

GROWTH AND SPATIAL PATTERN OF SETTLEMENTS IN MYSURU DISTRICT.

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Abstract

Industrial Revolution in the world has significantly influenced on the growth of population and size of settlements. In India, after the independence through various five year plans, different sectors started to develop on priority basis. Due to this, they have changed demographic aspects significantly. Literacy, Transport and Communication, Industrialization, increased health facilities, rise in per capita income, food security and all other factors have combined influenced on the growth and spatial distribution of population in our country. The present study depends on secondary data. Simple statistical techniques like Pie chart, Simple Line diagram and thematic maps are used to understand the growth and spatial pattern of settlements of Mysuru District of the last six decades.

Key Words: *Spatial Pattern, Size, Pie Chart, Thematic Maps.*

Introduction

Man is a dominant creature in the world. Before industrialization the growth as well as the size of settlements was limited. After the industrial revolution in the world, the Population and the pattern of settlements started to change. We can observe these changes in our country too. But it gained momentum after independence. There is a transformation of different sectors of our country through various plans. Several sectors started to develop and influenced on each other. We can also observe the changing pattern of Literacy and Work Participation rate after independence. They have greatly influenced over the transformation of size of settlements and their pattern. Urbanization get momentum due to this. In this context, the authors have made an attempt to understand the changing size of settlements from the past six decades. .

Study Area

Karnataka state consist 30 districts. Among these Mysuru forms a distinct cultural centre. It is located in southern part of Karnataka State. It lies between 12° to 20° 17' North latitudes and 75° and 19 to 77° and 17' East longitudes. It covers an area of 6320 km² and accounts for 3.29% of the state's total geographical area. It ranks 14th place in the state in terms of area. But it ranks 4th place in population in the state. The district has 3001127 people in 2011 census. The district comprises seven taluks namely H.D.Kote, Hunsur, K.R. Nagar, Mysore, Nanjangud, Periyapatana and T.Narasipura. Among these, H.D.Kote taluk is the biggest (1618 km²) and K.R.Nagara is the smallest (596 km²) taluks in the district. The district is surrounded by Chamarajanagar district in the east and south, Mandya district in the north, Hassan in the north-west, Kodagu district and Kerala state in the west. Figure-1 shows the location of the study area.

Data and Methodology

The present study depends on secondary data collected through District Census Handbook and District at a Glance. Taluk wise data has been collected for six decades. For analysis

purpose, simple statistical techniques like Pie Chart, Simple Line diagram and thematic maps are used. These are used for comparison purpose and to know the spatial and temporal changes taken place in different decades and taluks.

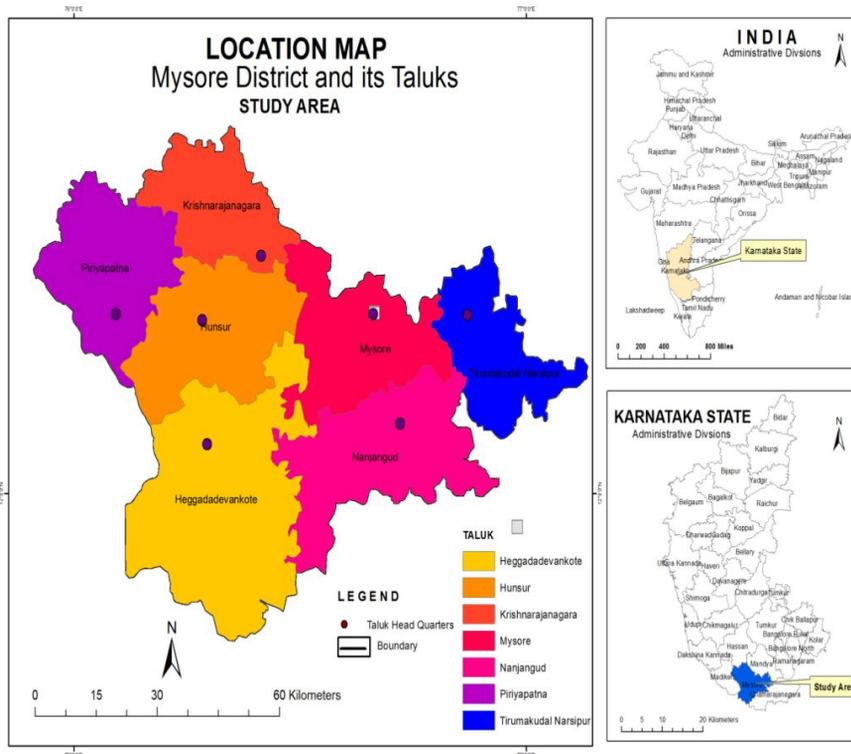


Figure 1.0 Location Map

Analysis and Interpretation

As we know that the population is continuously increasing in the country from the past one century. The growth of population tremendously influences the size of settlements. Hence it is essential to understand the growth of population of the district for the last six decades. It is shown in table 1.0

When we observe the table-1, in 1961 the total population of the district was about 11,37,640, which accounts 4.82% of population of the state. In 1971, the growth rate of population of the district was higher (28.40%) compared to the state's population growth rate(24.22%). In 1981 it is less than the state average, whereas it is more in 1991. But from 2001 onwards the population growth rate of the district started to decline compared to state's average.

Among the taluks of the district, H.D.Kote, Hunsur and Mysuru taluks have registered more population growth compared to district during 1971. Highest growth rate has been recorded in H.D.Kote (47.33%) where as T.N.Pura has recorded lowest (19.18%) during this period. In 1981, the district population growth rate was 25.12% . In this decade Periyapatana taluk

has recorded highest (34.42%) and lowest has been found in K.R.Nagar taluk. H.D.Kote, K.R.Nagara, Nanjangud and T.N.Pura taluks have less than the district's average population growth.

Table 1.0: Growth of Population in Mysore district and Karnataka State from 1961 to 2011. (Parenthesis indicate Growth rate in percentage)

Year	H.D.Kote	Hunsur	K.R. Nagar	Mysore	Nanjangud	Periyapatana	T.Narsipura	Tot Pop.of the district.	Karnataka Population
1961	98463	101286	132525	368005	189402	94965	152994	1137640	23586772
1971	145068 (47.33)	136914 (35.17)	158845 (19.86)	493800 (34.18)	228388 (20.58)	115381 (21.50)	182340 (19.18)	1460736 (28.40)	29299014 (24.22)
1981	173071 (19.30)	179359 (31.00)	183818 (15.72)	645104 (30.64)	270920 (18.62)	155094 (34.42)	220336 (20.84)	1827702 (25.12)	37043451 (26.43)
1991	216399 (25.03)	222173 (23.87)	217370 (18.25)	854499 (32.46)	324198 (19.66)	188902 (21.80)	258112 (17.14)	2281653 (24.84)	44977201 (21.42)
2001	245930 (13.65)	253926 (14.29)	239199 (10.04)	1038490 (21.53)	360223 (11.11)	224254 (18.71)	279005 (8.09)	2641027 (15.75)	52733958 (17.25)
2011	263706 (7.23)	282963 (11.04)	252657 (5.63)	1281768 (23.43)	384922 (6.86)	243076 (8.39)	292035 (4.67)	3001127 (13.63)	61130704 (15.92)

Source:- Mysore district and Karnataka Census Handbook – 1961 to 2011.

In 1991, the population growth rate of the district was reduced to 24.84% , but it is higher than the state's average. Hunsur, K.R.Nagar, Nanjangud, Periyapatana and T.N.Pura taluks have recorded less than the district average. Highest growth rate has been observed in Mysore taluk (32.46%) and lowest has been recorded in T.N.Pura taluk with 17.14%. In the next decade, the district's population growth rate has significantly reduced to 15.75% from the previous 24.84%. During this period, the growth rate of the district is lower than the state's average population growth rate. Lowest growth rate is found in T.N.Pura taluk with 8.09%, where as highest has been found in Mysore taluk. Mysore and Periyapatana taluk's have population growth rate compared to state's average population growth. In the latest census (2011), the growth rate of the district is only 13.63% compared to 15.92% of the state's average population growth rate. Lowest growth rate has been found in T.N.Pura taluk, where as highest has been recorded in Mysore taluk due to more urbanization. Except Periyapatana taluk, all other taluks have recorded lower than the district's population growth rate. In the past six decades, T.N.Pura has continuously recorded very less growth rate of population compared to the district and other taluks. These changes can be easily noticed in the figure 2.0

Table 2.0. Pattern of Rural-Urban Population in Mysore district and Karnataka State.

SI	Taluku	1961		1971		1981		1991		2001		2011	
		Rur	Urb										
1	H.D.Kote	92.4	7.6	93.1	6.9	92.1	7.9	90.7	9.3	95.1	4.9	90.2	9.76
2	Hunsur	85.8	14.2	85.4	14.6	84.5	15.5	84.4	15.6	82.7	17.3	82.0	18.0
3	K.R.Nagara	84.1	15.9	90.3	9.7	89.7	10.3	88.0	12.0	87.2	12.8	85.8	14.2
4	Mysore	31.0	69.0	28.0	72.0	25.7	74.3	23.5	76.5	23.0	77.0	20.9	79.1
5	Nanjangud	90.7	9.3	90.1	9.9	87.1	12.9	86.9	13.1	86.6	13.4	86.9	13.1
6	Periyapatana	93.6	6.4	93.6	6.4	93.5	6.5	93.6	6.41	93.3	6.7	93.1	6.9
7	T.Narasipura	83.3	16.7	89.9	10.1	89.1	10.9	89.3	10.7	88.1	11.9	82.4	17.6
DISTRICT		69.6	30.4	69.2	30.8	66.7	33.3	64.2	35.8	62.8	37.2	58.5	41.5
Karnataka		77.7	22.3	75.7	24.3	71.1	28.9	69.1	30.9	66.0	34.0	61.3	38.7

Source:- Mysore District Gazetteer-1986 & Mysore District Census Handbook 1991 & 2011

Pattern of Rural-Urban Population: It is found that, the growth rate of population of different taluks have significantly changed from the past six decades (Table-1). It is also

essential to know the changes occurred in Rural and Urban Population during this period. It has been given in table-2.

Here, a comparison is made between taluks, districts and state. In 1961, the rural population accounted about 77.66% in the state, it is 69.6% in our district. Compared to state, the urban population is more in Mysuru district in 1961 itself. But lowest urban population is found in Periyapatana taluk (6.4%) and highest is in Mysuru taluk (69.0%). In the next decades, we can observe that the share of rural population started to decline. In 1991, more than 1/3rd of population of the district are in urban area. The lowest urban population was found again in Periyapatana (6.4%) followed by H.D.Kote (9.3%) and T.Narasipura (10.7%) taluks. Highest Urbanized taluk is Mysore taluk during this period (76.5%). In 2011, the urban population has increased further and it reached 41.50% which is more than the state's urban population (38.7%). It clearly shows that from the past six decades, the urban population has increased to 11.4% in the district. But it has slightly increased in Periyapatana taluk . But Mysuru taluk has registered highest in the entire district with 79.13%.

Temporal Pattern of Settlements in Mysuru District: The scholars have observed that the distribution of population both in rural and urban areas are changing from 1961. It is also reflected in the pattern of size of settlements. It can be noticed in table-3.

Table: 3.0 Pattern of Settlements in Mysore District during 1961 to 2011 (Parenthesis indicate percentage to total)

Year	No. villages in different Population Size Class							Total
	< 200	200-499	500-999	1000-1999	2000-4999	5000-9999	10000 & above	
1961	227 (20.27)	309 (27.59)	317 (28.30)	203 (18.12)	61 (5.45)	03 (0.27)	-	1120
1971	189 (16.02)	294 (24.91)	362 (30.68)	225 (19.07)	103 (8.73)	07 (0.59)	-	1180
1981	162 (13.44)	243 (20.17)	371 (30.79)	278 (23.07)	141 (11.70)	09 (0.75)	01(0.08)	1205
1991	135 (11.27)	183 (15.27)	339 (28.30)	330 (27.55)	190 (15.86)	20 (1.67)	01 (0.08)	1198
2001	129 (10.60)	153 (12.57)	324 (26.62)	361 (29.66)	220 (18.08)	27 (2.22)	03 (0.25)	1217
2011	114 (9.50)	126 (10.59)	308 (25.69)	379 (31.61)	237 (19.77)	34 (2.83)	01 (0.08)	1199

Source:- Mysore District Gazetteer-1986 & Mysore District Census Handbook 1991 & 2011

In 1961, out of 1120 settlements in the district, 20.27% (227) settlements have less than 200 population. The population range between 200 to 499 and 500-999 have accounted 55.89% (626) during this period. The number of settlements having 1000 to 4999 have increased from 23.57% (264) to 51.38% against previous decades (616). It clearly shows that the size of settlements have changed significantly from the past six decades. The settlements which population less than 200 have reduced from 20.27% to 9.50% and population between 200 – 499 have reduced from 27.59% to 10.59% in 2011. But the population more than 1000 to 1999 have increased from 18.12% to 31.61% and 2000 to 4999 has increased from 5.45% to 19.77% during this period. Even the settlements having population between 5000 to 9999 have increased from 0.27 (03) to 2.83% (34) during this period. These big villages act as Rurban or Central villages in future.

Spatial Pattern of Settlements: It is essential to understand the spatial distribution of these size of settlements based on population. It shows the changing pattern or shifting of settlements as population increases. We can observe this in table-4.

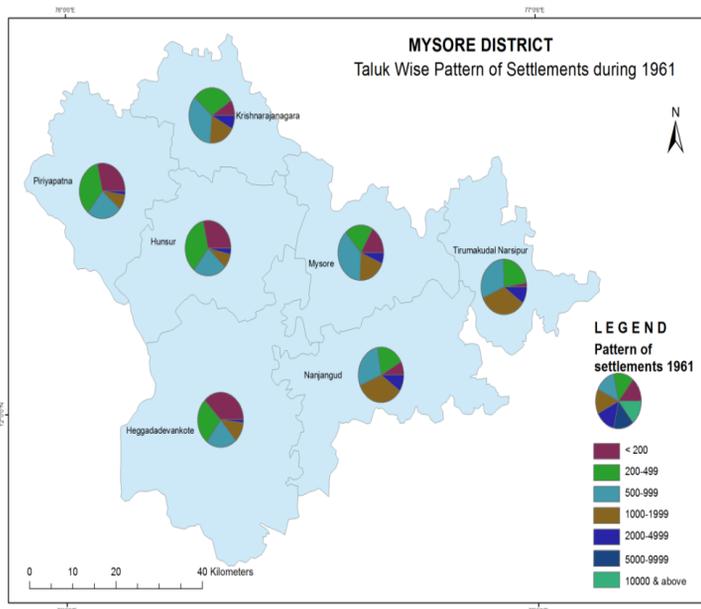
Table: 4.0 Talukwise pattern of Settlements in Mysore District during 1961.

Taluks	No. villages in different Population Size Class							Total
	< 200	200-499	500-999	1000-1999	2000-4999	5000-9999	10000 & above	
H.D.Kote	73 (34.43)	53 (27.18)	43 (22.05)	23 (11.79)	03 (1.54)	-	-	195
Hunsur	49 (28.65)	61 (35.67)	41 (23.98)	14 (8.19)	06 (3.51)	-	-	171
K.R.Nagar	13 (9.22)	41 (29.08)	49 (34.75)	26 (18.44)	11 (7.80)	01 (0.71)	-	141
Mysore	24 (16.67)	29 (20.14)	54 (37.5)	28 (19.44)	09 (6.25)	-	-	144
Nanjangud	13 (7.93)	32 (19.51)	47 (28.66)	55 (33.54)	16 (9.76)	01 (0.61)	-	164
Periyapatana	52 (28.57)	65 (35.71)	45 (24.72)	16 (8.79)	04 (2.20)	-	-	182
T.N.Pura	03 (2.44)	28 (22.76)	38 (30.89)	41 (33.33)	12 (9.76)	01 (0.81)	-	123
TOTAL	227 (20.27)	309 (27.59)	317 (28.3)	203 (18.12)	61 (5.45)	03 (0.27)	-	1120

Source:- Mysore District Gazetteer-1986 & Mysore District Census Handbook 1991 & 2011

In 1961, 1/5th of the villages of the district have less than 200 population. More than 1/3rd of settlements in H.D.Kote taluk have less than 200 population. It is followed by Hunsur (28.65%) and Periyapatana taluks (28.57%). But only 2.44% (three villages) of T.Narasipura taluk have less than 200 population during this period. Hunsur, K.R.Nagar and Periyapatana taluks have more number of settlements which are having 200 to 499 population compared to district average. More than 1/3rd of settlements of Periyapatana and Hunsur taluks have 200 to 499 population. Mysore taluk has more settlements (37.5%) having 500 to 999 population during this period. It is followed by K.R.Nagar, T.Narasipura, Nanjangud, Periyapatana, Hunsur and H.D.Kote taluks. 1/3rd of settlements in Nanjangud and T.Narasipura are having population of 1000-1999 during this period. But Hunsur has least number of settlements (8.19%) having population of 1000 to 1999. Nearly, 5.45% of settlements of the district consist population of 2000 to 4999 during this period. Nanjangud and Periyapatana have highest number of settlements in this group. Least number of settlements 1.54% (03) of H.D.Kote consist 2000 to 4999 population. Only one small town was found in K.R.Nagar, Nanjangud and T.Narasipura taluks consists 5000 to 9999 population during this period. These spatial changes can be observed in Figure-3.

Figure 3. Pattern of Settlements during 1961



After three decades, the situation has significantly changed in the district. It can be observed in table-5.

Table: 5.0 Talukwise pattern of Settlements in Mysore District during 1991

Taluks	No. villages in different Population Size Class							Total
	< 200	200-499	500-999	1000-1999	2000-4999	5000-9999	10000 & above	
H.D.Kote	50 (20.75)	60 (24.90)	59 (24.48)	52 (21.58)	20 (8.30)	-	-	241
Hunsur	26 (13.83)	33 (17.55)	61(32.45)	48 (25.53)	16 (8.51)	04 (2.13)	-	188
K.R.Nagar	13 (8.9)	21 (14.38)	48 (32.88)	37 (25.34)	24 (16.44)	02 (1.34)	01 (0.68)	146
Mysore	08 (6.25)	10 (7.81)	30 (23.44)	50 (39.06)	26 (20.31)	04 (3.12)	-	128
Nanjangud	13 (7.34)	14 (7.95)	38 (21.59)	62 (35.23)	44 (25.0)	05 (2.84)	-	176
Periyapatana	25 (12.75)	36 (18.37)	73 (37.24)	45 (22.96)	17 (8.67)	-	-	196
T.N.Pura	-	09 (7.32)	30 (24.39)	36 (29.27)	43 (34.96)	05 (4.06)	-	123
TOTAL	135 (11.27)	183 (15.27)	339 (28.30)	330 (27.55)	190 (15.86)	20 (1.67)	01 (0.08)	1198

Source: Census of India, (Karnataka)1991.

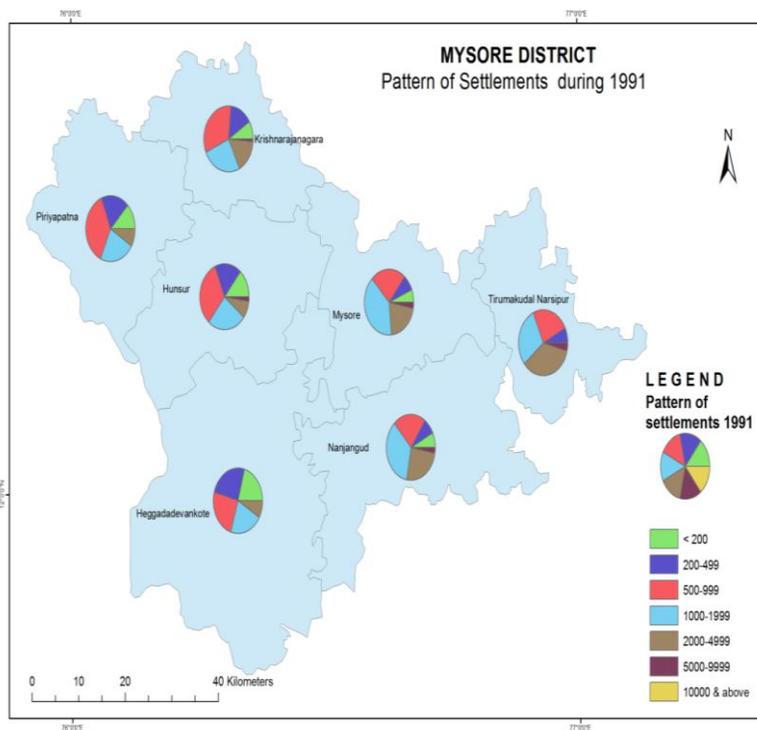


Figure 4. Pattern of Settlements during 1991

During this period the settlements which have less than 200 population has significantly decreased from 20.27% to 11.27% in the district. The number of settlements which are having a size of population 200 to 499 has also reduced from 309 to 183 (27.59% to 15.27%). But the percentage of settlements having a size of 500 to 999 range remains same. After this class, other sizes of settlements have increased. The 4th order (1000 to 1999) and 3rd order (2000 to 4999) settlements have significantly increased during this period. It is 18.12% to 27.55% and 5.45% to 15.86% respectively. The big villages which

are having 5000 to 9999 population have increased from three to twenty during this period. It is the major change found during this time.

When we observe the taluk wise growth of settlements, the last two orders (less than 200 and 200 to 499) have significantly reduced. In H.D.Kote taluk, the 4th order settlement (1000 to 1999) has increased more than 120% i.e., from 23 to 52. The 3rd order settlements have increased from 3 to 20. This kind of growth has been observed in all the taluks of the district. In K.R.Nagar more number of settlements (48) is found in 500 to 999 size of settlements. But in Mysore taluk, 3rd and 4th order settlements have increased significantly from 28 to 50 and 09 to 26 respectively. The same conditions have found in Nanjangud and Periyapatana taluks. In T.Narasipura taluk, the size of big villages (2000 to 4999 and 5000 to 9999) have increased more than 3.5 times, i.e., from 12 to 43 and 01 to 05 respectively during this period. These changes can be observed in figure-4.

After a gap of 20 years, the last three size of settlements (<200, 200 to 499 and 500-999) have significantly reduced in the entire district. It can be clearly seen in table-6.

Table 6.0. Talukwise pattern of Settlements in Mysore District during 2011

Taluk	No. villages in different Population Size Class							Total
	< 200	200-499	500-999	1000-1999	2000-4999	5000-9999	10000 & above	
H.D.Kote	49 (20.33)	38 (15.77)	61 (25.31)	64 (26.56)	29 (12.03)	-	-	241
Hunsur	26 (13.33)	25 (12.82)	57 (29.23)	60 (30.77)	22(11.28)	05 (2.56)	-	195
K.R.Nagar	12 (7.79)	15 (9.74)	46 (29.87)	51 (33.12)	25 (16.23)	04 (2.60)	01 (0.65)	154
Mysore	05 (4.06)	04 (3.25)	24 (19.51)	43 (34.96)	38 (30.89)	09 (7.32)	-	123
Nanjangud	04 (2.35)	09 (5.29)	34 (20.0)	59 (34.70)	55 (32.35)	09 (7.32)	-	170
Periyapatana	18 (9.18)	28 (14.29)	62 (31.63)	61 (31.12)	25 (12.76)	02 (1.02)	-	196
T.N.Pura	-	07 (5.83)	24 (20.0)	41 (34.17)	43 (35.83)	05 (4.17)	-	120
TOTAL	114 (9.51)	126 (10.51)	308 (25.69)	379 (31.61)	237 (19.77)	34 (2.84)	01 (0.08)	1199

Source: Census of India, (Karnataka) 2011

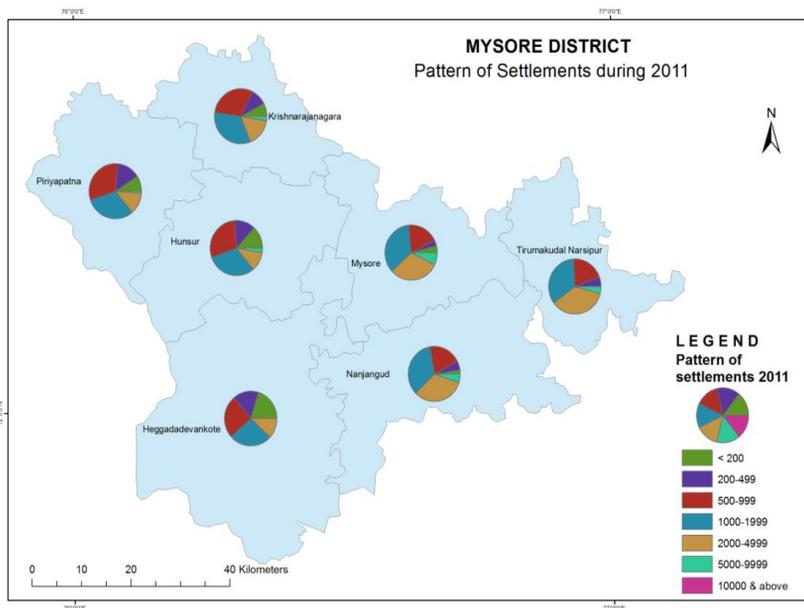


Figure 5. Pattern of Settlements during 2011.

During this period, less than 46% of settlements are having less than 1000 population. It was 76.16% during 1961. It means that there is a significant change in the size of settlements during this period. More than half of the population in rural areas are living, where the size of settlements are more than 1000. Nearly 50% of settlements in the district having the population range of 1000 to 1999 (31.61%) and 2000 to 4999 (19.77%). The number of big villages (5000 to 9999) have increased from 20 to 34 during the 20 years of time. These changes can be observed in Figure-5.

In H.D.Kote taluk, 26.56% of villages are found in 1000 to 1999 size. In Hunsur taluk 30.77% of settlements are having the population of 1000 to 1999. The situation is also same in K.R.Nagara taluk. Nanjangud and Mysore taluks have less number of villages having less than 200 population. This class is absent in T.N.Pura taluk. Nearly 2/3rd of settlements (65.85%) of Mysore taluk are having the population between 1000 to 4999. In Nanjangud taluk it is 67.05% where as in T.N.Pura taluk it has 70% of villages in this size of class.

Conclusions

The above discussion concludes that the population size in rural settlements is changing in these periods. It is also found that between the taluks these changes can be clearly marked. But as the same time there is a drastic fall in the rate of growth of population. Hence it is the right time for all Geographers, Economists, Sociologists and planners to address the fortunes and problems of future growth of villages which are having more population. There is an urgent need to address the prosperity of these big villages.

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