Spatial Distribution Of Population

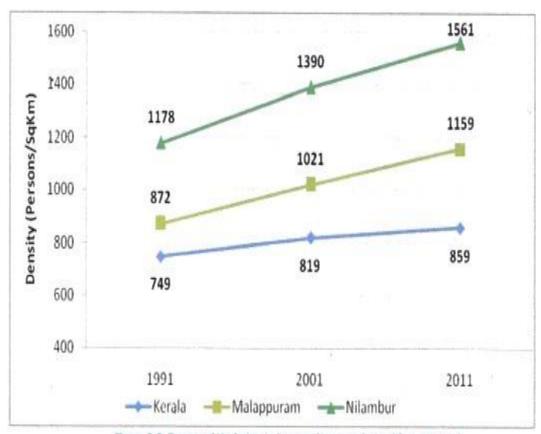


Figure 3-9: Temporal Variation in Density (Source: derived from Census)

Malappuram District temporally has a higher density compared to the state, as presented in Figure 3-9. As per Census 2011, the district has a population density of 1159 ppsqkm, fifth highest among the districts in the State, against 859 ppsqkm of the State.

As evident from Figure 3-9, Nilambur municipality, with a density of 1561 persons per square kilometer in 2011, have had a temporally increasing density, much higher than the district and the State. The density of the municipality increased by 383 points between 1991 and 2011 while that of the district increased by 287 points and the State by 110 points.

Among the LSGs in the District, Nilambur falls in the medium density category, along with other midland municipalities like Manjeri and Perinthalmanna as presented in Figure 3-10. Besides, it can also be observed that Nilambur is the only LSG that has medium density towards the north-eastern highland region of the district.

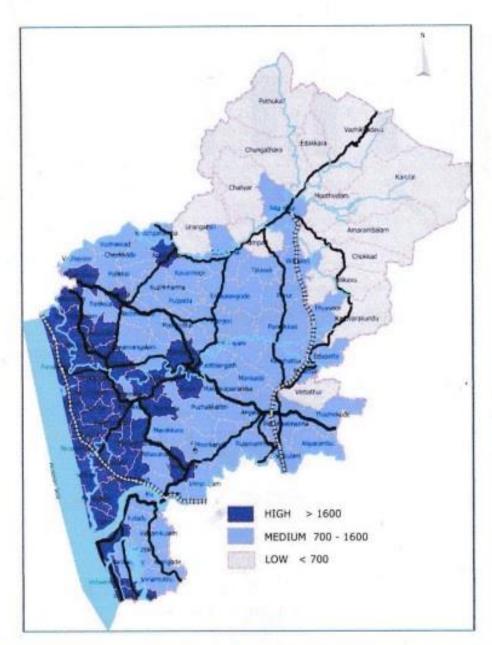


Figure 3-10: Variation of Gross Density among LSGs in the District (Source: District Urbanisation Report 2011)

Among the municipalities in the District (Figure 3-11), Nilambur temporally has the second lowest density, next to Perinthalmanna. The densities of all the municipalities are increasing temporally, and the densities of municipalities in the coastal strip are significantly higher than the others, historically. Nilambur has only less than half the density of the coastal municipalities.

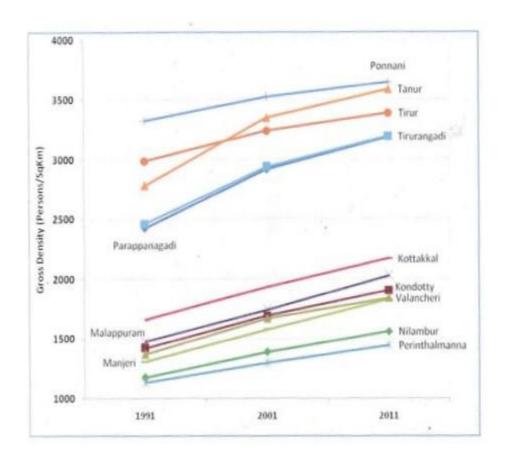


Figure 3-11: Variation in Gross Density - Municipalities in the District (Source: derived from Census)

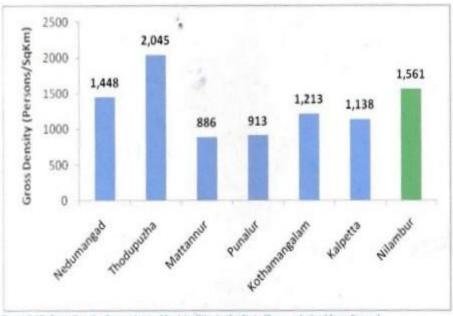


Figure 3-12: Gross Density Comparison - Municipalities in the State (Source: derived from Census)

Compared to similar municipalities in the State, Nilambur has the second highest density, next to Thodupuzha, as presented in Figure 3-12. Nilambur has a far higher density when compared to the nearby LSGs, as presented in Figure 3-13, being the sole urban area in the

less-dense upper reaches of the district.

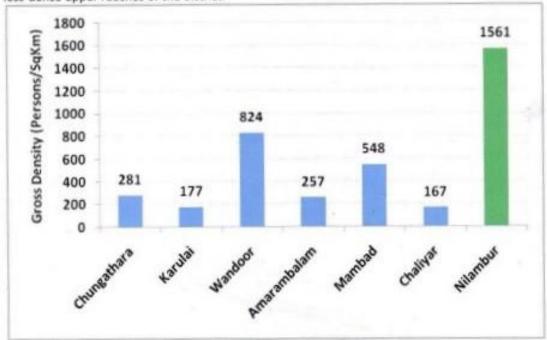


Figure 3-13: Gross Density Comparison - Nearby LSGs (Source: derived from Census)

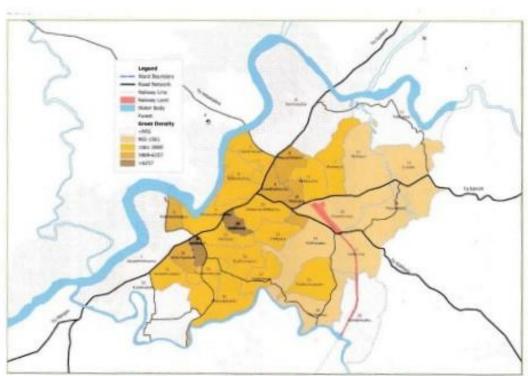


Figure 3-14: Gross Density Variation within the Municipality

To study the variations in density within the municipality, ward wise population data was interpolated using electoral ward delineation details, in the absence of such data in Census. The gross density variations thus obtained is presented in Figure 3-14. Most of the denser wards are along Calicut – Gudalur State highway.

While the lowest density of 348 ppsqkm is observed in ward 6 – Karimpuzha dominated by forests, highest density of 8605ppsqkm is observed in ward 30 – Veettikkuthu. Ward 24 – Padikunnu also has a very high density at 7429 ppsqkm compared to other wards. It can be seen that the density significantly varies within the municipality, around 25 fold between the most dense and least dense wards, and is relatively higher in the well-connected areas, mainly along the KNG road and in Kovilakathumuri, which houses the old settlement. Ward -21 Thekkumapadam shows a higher density may be due to the concentration of housing colony in the area.

Population Concentration Pattern

The population concentration pattern within the municipality, derived by mapping the cumulative population in the order of their gross densities, is presented in Figure 3-15. It can be seen that population is concentrated in the well connected areas and near the important road junctions. While 1/3" of the total population in the municipality is concentrated in less than 4sqkm (12%) of the municipal area, half the population is concentrated in less than 7sqkm (22%) and 2/3" of the population is concentrated in less than 11sqkm (35%) of the total area. While this reveals the areas where infrastructure and service provisions need more focus, it also suggests the presence of vast tracts of less-developed land in the peri-urban areas.

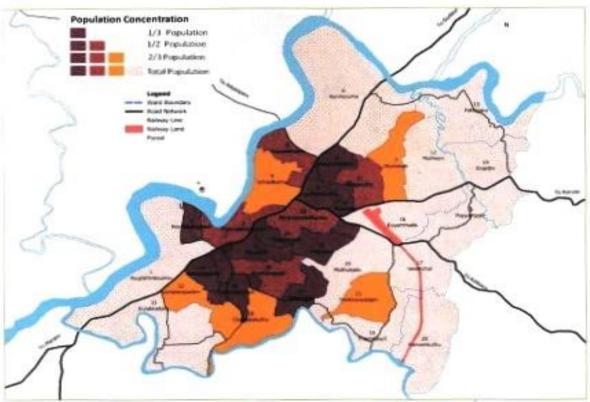


Figure 3-15: Population Concentration Pattern in the Municipality

Net Density

Net density is the density in net area, which can be considered as the inhabitable areas. It gives a clearer picture of population distribution. Forests and water bodies are the uninhabitable areas in Nilambur, which are deducted from the total area to derive the net area of each ward. The net density distribution in the municipality thus derived is presented in Figure 3-16.

Net density of the municipality is 1953 ppsqkm. It can be seen that the net density varies around tenfold between the least dense and most dense wards, from 861ppsqkm is observed in ward 33 – Veettikkuthu. It can also be observed that Ward 7- Mummulli and Ward 21-Thekkumpadam which were in the above-average gross density group has reduced to below average net density group. Figure 3-16 makes it clear that above-average densities are spread over a smaller region on either sides of SH 28.Veettikkuthu and Padikkunnu remain the densest wards and ward 33- Kulakkandam and ward 20 - Ramamkuthu are the least dense wards.

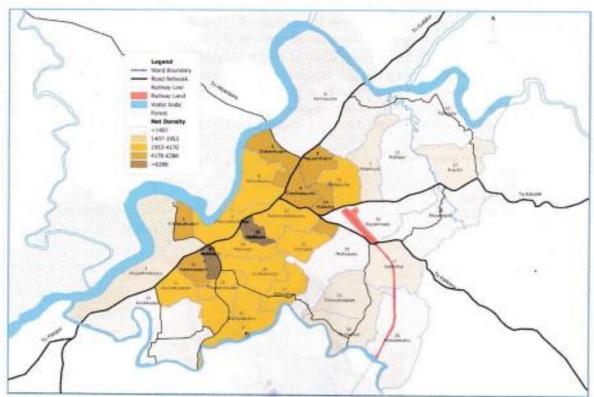


Figure 3-16: Net Density Variation within the Municipality

Net Residential Density

Net Residential Density gives the density in the residential areas. Net residential density of the municipality is 6523 ppsqkm. The residential density, as presented in Figure 3-17 depicts a significantly different picture compared to gross and net densities. The net density varies around fourfold between the least dense ward 16 – Eyyammada and most dense ward 30 – Veettikkuthu, from 3572 ppsqkm to 16003 ppsqkm. Ward 30 – Veettikkuthu and ward 22 – Pottippara have the densest residential pockets and ward 16- Eyyammada and ward 26 - Eruthampoyil have the least dense residential pockets.

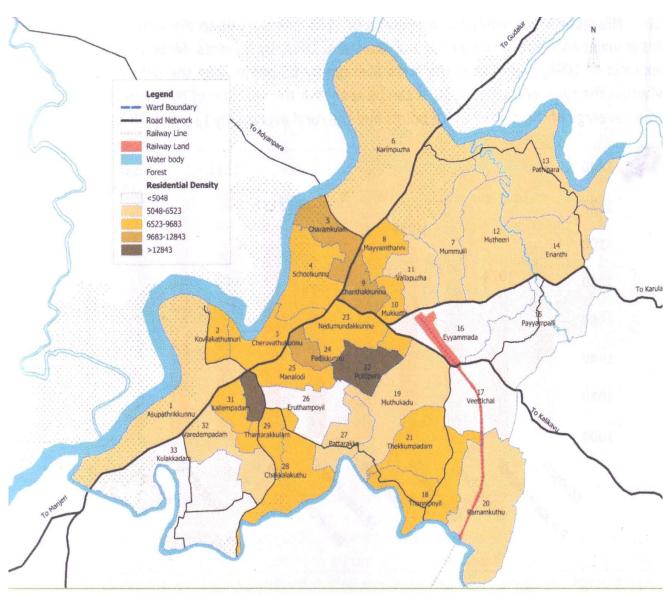


Figure 3-17: Net Residential Density Variation within the Municipality