4500000 |
| 18 | Adichanallor | 6 | 450000 | 2700000 |
| 19 | Kalluvathukkal | 8 | 450000 | 3600000 |
| | | | | 43650000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | | | |
|---|--------------------|--|-----------------------|---------|----------------|---------|----------------|----------|----------------|----------|----------------|----------|-------------|
| Other facilities for Aws having own land and building by 2015 | | | | | | | | | | | | | |
| 4 | Thrust I A | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Play Materials | | Others | | Grand Total |
| Sl.No. | LSGs | No. of AWC having land but no building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | |
| 1 | Kollam Corporation | 219 | 15000 | 3285000 | 15000 | 3285000 | 70000 | 15330000 | 50000 | 10950000 | 100000 | 21900000 | |
| 2 | Neendakara | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 50000 | 450000 | 100000 | 900000 | |
| 3 | Thrikkedavoor | 11 | 15000 | 165000 | 15000 | 165000 | 70000 | 770000 | 50000 | 550000 | 100000 | 1100000 | |
| 4 | Kottamkara | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 50000 | 1000000 | 100000 | 2000000 | |
| 5 | Elampalloor | 24 | 15000 | 360000 | 15000 | 360000 | 70000 | 1680000 | 50000 | 1200000 | 100000 | 2400000 | |
| 6 | Thrikkovilvattom | 22 | 15000 | 330000 | 15000 | 330000 | 70000 | 1540000 | 50000 | 1100000 | 100000 | 2200000 | |
| 7 | Mayyanadu | 32 | 15000 | 480000 | 15000 | 480000 | 70000 | 2240000 | 50000 | 1600000 | 100000 | 3200000 | |
| 8 | Punalur | 41 | 15000 | 615000 | 15000 | 615000 | 70000 | 2870000 | 50000 | 2050000 | 100000 | 4100000 | |
| 9 | Kottarakkara | 22 | 15000 | 330000 | 15000 | 330000 | 70000 | 1540000 | 50000 | 1100000 | 100000 | 2200000 | |
| 10 | Karunagappally | 19 | 15000 | 285000 | 15000 | 285000 | 70000 | 1330000 | 50000 | 950000 | 100000 | 1900000 | |
| 11 | Anchal | 7 | 15000 | 105000 | 15000 | 105000 | 70000 | 490000 | 50000 | 350000 | 100000 | 700000 | |
| 12 | Chathannoor | 8 | 15000 | 120000 | 15000 | 120000 | 70000 | 560000 | 50000 | 400000 | 100000 | 800000 | |
| | | | | 6510000 | | 6510000 | | 30380000 | | 21700000 | | 43400000 | 108500000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | | | |
|--|------------------|--|-----------------------|---------|----------------|---------|----------------|----------|----------------|----------|----------------|----------|-------------|
| Other facilities for AWCs having own land and building by 2015 | | | | | | | | | | | | | |
| 4 | Thrust I B | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Play Materials | | Others | | |
| S.N o. | LSGs | No. of AWC having land but no building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Ezhukone | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 50000 | 1000000 | 100000 | 2000000 | |
| 2 | Elamadu | 16 | 15000 | 240000 | 15000 | 240000 | 70000 | 1120000 | 50000 | 800000 | 100000 | 1600000 | |
| 3 | Veliyam | 23 | 15000 | 345000 | 15000 | 345000 | 70000 | 1610000 | 50000 | 1150000 | 100000 | 2300000 | |
| 4 | Kareepra | 18 | 15000 | 270000 | 15000 | 270000 | 70000 | 1260000 | 50000 | 900000 | 100000 | 1800000 | |
| 5 | Aryankavu | 12 | 15000 | 180000 | 15000 | 180000 | 70000 | 840000 | 50000 | 600000 | 100000 | 1200000 | |
| 6 | Neduvathur | 18 | 15000 | 270000 | 15000 | 270000 | 70000 | 1260000 | 50000 | 900000 | 100000 | 1800000 | |
| 7 | Pooyappally | 18 | 15000 | 270000 | 15000 | 270000 | 70000 | 1260000 | 50000 | 900000 | 100000 | 1800000 | |
| 8 | Vilakudy | 18 | 15000 | 270000 | 15000 | 270000 | 70000 | 1260000 | 50000 | 900000 | 100000 | 1800000 | |
| 9 | Kundara | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 50000 | 750000 | 100000 | 1500000 | |
| 10 | Kulasekharapuram | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 50000 | 450000 | 100000 | 900000 | |
| 11 | Thazhava | 27 | 15000 | 405000 | 15000 | 405000 | 70000 | 1890000 | 50000 | 1350000 | 100000 | 2700000 | |
| 12 | Alayamon | 11 | 15000 | 165000 | 15000 | 165000 | 70000 | 770000 | 50000 | 550000 | 100000 | 1100000 | |
| 13 | Edamulakkal | 13 | 15000 | 195000 | 15000 | 195000 | 70000 | 910000 | 50000 | 650000 | 100000 | 1300000 | |
| 14 | Poothakkulam | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 50000 | 300000 | 100000 | 600000 | |
| | | | | 3360000 | | 3360000 | | 15680000 | | 11200000 | | 22400000 | 56000000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | | | |
|--|-----------------|--|-----------------------|---------|----------------|---------|----------------|----------|----------------|----------|----------------|----------|-------------|
| Other facilities for AWCs having own land and building by 2018 | | | | | | | | | | | | | |
| 4 | Thrust 2 | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Play Materials | | Others | | |
| Sl. No. | LSGs | No. of AWC having land but no building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Ummannur | 11 | 15000 | 165000 | 15000 | 165000 | 70000 | 770000 | 50000 | 550000 | 100000 | 1100000 | |
| 2 | Parmana | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 50000 | 1000000 | 100000 | 2000000 | |
| 3 | Kadakkal | 29 | 15000 | 435000 | 15000 | 435000 | 70000 | 2030000 | 50000 | 1450000 | 100000 | 2900000 | |
| 4 | Karavallur | 10 | 15000 | 150000 | 15000 | 150000 | 70000 | 700000 | 50000 | 500000 | 100000 | 1000000 | |
| 5 | Kulathupuzha | 12 | 15000 | 180000 | 15000 | 180000 | 70000 | 840000 | 50000 | 600000 | 100000 | 1200000 | |
| 6 | Yeroor | 11 | 15000 | 165000 | 15000 | 165000 | 70000 | 770000 | 50000 | 550000 | 100000 | 1100000 | |
| 7 | Pathanapuram | 14 | 15000 | 210000 | 15000 | 210000 | 70000 | 980000 | 50000 | 700000 | 100000 | 1400000 | |
| 8 | Paravoor | 11 | 15000 | 165000 | 15000 | 165000 | 70000 | 770000 | 50000 | 550000 | 100000 | 1100000 | |
| 9 | Thenmala | 8 | 15000 | 120000 | 15000 | 120000 | 70000 | 560000 | 50000 | 400000 | 100000 | 800000 | |
| 10 | Thevalakkara | 17 | 15000 | 255000 | 15000 | 255000 | 70000 | 1190000 | 50000 | 850000 | 100000 | 1700000 | |
| 11 | Melila | 7 | 15000 | 105000 | 15000 | 105000 | 70000 | 490000 | 50000 | 350000 | 100000 | 700000 | |
| 12 | Thalavoor | 16 | 15000 | 240000 | 15000 | 240000 | 70000 | 1120000 | 50000 | 800000 | 100000 | 1600000 | |
| 13 | Nilamel | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 50000 | 450000 | 100000 | 900000 | |
| 14 | Chavara | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 50000 | 750000 | 100000 | 1500000 | |
| 15 | Velinallur | 19 | 15000 | 285000 | 15000 | 285000 | 70000 | 1330000 | 50000 | 950000 | 100000 | 1900000 | |
| 16 | Kulakkada | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 50000 | 300000 | 100000 | 600000 | |
| 17 | West Kallada | 7 | 15000 | 105000 | 15000 | 105000 | 70000 | 490000 | 50000 | 350000 | 100000 | 700000 | |
| 18 | Vetikkavala | 8 | 15000 | 120000 | 15000 | 120000 | 70000 | 560000 | 50000 | 400000 | 100000 | 800000 | |
| 19 | Alappad | 1 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 20 | Thodiyoor | 2 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 21 | Perayam | 7 | 15000 | 105000 | 15000 | 105000 | 70000 | 490000 | 50000 | 350000 | 100000 | 700000 | |
| 22 | Sasithamcotta | 5 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 50000 | 250000 | 100000 | 500000 | |
| 23 | Ittira | 14 | 15000 | 210000 | 15000 | 210000 | 70000 | 980000 | 50000 | 700000 | 100000 | 1400000 | |
| 24 | Pattazhy | 3 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 25 | Kunnathur | 5 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 50000 | 250000 | 100000 | 500000 | |
| 26 | Pavithreswaram | 4 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 50000 | 200000 | 100000 | 400000 | |
| 27 | Chadayamangalam | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 50000 | 450000 | 100000 | 900000 | |
| | | | | 4200000 | | 4200000 | | 19600000 | | 14000000 | | 28000000 | 70000000 |

Appendix 45-2 Fund Requirements

| Other facilities for Aaws having own land and building by 2021 | | | | | | | | | | | | | |
|--|----------------------|--|-----------------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|-------------|
| 4 | Thrust 3 | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Play Materials | | Others | | |
| Sl. No. | LSGs | No. of AWC having land but no building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Perinadu | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 50000 | 450000 | 100000 | 900000 | |
| 2 | Panayam | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 50000 | 300000 | 100000 | 600000 | |
| 3 | Pattazhy vadakkekara | 2 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 4 | Chithara | 14 | 15000 | 210000 | 15000 | 210000 | 70000 | 980000 | 50000 | 700000 | 100000 | 1400000 | |
| 5 | Thekkumbhagom | 4 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 50000 | 200000 | 100000 | 400000 | |
| 6 | East Kallada | 4 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 50000 | 200000 | 100000 | 400000 | |
| 7 | Mylom | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 50000 | 450000 | 100000 | 900000 | |
| 8 | Sooranadu North | 4 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 50000 | 200000 | 100000 | 400000 | |
| 9 | Mantretthuruthu | 2 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 10 | Thrikkaruva | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 11 | Sooranadu south | 3 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 12 | Clappana | 1 | 15000 | 15000 | 15000 | 15000 | 70000 | 70000 | 50000 | 50000 | 100000 | 100000 | |
| 13 | Poruvazhy | 2 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 50000 | 100000 | 100000 | 200000 | |
| 14 | Mynagappally | 0 | 15000 | 0 | 15000 | 0 | 70000 | 0 | 50000 | 0 | 100000 | 0 | |
| 15 | Oachira | 3 | 15000 | 45000 | 15000 | 45000 | 70000 | 210000 | 50000 | 150000 | 100000 | 300000 | |
| 16 | Nedumpana | 10 | 15000 | 150000 | 15000 | 150000 | 70000 | 700000 | 50000 | 500000 | 100000 | 1000000 | |
| 17 | Piravanthoor | 10 | 15000 | 150000 | 15000 | 150000 | 70000 | 700000 | 50000 | 500000 | 100000 | 1000000 | |
| 18 | Adichanallor | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 50000 | 300000 | 100000 | 600000 | |
| 19 | Kalluvathukkal | 8 | 15000 | 120000 | 15000 | 120000 | 70000 | 560000 | 50000 | 400000 | 100000 | 800000 | |
| | | | | 1455000 | | 1455000 | | 6790000 | | 4850000 | | 9700000 | 24250000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | |
|---|-------------------|--------------------------------|-----------------------|---------|----------------|---------|----------------|----------|----------------|----------|-------------|
| Other facilities for AWCs having own building by 2009 | | | | | | | | | | | |
| 5 | Thrust I A | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Others | | Grand Total |
| Sl.No | LSGs | No. of AWC having own building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | |
| 1 | Kolam Corporation | 74 | 15000 | 1110000 | 15000 | 1110000 | 70000 | 5180000 | 100000 | 7400000 | |
| 2 | Neendakara | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 100000 | 600000 | |
| 3 | Thrikkadavoor | 13 | 15000 | 270000 | 15000 | 270000 | 70000 | 1260000 | 100000 | 1800000 | |
| 4 | Kottamkara | 5 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 100000 | 500000 | |
| 5 | Elampalloor | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 100000 | 600000 | |
| 6 | Thrikkovilattom | 22 | 15000 | 330000 | 15000 | 330000 | 70000 | 1540000 | 100000 | 2200000 | |
| 7 | Mayyanadu | 4 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 100000 | 400000 | |
| 8 | Punalur | 14 | 15000 | 210000 | 15000 | 210000 | 70000 | 980000 | 100000 | 1400000 | |
| 9 | Kottarakkara | 5 | 15000 | 75000 | 15000 | 75000 | 70000 | 350000 | 100000 | 500000 | |
| 10 | Karunagappally | 22 | 15000 | 330000 | 15000 | 330000 | 70000 | 1540000 | 100000 | 2200000 | |
| 11 | Anchal | 25 | 15000 | 375000 | 15000 | 375000 | 70000 | 1750000 | 100000 | 2500000 | |
| 12 | Chathanoor | 25 | 15000 | 375000 | 15000 | 375000 | 70000 | 1750000 | 100000 | 2500000 | |
| | | | | 3390000 | | 3390000 | | 15820000 | | 22600000 | 45200000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | |
|---|------------------|--------------------------------|-----------------------|---------|----------------|---------|----------------|---------|----------------|----------|-------------|
| Other facilities for AWCs having own building by 2009 | | | | | | | | | | | |
| 5 | Thrust I B | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Others | | |
| Sl.No | LSGs | No. of AWC having OWN building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Ezhukone | 4 | 15000 | 60000 | 15000 | 60000 | 70000 | 280000 | 100000 | 400000 | |
| 2 | Elamadu | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 100000 | 900000 | |
| 3 | Veliyam | 8 | 15000 | 120000 | 15000 | 120000 | 70000 | 560000 | 100000 | 800000 | |
| 4 | Kareepra | 10 | 15000 | 150000 | 15000 | 150000 | 70000 | 700000 | 100000 | 1000000 | |
| 5 | Aryankavu | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 100000 | 600000 | |
| 6 | Neduvathur | 7 | 15000 | 105000 | 15000 | 105000 | 70000 | 490000 | 100000 | 700000 | |
| 7 | Pooyappally | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 100000 | 600000 | |
| 8 | Vilakudy | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 100000 | 1500000 | |
| 9 | Kundara | 6 | 15000 | 90000 | 15000 | 90000 | 70000 | 420000 | 100000 | 600000 | |
| 10 | Kulasekharapuram | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 100000 | 2000000 | |
| 11 | Thazhava | 2 | 15000 | 30000 | 15000 | 30000 | 70000 | 140000 | 100000 | 200000 | |
| 12 | Alayamon | 10 | 15000 | 150000 | 15000 | 150000 | 70000 | 700000 | 100000 | 1000000 | |
| 13 | Edamulakkal | 22 | 15000 | 330000 | 15000 | 330000 | 70000 | 1540000 | 100000 | 2200000 | |
| 14 | Poothakkulam | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 100000 | 1500000 | |
| | | | | 2100000 | | 2100000 | | 9800000 | | 14000000 | 28000000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | |
|---|-----------------|--------------------------------|-----------------------|---------|----------------|---------|----------------|----------|----------------|----------|-------------|
| Other facilities for AWCs having own building by 2010 | | | | | | | | | | | |
| 5 | Thrust 2 | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Others | | |
| S.N o. | LSGs | No. of AWC having OWN building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Ummannur | 25 | 15000 | 375000 | 15000 | 375000 | 70000 | 1750000 | 100000 | 2500000 | |
| 2 | Panmana | 23 | 15000 | 345000 | 15000 | 345000 | 70000 | 1610000 | 100000 | 2300000 | |
| 3 | Kadakkal | 25 | 15000 | 375000 | 15000 | 375000 | 70000 | 1750000 | 100000 | 2500000 | |
| 4 | Karavalloor | 13 | 15000 | 195000 | 15000 | 195000 | 70000 | 910000 | 100000 | 1300000 | |
| 5 | Kulathupuzha | 22 | 15000 | 330000 | 15000 | 330000 | 70000 | 1540000 | 100000 | 2200000 | |
| 6 | Yeroor | 19 | 15000 | 285000 | 15000 | 285000 | 70000 | 1330000 | 100000 | 1900000 | |
| 7 | Pathanapuram | 14 | 15000 | 210000 | 15000 | 210000 | 70000 | 980000 | 100000 | 1400000 | |
| 8 | Paravoor | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 100000 | 1500000 | |
| 9 | Thenmala | 17 | 15000 | 255000 | 15000 | 255000 | 70000 | 1190000 | 100000 | 1700000 | |
| 10 | Thevalakkara | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 100000 | 2000000 | |
| 11 | Melila | 14 | 15000 | 210000 | 15000 | 210000 | 70000 | 980000 | 100000 | 1400000 | |
| 12 | Thalavoor | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 100000 | 2000000 | |
| 13 | Nilamel | 10 | 15000 | 150000 | 15000 | 150000 | 70000 | 700000 | 100000 | 1000000 | |
| 14 | Chavara | 21 | 15000 | 315000 | 15000 | 315000 | 70000 | 1470000 | 100000 | 2100000 | |
| 15 | Velinalloor | 13 | 15000 | 195000 | 15000 | 195000 | 70000 | 910000 | 100000 | 1300000 | |
| 16 | Kulakkada | 23 | 15000 | 345000 | 15000 | 345000 | 70000 | 1610000 | 100000 | 2300000 | |
| 17 | West Kallada | 11 | 15000 | 165000 | 15000 | 165000 | 70000 | 770000 | 100000 | 1100000 | |
| 18 | Vettikkavala | 26 | 15000 | 390000 | 15000 | 390000 | 70000 | 1820000 | 100000 | 2600000 | |
| 19 | Aleppad | 19 | 15000 | 285000 | 15000 | 285000 | 70000 | 1330000 | 100000 | 1900000 | |
| 20 | Thodiyoor | 39 | 15000 | 585000 | 15000 | 585000 | 70000 | 2730000 | 100000 | 3900000 | |
| 21 | Perayam | 13 | 15000 | 195000 | 15000 | 195000 | 70000 | 910000 | 100000 | 1300000 | |
| 22 | Sasthamcotta | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 100000 | 1500000 | |
| 23 | Ittira | 25 | 15000 | 375000 | 15000 | 375000 | 70000 | 1750000 | 100000 | 2500000 | |
| 24 | Pattazhy | 16 | 15000 | 240000 | 15000 | 240000 | 70000 | 1120000 | 100000 | 1600000 | |
| 25 | Kunnathur | 13 | 15000 | 195000 | 15000 | 195000 | 70000 | 910000 | 100000 | 1300000 | |
| 26 | Pavithreswaram | 26 | 15000 | 390000 | 15000 | 390000 | 70000 | 1820000 | 100000 | 2600000 | |
| 27 | Chadayamangalam | 13 | 15000 | 195000 | 15000 | 195000 | 70000 | 910000 | 100000 | 1300000 | |
| | | | | 7650000 | | 7650000 | | 35700000 | | 51000000 | 102000000 |

| Appendix 45-2 Fund Requirements | | | | | | | | | | | |
|---|----------------------|--------------------------------|-----------------------|----------------|----------------|----------------|----------------|-----------------|----------------|-----------------|-----------------|
| Other facilities for AWCs having own building by 2011 | | | | | | | | | | | |
| 5 | Thrust 3 | | Child Friendly Toilet | | Water Supply | | Compound Wall | | Others | | |
| SIN o. | LSGs | No. of AWC having own building | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Amount per AWC | Total | Grand Total |
| 1 | Perinadu | 21 | 15000 | 315000 | 15000 | 315000 | 70000 | 1470000 | 100000 | 2100000 | |
| 2 | Panayam | 17 | 15000 | 255000 | 15000 | 255000 | 70000 | 1190000 | 100000 | 1700000 | |
| 3 | Pattazhy vadakkekara | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 100000 | 1500000 | |
| 4 | Chithara | 28 | 15000 | 420000 | 15000 | 420000 | 70000 | 1960000 | 100000 | 2800000 | |
| 5 | Thekkumbnagom | 11 | 15000 | 165000 | 15000 | 165000 | 70000 | 770000 | 100000 | 1100000 | |
| 6 | East Kalada | 15 | 15000 | 225000 | 15000 | 225000 | 70000 | 1050000 | 100000 | 1500000 | |
| 7 | Vylom | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 100000 | 2000000 | |
| 8 | Sooranadu North | 17 | 15000 | 255000 | 15000 | 255000 | 70000 | 1190000 | 100000 | 1700000 | |
| 9 | Vantrothuruthu | 9 | 15000 | 135000 | 15000 | 135000 | 70000 | 630000 | 100000 | 900000 | |
| 10 | Thrikkaruva | 18 | 15000 | 270000 | 15000 | 270000 | 70000 | 1260000 | 100000 | 1800000 | |
| 11 | Sooranadu south | 12 | 15000 | 180000 | 15000 | 180000 | 70000 | 840000 | 100000 | 1200000 | |
| 12 | Clappana | 17 | 15000 | 255000 | 15000 | 255000 | 70000 | 1190000 | 100000 | 1700000 | |
| 13 | Poruvazhy | 17 | 15000 | 255000 | 15000 | 255000 | 70000 | 1190000 | 100000 | 1700000 | |
| 14 | Vynagappally | 36 | 15000 | 540000 | 15000 | 540000 | 70000 | 2520000 | 100000 | 3600000 | |
| 15 | Cachira | 18 | 15000 | 270000 | 15000 | 270000 | 70000 | 1260000 | 100000 | 1800000 | |
| 16 | Nedumpana | 30 | 15000 | 450000 | 15000 | 450000 | 70000 | 2100000 | 100000 | 3000000 | |
| 17 | Piravanthoor | 30 | 15000 | 450000 | 15000 | 450000 | 70000 | 2100000 | 100000 | 3000000 | |
| 18 | Adichanallor | 20 | 15000 | 300000 | 15000 | 300000 | 70000 | 1400000 | 100000 | 2000000 | |
| 19 | Kalluvathukkal | 24 | 15000 | 360000 | 15000 | 360000 | 70000 | 1680000 | 100000 | 2400000 | |
| | Total | | | 5625000 | | 5625000 | | 26250000 | | 37500000 | 75000000 |

| Appendix 45-2 Fund Requirements | | | | |
|--|--------------------|--------------------------------|----------------|-----------------|
| Play Materials for Aws having own building by 2012 | | | | |
| 6 | Thrust I A | | Play Materials | |
| Sl.No. | LSGs | No. of AWC having own building | Amount per AWC | Total |
| 1 | Kollam Corporation | 74 | 50000 | 3700000 |
| 2 | Neendakara | 6 | 50000 | 300000 |
| 3 | Thrikkadavoor | 18 | 50000 | 900000 |
| 4 | Kottamkara | 5 | 50000 | 250000 |
| 5 | Elampalloor | 6 | 50000 | 300000 |
| 6 | Thrikkovilvattom | 22 | 50000 | 1100000 |
| 7 | Mayyanadu | 4 | 50000 | 200000 |
| 8 | Punalur | 14 | 50000 | 700000 |
| 9 | Kottarakkara | 5 | 50000 | 250000 |
| 10 | Karunagappally | 22 | 50000 | 1100000 |
| 11 | Anchal | 25 | 50000 | 1250000 |
| 12 | Chathannoor | 25 | 50000 | 1250000 |
| | Total | | | 11300000 |

| Appendix 45-2 Fund Requirements | | | | |
|--|------------------|--------------------------------|----------------|----------------|
| Play Materials for Aws having own building by 2012 | | | | |
| 6 | Thrust I B | | Play Materials | |
| Sl.No. | LSGs | No. of AWC having OWN building | Amount per AWC | Total |
| 1 | Ezhukone | 4 | 50000 | 200000 |
| 2 | Elamadu | 9 | 50000 | 450000 |
| 3 | Veliyam | 8 | 50000 | 400000 |
| 4 | Kareepra | 10 | 50000 | 500000 |
| 5 | Aryankavu | 6 | 50000 | 300000 |
| 6 | Neduvathur | 7 | 50000 | 350000 |
| 7 | Pooyappally | 6 | 50000 | 300000 |
| 8 | Vilakudy | 15 | 50000 | 750000 |
| 9 | Kundara | 6 | 50000 | 300000 |
| 10 | Kulasekharapuram | 20 | 50000 | 1000000 |
| 11 | Thazhava | 2 | 50000 | 100000 |
| 12 | Alayamon | 10 | 50000 | 500000 |
| 13 | Edamulakkal | 22 | 50000 | 1100000 |
| 14 | Poothakkulam | 15 | 50000 | 750000 |
| | Total | | | 7000000 |

| Appendix 45-2 Fund Requirements | | | | |
|--|-----------------|--------------------------------|----------------|----------|
| Play Materials for Aws having own building by 2015 | | | | |
| 6 | Thrust 2 | | Play Materials | |
| Sl.N o. | LSGs | No. of AWC having OWN building | Amount per AWC | Total |
| 1 | Ummannur | 25 | 50000 | 1250000 |
| 2 | Panmana | 23 | 50000 | 1150000 |
| 3 | Kadakkal | 25 | 50000 | 1250000 |
| 4 | Karavallur | 13 | 50000 | 650000 |
| 5 | Kulathupuzha | 22 | 50000 | 1100000 |
| 6 | Yeroor | 19 | 50000 | 950000 |
| 7 | Pathanapuram | 14 | 50000 | 700000 |
| 8 | Paravoor | 15 | 50000 | 750000 |
| 9 | Thenmala | 17 | 50000 | 850000 |
| 10 | Thevalakkara | 20 | 50000 | 1000000 |
| 11 | Melila | 14 | 50000 | 700000 |
| 12 | Thalavoor | 20 | 50000 | 1000000 |
| 13 | Nilamel | 10 | 50000 | 500000 |
| 14 | Chavara | 21 | 50000 | 1050000 |
| 15 | Velinalloor | 13 | 50000 | 650000 |
| 16 | Kulakkada | 23 | 50000 | 1150000 |
| 17 | West Kallada | 11 | 50000 | 550000 |
| 18 | Vettikkavala | 26 | 50000 | 1300000 |
| 19 | Alappad | 19 | 50000 | 950000 |
| 20 | Thodiyoor | 39 | 50000 | 1950000 |
| 21 | Perayam | 13 | 50000 | 650000 |
| 22 | Sasthamcotta | 15 | 50000 | 750000 |
| 23 | Ittira | 25 | 50000 | 1250000 |
| 24 | Pattazhy | 16 | 50000 | 800000 |
| 25 | Kunnathur | 13 | 50000 | 650000 |
| 26 | Pavithreswaram | 26 | 50000 | 1300000 |
| 27 | Chadayamangalam | 13 | 50000 | 650000 |
| Total | | | | 25500000 |

| Appendix 45-2 Fund Requirements | | | | |
|--|----------------------|--------------------------------|----------------|----------|
| Play Materials for Aws having own building by 2017 | | | | |
| 6 | Thrust 3 | | Play Materials | |
| Sl.N o. | LSGs | No. of AWC having own building | Amount per AWC | Total |
| 1 | Perinadu | 21 | 50000 | 1050000 |
| 2 | Panayam | 17 | 50000 | 850000 |
| 3 | Pattazhy vadakkekara | 15 | 50000 | 750000 |
| 4 | Chithara | 28 | 50000 | 1400000 |
| 5 | Thekkumbhagom | 11 | 50000 | 550000 |
| 6 | East Kallada | 15 | 50000 | 750000 |
| 7 | Mylom | 20 | 50000 | 1000000 |
| 8 | Sooranadu North | 17 | 50000 | 850000 |
| 9 | Mantrothuruthu | 9 | 50000 | 450000 |
| 10 | Thrikkaruva | 18 | 50000 | 900000 |
| 11 | Sooranadu south | 12 | 50000 | 600000 |
| 12 | Clappana | 17 | 50000 | 850000 |
| 13 | Poruvazhy | 17 | 50000 | 850000 |
| 14 | Mynagappally | 36 | 50000 | 1800000 |
| 15 | Oachira | 18 | 50000 | 900000 |
| 16 | Nedumpana | 30 | 50000 | 1500000 |
| 17 | Piravanthoor | 30 | 50000 | 1500000 |
| 18 | Adichanallor | 20 | 50000 | 1000000 |
| 19 | Kalluvathukkal | 24 | 50000 | 1200000 |
| Total | | | | 18750000 |

| Appendix 45-3 Phasing of Proposals for Fire and Rescue Services | | | | | | | |
|---|--|---|---|--|--|---|---|
| Name of Sector : Social Welfare | | | | | | | |
| Name of Proposal : New Fire Stations | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | | Sasthamcotta : 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) | Sasthamcotta: 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. Oyur (Vettikavala) : 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) | Oyur (Vettikavala) : 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. Kottamkara : 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) | Kottamkara: 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. Chethannur: 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) | Chalthannur : 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. Kottarakkara : 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) | Kottarakkara: 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. Anchal : 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) |
| Agencies | | Fire and Rescue Services Department, LSGIs | Fire and Rescue Services Department, LSGIs | Fire and Rescue Services Department, LSGIs | Fire and Rescue Services Department, LSGIs | Fire and Rescue Services Department, LSGIs | Fire and Rescue Services Department, LSGIs |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Ancha : 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. Eravipuram: 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) | Eravipuram: 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. Thrikkadavoor: 1. Land including parade ground and Building 2. Infrastructure (Static water tank etc.) | Thrikkadavoor: 1. Purchase of Emergency tender , Mobile tank unit, Water lorry, Recovery vehicle, Ambulance, Jeep, etc. | | | | |
| Agencies | Fire and Rescue Services Department, LSGIs | Fire and Rescue Services Department, LSGIs | Fire and Rescue Services Department, LSGIs | | | | |

| Appendix 45-3 Phasing of Proposals for Fire and Rescue Services | | | | | | | |
|---|-------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|-------------------------------------|
| Name of Sector : Social Welfare | | | | | | | |
| Name of Proposal :Modernisation of Existing Fire Stations | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | | | | | | | |
| Activities | | Modernisation of Kadappakkada Station | Modernisation of Chamakkada Station | Modernisation of Punalur Station | Modernisation of Kundara Station | Modernisation of Karunagapally Station | Modernisation of Kadakkal Station |
| Agencies | | Fire and Rescue Services Department | Fire and Rescue Services Department | Fire and Rescue Services Department | Fire and Rescue Services Department | Fire and Rescue Services Department | Fire and Rescue Services Department |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Modernisation of Paravur Station | | | | | | |
| Agencies | Fire and Rescue Services Department | | | | | | |

| Appendix 47-1 Additional Power Requirements | | | | | | | |
|---|----------------|--|-------------|---------------|-------------|--|-----------------------|
| Name of the Sector: Power | | | | | | | |
| Sl.No. | Name of sector | Name of the proposal | Article No. | Starting Year | Ending year | Locations | Power required in KVA |
| 1 | Industries | Agro bio based industries | 2.1 | 2009 | 2011 | Thevalakkara | 15 |
| 2 | Industries | Fish Processing | 2.2 | 2008 | 2011 | Kollam Corporation, Alappad, Chavara, Karunagapally, Neendakara | 30 |
| 3 | Industries | Dairy Unit | 2.3 | 2009 | 2011 | Mynagappally | 50 |
| 4 | Industries | Milk Processing unit with chilling plant | 2.4 | 2008 | 2012 | Anchal | 50 |
| 5 | Industries | Food Processing unit | 2.5 | 2008 | 2011 | Alayamon, Edamulakkal, Pathanapuram, Yeroor, Kadakkal, Ummannur, Vettikkavala, Sooranad (N), Sooranad (S), Thodiyoor, Kareepra, Kulakkada | 15 |
| 6 | Industries | Flour mills & curry powder manufacturing units | 2.6 | 2008 | 2009 | Alayamon, Anchal, Neduvathur, Edamulakkal, Karavaloor, Kottarakkara, Veliyam, Pathanapuram, Pattazhy, Vadakkekara, Pooyappally, Yeroor, Chadayamangalam, Chithara, Elamadu, Ittiva, Kadakkal, Thalavoor, Vilakkudy, Nilamel, Melila, Mylom, Ummannur, Vettikkavala, Velinalloor, Punalur (M) | 15 |
| 7 | Industries | Mechanised coir manufacturing units | 3.1 | 2008 | 2012 | Kulasekharapuram, Paravur (M) | 10 |
| 8 | Industries | Handloom industry renovation centre | 3.2 | 2009 | 2015 | Nedungolam (Chathanloor) | 20 |
| 9 | Industries | Clay based industries | 3.3 | 2008 | 2013 | Chathanloor | 50 |
| 10 | Industries | Value added cashew kernel units | 3.4 | 2008 | 2010 | Elampallur, Ezhukone, Kalluvathukkal, Kareepra, Kunnathur, Pavithreswaram | 15 |

| | | | | | | | |
|----|------------|--|-----|------|------|---|---|
| 12 | Industries | Bamboo based products & Handicrafts items | 3.6 | 2008 | 2009 | Piravanthur, Kulathupuzha, Thenmala, Aryankavu | 2 |
| 13 | Industries | Development of existing industries | 3.7 | 2008 | 2011 | Elampallur, East Kallada, West Kallada, Perayam | 15 |
| 14 | Industries | Development of existing industries & starting of micro units | 3.8 | 2008 | 2010 | Paravur (M) Kalluvathukkal, Poothakkulam | 30 |
| 15 | Industries | Public Medical Centre & Bio Medical unit | 4.1 | 2008 | 2010 | Chathanoor | 20 |
| 16 | Industries | Ayurvedic Medicine Manufacturing units | 4.2 | 2008 | 2010 | Punalur (M) | 10 |
| 17 | Industries | IT Park paravur and Technopark, Kundara | 5.1 | 2008 | 2011 | Paravur(M),Kundara | 600 |
| 18 | Industries | Entrepreneurship Development Training centre | 5.2 | 2008 | 2009 | Kollam Corporation | 2 |
| 19 | Industries | Revival of Premo pipe factory | 6.1 | 2009 | 2011 | Chavara | 250 |
| 20 | Industries | Rehabilitation of ALIND, Travancore Chemicakls, Punalur Paper Mills, Travancore Plywood industries | 6.2 | 2009 | 2014 | Kundara, Punalur | GOI undertaking. So the rehabilitation proposals has to be formulated by GOI. Therefore the power requirement can be assessed only as per the final proposal. |
| 21 | Industries | Revival of Pomsy Biscuit manufacturing unit | 6.3 | | | Karunagappally | 10 |
| 22 | Industries | Revival of Parvathy mills | 6.4 | 2009 | 2014 | Kollam Corporation | GOI undertaking. So the rehabilitation proposals has to be formulated by GOI. Therefore the power requirement can be assessed only as per the final proposal. |
| 23 | Industries | Revival of other closed & sick industries | 6.5 | 2008 | 2009 | All LSGIs | 30 |
| 24 | Industries | Entrepreneurship Training & Employment Exchange | 7.1 | 2008 | 2009 | Kollam Corporation | GOI undertaking. So the rehabilitation proposals has to be formulated by GOI. Therefore the power requirement can be assessed only as per the final proposal. |
| 25 | Industries | Tool Room Training Centre at Qet cos | 7.2 | 2009 | 2010 | Thrikkovilattom(Umayanalloor) | 10 |
| 26 | Industries | Toy Manufacturing | 8.1 | 2009 | 2011 | Oachira | 100 |
| 27 | Industries | Mini Industrial Estate, Nedungolam | 8.2 | 2008 | 2010 | Nedungolam | 50 |

| | | | | | | | |
|----|------------|---|------|------|------|--|---|
| 28 | Industries | Coir yarn manufacturing units | 8.3 | 2008 | 2010 | Chavara, Clappana, Karunagappally, Kulasekharapuram, Munroe Island, Oachira, Panayam, Perinadu, Thekkumbhagom, Thevalakkara, Thrikkaruva, Thrikkadavoor | 5 |
| 29 | Industries | Light Engineering units | 8.4 | 2008 | 2010 | Elampalloor, Mynagappally, Ezhukone, Kalluvathukkal, Kareepra | 8 |
| 30 | Industries | Straw picture and screw pine products manufacturing units | 8.5 | 2008 | 2010 | Thrikkadavur, Thazhava | 2 |
| 31 | Industries | Note Book manufacturing unit | 8.6 | 2008 | 2010 | Punalur (M) | 15 |
| 32 | Industries | School Bag Manufacturing units | 8.7 | 2008 | 2011 | Punalur, Karunagappally | 5 |
| 33 | Industries | Wood based Industries | 8.8 | 2008 | 2011 | All I SGIs | 50 |
| 34 | Industries | Rubber Wood Treatment Plant | 8.9 | 2011 | 2012 | Pathanapuram | 200 |
| 35 | Industries | Rubber Based Industries | 8.10 | 2008 | 2011 | Alayamon, Anchal, Aryankavu, Edamulakkal, Karavalur, Yeroor, Chadayamangalam, Nilamel, Ittiva, Pattazhy, Pathananpuram, Piravanthur, Mylom, Kulakkada and Kummil | 35 |
| 36 | Industries | Food Park | 8.11 | 2008 | 2011 | Kundara, Karunagappally, Kottarakkara, Kollam Corporation, Paravur and Punalur Municipalities. | 250 |
| 37 | Industries | Development of Existing Clusters | 8.12 | 2008 | 2012 | Kollam District | GOI undertaking. So the rehabilitation proposals has to be formulated by GOI. Therefore the power requirement can be assessed only as per the final proposal. |

| Appendix 47-1 Additional Power Requirements | | | | | | | |
|---|----------------|--|-------------|---------------|-------------|-----------|-----------------------|
| Name of the Sector: SC/ST | | | | | | | |
| Sl.No. | Name of sector | Name of the proposal | Article No. | Starting Year | Ending year | Locations | Power required in KVA |
| 6 | SC/ST | Electrification of un-electrified houses | 7 | 2009 | 2011 | | |

| Appendix 47-1 Additional Power Requirements | | | | | | |
|---|----------------|---|-------------|---------------|-------------|-----------------------|
| Name of the sector: Agriculture | | | | | | |
| Sl.No | Name of sector | Name of the proposal | Article No. | Starting Year | Ending year | Power required in KVA |
| 1 | Agriculture | Primary Agri. Market | 4.1 | 2008 | 2012 | 50 each |
| 2 | Agriculture | Secondary Agri. Market | 4.2 | 2008 | 2012 | 250 |
| 3 | Agriculture | Bio Technology Park and Microbial Technology Centre | 5.1 | 2008 | 2017 | 50 each |
| 4 | Agriculture | Hi-tech Cultivation (Poly house cultivation) | 5.2 | 2012 | 2017 | 150 KVA each |
| 5 | Agriculture | Bio Technology and Genetic Engineering Park | 5.3 | 2012 | 2017 | 100 KVA each |

Appendix 48-1 Proposal Phasing

Name of Sector: Scheduled caste Development

Name of proposal: 2. 1 Proposals for providing Shelter to the Houseless Scheduled Caste

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|---|---|---|---|---|--|
| Activities | Detailed survey of SC | Integration of Housing schemes of various departments and starting of I phase by assisting 1500 houses per year @ Rs.75000 per unit | Assisting 1500 families per year | Assisting 1500 families per year | Assisting 1500 families per year | Assisting 1500 families per year | Detailed survey of Houseless |
| Agencies | SC promoters and preraks with the help of Gramapanchayath | SCDD,RDD,LSGIS,fisheries and Coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SC promoters and preraks with the help of Gramapanchayath |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | New integration of Housing schemes of various departments in accordance with new trends in houses starting II phase construction of 1000 houses per year. | Assisting 1000 families per year | Assisting 1000 families | Assisting 1000 families | Assisting 1000 families | Detailed survey of Houseless | Integration of Housing schemes of various departments and starting of III phase by constructing 500 houses per year. |
| Agencies | SCDD,RDD, LSGIS fisheries and coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SCDD,RDD,LSGIS,fisheries and Coir departments | SC promoters and preraks with the help of Gramapanchayath | SCDD,RDD,LSGIS,fisheries and Coir departments |

Appendix 48-1 Proposal Phasing

Name of Sector: Scheduled caste Development

Name of Proposal: 2. 2 Proposals for providing Shelter to the Houseless Scheduled Tribe

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|--|---|---|---|---|---|---|
| Activities | Detailed survey of houseless | Integration of Housing Schemes of various departments and starting first phase by constructing 40 houses, @ 100000 per unit | Integration of Housing Schemes of various departments and starting first phase by constructing 40 houses, @ 100000 per unit | Integration of Housing Schemes of various departments and starting first phase by constructing 40 houses, @ 100000 per unit | Integration of Housing Schemes of various departments and starting first phase by constructing 40 houses, @ 100000 per unit | Integration of Housing Schemes of various departments and starting first phase by constructing 40 houses, @ 100000 per unit | Detailed survey of houseless |
| Agencies | ST Promoters with the help of Gramapanchayath | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | ST promoters with the help of Gramapanchath |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Integration of Housing schemes of various depts. in accordance with their living environment and starting III phase by constructing 30 houses per year | Assisting 30 families per year. | Assisting 30 families per year. | Assisting 30 families per year. | Assisting 30 families per year. | Detailed survey of Houseless with the help of ST promoters and Gramapanchayath | Formation and integration of new Housing schemes of various departments and starting III phase by constructing 25 houses per year |
| Agencies | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments | STDD, RDD, LSGs, Forest Departments |

Appendix 48-1 Proposal Phasing

Name of Sector: Sheduled Caste Development

Name of Proposal: 3.1 Rehabilitation of Landless Scheduled Caste Families

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|---|---|---|---|---|--|
| Activities | Detailed survey of Landless | Formulation and integration of rehabilitation schemes and starting of first phase by assisting 700 families. Average assistance will be Rs.50000 per family | Formulation and integration of rehabilitation schemes and starting of first phase by assisting 700 families. Average assistance will be Rs.50000 per family | Formulation and integration of rehabilitation schemes and starting of first phase by assisting 700 families. Average assistance will be Rs.50000 per family | Formulation and integration of rehabilitation schemes and starting of first phase by assisting 700 families. Average assistance will be Rs.50000 per family | Formulation and integration of rehabilitation schemes and starting of first phase by assisting 700 families. Average assistance will be Rs.50000 per family | Detailed survey of landless |
| Agencies | SC promoters and preraks with the help of Gramapanchayath | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | SC promoters and preraks with the help of Gramapanchayath |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Launcing of new rehabilitation schemes and starting of II phase by assisting 500 families | Launcing of new rehabilitation schemes and starting of II phase by assisting 500 families | Launcing of new rehabilitation schemes and starting of II phase by assisting 500 families | Launcing of new rehabilitation schemes and starting of II phase by assisting 500 families | Launcing of new rehabilitation schemes and starting of II phase by assisting 500 families | Detailed survey of landless | Launcing of new rehabilitation schemes and starting of III phase |
| Agencies | SC promoters and preraks with the help of Gramapanchayath | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | SCpromoters and preraks with the help of Grama panchayath | SCDD, LSGIS |

Appendix 48-1 Proposal Phasing

Name of Sector: SC/ST Development

Name of Proposal: 4.1.1 Setting up of new Nursery Schools

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|--|--|--|--|--|--|---|
| Activities | Identification of Block where nursery schools are to be setup in order of priority | Starting of a new school in Ithikkara Block | Starting of a new school in Kollam Corporation | Starting of a new school in Sasthamcottah | Settingup of new school Chadaya mangalam | Settingup of a new school Anchal | Settingup of new school Mukhathala |
| Agencies | Scheduled Caste Development Department | Scheduled Caste Development Department with the help of LSGs | Scheduled Caste Development Department with the help of LSGs | Scheduled Caste Development Department with the help of LSGs | Scheduled Caste Development Department with the help of LSGs | Scheduled Caste Development Department with the help of LSGs | Scheduled Caste Development Department with the help of LSGs |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Settingup of new school in Chittumala | Settingup of new school in Chavara | Settingup of new school in Karunagappally | Settingup of new school in Oachira | Settingup of new school in Anchalumoodu | Review of the new schools so as to attain further additional requirements if any | Identification of LSGs where new schools are to be setup on the basis of review |
| Agencies | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | SCDD, LSGIS | LSGIS | LSGIS |

Appendix 48-1 Proposal Phasing

Name of Sector: SC/ST Development

Name of proposal: 4.2 Pre-metric Studies - Improvement of learning ability for students up to pre-metric level

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|--|---|---|---|---|--|
| Activities | Identification of childrens who are not enrolled in standard I, if any | Identification of dropouts from various classes | Improvement of learning ability of SC and ST students with special drive | Improvement of learning ability of SC and ST students with special drive | Identification of talented students for Ayyankali talent search scholarship | Identification of students for better education | Identification and selection students for MRS |
| Agencies | With the help of SC promoters and Preraks | With the help of SC promoters and Preraks and School authorities | With the help School authorities | With the help School authorities | With the help of SC promoters and Preraks and School authorities | DDO for SC, District Panchayath and School authorities | School authorities with the help of SC promoters |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Re-wamping of the existing pre metric hostels with a view to improve overall level of functioning of pre metric hostels | Evaluating students studying is recognized unaided schools under fees reimbursement system | Spl.coaching programmes for 8th standard students | Spl.coaching programmes for 8th and 9th standard students | Spl.coaching programmes for 8,9,10 standard students | Evaluating the new programmes introduced in the previous year | Launching new programmes on the bases of the finding of the evaluation |
| Agencies | SC development and LSGIS | SC development and LSGIS | School authorities with the help of SC Dev.Dept and Block Panchayath /municipality/ corporation | School authorities with the help of SC Dev.Dept and Block Panchayath/ municipality/ corporation | School authorities with the help of SC Dev.Dept and Block Panchayath/ municipality/ corporation | School authorities with the help of SC Dev.Dept and Block Panchayath /municipality /corporation | SC and ST Dept.and Edn Dept LSG |

Appendix 48-1 Proposal Phasing

Name of Sector: SC /ST Development

Name of proposal: 4.3 Post - Matric Studies - Improving the learning ability of SC /ST students in HSS

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|---|---|---|---|--|---|
| Activities | Detailed survey of HSS students | Analyses of the survey report with a view to launch special schemes for improving performance of HSS students | Identification of weak, average and excellent students among SC and ST | Launching of special schemes for each category of students to maintain and improve their learning ability | The years to be observed as the year of SC and ST students so as to ensure that reservation and other benefits are available to them. | Identification of students for special coaching for entrance examination for professional courses | Detailed survey of the measures taken their to ascertain its impact on their performance. |
| Agencies | With the help of SC promoters | SC Dev. Dept. and Edl Dept. | School Authorities | SC and ST dept. Edl. Dept. and Local self Government | SC and ST dept. Edl. Dept. Private agency. | SC and ST dept. and Educational dept. | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Launching a new learning process after taking appropriate remedials measures on the findings of the survey. | Launching a new learning process after taking appropriate remedials measures on the findings of the survey. | Launching a new learning process after taking appropriate remedials measures on the findings of the survey. | Launching a new learning process after taking appropriate remedials measures on the findings of the survey. | Launching a new learning process after taking appropriate remedials measures on the findings of the survey. | Evaluation of the programmes implemented in the previous year for improving the performance of SC students | Launching of new schemes wherever necessary to streamline the present system of Edn. Given to them. |
| Agencies | Sc and St and Edl. Dept. | | | | | SC and ST Dept. and Edn.Dept. | SC and ST Dev.Dept. |

Appendix 48-1 Proposal Phasing

Name of Sector: Scheduled caste Development

Name of proposal: 6 Proposals for Drinking water Programme

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|---|--|---|---|---|---|---|
| Activities | Formulating mini water supply project | Formulating project for extending water supply scheme. | Implementation of I phase. | Implementation of II phase | Implementation of III phase. | Implementation of IV phase | Implementation of V phase |
| Agencies | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Detailed survey of the SC habitats to problem area. | Formulation and getting approval of projects and VI phase implementation | Implementation of VII phase | | | | |
| Agencies | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. | KWA, Ground water, RDD, Local bodies, SCSTDD. | | | | |

| Appendix 48-1 Proposal Phasing | | | | | | | |
|--|--|------------------------------------|------------------------------------|---|------|------|------|
| Name of Sector: Scheduled caste Development | | | | | | | |
| Name of proposal: 7 Proposals for Electrification of un-electrified Houses | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Identification of unelectrified and houses and preparation of projects | Electrification of 29 SC Colonies. | Electrification of 29 SC Colonies. | Electrification of remaining SC Colonies. | | | |
| Agencies | KSEB, SC ST Dept., LSGIs | KSEB, SC ST Dept., LSGIs | KSEB, SC ST Dept., LSGIs | KSEB, SC ST Dept., LSGIs | | | |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | | | | | | | |
| Agencies | | | | | | | |

| Appendix 48-1 Proposal Phasing | | | | | | | |
|--|---------------------------|---|----------------|----------------|----------------|----------------|----------------|
| Name of Sector: Scheduled caste Development | | | | | | | |
| Name of proposal: 9 Proposals for Bringing down SC and ST BPL families to Zero Level | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Finalisation at BPL list. | Project proposal for assisting SC and ST BPL families will be got prepared by the local bodies with the help of RDD | Implementation | Implementation | Implementation | Implementation | Implementation |
| Agencies | LSGIs, RDD | LSGIs, RDD | LSGIs, RDD | LSGIs, RDD | LSGIs, RDD | LSGIs, RDD | LSGIs, RDD |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Implementation | | | | | | |
| Agencies | LSGIs, RDD | | | | | | |

Appendix 48-1 Proposal Phasing

Name of Sector: Scheduled caste Development

Name of proposal: 11 Proposals for Organising Awareness Camps

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------|--|---|---|---|---|---|---|
| Activities | Organizing awareness camps and Distribution of pamphlets | Arranging 14 awareness camp one in each Block | Arranging 14 awareness camp one in each Block | Arranging 14 awareness camp one in each Block | Arranging 14 awareness camp one in each Block | Arranging 14 awareness camp one in each Block | Arranging 14 awareness camp one in each Block |
| Agencies | LSG s,RDD, SCST Dept | LSGIs,RDD, SCST Dept. | LSGIs,RDD, SCST Dept. | LSGIs,RDD, SCST Dept. | LSGIs,RDD, SCST Dept. | LSGIs,RDD, SCST Dept. | LSGIs,RDD, SCST Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Arranging 14 awareness camp one in each Block | | | | | | |
| Agencies | LSG s,RDD, SCST Dept | | | | | | |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal :Terminal Complex at boat jetty

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|---|-------------------------|
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3.Submission to Govt. | Implementation | Operation | Operation | Operation / Mainiance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1.Kerala State Water Transport Dept.(KSWTD), Kollam Corporation / Inland Navigation/ Irrigation 2.DTPC 3. Dept of Tourism | Inland Navigation | DTPC | DTPC | DTPC | DTPC | DTPC |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC | DTPC | DTPC | DTPC | DTPC | 1. DTPC 2.Dept of Tourism 3. LSGI | DTPC |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal :2.1.2 Beautification of Kollam Canal – Ashtamudi to Eravipuram (Phase -1)

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|-------------------------|--|-------------------------|-------------------------|-------------------------|---|-------------------------|
| Activities | Land acquisition | 1. Project Preparation 2.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance |
| Agencies | Irrigation, LSGIs | 1. DTPC 2.Dept of Tourism | Irrigation/ KITCO | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | 1. DTPC 2.Dept of Tourism 3. LSGI | DTPC / LSGI |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal :2.1.3 Beautification of Kollam Canal – The Proposal for setting up of Kaayaloram-Responsible Tourism project for Ashtamudi and Paravur Backwaters (Phase - 2)

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|-------------------------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Activities | 1. Permissive sanction for Land use | 1. Project Preparation 2.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintanance | Operation / Maintanance |
| Agencies | 1.Private Owners | 1. DTPC 2.Dept of Tourism | Private Owners | Private Owners | Private Owners | Private Owners | Private Owners |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | Private Owners | Private Owners | Private Owners | Private Owners | Private Owners | Private Owners | Private Owners |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : "Paithrikatheeram"-Preservation of natural and cultural heritage on the shores of backwaters and beaches of Kollam

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|-------------------------|--|-------------------------|-------------------------|-------------------------|--|-------------------------|
| Activities | Land acquisition | 1. Project Preparation 2. Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance |
| Agencies | LSGIs | 1. DTPC 2. Dept of Tourism 3. Inland navigation 4. Harbour Engg. Division 5. PWD (Roads) 6. Culture Dept. 7. Fisheries Dept. | Concerned agency | Concerned agency | Concerned agency | Concerned agency | Concerned agency |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | Concerned agency | Concerned agency | Concerned agency | Concerned agency | Concerned agency | 1. DTPC 2. Dept of Tourism 3. LSGI | Concerned agency |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : Smart waterway terminal cum Water sports Centre

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|-------------------------|---|----------------------------|----------------------------|----------------------------|--|-------------------------|
| Activities | Land acquisition | 1. Project Preparation 2.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance |
| Agencies | LSGIs | 1. DTPC 2.Dept of Tourism | Irrigation/ KITCO | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | 1. DTPC 2.Dept of Tourism 3. LSGI | DTPC / LSGI |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : Development and beautification of Kollam beach

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|---|-------------------------------|--------------------------|--------------------------|--------------------------|--|--------------------------|
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3. Submission to Govt. | Implementation | Operation | Operation | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | 1.Kollam Corporation / Harbour Engineering Division 2.DTPC 3. Dept of Tourism | 1. DTPC 2. Dept of Tourism | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | 1. DTPC 2. Dept of Tourism 3. LSGI | DTPC/ Kollam Corporation |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal :Development and beautification of Thangassary Break water Beach

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|--|------------------------------|--------------------------|--------------------------|--------------------------|---|--------------------------|
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | 1.Kollam Corporation / Harbour Engineering Division 2.KITCO 3. Dept of Tourism | Harbour Engineering Division | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | 1. DTPC 2.Dept of Tourism 3. LSGI | DTPC/ Kollam Corporation |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : Development of Thirumullavaram and Mundakkal Beach

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|--|------------------------------|--------------------------|--------------------------|--------------------------|---|--------------------------|
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | 1.Kollam Corporation / Harbour Engineering Division 2.DTPC 3. Dept of Tourism | 1. DTPC 2.Dept of Tourism | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | DTPC/ Kollam Corporation | 1. DTPC 2.Dept of Tourism 3. LSGI | DTPC/ Kollam Corporation |

| Appendix 49-1 Proposal Phasing | | | | | | | |
|--|--|--|-------------------------|-------------------------|-------------------------|---|-------------------------|
| Name of Sector : Tourism | | | | | | | |
| Name of Proposal : Under water Marine Aquarium | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1.Fisheries Dept. /Kollam Corporation 2.DTPC 3. Dept of Tourism | 1. DTPC 2.Dept of Tourism 3. Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC/ Fisheries Dept | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | 1. DTPC 2.Dept of Tourism 3. LSGI | DTPC/ Fisheries Dept. |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : Beautification of Paravur Beach

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|----------------------------|---|----------------------------|----------------------------|----------------------------|---|----------------------------|
| Activities | Land acquisition | 1. Project Preparation 2.Submission to Govt. | Operat on | Operation | Operation | Operation | Operation |
| Agencies | 1. Paravur Municipality | 1. DTPC/ KITCO 2.Dept of Tourism | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation | Operation | Operat on | Operation | Operation | Operation | Operation |
| Agencies | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality | DTPC/ Paravur Municipality | 1. DTPC 2.Dept of Tourism 3. LSGI | DTPC/ Paravur Municipality |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : Development of Pozhikkara Beach

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|---|--|-----------------------------|-----------------------------|-----------------------------|--|-----------------------------|
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3. Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1. Paravur Muni. 2. DTPC 3. Dept of Tourism 4. Harbour Engg. Division | 1. DTPC 2. Dept of Tourism 3. Harbour Engg. Division | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Paravur Muni. | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Paravur Muni. |

Appendix 49-1 Proposal Phasing

| Appendix 49-1 Proposal Phasing | | | | | | | |
|--|---|---|-------------------------|-------------------------|-------------------------|--|-------------------------|
| Name of Sector : Tourism | | | | | | | |
| Name of Proposal : Deep sea fishing cruise terminal complex at Neendakara | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3. Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1. Fisheries Dept. 2. DTPC 3. Dept of Tourism | 1. DTPC 2. Dept of Tourism 3. Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | DTPC/ Fisheries Dept. | 1. DTPC 2. Dept of Tourism 3. LSGI | DTPC/ Fisheries Dept. |

| Appendix 49-1 Proposal Phasing | | | | | | | |
|---|----------------------------|---|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of Sector : Tourism | | | | | | | |
| Name of Proposal : Development of Tourism hub at Perinad – Village Tourism Facilitation complex | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Land acquisition | 1. Project Preparation 2.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance |
| Agencies | LSGIs | 1. DTPC 2.Dept of Tourism | PWD Roads/PWD Buildings/Irrigation/ KITCO | DTPC /LSGI | DTPC /LSGI | DTPC /LSGI | DTPC /LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC /LSGI | DTPC /LSGI | DTPC /LSGI | DTPC /LSGI | DTPC /LSGI | DTPC /LSGI | DTPC /LSGI |

| Appendix 49-1 Proposal Phasing | | | | | | | |
|---|-------------------------|--|-----------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of Sector : Tourism | | | | | | | |
| Name of Proposal : Destination Sasthamkotta | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Land acquisition | 1. Project Preparation 2. Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance |
| Agencies | LSGIs | 1. DTPC 2. Dept of Tourism | Inland Navigation / Irrigation | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : Museum of Kollam at Thevally palace

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|--|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3.Submission to Govt. | 1. Project Preparation 2.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintanance | Operation / Maintanance |
| Agencies | 1.PWD 2.DTPC 3. Dept of Tourism | 1. DTPC /Dept. of Archeology 2.Dept of Tourism | Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology | DTPC / Dept. of Archeology |

| Appendix 49-1 Proposal Phasing | | | | | | | |
|---|-------------------------|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Name of Sector : Tourism | | | | | | | |
| Name of Proposal : Houseboat Construction yard cum Museum of Traditional crafts at Alumkadavu | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | Land acquisition | 1. Project Preparation 2.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance |
| Agencies | Irrigation, LSGIs | 1. DTPC 2.Dept of Tourism | Irrigation | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI | DTPC / LSGI |

Appendix 49-1 Proposal Phasing

| Appendix 49-1 Proposal Phasing | | | | | | | |
|---|---|--|--|--|--|---|--|
| Name of Sector : Tourism | | | | | | | |
| Name of Proposal : Handicraft village at Thazhava/Perinadu | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Land acquisition 2. Project Preparation 3. Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1. LSGI 2. DTPC 3. Dept of Tourism | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3 LSGI 4. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI 4. Dept. of Culture |

Appendix 49-1 Proposal Phasing

| Appendix 49-1 Proposal Phasing | | | | | | | |
|---|--|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Name of Sector : Tourism | | | | | | | |
| Name of Proposal : Interpretation center for History and Literature | | | | | | | |
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Activities | 1. Permissive sanction for Land use 2. Project Preparation 3.Submission to Govt. | Implementation | Operation | Operation | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | 1.Mayanadu GP 2.DTPC 3. Dept of Tourism 4. Dept. of Culture 5.Dept. of Education | 1. DTPC 2.Dept of Tourism | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance | Operation / Maintanance |
| Agencies | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP | 1. DTPC 2.Mayanadu GP |

Appendix 49-1 Proposal Phasing

Name of Sector : Tourism

Name of Proposal : Promotion of Festivals

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------------|---|--|--|--|--|--|--|
| Activities | 1. Documentation 2. Project Preparation 3. Submission to Govt. | Implementation | Operation | Operation | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1. Town and Country Planning Dept. 2. LSGI 3. DTPC 4. Dept of Tourism 5. Dept. of Culture | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI |
| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Activities | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance | Operation / Maintenance |
| Agencies | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI | 1. DTPC 2. Dept of Tourism 3. LSGI |

| Appendix 50-1 Proposals Consolidation Table | | | | | |
|---|--|----------------|---------------------------------------|---|--|
| Name of the development sector: Agriculture | | | | | |
| Sl. No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible implementing Agencies | Remarks From Finance Sector |
| 1 | Paddy seed village 235 Ha | 75 lakhs/yr | 30000 man days/year | Dept of Agri LSGI Seed Authority | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Improving production and productivity of Rice 10000 Ha | 280 Lakhs/yr | 1000000 man days/yr | Dept of Agri LSGI | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 3 | Aromatic and Medicinal Rice cultivation 50 Ha | 20 lakhs/yr | 700man days/yr | Dept of Agri LSGI | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 4 | Paddy Processing Centres 3 Nos | 150 Lakh | 12000 Man days/Yr | Dept of Agri LSGI , Co-operatives and Civil Supplies | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 1 | Vegetable seed prdn. Phase 1-20 Ha | 20 lakh/yr | 40000 man days/year | Dept of Agri. LSGI, Seed Authority | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | do phase II - 50 Ha | 50 lakhs/yr | 100000 " | Dept of Agri. LSGI, Co-operatives | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 3 | Intensive vegetable cultivation (1000 Ha. Addl.) | 750 lakhs/yr. | 200000 Man days/yr | Dept of Agri. LSGI, Co-operatives | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 1 | Productivity improvement 2000 Ha. Phase - I | 1500 lakhs/yr | 200000 " | Dept of Agri LSGI. Co-operatives Kudumbasree | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Productivity improvement 4000 Ha. Phase - II | 30000 lakhs/yr | 4 lakhsman days/yr | Dept of Agri LSGI. Co-operatives Kudumbasree | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 3 | Productivity improvement 4000 Ha. Phase - III | 30001 lakhs/yr | 4 lakhsman days/yr | Dept of Agri LSGI. Co-operatives Kudumbasree | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| D | Rural Homestead farming (25000 Farm families) | 4250 lakhs/yr. | 100 lakhs man days/yr. | Dept of Agri LSGI. Co-operatives Kudumbasree | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| E | Sesamum cultivation 100 Ha/yr X 5 years. | 50 lakhs/yr | 0.1 lakh/yr | Dept of Agri LSGI. Co-operatives Kudumbasree | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 1 | Rubber Area expansion 100 ha/yr | 480 lakhs/yr | 2 lakhs man days/yr. | Dept of Agri LSGI. Co-operatives Kudumbasree Rubber Board | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Integrated Rubber cultivation Agriculture/Banana Replanting 5000 ha./yr. till 2021 (35000 ha.) | 10500 lakhs/yr | 13 lakhs man days/yr. | Dept of Agri LSGI. Co-operatives Kudumbasree Rubber Board | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 1 | Rehabilitation 10000 ha (1000 ha/year X 10 yrs) | 320 lakhs/yr. | 2.5 lakhs man days/yr. | Agri Dept Coconut Board Kerafed LSGI Co operative | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Coirpith compost (10 Unit) | 10 lakhs | 0.01 lakhs man days/yr. | Agri Dept Coconut Board Kerafed LSGI Co operative industr. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 3 | Value addition 100 units SHGS and 2 expellor units | 200 lakhs | 1.25 lakhs man days/yr. | Agri Dept Coconut Board Kerafed LSGI Co operative industr. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 0 | Area expansion (200 Ha.) Productivity Improvement + Maint. 10000 ha. | 3000 lakhs/yr. | 20 lakhs man days/yr. | Agri Dept Coconut Board Kerafed LSGI Co operatives industries | Required funds to be mobilised from banks, LSGD, GOK grants etc. |

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| Sl. No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible implementing Agencies | Remarks From Finance Sector |
|---------|--|-------------------|---------------------------------------|--|--|
| 1 | Banana cultivation (1500 ha.) | 2200 lakhs/yr. | 2.25 lakhs man days/yr. | Agri Dept LSGI Co operatives industries Kudumbasree | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Value addition (10 processing units) | 10 lakhs/unit. | 0.1 lakhs man days/yr. | Agri Dept LSGI Co operatives industries Kudumbasree | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 1 | Area expansion + Rehabilitation (@ 500 ha./Yr + 3000 ha. In 6 years) | 175 lakhs/yr. | 0.70 lakhs man days/yr. | Agri. Dept. Cashew LSGI Co-Operatives Cashew Council, Industries | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Cashew-Theeravanam | 150 lakhs | 0.70 lakhs man days/yr. | Agri. Dept. Cashew LSGI Co-Operatives Cashew Council, Industries Fisheries | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| K | Pineapple New Cultivation (5000 ha) Repetition in every three years | 6250 lakhs/tri yr | 12 lakhs man days tri/yr | Agri. Dept. Industries, Kudumbasree, KSHDPC LSGI | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| L | New Generation Crops (Genetically modified crops) (50 Ha.) | 16 Lakhs | 90.17 lakhs man days/yr. | Agri. Dept. LSGI Industries, Pollution Control Board | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| M | Maint. Of native crops | 50 lakhs | 3 lakhs man days/yr. | Agri. Dept. LSGI Forestry | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| N | Flori culture (100 units/yr X 10 years) | 75 lakhs./Yr | 4 lakhs man days/yr. | Agri. Dept. Horti corp Export Agencies Industries, LSGI Co-Operatives | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| O | Arecanut cultivation (100Ha.) | 20 Lakhs/yr | 0.05 lakhs man days/yr. | Agri. Dept. Horti corp Export Agencies Industries, LSGI Co-Operatives | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| P | Medicinal Plants | 270 Lakhs/yr | 0.1 lakhs man days/yr. | Agri. Dept. Tourism LSGI Industries Co-Operatives, Kudumbasree, Ayurveda Dept. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 1 | Primary Agri. Market | 150 Lakhs | 0.6 lakhs man days/yr. | Agri. Dept. LSGI, Co-Operatives, Teli communication, Fisheries, Diary, Animal husbandry, etc | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Secondary Agri. Market | 250 Lakhs | 1.5 lakhs man days/yr. | Agri. Dept. LSGI, Warehousing Financial Institution Diary, AH, Fisheries, Co-Operatives Transport Railway etc. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 3 | Service Centres | 150 Lakhs | 0.2 lakhs man days/yr. | Agri. Dept., Industries, Banking, LSGI, Co-Operatives, Input Agencies, supply and service agencies | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 4 | Bio Technology Park | 500Crores | 15 lakhs man days/yr. | All Dept. Including Science and Technology, Dept of Non Conventional Energy sources | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 5 | Micro bial Technology Centre | 50 lakhs | 0.015 lakhs man days/yr. | All Dept. Including Science and Technology, Dept of Non Conventional Energy sources | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| R | Hi-tech Cultivation (Poly house cultivation) | 200 lakhs | 3.5 lakhs man days/yr. | Agri. Dept, LSGI, Horticulture etc. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |

| Sl. No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Implementing Agencies | Remarks From Finance Sector |
|---------|--|-------------------|---------------------------------------|--|--|
| 1 | Water Conservation Programme | 250 lakhs | 500 lakhs | Agri. Dept. LSGI M.I.Etc. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Controlling Chemical usage in Agri. Sector | 50 lakhs | 0.01 lakhs man days/yr. | Agri. Dept.Fisheries, Water Resources LSGI Heath etc. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 3 | Solar Fencing | To be estimated | | Forest and wild life, LSGI Agri. Dept. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 1 | Agri. Based Cottage industries (6 Nos) | 60 lakhs | 1.5 lakhs man days/yr. | Agri. Dept. Tourism, Social Welfare Handicrafts Industries LSGI | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 2 | Recycling of Farm waste | 90 lakhs | 0.2 lakhs man days/yr. | LSGI Agri. Dept. A.H. Fisheries, Pollution Control Board, Health | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 3 | Labourers/Farmers Welfare | 50 lakhs/tr (L.S) | N.A | Agri. Dept. LSGI, Labourer, Financial institution | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 4 | Research Cum. Training Centre | 50 Lakhs | 0.0025 lakhs man days/yr. | Agri. Dept. Horti Culture, Kudumbasree, I.T., Poverty alliviation, ICDS, KILA etc. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |
| 5 | Mechanization of Agri. Operations | 100 Lakhs | 0.001 lakhs man days/yr. | Agri. Dept. LSGI, Industries, RTT Centre, RAIDO, KAMCO/KAICO etc. | Required funds to be mobilised from banks, LSGD, GOK grants etc. |

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| Appendix50-1 Proposals Consolidation Table | | | | |
|---|--|------------|---------------------------------------|--|
| Name of Development Sector : Animal Husbandry | | | | |
| Sl.N o. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
| 1 | Establishment of Large Scale Dairy Farms | 1400 Lakh | 1.15 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 1500 Lakh | 1.23 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 1100 Lakh | 0.9 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 2 | Establishment of Medium Scale Dairy Farms | 360 Lakh | 50000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 360 Lakh | 50000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 300 Lakh | 40000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 3 | Ksheera Samrudhi Dairy Scheme | 5400 Lakh | 40 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 3000 Lakh | 30 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 2400 Lakh | 24 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 4 | Existing Dairy Farms with Increased Productivity | 150 Lakh | 40000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 50 Lakh | 40000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 50 Lakh | 40000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 5 | Fodder Production Units | 27 Lakh | 2 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 6 | Feed Production, Mixing and Feed Analytical lab | 50 Lakh | 73000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |

| Sl.N o. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
|------------|---|------------|---|---|
| 7 | Silage Production Units | 25 Lakh | 3650 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 8 | Mobile Milking Units | 320 Lakh | 1.2 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 280 Lakh | 1 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 240 Lakh | 0.9 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 9 | Establishment of Chilling Plant | 60 Lakh | 70000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 10 | Quality Control of milk and milk products | 35 Lakh | 11000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 25 Lakh | 7000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 11 | Establishment of Milk Processing cum products Factory | 100 Lakh | 75000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 12 | Dhenuraksha Scheme | 162 Lakh | 30000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 13 | Comprehensive Baby Calf Health Scheme | 500 Lakh | | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 500 Lakh | | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 500 Lakh | | 1) LSGI 2) NABARD 3) Commercial Banks |
| 14 | Calf Feed Subsidy Scheme | 3250 Lakh | | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 3250 Lakh | | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 3250 Lakh | | 1) LSGI 2) NABARD 3) Commercial Banks |

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| Sl.N o. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
|---------|--|------------|---------------------------------------|--|
| 15 | Hi-tech Parent Stock and Poultry Farm and Hatchery | 100 Lakh | 36500 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 16 | Large Scale Duck Parent Stock | 50 Lakh | 20000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 17 | Quail Parent Stock Farm and Hatchery | 8 Lakh | 6000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 18 | Nurseries | 25 Lakh | 20000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 19 | Large Scale Poultry and Quail Farms | 105 Lakhs | 2 Lakh Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 20 | Backyard Poultry Units | 180 Lakhs | Parttime employment to 18000 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 180 Lakhs | Parttime employment to 18000 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 180 Lakhs | Parttime employment to 18000 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| 21 | Duck Rearing Units | 12 Lakhs | 18000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 12 Lakhs | 18000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 12 Lakhs | 18000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 22 | Backyard Duck Rearing Units | 58 Lakhs | Parttime employment to 4800 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 58 Lakhs | Parttime employment to 4800 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 58 Lakhs | Parttime employment to 4800 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| 23 | Homestead Quail Units | 30 Lakh | Parttime employment to 400 Families | 1)LSGI 2) NABARD 3) Commercial Banks |

| Sl.No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
|--------|---------------------------------------|------------|---------------------------------------|--|
| | | 30 Lakh | Parttime employment to 400 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 30 Lakh | Parttime employment to 400 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| 24 | Male Calf Fattening Scheme | 87 Lakh | Parttime employment to 2500 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 18 Lakh | Parttime employment to 500 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| 25 | Malabari Goat Parent Stock Farm | 30 Lakh | 2500 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 26 | Malabari Goat Rearing Satellite Units | 35 Lakh | 25000 mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| | | 25 Lakh | 18000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 27 | Goat Rearing Units | 270 Lakh | Parttime employment to 1800 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| 28 | Goat Nurseries | 10 Lakh | 3000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 29 | Parent Stock Piggery Farm | 20 Lakh | 3650 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 30 | Piggery Units | 24 Lakh | 15000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 31 | Rabbit Parent Stock Unit | 2.5 Lakh | 3650 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 32 | Rabbit Nursery | 1.5 Lakh | 1000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |
| 33 | Rabbit Units | 20 Lakh | Parttime employment to 200 Families | 1)LSGI 2) NABARD 3) Commercial Banks |
| 34 | High-tech Broiler Farm | 80 Lakhs | 30000 Mandays/Year | 1)LSGI 2) NABARD 3) Commercial Banks |

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| Sl.N o. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
|------------|---|------------|---|---|
| 35 | Broiler Farm | 120 Lakh | 1 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 36 | Turkey Farm including Hatchery | 75 Lakh | 9000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 37 | Hometead Turkey Units | 43 Lakh | Parttime employment to 360 Families | 1) LSGI 2) NABARD 3) Commercial Banks |
| 38 | Slaughter Houses | 740 Lakh | 7 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 39 | Abattoir, Meat Production and Tanning | 75 Lakh | 9000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 40 | Meat Processing Units | 50 Lakh | 3 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 41 | Meat Export | 75 Lakh | 1.5 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 42 | Veterinary Speciality Hospital | 100 Lakh | 7300 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| | | 150 Lakh | 11000 Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 43 | Artificial Insemination Centre | 32 Lakh | 15000 Mandays/Year | 1) LSGI 2) NABARD 3) RIDF |
| | | 30 Lakh | 15000 Mandays/Year | 1) LSGI 2) NABARD 3) RIDF |
| 44 | Semen Holding Bank | 2.5 Lakh | 10000 Mandays/Year | 1) LSGI 2) NABARD 3) RIDF |
| 45 | | 20 Lakh | 1 Lakh Mandays/Year | 1) LSGI 2) NABARD 3) Commercial Banks |
| 46 | Prevention of Cruelty Against animals | 10 Lakh | 1000 Mandays/Year | LSGI 2) AWBI |
| 47 | Population control programme for dogs | 10 Lakh | 1000 Mandays/Year | LSGI 2) AWBI |
| 48 | Elephant Rides | 5 Lakh | 1000 Mandays/Year | Dept of Tourism |

| Sl.No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
|--------|--|------------|---------------------------------------|--------------------------|
| 49 | Ornamental Poultry Breeding | 5 Lakh | 3000 Mandays/Year | Dept of Tourism |
| 50 | Zoonotic Disease Control Programme | 40 Lakh | 3000 Mandays/Year | LSGI 2) AWBI |
| | | 40 Lakh | 3000 Mandays/Year | LSGI 2) AWBI |
| | | 40 Lakh | 3000 Mandays/Year | LSGI 2) AWBI |
| 51 | Comprehensive Rabies Control Programme | 40 Lakh | 3000 Mandays/Year | LSGI 2) AWBI |
| | | 40 Lakh | 3000 Mandays/Year | LSGI 2) AWBI |
| | | 40 Lakh | 3000 Mandays/Year | LSGI 2) AWBI |
| 52 | Avian Influenza Control Programme | 40 Lakh | 3000 Mandays/Year | LSGI 2) AHD |
| | | 40 Lakh | 3000 Mandays/Year | LSGI 2) AHD |
| | | 40 Lakh | 3000 Mandays/Year | LSGI 2) AHD |
| 53 | Zoonotic disease surveillance Cell | 10 Lakh | 2000 Mandays/Year | LSGI |

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| Appendix 50-1 Proposals Consolidation Table | | | | | |
|---|----------------------------------|------------|-----|--------------------------------------|----------------------------------|
| Name of development sector : Watershed | | | | | |
| Sl.No | Name of the devolpment proposals | Total cost | Rs: | Employment generated after comletion | Possible source of funds |
| ZONE A Bio reserve Zone | | | | | |
| 1 | Kulathoopuza | 837920000 | | 3591086 | Jilla Panchayath/ N A B A R D |
| 2 | Aryankavu | 392080000 | | 1680343 | Jilla Panchayath/ N A B A R D |
| 3 | Thenmala | 323380000 | | 1385914 | Jilla Panchayath/ N A B A R D |
| 4 | Piravanthoor | 243000000 | | 1041429 | Jilla Panchayath/ N A B A R D |
| ZONE B Agro development Zone | | | | | |
| 5 | Alayamon | 53190000 | | 227957 | Jilla Panchayath/ N A B A R D |
| 6 | Anchal | 28860000 | | 123686 | Jilla Panchayath/ N A B A R D |
| 7 | Neduvathoor | 25035000 | | 107293 | Jilla Panchayath/ N A B A R D |
| 8 | Edamulakkal | 57690000 | | 241243 | Jilla Panchayath/ N A B A R D |
| 9 | Karavaloor | 31995000 | | 137121 | Jilla Panchayath/ N A B A R D |
| 10 | Kottarakkara | 19860000 | | 85114 | Jilla Panchayath/ N A B A R D |
| 11 | Veliyam | 28605000 | | 122593 | Jilla Panchayath/ N A B A R D |
| 12 | Pathanapuram | 39195000 | | 167978 | Jilla Panchayath/ N A B A R D |
| 13 | Pattazy | 19380000 | | 83057 | Jilla Panchayath/ N A B A R D |
| 14 | Pattazy Vadakkekara | 17355000 | | 74378 | Jilla Panchayath/ N A B A R D |
| 15 | Pooyappally | 24270000 | | 104014 | Jilla Panchayath/ N A B A R D |
| 16 | Yerror | 41385000 | | 177364 | Jilla Panchayath/ N A B A R D |
| 17 | Chadayamangalam | 17760000 | | 76114 | Jilla Panchayath/ N A B A R D |
| 18 | Chithara | 77280000 | | 331200 | Jilla Panchayath/ N A B A R D |
| 19 | Elamadu | 43710000 | | 187328 | Jilla Panchayath/ N A B A R D |
| 20 | Ittiva | 68850000 | | 295071 | Jilla Panchayath/ N A B A R D |
| 21 | Kadakkal | 21960000 | | 94114 | Jilla Panchayath/ N A B A R D |
| 22 | Thalavoor | 42750000 | | 183214 | Jilla Panchayath/ N A B A R D |
| 23 | Vilakkudy | 31500000 | | 135000 | Jilla Panchayath/ N A B A R D |

| Sl.No | Name of the development proposals | Total cost | Rs: | Employement generated after comletion | Possible source of funds |
|--|-----------------------------------|------------|-----|---------------------------------------|----------------------------------|
| 24 | Nilamel | 31740000 | | 136028 | Jilla Panchayath/ N A B A R D |
| 25 | Melila | 18780000 | | 80486 | Jilla Panchayath/ N A B A R D |
| 26 | Mylom | 31260000 | | 133971 | Jilla Panchayath/ N A B A R D |
| 27 | Ummannoor | 46005000 | | 197164 | Jilla Panchayath/ N A B A R D |
| 28 | Vettikkavala | 48195000 | | 206550 | Jilla Panchayath/ N A B A R D |
| 29 | Velinelloor | | | | Jilla Panchayath/ N A B A R D |
| 30 | Punalur muncipally | 53250000 | | 228214 | Jilla Panchayath/ N A B A R D |
| ZONE C (Agro allied development zone) | | | | | |
| 31 | Thazhava | 29190000 | | 125100 | Jilla Panchayath/ N A B A R D |
| 32 | Chathannoor | 11640000 | | 49886 | Jilla Panchayath/ N A B A R D |
| 33 | Kunnathoor | 23160000 | | 99257 | Jilla Panchayath/ N A B A R D |
| 34 | Poruvazhy | 25680000 | | 110057 | Jilla Panchayath/ N A B A R D |
| 35 | Sasthamcotta | 30630000 | | 131271 | Jilla Panchayath/ N A B A R D |
| 36 | Sooranadu North | 27180000 | | 116486 | Jilla Panchayath/ N A B A R D |
| 37 | Sooranadu South | 22695000 | | 97264 | Jilla Panchayath/ N A B A R D |
| 38 | Kulakkada | 41970000 | | 179871 | Jilla Panchayath/ N A B A R D |
| 39 | Kalluvathukkal | | | | Jilla Panchayath/ N A B A R D |
| 40 | Elampalloor | 21630000 | | 92700 | Jilla Panchayath/ N A B A R D |
| 41 | Nedumpana | 36870000 | | 156728 | Jilla Panchayath/ N A B A R D |
| 42 | Pavithreswaram | 34455000 | | 147664 | Jilla Panchayath/ N A B A R D |
| 43 | Mynagappally | 10020000 | | 42943 | Jilla Panchayath/ N A B A R D |
| 44 | Thodiyoor | 30765000 | | 131850 | Jilla Panchayath/ N A B A R D |
| 45 | Ezukone | 25095000 | | 107550 | Jilla Panchayath/ N A B A R D |
| 46 | Kareepra | 19305000 | | 82736 | Jilla Panchayath/ N A B A R D |

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| ZONE D (Special Development Zone) | | | | | |
|-----------------------------------|------------------|----------|--------|----------------------------|-------|
| 47 | Alapad | 15160000 | 64971 | Jilla Panchayath/ A R D | N A B |
| 48 | Karunagappally | 33660000 | 144257 | Jilla Panchayath/ A R D | N A B |
| 49 | Panmana | 33700000 | 144429 | Jilla Panchayath/ A R D | N A B |
| 50 | Chavara | 22700000 | 97286 | Jilla Panchayath/ A R D | N A B |
| 51 | Neendakara | 19420000 | 83229 | Jilla Panchayath/ A R D | N A B |
| 52 | Thevalakkara | 25820000 | 110657 | Jilla Panchayath/ A R D | N A B |
| 53 | Clappana | 34980000 | 149914 | Jilla Panchayath/ A R D | N A B |
| 54 | Kulasekharapuram | 32180000 | 137914 | Jilla Panchayath/ A R D | N A B |
| 55 | Ochira | 25720000 | 110229 | Jilla Panchayath/ A R D | N A B |
| 56 | Mynagappally | 13360000 | 57257 | Jilla Panchayath/ A R D | N A B |
| 57 | Sasthamcotta | | | Jilla Panchayath/ A R D | N A B |
| ZONE E (Aqua BioreserveZone) | | | | | |
| 58 | Thrikkadvoor | 22800000 | 97714 | Jilla Panchayath/ A R D | N A B |
| 59 | thikkaruva | 36420000 | 156086 | Jilla Panchayath/ A R D | N A B |
| 60 | East kallada | 24400000 | 104571 | Jilla Panchayath/ A R D | N A B |
| 61 | Sasthamkotta | 40840000 | 175029 | Jilla Panchayath/ A R D | N A B |
| 62 | Chavara | 22700000 | 97286 | Jilla Panchayath/ A R D | N A B |
| 63 | Nendakara | 19420000 | 83229 | Jilla Panchayath/ A R D | N A B |
| 63 | Thekkumbhagm | 39920000 | 171086 | Jilla Panchayath/ A R D | N A B |
| 65 | thevalakara | 25820000 | 110657 | Jilla Panchayath/ A R D | N A B |
| 66 | West Kallada | 26720000 | 114514 | Jilla Panchayath/ A R D | N A B |
| 67 | Mandro-island | 26520000 | 113657 | Jilla Panchayath/ A R D | N A B |
| 68 | Panayam | 21880000 | 93771 | Jilla Panchayath/ A R D | N A B |
| 69 | perayam | 29340000 | 125743 | Jilla Panchayath/ A R D | N A B |
| 70 | Perinad | 16920000 | 72514 | Jilla Panchayath/ A R D | N A B |

| Sl.No | Name of the development proposals | Total cost | Rs: | Employement generated after comletion | Possible source of funds |
|-------------------------------|-----------------------------------|------------|--------|---------------------------------------|----------------------------------|
| 71 | Mayyanadu | 34900000 | 149571 | | Jilla Panchayath/ N A B A R D |
| 72 | Poothakulam | 33120000 | 141943 | | Jilla Panchayath/ N A B A R D |
| 73 | Kollamcorporation | 150240000 | 643886 | | Jilla Panchayath/ N A B A R D |
| 74 | Paravoor muncipality | 38380000 | 164486 | | Jilla Panchayath/ N A B A R D |
| ZONE F (Multifunctional Zone) | | | | | |
| 75 | Thrikkovilvattom | 15420000 | 66086 | | Jilla Panchayath/ N A B A R D |
| 76 | Kottamkara | 2860000 | 12257 | | Jilla Panchayath/ N A B A R D |
| 77 | Mayyanadu | 34500000 | 147857 | | Jilla Panchayath/ N A B A R D |
| 78 | Panayam | 21880000 | 93771 | | Jilla Panchayath/ N A B A R D |
| 79 | Neendakara | 19420000 | 83229 | | Jilla Panchayath/ N A B A R D |
| 80 | Kollam corporation | 150000000 | 642857 | | Jilla Panchayath/ N A B A R D |

Appendix 50-1 Proposals Consolidation Table

Name of Development Sector: Education

| Sl.No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
|--------|--|---------------------|---------------------------------------|--|
| 1 | 2.1 New Educational institutions in the educationally back ward area | 50 Lakhs | Approx 5000 to 7500 | Govt Education, Pachayat PWD, KSEB Budgeting Allocations on RIDF of NABARD |
| 2 | 2.2 Arts and Science Colleges in the Central and Eastern parts | 1.5 crore | 10,500 | Govt Jilla Panchayat LSGD, Budgeting Allocations on RIDF of NABARD |
| 3 | 2.3 Literacy Mission Programme (Non-formal education) | 75,000 (2500 X 3) | 75 | Jilla Grama Panchayat KSEB |
| 4 | 3.1 Independent Pre-primary Education | 5 Lakhs | 500 | Jilla Grama Panchayat KSEB |
| 5 | 3.2 Training Programmes to Teachers | 1 crore | 10, 000 | Jilla Grama Panchayat PWD, KSEB, Education department |
| 6 | 3.3 Incentives to Students and Parent Counseling | 10 Lakhs | 1000 | Jilla/Grama Panchayat Education department, Health |
| 7 | 3.4 Continuing Education through Local Libraries | 19 Lakhs (25000X72) | 75 (72+3) | Jilla/Grama Panchayat water authority, KSEB, Education, Social welfare |
| 8 | 4.1 Government Nursing College | 50 Lakhs | 5000 | Jilla/Grama Panchayat KSEB, Budgetary funds or RIDF of NABARD |
| 9 | 4.2 Medical college in Government Sector | 2 Crore | 20,000 | Govt, Jilla/Grama Panchayat, Health PWD, KSEB, Budgetary funds or RIDF of NABARD |

| Appendix 50-1 Proposals Consolidation Table | | | | |
|---|--|---|---|--|
| Name of Development Sector : Fisheries | | | | |
| Sl.No. | Name of the Development Proposal | Total Cost (in Lakh Rupees) for all units | Employment generated after completion (Total) | Possible Sources of fund |
| 1 | Carp Seed Hatchery | 60 | 10 | NFDB/RKVY, |
| 2 | Carp Seed Rearing Units | 30 | 150 | FFDA, Fisheries Dpt., Beneficiaries/FFDA |
| 3 | Shrimp Hatchery | 50 | 10 | NFDB/RKVY, |
| 4 | Fresh Water Prawn Hatchery | 50 | 10 | NFDB/RKVY, |
| 5 | Mud Crab Hatchery | 50 | 10 | NFDB/RKVY, |
| 6 | Marine and Brackish Water Fin Fish Hatchery | 50 | 10 | NFDB/RKVY, |
| 7 | Marine Ornamental Fish Hatchery | 50 | 10 | NFDB/RKVY, |
| 8 | Larvivorous Fish Seed Production Centre | 25 | 6 | RKVY |
| 9 | All Male Tilapia Seed production Centres | 10 | 6 | NFDB/RKVY |
| 10 | Fresh Water Fish Culture | 9000 | 3000 | FFDA, Fisheries Dpt., Beneficiaries/ Bank loan |
| 11 | Paddy cum Fish Culture | 1500 | 750 | FFDA, Fisheries Dpt., Beneficiaries/ Bank loan |
| 12 | Integrated Pig Cum Fish Culture | 42 | 15 | FFDA, Fisheries Dpt., Beneficiaries/Bank loan |
| 13 | Integrated Duck Cum Fish Culture | 42 | 15 | FFDA, Fisheries Dpt., Beneficiaries/Bank loan |
| 14 | Integrated Poultry Cum Fish Culture | 42 | 15 | FFDA, Fisheries Dpt., Beneficiaries/Bank loan |
| 15 | All Male Tilapia Culture | 900 | 300 | FFDA, Fisheries Dpt., Beneficiaries/Bank loan |
| 16 | Pen Culture and Running Water Fish Culture | 150 | 120 | FFDA, BFFDA, Fisheries Dpt., Beneficiaries/Bank loan |
| 17 | Renovation of Panchayat Ponds For Fish Culture | 180 | 60 | LSGI Plan fund, Central fund |
| 18 | Production Enhancement through Social Fisheries | 75 | 100 | Fisheries Dept, District Panchayat |
| 19 | Production Enhancement through Reservoir Fisheries | 750 | 60 | Fisheries Dept, ADAK, District Panchayat |
| 20 | Open Water Ranching | 75 | 100 | Fisheries Dept, District Panchayat |
| 21 | Sea Ranching | 75 | 100 | Fisheries Dept, District Panchayat |
| 22 | Ornamental Fish Culture | 375 | 1800 | RKVY, Fisheries Dept, District Panchayat & LSGI |
| 23 | Shrimp Farming | 4500 | 1500 | BFFDA, MPEDA, NFDB, RKVY |
| 24 | Mussel Farming | 300 | 1500 | BFFDA, MPEDA, NFDB, RKVY |
| 25 | Oyster Farming | 225 | 1500 | BFFDA, MPEDA, NFDB, RKVY |
| 26 | Prawn Farming | 2250 | 750 | BFFDA, MPEDA, NFDB, RKVY |
| 27 | Cage Culture | 375 | 1800 | BFFDA, MPEDA, NFDB, RKVY |
| 28 | Mud Crab Farming | 630 | 150 | BFFDA, MPEDA, NFDB, RKVY |
| 29 | Marine Pearl Culture | 35 | 100 | BFFDA/NFDB/RKVY |
| 30 | Aqua Culture Estate | 180 | 180 | FFDA, BFFDA, MPEDA & NFDB/RKVY |

| Sl.No. | Name of the Development Proposal | Total Cost (in Lakh Rupees) for all units | Employment generated after completion (Total) | Possible Sources of fund |
|--------|--|---|---|--|
| 31 | Fresh Water Pearl Culture | 35 | 50 | FFDA, LSGI & NFDB/RKVY |
| 32 | Seaweed Farming | 675 | 150 | BFFDA, MPEDA, NFDB, RKVY |
| 33 | Clam Culture | 300 | 150 | BFFDA, MPEDA, NFDB, RKVY |
| 34 | Spirulina Culture | 225 | 150 | FFDA, MPEDA, NFDB, RKVY |
| 35 | Mussel & Oyster Spat Collection Units | 1 | 10 | Fisheries Dept, LSGI |
| 36 | Marine Ornamental Fish Collection and Trade Units | 100 | 10 | Fisheries Dept, LSGI |
| 37 | Aqua Pet Trade Units | 300 | 150 | Fisheries Dept, Beneficiaries |
| 38 | Deep sea Fishing By Diversification of Excess Number of Mechanised Fishing Fleet | 1500 | 150 | Fisheries Dept, NFDB, Beneficiaries/Bank loan |
| 39 | Popularisation of Eco-friendly Gears for the Sustainable Fisheries by Providing Suitable Subsidy to Fishing Implements | 30 | 2100 | Fisheries Dept/LSGI |
| 40 | Game Fisheries | 30 | 6 | Fisheries Dept |
| 41 | Aqua Techno Park | 100 | 10 | Fisheries Dept, Central govt, District Panchayat |
| 42 | Oceanarium | 30 | 10 | Fisheries Dept/Central Govt |
| 43 | Deep Sea Fishing Tour | 50 | 10 | Fisheries & Tourism Dept, Beneficiaries, Bank loan |
| 44 | Fisheries Museum | 10 | 2 | Fisheries Dept |
| 45 | Ornamental Fish Shows | 240 | 0 | Fisheries Dept/LSGI |
| 46 | Theera Vanam/Haritha theeram | 300 | 0 | TEAP/TRP, Fisheries Dept |
| 47 | Enforcement of KMFR Act | 150 | 0 | Fisheries Dept |
| 48 | Establishment of Artificial Reef | 100 | 0 | Fisheries Dept |
| 49 | Marine Bio Reserve | 200 | | Fisheries Dept, Central govt. |
| 50 | Enforcement of Inland Fisheries Act | 75 | 0 | Fisheries Dept |
| 51 | Mangrove Afforestation | 200 | 0 | Fisheries Dept |
| 52 | Fish Wealth Conservation through Removal of Stake Nets | 450 | 0 | Fisheries Dept, Central govt. |
| 53 | Replacement of Kayal Latrines | 800 | 0 | Fisheries Dept/LSGI |
| 54 | Dredging of Backwater | 500 | 0 | Fisheries Dept, Central govt. |
| 55 | Silvo-Fisheries at Ayiramthengu | 50 | 6 | Fisheries Dept/FIRMA |

| Sl.No. | Name of the Development Proposal | Total Cost (in Lakh Rupees) for all units | Employment generated after completion (Total) | Possible Sources of fund |
|--------|--|---|---|------------------------------------|
| 56 | Scheme for Controlling the Little Cormorants Population to Prevent the Reduction of Fishery Wealth | 4 | 10 | Fisheries Dept |
| 57 | Fish Sanctuary at Kulathupuzha | 25 | 0 | Fisheries Dept, Central govt. |
| 58 | Mahaseer Hatchery at Kulathupuzha | 80 | | Fisheries Dept, Central govt. |
| 59 | Pisci- Clubs | 4 | 0 | Fisheries Dept/LSGI |
| 60 | Ranching of Larvivorous Fishes in Drainage Canals and Other Open Waters for the Biological Control of Mosquitoes | 45 | 0 | Health Dept |
| 62 | Infrastructure for Thagassery Port | 300 | 200 | Fisheries Dept, Central govt. |
| 63 | Modernisation of Fishing Harbours | 300 | 400 | Fisheries Dept, Central govt. |
| 64 | Modernisation of Fish Pre Processing Centers | 150 | 2000 | Fisheries Dept, Central govt. |
| 65 | Depuration Units | 15 | 15 | Fisheries Dept |
| 66 | Value Added Fish Products Units | 150 | 60 | Fisheries Dept |
| 67 | | | | Fisheries Dept |
| 68 | Modernisation of Fish Markets | 75000 | 500 | Fisheries Dept/LSGI |
| 69 | Establishment of Cold Storage and Cold Chain | 300 | 100 | Fisheries Dept/LSGI |
| 70 | Fish Booths | 4500 | 1500 | Fisheries Dept/LSGI |
| 71 | Economic Empowerment of Fisher Women SHG's through the Development of Micro enterprises | 25 | 1000 | Fisheries Dept |
| 72 | Scheme for Providing Insulated Crates for Fish Vending | 100 | 10000 | Fisheries Dept/LSGI, Beneficiaries |
| 73 | Vehicle For the Fish Vending Women Group | 30.9 | 50 | TEAP, Beneficiaries |
| 74 | Controlled/Modified Atmosphere Packing (CAP) Units | 7.21 | 0 | TEAP, Fisheries Dept,LSGI |
| 75 | Cluster Production Centres | 39.5 | 0 | TEAP, LSGI |

| Sl.No. | Name of the Development Proposal | Total Cost (in Lakh Rupees) for all units | Employment generated after completion (Total) | Possible Sources of fund |
|--------|--|---|---|------------------------------------|
| 76 | Dried Fish Product Making Unit | 30 | 150 | Fisheries Dept/LSGI, Beneficiaries |
| 77 | Sea Food Restaurants | 50 | 40 | Fisheries Dept, Beneficiaries |
| 78 | Fish Meal Production Unit | 8 | 4 | Fisheries Dept/LSGI, Beneficiaries |
| 79 | Fish Silage Production Unit | 4 | 2 | TEAP, Beneficiaries |
| 80 | Ready to Cook/Ready to Eat fish Product Making Unit | 30 | 10 | Fisheries Dept/LSGI, Beneficiaries |
| 81 | Aqua/Fishery Stores | 20 | 5 | Fisheries Dept |
| 82 | Live Fish Markets | 50 | 10 | Fisheries Dept |
| 83 | Matsya Vikjana Kendram | 30 | 2 | Fisheries Dept, Central govt. |
| 84 | Establishment of New Matsyabhavans and Infrastructure Facilities for the Exiting Matsyabhavans | 45 | 0 | Fisheries Dept, LSGI |
| 85 | Model Demonstration Fish Farm | 5 | 3 | Fisheries Dept/FFDA |
| 86 | Establishment of Fisheries Research Laboratory | 15 | 5 | Fisheries Dept, Central govt. |
| 87 | Fish Quarantine and Inspection Unit | 50 | 5 | Fisheries Dept, Central govt. |
| 88 | Strengthening of Matsyabhavans as Knowledge Centres for Fishermen in Coastal Villages | 20 | 0 | Fisheries Dept |
| 89 | Aqua Book Shelves | 20 | 0 | Fisheries Dept/District Panchaya |
| 90 | Setting up of Feed Mills | 10 | 5 | Fisheries Dept/FFDA/Bank loan |
| 91 | Establishment of Inland Fish Landing Centers | 50 | 0 | Fisheries Dept/LSGI |
| 92 | Establishment of Boat Berthing Facilities | 20 | 0 | Fisheries Dept/Central govt. |
| 93 | Net Mending Unit | 120 | 100 | Fisheries Dept/LSGI/Beneficiaries |
| 94 | Fisheries Roads | 10 | 0 | Fisheries Dept |
| 95 | Establishment of Guide Lights | 50 | 0 | Fisheries Dept |
| 96 | Fishermen Housing Scheme | 3600 | 0 | Fisheries Dept, Central Govt. |

| Sl.No. | Name of the Development Proposal | Total Cost (in Lakh Rupees) for all units | Employment generated after completion (Total) | Possible Sources of fund |
|--------|--|---|---|-------------------------------|
| 97 | Proposal for Providing Land to Landless Fishermen | 2250 | 0 | Fisheries Dept |
| 98 | Scheme for Providing Assistance to Fishermen House Renovation | 1200 | 0 | Fisheries Dept, Central Govt. |
| 99 | Scheme for Providing Sanitation Facilities to Fishermen Houses | 1200 | 0 | Fisheries Dept |
| 100 | Scheme for Fishermen House Electrification | 240 | 0 | Fisheries Dept |
| 101 | Roof top Rain water Harvesting For Fisher House Holds | 1200 | 0 | Fisheries Dept |
| 102 | Saving Cum Relief Scheme | 3900 | 0 | Fisheries Dept, Central Govt. |
| 103 | Sea Rescue Squad | 50 | 10 | Fisheries Dept |
| 104 | Educational Concession to Fisher Folk | 1350 | 0 | Fisheries Dept |
| 105 | Maintenance of Karunagappally Regional Fisheries Technical High School | 120 | 0 | Fisheries Dept |
| 106 | Free Ration to The Fishermen of Mechanized Boats and Allied Worker at the Fishing Harbours During Trawl Ban Period | 120 | 0 | Fisheries Dept |
| 107 | Kerosene Subsidy For Fishing | 3600 | 0 | Fisheries Dept, Central Govt. |
| 108 | Fishermen Development Rebate on HSD Oil | 1125 | 0 | Fisheries Dept, Central Govt. |
| 109 | Providing LPG Kit to OBM Based Marine Plywood Canoes | 160 | 0 | Fisheries Dept, Matsyafed |
| 110 | Scheme for Providing Solar Lamps to MPC's | 40 | 0 | Fisheries Dept |
| 111 | Providing GPS And Wireless Sets To The Small Mechanised Fishing Vessel | 1500 | 0 | Fisheries Dept |

| Sl.No. | Name of the Development Proposal | Total Cost (in Lakh Rupees) for all units | Employment generated after completion (Total) | Possible Sources of fund |
|--------|--|---|---|---|
| 112 | Scheme for Providing Assistance to Fishermen for Treatment of Fatal Diseases | 60 | 0 | KFWFB |
| 113 | Fishermen Old Age Pension | 1305 | 0 | KFWFB |
| 114 | Fishermen Group Insurance Scheme | 90 | 0 | Insurance companies |
| 115 | Fishermen Personal Accident Insurance Scheme | | 0 | Insurance companies |
| 116 | Matsyafed Input Security Scheme | 75 | 0 | Insurance companies |
| 117 | Providing Subsidy to Suitable Components of Fishing Gear | 90 | 1500 | Matsyafed/NCDC/ Beneficiaries/Bank loan |
| 118 | Scheme For Motorisation of country craft | 75 | 1500 | Matsyafed/NCDC/ Beneficiaries/Bank loan |

| Appendix 50-1 Proposals Consolidation Table | | | | |
|---|---|----------------------|--|---------------------------|
| Name of Development Sector : Forest | | | | |
| Sl.No. | Name of the Development Proposal | Total Cost (in Lakh) | Employment generated after completion | Possible Sources of fund |
| 1 | New Wildlife Sanctuary at Achencovil | 50.00 | 10 persons directly 90 persons indirectly | Plan fund of Forest Dept. |
| 2 | Management of Protected area in Schenthuruni Wildlife Sanctuary | 25.00 | 5 persons directly 25 persons indirectly | Central Sponserd Scheme |
| 3 | New Bird Sanctuary at Karali, Kandanchira and Polachira | 25.00 | 5 persons directly 25 persons indirectly | Central Sponserd Scheme |
| 4 | Development of Mangrove areas | 5.00 | 50 persons | Central Sponserd Scheme |
| 5 | Prevention of Forest Fire through people's participation | 10.00 | 100 persons | Plan fund of Forest Dept. |
| 6 | Consolidation of Forest Boundaries for Protection and Management of Forests | 50.00 | 1000 persons | Plan fund of Forest Dept. |
| 7 | Proposals for Greening Non Forest land | 50.00 | 1000 persons | Plan fund of Forest Dept. |
| 8 | Private Holdings | 26.00 | 1000 persons | Plan fund of Forest Dept. |
| 9 | River Bank Management | 25.00 | 100 persons | Plan fund of Forest Dept. |
| 10 | Alternate species of timber for furniture | 5.00 | 10 persons | Plan fund of Forest Dept. |
| 11 | Raising Medicinal plants Nurseries and Plantations | 50.00 | 1000 persons | Plan fund of Forest Dept. |
| 12 | Multiplication and propagation of tree plants | 10.00 | 10 persons | Plan fund of Forest Dept. |
| 13 | Improving the productivity of the existing plantations | 30.00 | 100 persons | Plan fund of Forest Dept. |

| Appendix 50-1 Proposals Consolidation Table | | | | |
|---|--|---------------------|---------------------------------------|--|
| Name of Development Sector :Environment | | | | |
| Sl.No | Name of the Development Proposal | Total Cost in lakhs | Employment generated after completion | Possible Sources of fund |
| 1 | 2.1-I. Prevention of direct discharge of waste water through public drains of Kollam Corporation | 600 | 200 | Kollam Jilla Panchayat, Kollam Corporation, Hospital managements |
| 2 | 2.1-II. Providing effluent treatment plants for sea food pre-processing plants | 125 | 50 | Kollam Corporation Neendakara LSGI |
| 3 | 2.1-III. Conversion of hanging toilets to ecosan toilets / biotoilets | 60 | 15 | Revenue Department, Kollam Co Chavara LSGI, Chavara south LSGI, Kundara LSGI, Perinad LSGI, Mandrothuruth LSGI |
| 4 | 2.1-IV. Water quality monitoring of Ashtamudi lake | 25 | 5 | KSPCB |
| 5 | 2.1-V. Modernisation of coconut husk retting units | 125 | 50 | Individual Industrial Units |
| 6 | 2.2-I. Providing Municipal solid waste treatment facilities | 271.8 | 200 | Sasthamkotta LSGI, Mynagappally LSGI, West Kallada LSGI |
| 7 | 2.2-II. Fencing along the boundary of Sasthamkotta lake | 152 | 5 | MOEF, Government of Kerala |
| 8 | 2.2-III. Providing basic amenities like latrines, facility for laundry etc | 150 | Nil | MOEF, Government of Kerala |
| 9 | 2.2-IV. Banning of sand mining | Nil | Nil | |
| 10 | 2.2-V. Ground Water Recharging | 5 | Nil | |
| 11 | 2.3. Costal Zone Regulations | | Nil | |
| 12 | 2.4. Conservation of Paravur Kayal | 180 | 25 | Government of Kerala |
| 13 | 2.5 Edava Nadayara Kayal | 130 | 20 | Government of Kerala |
| 14 | 2.6. Proposals for other water bodies | 350 | 150 | MOEF, Government of Kerala |
| 15 | 3. Conservation and regeneration of mangroves. | 225 | 100 | |
| 16 | 4. Conservation of sacred groves | 120 | 65 | MOEF, Government of Kerala |

| Appendix 50-1 Proposals Consolidation Table | | | | | |
|---|-------------|--|------------------------------|---------------------------------------|-------------------------------------|
| Name of Development Sector : Industries | | | | | |
| Sl.No. | Article No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
| 1 | 2.1 | Agro bio based industries | 10 Lakhs | 30 | Banks |
| 2 | 2.2 | Fish Processing | 250 Lakhs @ 10 lakh/unit | 50 | District Panchayat, Banks |
| 3 | 2.3 | Dairy Unit | 10 Lakhs | 7 | Banks |
| | 2.4 | Milk Processing unit with chilling plant | 1'00 Lakhs | 50 | LSGIs, Banks |
| 4 | 2.5 | Food Processing unit | 120 Lakhs @ 10 lakh/unit | 120 | LSGIs, Banks |
| 5 | 2.6 | Flour mills & curry powder manufacturing units | 75 Lakhs @ 3 Lakhs/unit | 100 | Banks |
| 6 | 3.1 | Mechanised coir manufacturing units | 20 Lakhs @ 10 Lakh/unit | 50 | Banks |
| 7 | 3.2 | Handloom industry renovation centre | 50 Lakhs | 50 | H&T Department, NABARD Schemes |
| 8 | 3.3 | Clay based industries | 500 Lakhs | 100 | Private agencies |
| 9 | 3.4 | Value added cashew kernel units | 42 Lakhs @ 7 lakh/unit | 35 | Banks |
| 10 | 3.5 | Handloom Units | 50Lakh @ 5 Lakh/unit | 100 | Banks individuals |
| 11 | 3.6 | Bamboo based products & Handicrafts items | 60 Lakhs @ 3 lakhs/unit | 200 | LSGIs, Banks |
| 12 | 3.7 | Development of existing industries | 120 Lakhs @ Rs. 10 Lakh/Unit | 100 | Banks |
| 13 | 3.8 | Development of existing industries & starting of micro units | 610 Lakhs | 250 | District Panchayat, Banks |
| 14 | 4.1 | Public Medical Centre & Bio Medical unit | 400 Lakhs | 10 | District Panchayat, Banks |
| 15 | 4.2 | Ayurvedic Medicine Manufacturing units | 30 Lakhs | 25 | LSGIs, Banks |
| 16 | 5.1 | IT Park paravur and Technopark, Kundara | 800 Lakhs | 100 | District Panchayat, RIDF, Bank, LIC |
| 17 | 5.2 | Entrepreneurship Development Training centre | 15 Lakhs | 5 | District Panchayat |
| 18 | 6.1 | Revival of Premo pipe factory | 600 Lakhs | 150 | KWA, Banks |
| 19 | 6.2 | Rehabilitation of ALIND, Travancore Chemicakls, Punalur Paper Mills, Travancore Plywood industries | To be ascertained | To be ascertained | GOK, Banks |
| 20 | 6.3 | Revival of Pomsy Biscuit manufacturing unit | | | |

| Sl.No. | Article No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
|--------|-------------|---|------------------------------|---------------------------------------|---------------------------------------|
| 21 | 6.4 | Revival of Parvathy mills | To be ascertained | To be ascertained | GOI, NTC Banks |
| 22 | 6.5 | Revival of other closed & sick industries | 740 Lakhs | 740 | LSGIs, District Panchayat, DIC, Banks |
| 23 | 7.1 | Entrepreneurship Training & Employment Exchange | NIL | 5 | N.A |
| 24 | 7.2 | Tool Room Training Centre at Qet cos | 1200 Lakhs | 50 | GOI, GOK, GOI |
| 25 | 8.1 | Toy Manufacturing | 62.5 Lakhs | 125 | LSGI, Banks |
| 26 | 8.2 | Mini Industrial Estate, Nedungolam | 40 Lakh | 50 | |
| 27 | 8.3 | Coir yarn manufacturing units | 13 Lakhs | 130 | Coir Directorate, Banks |
| 28 | 8.4 | Light Engineering units | 10 Lakhs @ 2 Lakh/unit | 25 | Banks |
| 29 | 8.5 | Straw picture and screw pine products manufacturing units | 15 Lakhs | 150 | District panchayat, Banks |
| 30 | 8.6 | Note Book manufacturing unit | 25 Lakh | 10 | Banks, District Panchayat |
| 31 | 8.7 | School Bag Manufacturing units | Rs. 50 Lakh @ 25 Lakh/unit | 50 | Banks |
| 32 | 8.8 | Wood based Industries | Rs3700 Lakhs@10 lakh/unit | 1000 | Banks |
| 33 | 8.9 | Rubber Wood Treatment Plant | Rs500 Lakhs | 10 | Dist Panchayath |
| 34 | 8.10 | Rubber Based Industries | Rs375 Lakhs | 100 | Banks |
| 35 | 8.11 | Food Park | Rs3000 lakhs | 100 | Dist Panchayath, Private Players |
| 36 | 8.12 | Development of Existing Clusters | Rs25 Lakhs /Year for 5 Years | 150 | Dist Panchayath |

| Appendix 50-1 Proposals Consolidation Table | | | |
|---|---|-----------------------------|--------------------------|
| Name of Development Sector : Power Sector | | | |
| Sl. No | Name of the Development Proposal | Total Cost (in Lakh Rupees) | Possible Sources of fund |
| 1 | 110 KV Substation at Enatha and Pathanapuram | 12 Crores | KSEB |
| 2 | 110 KV Substation at Kollam and 110 KV upgradation at Ayathil Substation | 37 Crores | KSEB |
| 3 | Upgradation of Karunagapally Substation | 120 Crores | KSEB |
| 4 | Kundara-Sasthamcottah 110 KV Double Circuit feeder | 5 Crores | KSEB |
| 5 | Upgradation of Edamon 220 KV substation to 440 KV | 40 Crores | KSEB |
| 6 | Upgradation of Edamon Ayoor 66 KV line to 110 KV | 4 Crores | KSEB |
| 7 | Evacuation of power from Achankovil New Hydro Electric Project by constructing 110 KV | 10.5 Crores | KSEB |
| 8 | 11 KV | 902.9 Lakhs | KSEB |
| 9 | 100 KV transfer | 935 Lakhs | KSEB |
| 10 | LT 3 Phase | 73.03 Lakhs | KSEB |
| 11 | LT Single Phase | 513.62 Lakhs | KSEB |
| 12 | Conversion | 707.55 Lakhs | KSEB |

| Appendix 50-1 Proposals Consolidation Table | | | |
|---|--|------------------------------|---|
| Name of Development Sector : Infra structure Sector | | | |
| Sl.No. | Name of the Development Proposal | Total Cost (Crore Rupees) | Possible sources of fund |
| NATIONAL HIGHWAY (30 m land width) | | | |
| 1 | National Highway 220 (Kollam – Theni road) | 136.76 | Central Government, Budgetary fund |
| STATE HIGHWAYS (30 m land width) | | | |
| 2 | Nilamel – Ayoor – Kottarakkara – Kulakkada road | – | World Bank, RIDF or State Govt or LSGD |
| 3 | Ayoor – Anchal – Punalur – Pathanapuram road | 56.55 | State Government / World Bank / ADB, RIDF or State Govt or LSGD |
| 4 | Parippally – Nilamel – Madathara road | 61.39 | NABARD, RIDF or State Govt or LSGD |
| 5 | Kulathupuzha – Madathara – Chithara road | 33.38 | NABARD, RIDF or State Govt or LSGD |
| 6 | Bharanikkavu – Adoor road | 21.31 | Central / State Government, RIDF or State Govt or LSGD |
| PRIMARY ROADS (21 m land width) | | | |
| 7 | Tangassery Harbour – Paravoor – Chathannur road | 112.5 | State Government / ADB, RIDF or State Govt or LSGD |
| 8 | Chathannur – Velinalloor – Ayoor road | 36.63 | World Bank / NABARD, RIDF or State Govt or LSGD |
| 9 | Kottiyam – Kannanailoor – Kundara – Bharanikkavu – Karunagappally road | 82.36 | World Bank, RIDF or State Govt or LSGD |
| SECONDARY ROADS (16 m land width) | | | |
| 10 | Chavara – Sassthancotta road | 37.86 | State / Central Government, RIDF or State Govt or LSGD |
| 11 | Paravur – Varkala road | 9.5 | State Government, RIDF or State Govt or LSGD |
| 12 | Paravur – Parippally road | 15.29 | Central / State Government, RIDF or State Govt or LSGD |
| 13 | Kannanailoor – Pooyappally – Ayoor road | 31.33 | World Bank, RIDF or State Govt or LSGD |
| 14 | Kadakkal – Anchal – Chengamanadu road | 45.05 | NABARD, RIDF or State Govt or LSGD |
| 15 | Bharanikkavu – Kottarakkara – Pooyappally – Kurisummoodu Jn. Road | 44 | World Bank / ADB, RIDF or State Govt or LSGD |
| 16 | Kottarakkara – Mylom – Pattazhy – Pathanapuram road | 19.55 | NABARD, RIDF or State Govt or LSGD |
| 17 | Anchal – Kulathupuzha – Thenmala road | 30.86 | NABARD, RIDF or State Govt or LSGD |

| Appendix 50-1 Proposals Consolidation Table | | | |
|---|---|------------|---------------------------------|
| Name of Development Sector : IRRIGATION | | | |
| Sl.N o. | Name of the Development Proposal | Total Cost | Possible Sources of fund |
| 1 | Replacement of pumpsets (15 Nos) | 25 Lakhs | No. 1 |
| 2 | Maintenance of conveyance system | 5 Lakhs | No. 1 |
| 3 | New conveyance system to storage tanks from L.I.S | 3 Lakhs | M.I & LSGD |
| 4 | Construction of Ferro - Cement storage tanks (100 Nos) | 80 Lakhs | KIP, CADA, LSGD & Deposit works |
| 5 | New conveyance system to storage tanks from KID-1st 5 phases | 25 Lakhs | KIP, CADA, LSGD & Deposit works |
| 6 | Construction of Ferro - Cement storage tanks (127Nos) | 102 Lakhs | KIP, CADA, LSGD & Deposit works |
| 7 | New conveyance system to storage tanks from KIP-Next 5 phases | 32 Lakhs | KIP, CADA, LSGD & Deposit works |

| Appendix 50-1 Proposals Consolidation Table | | | | |
|---|--|---|---------------------------------------|---|
| Name of Development Sector : SC/ST | | | | |
| Sl.N o. | Name of the Development Proposal | Total Cost (in Lakh Rupees) | Employment generated after completion | Possible Sources of fund |
| 1 | Providing Housing grant to Houseless SC | 120 Crore | 8,00, 000 man days | State Assistant Central Assistnat grant in aid. |
| 2 | Providing Housing grant to Houseless ST | 5.2 Crore | 18200 man days | State Assistant Central Assistant grant in aid. |
| 3 | Rehabilitation to landless SC | 41 Crore | Nil | State Assistant Central Assistnat grant in aid. |
| 4 | Rehabilitation to landless ST | 10 Lakh | Nil | State, Central and LSGIs |
| 5 | Pre-Primary schools | Expected recurring expenditure 1210000 per annum capital expenditure 1 crore 10 lakh | 20 mandays | Grand in aid of SCDD |
| 6 | Primary | 8.25 Crore at the present rate | | State Fund |
| 7 | Upper Primary | 5.18 Crore at the present rate | | State Fund |
| 8 | High School | 7.50 Crore at the present rate | | State Fund |
| 9 | Post Matric Education | 104 Crore at the present rate | | State Fund, Grand in aid |
| 10 | Settingup Coaching Centres | Recurring expenditure 4.50 per annum capital expenditure 45 lakhs | 25 | State Fund, Grand in aid |
| 11 | Settingup Nursing Colleges | Recurring expenditure 15 Lakh per year excluding salary of staff capital expenditure 1 Crore | 10000 man days 25 per annual | State Fund, Grand in aid |
| 12 | Settingup of two Post Matric Hostels | Recurring expenditure 15 Lakh per annum excluding salary of staff capital expenditure 1 Crore | 15000 Mandays & 12 permanent | State Fund, Grand in aid |
| 13 | Providing Drinking water | Not accessible at present | | State Fund, Grand in aid |
| 14 | Electrification SC and ST Housings | Not accessible at present | | State Fund, Grand in aid, Central Fund |
| 15 | Reduction of unemployment, Settingup of Self employee ventures | Reduction of unemployment settingup of self employee ventures | 1200 | State Fund, Grand in aid, Central Fund |

| Appendix 50-1 Proposals Consolidation Table | | | | | |
|---|-------------|--|------------|---------------------------------------|---|
| Name of Development Sector : Tourism | | | | | |
| Sl.No. | Article No. | Name of the Development Proposal | Total Cost | Employment generated after completion | Possible Sources of fund |
| 1 | 2.1.1 | Terminal complex at boat jetty | 80 lakh | 30 | DOT |
| 2 | 2.1.2 | Beautification of Kollam Canal - Ashtamudi to Eravipuram | 3.25 lakh | 25 | DOT allows subsidy to 1.5 lakhs |
| 3 | 2.1.3 | Proposal for setting up of Kaayaloram - Responsible tourism Project for Ashtamudi and Paravur | 25 lakh | 25 | DOT allows subsidy to 1.5 lakhs |
| 4 | 2.1.4 | Paithrikatheeram-Preservation of Natural and Cultural Heritage on the shores of backwaters and beaches of Kollam | 25 lakh | 100 | |
| 5 | 2.1.5 | Smart waterway terminal cum Water sports centre | 50 lakh | 200 | |
| 6 | 2.2.1 | Development and beautification of Kollam Beach | 2.35 crore | 25 | DOT |
| 7 | 2.2.2 | Development and beautification of Thangassary Break water Beach | 2.35 crore | 25 | DOT |
| 8 | 2.2.3 | Development of Thirumullavaram and Mundakkal beach | 1 crore | 100 | |
| 9 | 2.2.4 | Under Water Marine Aquarium 2008-2009 | 3 crore | 100 | DOT |
| 10 | 2.2.5 | Beautification of Paravur Beach | 5 crore | 200 | DOT |
| 11 | 2.2.6 | Development of Pozhikkara beach | 50 lakh | 50 | DOT |
| 12 | 2.2.7 | Deep Sea Fishing Cruise Terminal Complex at Neendakara | 1.5 crore | 50 | |
| 13 | 2.3 | Eco-Tourism Proposals | 2 crore | 50 | |
| 14 | 2.4.1 | Development of Tourism hub at Perinad-Village Tourism Facilitation Complex | 5 crore | 100 | DOT ,Govt of Kerala ,Govt of India |
| 15 | 2.4.2 | Destination Ashramam | 2 crore | 20 | DOT ,Fisheries Dept |
| 16 | 2.4.3 | Destination Sasthankotta | 2crore | 50 | Local Self Govt |
| 17 | 2.4.4 | Poothakulam Village Tourism | 20 lakhs | 50 | 10 lakhs by DOT , 10 Lakhs by local self govt |
| 18 | 2.5.1 | Museum at Thevally Palace | 1crore | 15 | DOT |
| 19 | 2.5.2 | House Boat Construction Yard cum Museum of Traditional crafts at Alumkadavu | 15lakhs | 10 | DOT |
| 20 | 2.5.3 | Handicraft Village at Thazhava / Perinadu | 50lakhs | 100 | State Govt |
| 21 | 2.5.4 | Interpretation center for history and literature | 50lakh | 20 | Local Self Govt |
| 22 | 2.5.5 | Development of Heritage Precincts | 1.5crore | 100 | Local Self Govt,Devasom Board |
| 23 | 2.5.6 | Special Cultural Activities | 10 lakh | 50 | DOT |
| 24 | 2.6.1 | Pilgin Centre Infrastructure Development | 50lakh | 50 | State Govt |
| 25 | 2.6.2 | Promotion of Festivals | 2crore | 50 | |
| 26 | 3.A | Beach -backwater Tourism Circuit | 1crore | 100 | DOT |
| 27 | 3.B | Pilgrim Eco Tourism Circuit | lakh | 25 | LSGI |
| 28 | 3.C | Heritage Tourism Circuit | 1crore | 100 | DOT |
| 29 | 3.D | Village Tourism Circuit | 50lakh | 20 | DOT |
| 30 | 4 | Proposals for marketing and promotion | 1 crore | 100 | DOT |
| 31 | 5 | Proposals for Private Investors | 5 crore | 300 | Private Sectors |

| Appendix 50-1 Proposals Consolidation Table | | | | |
|---|--|------------------------|---------------------------------------|---|
| Name of Development Sector : Allopathy | | | | |
| Article No. | Name of the Development Proposal | Total Cost (in crores) | Employment generated after completion | Possible Sources of fund |
| 2.1.1 | District Hospital to be raised to the status of General Hospital | 167.80 | | Jilla Panchayat Fund, Health Department Fund, NUHM Fund, MLA-MPFund |
| 2.1.2 | Women & Children Hospital (Victoria Hospital, Kollam) | 117.80 | | Jilla Panchayat Fund, Health Department Fund, NUHM Fund, MLA-MPFund |
| 2.1.3 | Taluk Hospital | 56.17 | | Municipality Fund, NUHM Fund, Health Dept. Fund, MLA Fund |
| 2.1.5 | CHC Kadakkal | 32.09 | | Kadakkal Grama panchayat, Health Dept., NRHM |
| | G.H Nedumpana | 32.09 | | Nedumpana Grama panchayat, Health Dept., NRHM |
| | RRH Nedungolam | 32.09 | | Paravur Municipality, Health Dept., NUHM |
| | THQH | 55.14 | | Block Panchayat Fund, NRHM, Health Dept Fund, MLA, M.P Fund |
| | THQH | 55.14 | | Block Panchayat Fund, NRHM, Health Dept Fund, MLA, M.P Fund |
| | THQH | 55.14 | | Block Panchayat Fund, NRHM, Health Dept Fund, MLA, M.P Fund |

| Appendix 50-1 Proposals Consolidation Table | | | | | |
|---|---|-------------------|---------------------------------------|------------------------------|--|
| Name of Development Sector : Ayurveda | | | | | |
| Article No. | Name of the Development Proposal | Total cost | Employment generated after completion | Possible sources of fund | |
| 3.3.1 | District Medical Office(ISM),Kollam | 5 Crore 30 Lakhs | 103 | State and Central Government | |
| 3.3.2 | District Ayurveda Hospital,Kollam. | 12 Crore 60 Lakhs | 374 | | |
| 3.3.3 | Govt.Ayurveda Hospital,Ayoor. | 5 Crore 58 Lakhs | 123 | | |
| 3.3.4 | Govt.Ayurveda Hospital,Thalavoor | 5 Crore 58 Lakhs | 123 | | |
| 3.3.5 | Govt.Ayurveda Hospital,Paravoor | 5 Crore 58 Lakhs | 123 | | |
| 3.3.6 | Upgradation 10 bedded hospital into 150 bed | | | | |
| | Govt.Ay.Hospital,Karunagappally | 2 Crore 14 Lakhs | 95 | State and Central Government | |
| | Govt.Ay.Hospital,Kottarakkara | 2 Crore 14 Lakhs | 95 | | |
| | Govt.Ay.Hospital,Iverkala | 2 Crore 14 Lakhs | 95 | | |
| | Govt.Ay.Hospital,Poruvazhy | 2 Crore 14 Lakhs | 95 | | |
| | Govt.Ay.Hospital,Nedumpana | 2 Crore 14 Lakhs | 95 | | |
| 3.3.7 | Upgradation of Dispensaries into 50 bedded Hospital | | | | |
| | Govt.Ay.Dispensary,Srayikkad | 1 Crore 53 Lakhs | 44 | State and Central Government | |
| | Govt.Ay.DispensaryThrikkadavoor | 1 Crore 53 Lakhs | 44 | | |
| | Govt.Ay.Dispensary Kuzhikkalidavaka | 1 Crore 53 Lakhs | 44 | | |
| | Govt.Ay.DispensaryChavara | 1 Crore 53 Lakhs | 44 | | |
| | Govt.Ay.DispensaryVadakkevila | 1 Crore 53 Lakhs | 44 | | |
| 3.3.8 | Upgradation of Govt.Ay.Dispensary, Thenmala | 2Crore 80 Lakhs | 95 | State and Central Government | |
| 3.3.9 | Construction of own building for Ayurveda Dispensaries | | | | |
| | Govt.Ay.Dispensary,Eravipuram. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Cherukarakani | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Mundrothuruth | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Piravanthoor. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Kundara. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Elampalloor. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Chathanoor. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Achencoil | 20 Lakhs | NIL | | |
| 3.3.9 | Govt.Ay.Dispensary,Chadayamangalam | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Chithara. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Kareepa. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Devikulangara. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Panayam. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Perayam. | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Umayanalloor | 20 Lakhs | NIL | | |
| | Govt.Ay.Dispensary,Thamarakudy | 20 Lakhs | NIL | | |
| 3.3.10 | Starting of New Ayurveda Dispensaries in 15 Grama Panchayat | 5 Crore | 60 | State and Central Government | |
| 3.4.3 | Medicinal Plant Cultivation Unit | 2 Crore 15 Lakhs | 45 | State and Central Government | |
| 3.4.4 | Medicine Manufacturing Unit | 13 Crore 45 Lakhs | 48 | State and Central Government | |

| Appendix 50-1 Proposals Consolidation Table | | | | |
|---|--|-------------|---------------------------------------|--|
| Name of Development Sector : Homoeo | | | | |
| SI No: | Name of the development proposals | Total cost | Employment generated after completion | Possible source of fund |
| 1 | 4.1.1.1. Taluk/Urban Head quarters | Rs.9 crore | | Nabard, MLA & MP fund, Central govt.fund. |
| 2 | 4.1.1.2.Community Homoeo Hospital | Rs.18 Crore | | Nabard, MLA & MP fund, Central govt.fund. |
| 3 | 4.1.1.3.Govt. Homoeo Dispensaries | Rs.16 Crore | | Nabard, MLA & MP fund, Central govt.fund.,NRHM |
| 4 | 4.1.2.1.District medical office, Kollam | Rs.5 crore | 342 | Nabard, MLA & MP fund, Central govt. fund. |
| 5 | 4.1.2.2.Kollam District Homoeo Hospital | Rs.3.Crore | 276 | Nabard,MLA & MP fund, Central govt. fund. Jilla Panchyat |
| 6 | 4.1.2.3.Taluk/Urban Head quarter Homoeo Hospital | Rs.6. Crore | 167 | Nabard, MLA &MP fund, Central govt. fund. |
| 7 | 4.1.2.4.Government Homoeo Dispensaries | Rs.1 Crore | 333 | Nabard, MLA & MP fund, Central govt. fund. |

| Appendix 50-1 Proposals Consolidation Table | | | | |
|---|---|-----------------------|---|---|
| Name of Development Sector : Drinking Water | | | | |
| Article No. | Name of the Development Proposal | Total Cost (in Lakhs) | Possible Implementing agencies | Possible Sources of fund |
| 2.1 | Proposals for Improvement of Ground Water Sources | 390 | Ground water Dept. and KWA | Panchayat, LSGIs, MP/MLA funds |
| 2.2.2 | Proposals for Check dams | 200 | Irrigation Dept., River basin Authority under formation LSGI, Tourism Dept. Fisheries Dept. | |
| 2.3 | Proposals for Rain Water Harvesting | 50 | LSGI | District Panchayat/ LSGI |
| 2.4 | Proposals for Non conventional Sources of Water | 50 | Irrigation Dept., Fisheries Dept., Tourism Dept. and Mining and Geology Dept. | District Panchayat, LSGI, financing agencies, Benefiting communities, Financial assistance and loans /grant |
| 3.1 | Rural Water Supply Scheme to Ayoor in Edamulakkal Grama Panchayat - Source improvement | 12 | KWA | GOI |
| 3.2 | Water Supply Scheme to Kadakkal Grama Panchayat for Extension of Water Supply pipe lines | 55 | KWA | GOI |
| 3.3 | Water Supply Scheme to Kummil Grama Panchayat -Extension of Water Supply pipe lines | 18 | KWA | GOI |
| 3.4 | Water Supply Scheme to Chithara Grama Panchayat - Extension of Water Supply pipe lines | 18 | KWA | GOI |
| 3.5 | Water Supply Scheme to Nilamel Grama Panchayat - Extension of Water Supply pipe lines | 18 | KWA | GOI |
| 3.6 | Water Supply Scheme to Kadakkal Grama Panchayat -Rehabilitation of existing damaged pipes | 50 | KWA | GOI |
| 3.7 | Water Supply Scheme to Kadakkal Grama Panchayat -Construction of OHSR | 30 | KWA | GOI |
| 3.8 | Water Supply Scheme to Kadakkal, Kummil, Nilamel and Chadayamangalam Grama Panchayats - Augmentation of the Existing scheme | 481.78 | KWA | GOI |
| 3.9 | Water Supply Scheme to Elamadu Grama Panchayat - Extension of water supply pipe lines | 22 | KWA | GOI |
| 3.10 | Water Supply Scheme to Ummannoor Grama Panchayat -Extension of water supply pipe lines | 22 | KWA | GOI |
| 3.11 | Water Supply Scheme to Chadayamangalam Grama Panchayat - Source improvement | 10 | KWA | GOI |
| 3.12 | Augmentation BAWSS to Kundara and adjoining Grama Panchayats and Augmentation of RWSS in Ezhukone Grama Panchayat | 100 | KWA | GOK/ GOI/ Nabard |

| Article No. | Name of the Development Proposal | Total Cost (in Lakhs) | Possible Implementing agencies | Possible Sources of fund | |
|-------------|--|-----------------------|--------------------------------|--------------------------|----|
| | Augmentation of RWSS in Ezhukone Grama Panchayat | 75 | KWA | MP LAD/ MLALAD/ GP/ GOK | 34 |
| 3.13 | Augmentation of ARWSS to Kulakkada and Pavithreswaram in Kulakkada Grama Panchayat | 160 | KWA | GP/GOK/ GOI | 35 |
| 3.14 | Augmentation BAWSS to Kundara and adjoining Grama Panchayats, Improvements to existing schemes and Proposal for Mini water supply scheme for Neduvathoor Grama Panchayat | 125 | KWA | GOK/ GOI | 36 |
| | Improvements of Existing Water supply scheme | 65 | KWA | SC Dept/ GOK/ GP | 37 |
| | Mini Water Supply schemes | 110 | KWA | SC Dept/ GOK/ GOI | |
| 3.15 | Augmentation of JBIC assisted Water supply scheme to Meenad and adjoining Villages (Kerala Water Supply Proposal) for Pooyapally Grama Panchayat | 200 | KWA | JBIC/GOK/ GOI | 38 |
| 3.16 | Augmentation of RWSS to Velinalloor Grama Panchayat | 10 | KWA | Nabard/ GOK/ GOI | 39 |
| 3.17 | Augmentation of JBIC assisted Water supply scheme to Meenad and adjoining Villages (Kerala Water Supply Proposal) for Veliyam Grama Panchayat | 10 | KWA | JBIC/GOK/ GOI | 40 |
| 3.18 | RWSS to Thrikkovilvattom Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | 105 | KWA | 29 RWSS | 41 |
| 3.19 | RWSS to Kottiyam - Perayam in Mayyanadu (Part), Adichanallur (Part) and Thrikkovilvattom (Part) Grama Panchayats– Source Improvement and Rehabilitation | 45 | KWA | 29 RWSS | 42 |
| 3.20 | RWSS to Mayyanad Grama Panchayat– Source Improvement and Extension of Pipe line | 44 | KWA | 29 RWSS | 43 |
| 3.21 | RWSS to Kottamkara Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | 150 | KWA | 29 RWSS | 44 |
| 3.22 | RWSS to Munroe Island Grama Panchayat – Source Improvement and Rehabilitation | 20 | KWA | 29 RWSS | 45 |
| 3.23 | RWSS to Thrikkaruva Grama Panchayat – Source Improvement and Rehabilitation | 18 | KWA | 29 RWSS | 46 |
| 3.24 | RWSS to Perinadu Grama Panchayat – Source Improvement and Rehabilitation | 26 | KWA | 29 RWSS | 46 |
| 3.25 | RWSS to Panayam Grama Panchayat– Source Improvement and Extension of Pipe line | 22 | KWA | 29 RWSS | 47 |
| 3.26 | RWSS to Thrikkadavoor Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | 55 | KWA | 29 RWSS | 48 |
| 3.27 | RWSS to Paravoor Municipality – Source Improvement, Rehabilitation and Extension of Pipe line | 64.75 | KWA | 09 UWSS | 49 |

| Article No. | Name of the Development Proposal | Total Cost (in Lakhs) | Possible Implementing agencies | Possible Sources of fund |
|-------------|---|-----------------------|--------------------------------|--------------------------|
| 3.28 | RWSS to Adichanalloor Grama Panchayat – Source Improvement and Rehabilitation | 123 | KWA | 29 RWSS |
| 3.29 | RWSS to Chathanloor Grama Panchayat – Source Improvement and Rehabilitation | 63 | KWA | 29 RWSS |
| 3.30 | RWSS to Poothakulam Grama Panchayat – Source Improvement and Extension of Pipe line | 36.50 | KWA | 29 RWSS |
| 3.31 | RWSS to Chirakkara Grama Panchayat – Source Improvement and Extension of Pipe line | 19 | KWA | 29 RWSS |
| 3.32 | RWSS to Kalluvathukkal Grama Panchayat – Source Improvement, Rehabilitation and Extension of Pipe line | 196 | KWA | 29 RWSS |
| 3.33 | Proposal for Conservation of Sasthamcotta Lake | 2756 | KWA | GOI |
| 3.34 | Water Supply scheme to Poruvazhy Grama Panchayat – Source Improvement and Extension of Pipe line | 173 | KWA | GOI |
| 3.35 | Water Supply scheme to Sooranad North Grama Panchayat – Source Improvement | 154 | KWA | GOI |
| 3.36 | Water Supply scheme to Kunnathoor Grama Panchayat – Source Improvement | 226 | KWA | GOI |
| 3.37 | Water Supply scheme to Mynagappally Grama Panchayat – Source Improvement | 152 | KWA | GOI |
| 3.38 | Water Supply scheme to Sasthamcotta Grama Panchayat – Source Improvement and Extension of Pipe line | 245 | KWA | GOI |
| 3.39 | Water Supply scheme to Sooranad South Grama Panchayat – Source Improvement and Extension of Pipe line | 191 | KWA | GOI |
| 3.40 | Water Supply scheme to Thevalakkara Grama Panchayat – Source Improvement and Rehabilitation | 329 | KWA | GOI |
| 3.41 | Water Supply scheme to Thekkumbhagom Grama Panchayat – Source Improvement and Rehabilitation | 209 | KWA | GOI |
| 3.42 | Water Supply scheme to Thazhava Grama Panchayat – Source Improvement and Extension of Pipe line | 349 | KWA | GOI |
| 3.43 | Water Supply scheme to Thodiyoor Grama Panchayat – Source Improvement and Extension of Pipe line | 189 | KWA | GOI |
| 3.44 | Water Supply scheme to Kulasekharapuram Grama Panchayat – Source Improvement and Extension of Pipe line | 424 | KWA | GOI |
| 3.45 | Water Supply scheme to West Kallada Grama Panchayat – Source Improvement and Extension of Pipe line | 351 | KWA | GOI |
| 3.46 | ARP- ARWSS to Pathanapuram Grama Panchayat –Extension of Pipe line | 100 | KWA | GOK/ GOI |

| Article No. | Name of the Development Proposal | Total Cost (in Lakhs) | Possible Implementing agencies | Possible Sources of fund |
|-------------|---|-----------------------|--------------------------------|--------------------------|
| 3.47 | ARP- ARWSS to Thenmala Grama Panchayat – Source Improvement | 32 | KWA | GOK/ GOI |
| 3.48 | ARP- ARWSS to Ariyamkavu Grama Panchayat – Source Improvement and Extension of Pipe line | 56 | KWA | GOK/ GOI |
| 3.49 | R.W.S.S. to Vilakkudi Grama Panchayat – Source Improvement and Extension of Pipe line | 115 | KWA | GOK/ GOI |
| 3.50 | R.W.S.S. to Piravanthoor Grama Panchayat –Extension of Pipe line | 31 | KWA | GOK/ GOI |
| 3.51 | U.W.S.S. to Punalur Municipality – Source Improvement and Extension of Pipe line | 115 | KWA | GOK/ GOI |
| 3.52 | WSS to Thalavoor Grama Panchayat – New Proposal | 155 | KWA | GOK/ GOI |
| 3.53 | WSS to Pattazhy Grama Panchayat – Source Improvement and Extension of Pipe line | 140 | KWA | GOK/ GOI |
| 3.54 | WSS to Pattazhy Vadakkekara Grama Panchayat – Source Improvement and Extension of Pipe line | 125 | KWA | GOK/ GOI |
| 3.55 | WSS to Karavaloor Grama Panchayat – New Proposal | 170 | KWA | GOK/ GOI |
| 3.56 | RWSS to Vettikkavala Panchayat – Augmentation Works | 390 | KWA | GOI |
| 4.1 | Proposals for Sewerage System | | | |
| | Kollam Corporation | 5163 | KWA/Kollam Corporation | GOK/ GOI |
| | Kottamkara | 240 | KWA/Kottamkara | GOK/ GOI |
| | Thrikkovilvattom | 300 | KWA/Thrikkovilvattom | GOK/ GOI |
| | Neendakara | 140 | KWA/Neendakara | GOK/ GOI |
| | Elampallur | 200 | KWA/Elampallur | GOK/ GOI |
| | Panayam | 160 | KWA/Panayam | GOK/ GOI |
| | Mayyanadu | 300 | KWA/Mayyanadu | GOK/ GOI |
| | Punalur | 400 | KWA/Punalur | GOK/ GOI |
| | Kottarakkara | 200 | KWA/Kottarakkara | GOK/ GOI |
| | Karunagapally | 300 | KWA/Karunagapally | GOK/ GOI |
| | Anchal | 200 | KWA/Anchal | GOK/ GOI |
| | Chathannur | 300 | KWA/Chathannur | GOK/ GOI |
| 5.1 | Quality Monitoring Program - Setting up of Labs | 1000 | KWA/LSGI | GOK/ GOI,ADB, World Bank |
| 5.2 | Replacing Railway crossing for Alappad, Clappana, Oachira and Karunagapally | 350 each | Railway and Revenue Dept. | KWA/GoK |

**Manual for Integrated District Planning,
Planning Commission, Government of India**

*“The Kollam experience, particularly
the methodologies developed
by it can be easily upscaled to
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**The Committee for Evaluation of
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*“This was like a demonstration
mission.Creating it is only
honouring the Constitutional mandate
enshrined in Article 243ZD in letter and in spirit.”*

**The 57th National Town and Country
Planners' Congress 2009**

*“Based on the experience gained from the
Kollam Model of Development Plan, an
exercise for designing a fast track district
development plan along with its handbook, manuals,
toolkit etc. may be prepared.”*