

Population is an important factor that plays a vital role in the country's economic development. The population of India has been increasing very fast, which creates so many problems like hunger, illiteracy, low standard of living, unemployment etc. But, when population increases alarmingly it becomes the problem of the country (Bhende Asha and Kanitkar Tara, 1978).

2.1 POPULATION GROWTH :

The population growth is determined by three dominant factors. They are birth rate, death rate and migration. The death rate is controlled by providing good medical facilities with the invention and wide spread diffusion of life saving drugs and with further improvement of means of transport, the mortality has declining trend (Gill,1980).

Growth of population may be studied in terms of the differences between population at present and population at base year. A study of absolute and percentage changes of population in study area is given in Table 2.1. The absolute population of the Kagal taluka was 1,10,734 in 1951. It increased from 1951 to 1991 by 2,12,128 i.e. nearly doubled in 40 years, registering an overall increase of 74.16 percent. There is absolute increase in population from 1961 to 1991, but growth rate varies from decade to decade. From year 1951 to 1961, the population increased by 18,296 that was 16.48

percent. It increased by 29,866 during 1961 to 1971, the growth was 28.11 percent. In the year 1971 to 1981 it increased by 24,238, that is 14.18 percent. And the absolute population of Kagal taluka was 2,12,128 in 1991. It increased by 29,094 from 1981 and the present growth is 20.39 percent.

Table 2.1 : Growth of population and decadal variation in Kagal taluka (1951-1991).

Sr. No.	Year	Population	Decadal variation	Percentage variation
1	1951	1,10,734	-	-
2	1961	1,28,980	18,296	16.48
3	1971	1,58,796	19,866	23.11
4	1981	1,83,034	24,238	14.18
5	1991	2,12,128	29,094	20.39

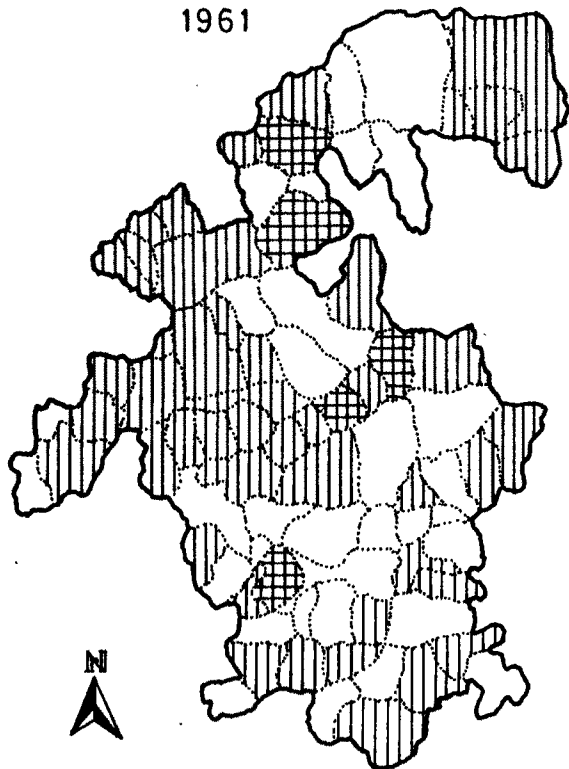
SOURCE : District Census Handbook of Kolhapur District.

2.1.1 Village population growth rate - 1991 :

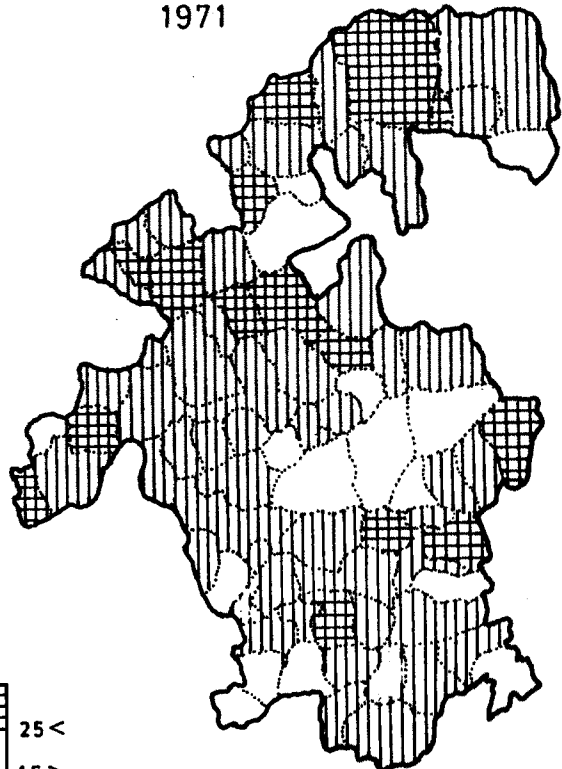
This general trend could not show the details of population growth in taluka. So villagewise population growth rate is calculated by Gibb's method. The high growth rate category is observed in five villages. These are Bachani, Nandyal, Sangaon Kasaba, Farakatewadi and Shindewadi. But, the highest growth rate is observed only at Shindewadi (43.60%). Moderate population growth

KAGAL TALUKA

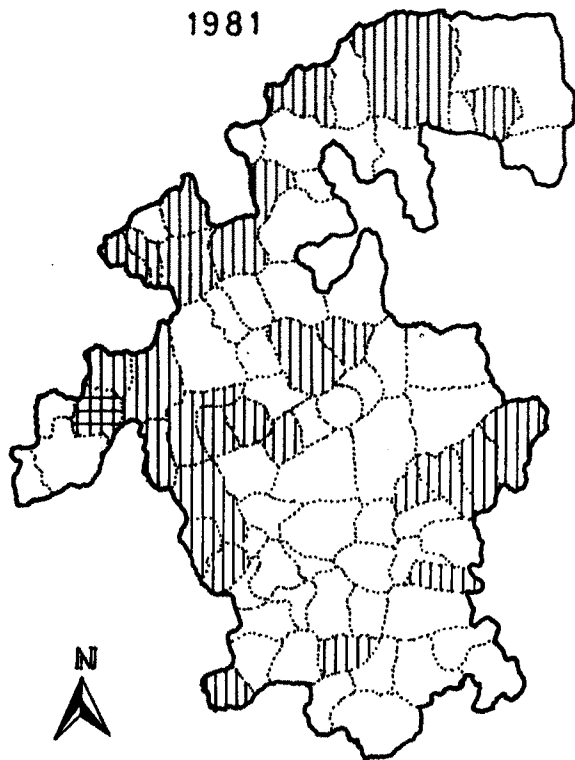
POPULATION GROWTH RATE
1961



POPULATION GROWTH RATE
1971



POPULATION GROWTH RATE
1981



POPULATION GROWTH RATE
1991

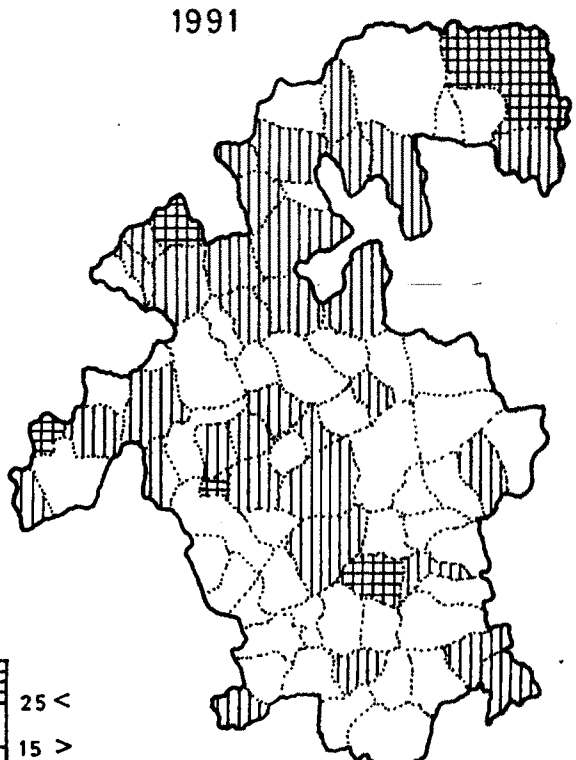


Fig. 2-1

rate is observed in 32 villages and low growth rate is found in 47 villages of the taluka. The maximum number of villages i.e. 47 villages have low growth of population.

2.1.2 Changes in population growth rate :

Growth rate changes can be studied by differences between past and present growth rates. Fig.2.1 shows spatio-temporal patterns of population growth rate in Kagal taluka for the year 1961, 1971, 1981 and 1991. It reveals striking spatial variations in growth rate of population. In this study area the declining trend in growth rate in 1981 is due to literacy. Literate population controls the family size and try to reach higher standard of living. In 1971 and 1991 increasing growth rate trend is observed. From 1961 to 1971 the growth rate increased by 6.63 percent, but it decreased by 8.93 percent from 1971 to 1981. It again increased in 1991 by 6.21 percent.

Changes in population growth for the villages is computed. This shows that in year 1961 there were five villages having higher growth rate, namely Shendur, Sidhnearli, Sonage, Karanjivane and Koulage. Moderate growth rate is observed in 44 villages and remaining 42 villages have low growth rate. This picture changed in 1971 as high growth rate is observed in 48 villages and low growth rate is found in 19 villages. In 1981, high growth rate is observed at 31 villages and low growth rate is found at 49 villages. In the year 1991 four centres have high growth rate,

34 villages have moderate growth rate and 48 villages have low growth rate.

2.2 DISTRIBUTION OF POPULATION :

The study of population distribution is useful to understand the regions of high concentration and sparse concentration of population and the facilities that are needed. The Kagal taluka of Kolhapur district has sparse population and it varies from village to village. The distribution of population is affected by historical, edaphic, economic and institutional factors. The population concentration is affected by socio-economic facilities (Betal, 1976).

2.2.1 Population distribution - 1991 :

Maximum population is concentrated in eastern part of taluka as compared to western. The agricultural activities are well developed in this area. The agricultural productivity is also high and so more population is concentrated in this part of the taluka.

There is only one centre having population more than 10,000, e.g. Kagal. The availability of facilities are responsible for concentration of population at this centre. Further there are four other centres having population ranging from 5,000 to 10,000. They are Kapashi (5297), Murgud (8597), Sangaon (5634) and Sangaon Kasaba (8132). There are thirteen

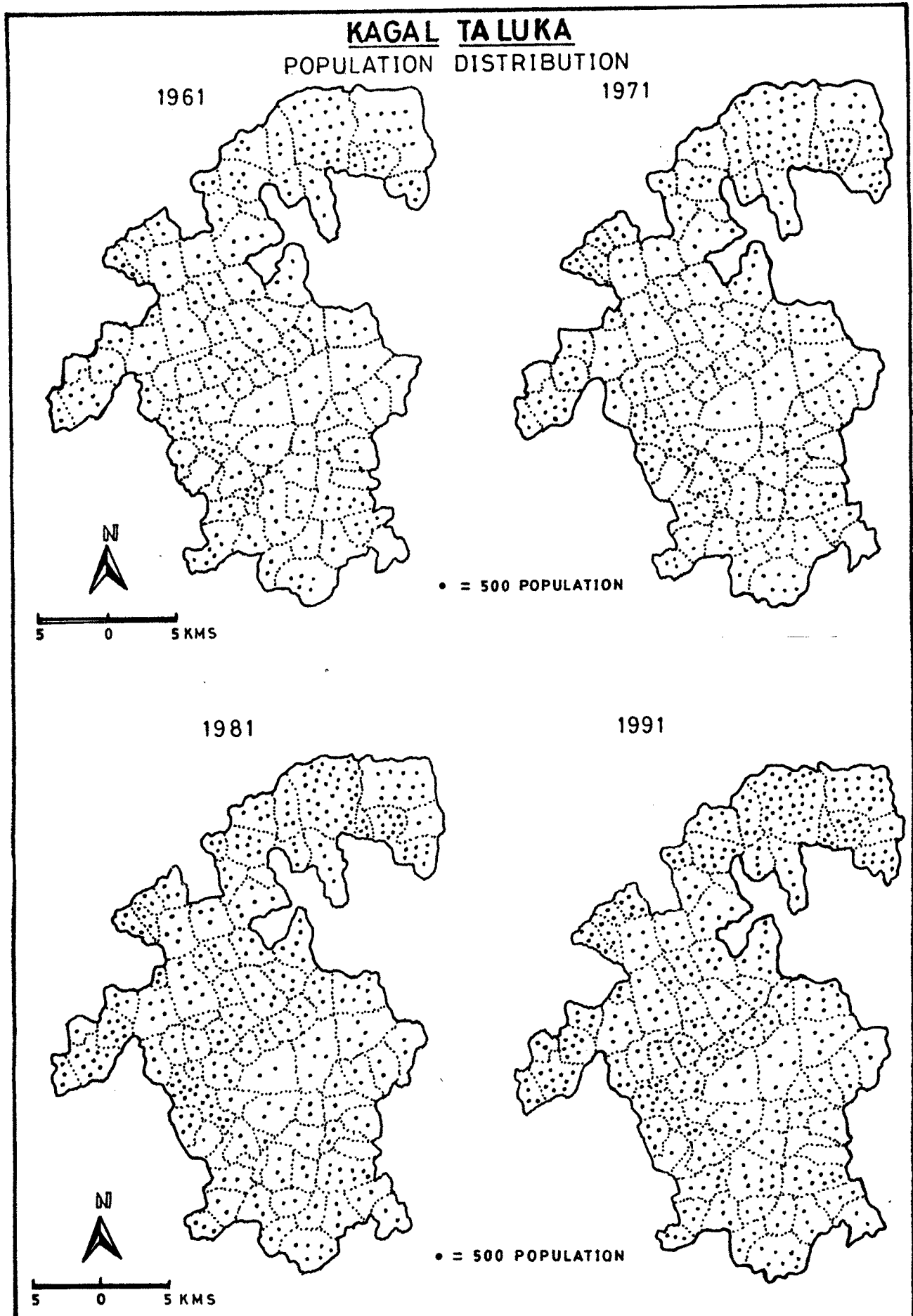


Fig. 2-2

villages which have population between 3000 to 5000. They are Vhanur, Yamage, Banage, Bidri, Boravade, Chikhali Kasaba, Madyal, Mhakave, Pimpalgaon Budruk, Savarde Budruk, Shendur, Sidhanerli and Sulkud. The remaining villages have the population below 3000.

2.2.2 Changes in population distribution :

In the year 1961 only one centre e.g. Kagal had the population of 10,533 and another centres Sangaon Kasaba and Murgud had 5169 and 6067 respectively. Three villages had population in between 3000 to 5000 namely Sangaon, Kapashi, Boravade and rest of the villages had the population below 3000. In the year 1971, three villages had population above 5000. They are Kagal, Murgud and Sangaon Kasaba. Eight centres had population in between 3000 to 5000. They are Mhakave, Sangaon, Sidhanerli, Sulkud, Kapashi, Madyal, Boravade, Chikhali Kasaba. The remaining villages had population below 3000. This picture changed in 1981. In that year four centres had population above 5000. They are Kagal, Murgud, Sangaon, Sangaon Kasaba. Ten villages had population in between 3000 to 5000. They are Mhakave, Savarde Budruk, Sidhnerli, Sulkud, Kapashi, Madyal, Bidri, Boravade, Chikhali Kasaba, Banage. The remaining villages had population below 3000. Lowest population is observed at Thanewadi (281) in 1981 which has increased from 195 in 1961 and 221 in 1971.

2.3 DENSITY OF POPULATION :

The term density of population implies average number of persons living per sq. kilometer. The density of population is affected by several factors like relief, soil, climate and socio-economic conditions. More than 90 percent area of Kagal taluka is covered by deep black soil and remaining area is covered by the brown soil. Deep black soil is observed in basins of Vedganga, Dudhganga and Chikutra rivers. The average rainfall is 650 to 900 cms, but it also varies from area to area and year to year. Agriculture is the main occupation and it depends upon monsoon and there is little irrigation development. Industrial development is also not observed in this taluka, so per capita income is very low. The social facilities like education, medical, communication etc. are not so developed. These physical and socio-economic factors affect the density of population. The decadal density of population of Kagal taluka is shown in Table 2.2.

Table 2.2 : Density of population in Kagal taluka.

Sr. No.	Year	Area (km ²)	Population	Density per km ²
1	1951	547.5	1,10,734	202
2	1961	"	1,28,980	236
3	1971	"	1,58,796	290
4	1981	"	1,83,034	334
5	1991	"	2,12,128	387

2.3.1 Population density - 1991 :

The average density of taluka is 387 persons per sq.km. This average density does not give real picture of variation in density. Therefore, villagewise density is calculated. The taluka reveals striking spatial variations in density of rural population and as such three regions can be distinguished.

Fig.2.3 shows the picture of arthimetical differences in population density. The density of population in Kagal taluka is not same every-where. In the year 1991 high density of population is noted at Pirachiwadi i.e. 914.38 persons per sq.km. This is a small village which is densely populated. Some other centres of high density of population are Bachani, Belevale Budruk, Bidri, Kagal, Lingnoor Dumala, Murgud and Sangaon. These eight centres cover 12.17 percent area of taluka. Out of these only Kagal and Murgud are big and socio-economically developed centres. These two are market centres of taluka. So population is attracted towards them. Moderate density of population is found at 41 villages. There are 31 villages having low density of population. These 31 villages contain 25.94 per cent population and 39.60 percent area of Kagal taluka. Low density is predominantly found in brown type of soil area of taluka. In Kagal taluka 40 percent villages have low density, and very low portion of taluka is covered by high density.

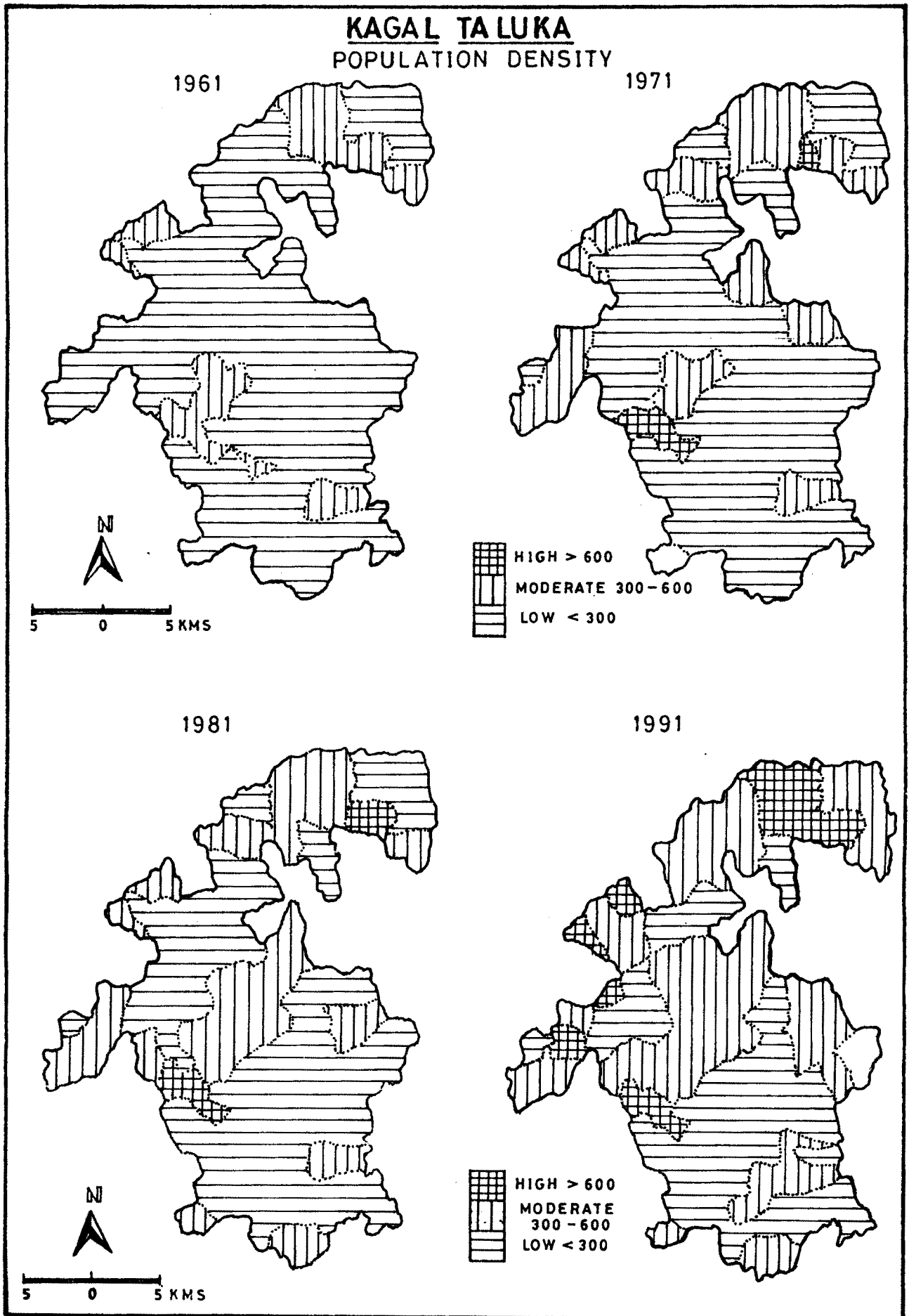


Fig.2-3

2.3.2 Changes in population density :

The changes in population density are observed from 1961 to 1991. According to 1951 census, Kagal taluka had an area of 547.5 sq.km. and population 1,10,734 with 202 persons per sq.km. This changed in later years. The density went upto 235 persons per sq.km. in 1961 and 290 persons in 1971 and 334 persons per sq.km. in 1981. In year 1991, density is 387 persons per sq.km. Thus, over four decades there is an increase of 185 persons per sq.km. This general picture of density cannot give accurate presentation of density of taluka. For this the villagewise density is needed for understanding the change in density.

The changes are observed in all categories of density divisions. In the year 1961 high density is not observed at any place in taluka. This picture of high density was changed in 1971. Lingnoor Dumala, Murgud and Pirachiwadi were the centres that had high density of population. Pirachiwadi had highest density of population (679.13 persons per sq.km.). These three centres had high density because of small area as compared to population. In 1981 four centres had high density of population. This picture changed in 1991, and eight villages found in high density population category. In 1971, 6.38 percent population was observed in high density centres which covered 2.86 percent area of taluka. This percentage changed in next decade. The high density area increased by 9.31 percent and the population increased by 15.19 percent from 1971 to 1991.

Moderate density of population changed very fast. In 1961 there was 29.06 percent population that lived in moderate density which covered 17.67 percent area of taluka. In 1971 39.14 percent population lived in 29.52 percent area. This picture changed in 1981 as 46.33 percent population lived in this category of density which accounted for 37.74 percent of area. In the year 1991, 52.49 percent population and 48.33 percent area of taluka is covered by moderate density.

In year 1981, it is observed that 70.83 percent population lived in low density category which covered 82.33 percent area of taluka. This picture changed in 1971 as 54.46 percent population and 67.60 percent area had low density of population and in the year 1981, 44.45 percent population and 57.95 percent area had low density of population. In the year 1991 this picture got changed as 25.94 percent population covered, 39.60 percent area. The population in low density area decreased by 44.89 percent. The number of villages in low density category also decreased from 1961 to 1991. In year 1991, 41 villages were in low density category.

SUMMARY :

The growth rate of population of Kagal taluka is changing. The growth rate changes are sharp upto 1971, but from 1971 to 1981 growth rate decreased by 8.33 percent and from 1981 to 1991 increased by 6.21 percent.

The distribution of population is affected by physiography and the socio-economic facilities of the region. Uneven distribution of population is observed in the taluka. Some centres have high density because of less amount of area as compared to population. Some centres like Kagal and Murgud have attracted the population by their socio-economic development. The overall picture shows that the population density increased from 1961 to 1991, but low density areas have recorded the decrease.

R E F E R E N C E S

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