

CHARACTER OF SETTLEMENTS IN THE KERALA CONTEXT

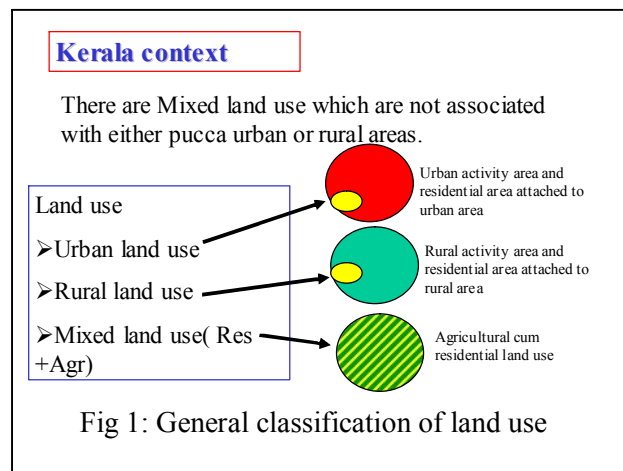
Census applies three fold criteria based on demography, to identify the character, be urban or not, of a settlement. If this criteria is applied for the study of settlements in Kerala, majority of the settlements will show urban character. Kerala, known as the abode of peculiarities, is different from other parts of the Country in its settlement pattern, population distribution, land use distribution etc. These peculiarities are to be taken into account while identifying the character (urban or rural) of an area in the Kerala Context. Here an attempt is made to derive a methodology to identify the nature of an area based on population and the nature of the land use. The methodology evolved is tested taking Kollam, one of the Southern Districts of Kerala, as a case study.

I.Urban and Rural area in the Kerala Context

A clear distinction exists between the rural and urban areas else where in India. One can visually feel the difference of urban and rural area. A rural area mainly consists of vast areas of agricultural land with hamlets distributed sporadically whereas an urban area will have multistoried buildings, high road density, high volume of vehicular traffic etc. But here in Kerala, one cannot clearly distinguish a rural area from an urban area. All over Kerala, it is like a large number of small and medium towns distributed in the village background. It is very difficult to demarcate the end or beginning of a town and a village. One can say that here exists an **urban rural continuum**.

A close examination of the land use pattern existing in Kerala will reveal that there are only a

few areas in the State which are pucca urban or pucca rural. In between the pucca urban or pucca rural area, large chunks of land ('in between land') with mixed land use character where in a combination of residential and agricultural land use, exists (Fig 1). This peculiar character of the land use



makes it difficult to classify a local body or a ward of a local body as either urban or pucca rural. The pucca urban or rural area is only a minor share of the total area; the remaining area being mixed land use areas. Hence the character of the mixed land use area determines the total character of the area. This mixed land use area is to be again classified in order to ascertain the character of the land use of an area. An attempt to do the above classification is done in the forthcoming paragraphs.

II. Classification of mixed land use area.

Average plot size (see the note) of the **mixed land use** is taken as the criterion for classifying the mixed land use area because in most of the cases this determines type of activity to be introduced there and consequently the character of the mixed land use area.

If the average plot size (total area/ number of houses) in the mixed land use area is such that one can earn reasonable income from agricultural activity alone (without considering the present status of land use), it can be classified as a rural area.

If the average plot size is such that a family can earn their livelihood only partially from the agricultural activity, it can be termed as semi urban or semi rural area. The share between the agricultural and non agricultural activity determines whether it is a semi urban or semi rural area. If the plot size is such that a family has to earn major share of their livelihood from rural activity but has to resort to some urban activity also to fill the gap (in the earnings) it can be termed as semi rural area. A reversed situation indicates a semi urban area.

Those plots size with an extent, which is not at all sufficient for any agriculture activity of namesake, can be treated as urban area.

From the above explanation it can be concluded that the mixed land use area can be classified as rural area, urban area, semi urban area and semi -rural area based on the average plot size

**Note: Average plot size as the major Criterion for the classification of mixed land use area-
Derivation**

The income from agricultural products from unit area of land is taken as the criteria to determine the average plot size. Yield of coconut trees in an area is taken for the calculation. Since the major agricultural cultivation in the mixed land use in this context is coconut cultivation, the minimum plot area which produces coconuts sufficient enough to fetch one third of the total income for the sustenance of an average family has to be determined here. It is presumed that the other agriculture and allied activities will bring in the remaining part of the income. An average family of 5 members needs an income of at least Rs.3500/ month- for their food, shelter and other daily necessities.

*In the Kerala context, the average yield of coconut is 5771 nuts / ha/year (the least value is taken). This is equivalent to Rs.50000/ Ha /year (Rs.16.4 /cent/ month). This means that an average extent of 70 cents will fetch minimum a monthly average income of Rs.1148 /- from the coconut trees. So if the average plot size is greater than or equal to 70 cents, this can be termed as rural area. Also it can be presumed that an extent of 25 cents of land or less will not fetch significant agricultural production to be taken in to account. An average plot of size less than 25 cents is assumed not to bring any agriculture products worth mentioning. Hence an average plot size of 25 cents or below can be termed as **urban area**. If the averages plot size is in between one HH/25- 70, a family has to depend on both agricultural activity and non agricultural activity for their livelihood. Depending on the share between agricultural and non agricultural activity which can be introduced in the plot, it can be termed as **semi urban or semi rural**. If the average plots size is between one HH/ 50-70 cents it is termed as **semi rural area** and if it is in between one HH/ 25-50 cents it is termed as **semi urban area**.*

So in the Kerala context a ward or a local body will be having either pucca urban area, pucca rural area or mixed (Residential cum agricultural) use area in separate or in its combination. And also the mixed land use area can be further classified into- Urban, semi urban, semi rural and rural as noted above. When the total area of a ward or local body is concerned, the predominance of any of the four (urban land use, rural land use, semi urban or semi rural) determines the character of the area. **While this condition always acceptable, certain other conditions, from the practical point of view, are also incorporated for classification of an area.**

The conditions are elaborated below.

The character of an area can be termed as urban

1. If the pucca urban land use (not taking in to account the classification of mixed land use) is more than or equal to 25 % of the total area, then the area can be termed as an urban area. (The analysis of the land use of various urban local bodies & the share of various land uses of an urban area as specified in the UDPFI guide lines shows that an urban area is having a residential land use of the same percentage as that of pucca urban land use (commercial, industrial, public & semi public etc. This is actually the residential land use attached to the urban land use. So if the pucca urban land use is 25% then by adding the residential share of 25% the total urban land use share becomes 50%)
2. The urban land use (Taking in to account the classification of mixed land use) percentage of 50% of the total area of a region can be taken as the lower limit to term it as an urban area.

The character of an area can be termed as rural ,

1. If the pucca rural land use share is more than 50% it is a rural area.
2. If the rural land use (taking into account, both pucca rural land use and the classification of mixed land use) share is greater than or equal to 50 % of the total area, then it can be termed as a rural area.

The character of an area can be termed as Semi urban,

1. If the mixed land use area is classified as semi urban and the sum of urban land use share and semi urban residential land use is greater than or equal to 50% of the total area.

The character of an area can be termed as Semi rural,

1. If the mixed land use area is classified as semi rural area and the sum of rural land use share and semi rural- mixed land use land use is greater than or equal to 50% of the total area.
2. If the pucca rural land use share is at least 1/3rd of the total area and the mixed land use is not urban or semi urban, then also the area can be termed as semi rural area (this condition is included after practical verification).

V. Kollam District – A Case study

The above methodology is applied in the Kollam District (Using GIS) in Kerala to identify the type (urban, rural, semi urban, semi rural) of the 72 Local bodies of Kollam District. Kollam district has one Corporation, two Municipalities and 69 Grama Panchayats. As a part of preparation of Integrated District Development Plan for the District, land use survey was conducted in all the local bodies of the district. This land use data and census data (to take the number of household local body wise) are taken for the study.

The result is shown in the figure2 below.

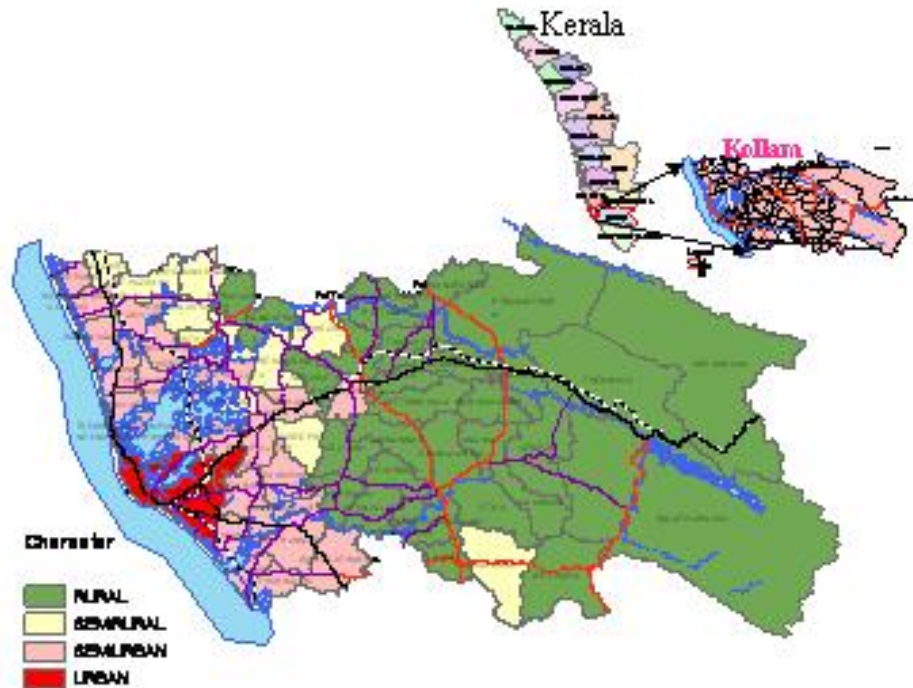


Figure2: District map with character of various settlements

The spatial distribution of the settlements based on its character (figure 2) shows a clear demarcation in the pattern of the settlements in the four categories. Kollam Corporation and its adjacent local bodies show the urban character. The semi urban character is exhibited by local bodies in the coastal belt. Local bodies in the midland and high land region of the District exhibit rural character. Semi rural character is seen in a few local bodies placed as a transition zone in-between the local bodies with semi urban and rural character.

The occupational structure (as per census 2001) of each of the local bodies are analyzed and found that the share of non agricultural workers are decreasing as the character of the settlement (as per the study) changes from urban to rural through semi urban to semi rural. (see the table)

	Avr plot size	Land use	Major share of Non agri workers %
Urban local body	< =25 cents	At least 50 % urban land use	> 80%
Semi urban local body	25 to 50 cents	At least 50 % Semi urban land use	> 75% up to 80%
Semi rural local body	50 to 70 cents	At least 50 % Semi rural land use	> 65% up to 75%
Rural local body	>70 cents	At least 50 % Rural land use	< 65%

It can be concluded that the assumptions made in the classification of a settlement into urban, rural, semi urban, semi rural is substantiated by the % of non agricultural workers as per Census data.

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