Chapter - IV

POPULATION CHARACTERISTICS

Chapter - IV
POPULATION CHARACTERISTICS

4.1 INTRODUCTION -

It is very essential to study the population Characteristics of the study region, becasue the population is an impor- tant natural resource of the country. Population helps to the development of the study region. In the study region population density, Population growth and caste-wise population density has been studied.Physical, cultural and social factors affects on the distribution of population in any area. Population distribution is a geographical Phenomenon. Population distribution tell us how many people lives in which area, and which areas have concen-tration of population which areas have few people in the study region.

On the earth surface human being is the most important factor, their characteristics and distribution, also human being are modifying his environment but total environmental situation is depend upon the quality of population as well as quantity of population.

Population geography studies man in all his aspects as an area-characterising and area-differentiating element. In, demography, which also studies population, the focus of attention is on determining the rates and trends of various population characteristics. Population geography thus avoids duplication of what is done in demography, despite overlapping in objects of study. (Gosal, 1956)

4.2 GROWTH OF POPULATION -

In each decade the population of koregaon taluka has changed. The growth of poplation has been increased in every decade. There are so many factors which are responsible for population growth, in these development of transporation, availability of medical facilities and traditional view of villagers are the major factors contributed in the growth of population in koregaon taluka.

The population growth is calculated on the basis of Gibb's following formula.

$$X = \frac{(P_2 - P_1)/t}{(P_2 - P_1)/2} \times 100$$

Where,

X = Population Growth

P_1 = Population of last year

P_2 = Population of first year

100 = constant

The trend of population growth of study area indicates gradual increase in population, while the decadal growth rate gives different picture. The growth rate of population in koregaon taluka shows continuous increase since 1951-1991. There are tremendous increase in the year 1961 and in the year 1991. The table No. IV-I and figure No. 4.1 shows the population growth of study region.

Table IV-I

Koregaon Taluka

Growth of population - 1951 -2001

Sr. No.	Year	Total Population	Absolute Growth	Growth in %	Annual Growth rate
1	1951	94,000	-	-	-
2	1961	1,22,000	28,000	29.8	2.59
3	1971	1,44,000	22,000	18.1	1.67
4	1981	1,53,000	09,000	6.3	0.41
5	1991	1,81,000	28,000	18.3	1.67
6	2001	2,20,000	39,000	21.5	1.95

Source - Census Handbook of Satara District.

KOREGAON TALUKA
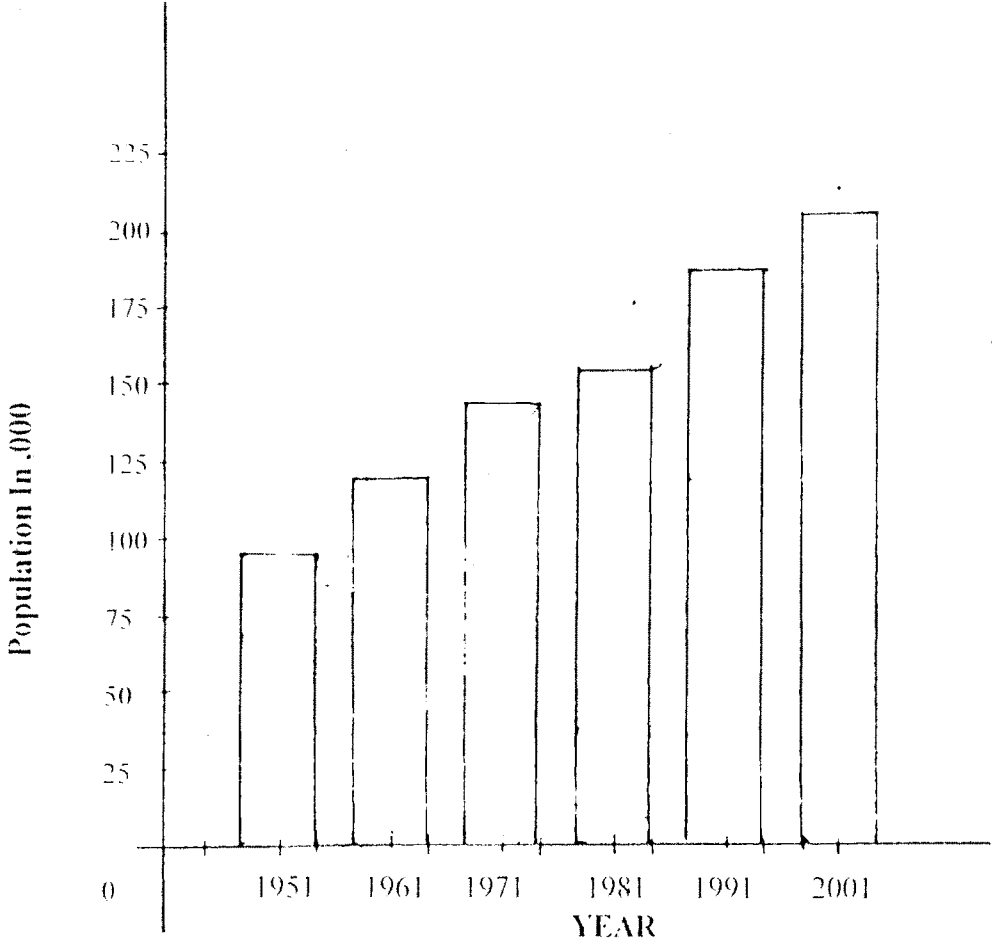DECADEWISE GROWTH PATTERN OF RURAL
POPULATION
1951 - 2001

FIGURE No. 4.1

4.3   POPULATION PROJECTION -

The above population figure shows continuous increase upto 1951-1991. It is observed from the table that the projected population for the year 2001 is calculated with the help of Gibb's following formula...

$$F = P_t + (Ri \times y)$$

where,

F= future Population

P_t = Population of first time

R_i = Rate of Growth

Y = Time interval.

Population projection is an estimate of population after a specific period of time taking into consideration The present population of the region, its age, sex composition and changes in the past, for planning purpose, reliable estimates regarding population, its rate of growth, age composition and spatial distribution are very essential to know what will be food requirement of the country after a specific period, what will be number of school going children, what will be number of job seekers,   also old people and medical establishments required to take care of them. Projection is also necessary to know the dynamic nature of Population (sawant and Athavale, 1994).

4.4 THE DENSITY AND DISTRIBUTION OF POPULATON-

The distribution of population and density of population, these concepts are intimately related to each other. For analysing entire demographic Characteristics of study region, the study of population is significant for geographers.

The villagewise population distribution and density of population has been studied as well as physiological and Agricultural density of population of the study region is also studied in this chapter. Population is a everchanging and dynamic process. Physical, social, cultural and economical factors affacts on the distribution of population. To analyse the population distribution, the study of man and environments is helpful.

Here, an attempt has been made to study the population density of koregaon Taluka. The villagewise Population density of the study region has been calculated and categorized into four groups, for the year 1981 and 1991.

* VILLAGEWISE POPULATION DISTRIBUTION - 1981

1) Very low density of Population - (less than 100)

Very low density of population is found at eastern patches of the boundary region. Naygaon, Chawaneshwar, Chaudharwadi, Ghigewadi, Bichukale, Jamb Bk. etc. Villages have very low density of population. Because most of the part is hilly, so development of agriculture is found less.

2) Low Density of Population- (100-200 persons per sq. km)

The density of population between 100-200 persons per sq. km is found at most of the eastern part of the study region. Solashi, Nandwal, Pimpode, Rautwadi, Asangaon, Talaye etc. Villages have low density of population. This part of the study region is away from the towns, like koregaon, wathar - station, satara Road and Rahimatpur.

3) Medium Density of Population - (200-300 persons per sq. km)

The density of population between 200 to 300 persons per sq. km is found near the towns, which is located in the western part of the study area. Near koregaon, Rahimat pur, Satara Road and Wathar Station, where density of population is found medium. Anpatwadi, Khadkhadwadi, Khed, Reodi, Kumthe etc. Villages have medium population density.

4) **High Density of Population - (300-400 persons per sq. km)**

The villages which are located near the towns and which are well connected to the towns and developed the well network of transportation, have high density of population.Lhasurne, Tadawale S. Koregaon, Manglapur, Dugalwadi etc. villages have high population density.

5) **Very High Density of Population - (Above 400 persons per sq.km)**

The western patches of taluka, which have very high density of population, in these koregaon, Rahimatpur, watharstation, Shirambe, sarkalwadi, Ghigewadi are included as the main centres.Here, well network of transport and communication, market facilities, development of secondary and tertiary occupations which give rise to more population.

* **VILLAGEWISE POPULATION DISTRIBUTION -1991**

1) **Very low Density of Population- (less than 100 persons per sq.km)**

Very few villages of the study region, which have population density less than 100 persons per sq.km. Tadawale s. Wagholi, Chawaneshwar, Bhadale, Nhavi Bk., Jamb Bk., these villages of the Eastern part of study region have very low density of population.

2) **Low Density of Population- (100-200 persons per sq. km)-**

Most of the eastern part of study region have low density of population. As compare to 1931 decade, many villages are included in the medium population density category, because population of these villages have increased in this decade i.e. 1991. Solashi, Nandwal, Deur, Talaye, kawadewadi, chanchali, kolavadi etc. villages have low density of population.

3) **Medium Density of Population - (200-300 persons per sq. km)**

Mainly western part of the study region have medium popula-

KOREGAON TALUKA
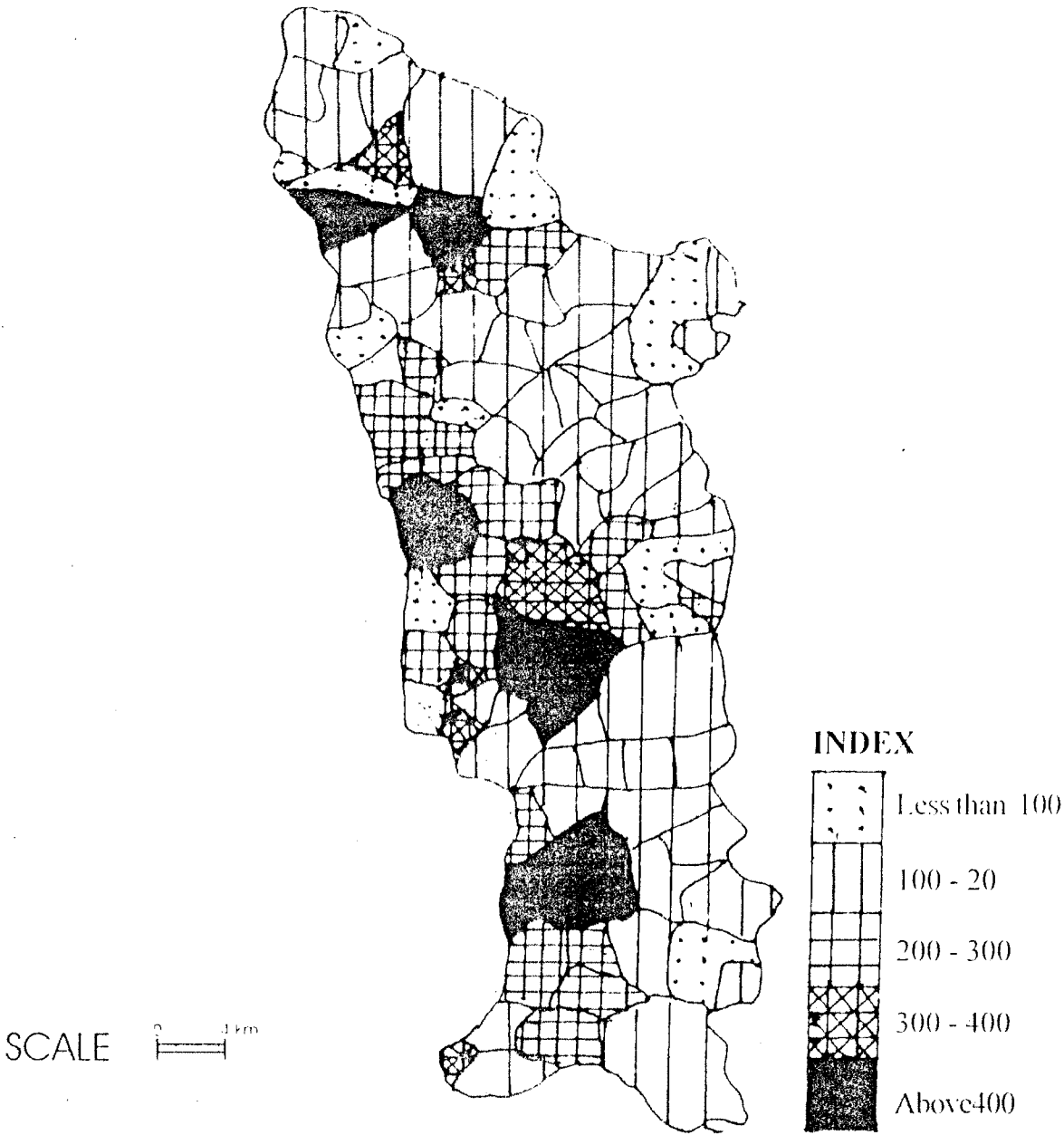## VILLAGEWISE POPULATION DENSITY
1981

INDEX

Less than 100

100 - 20

200 - 300

300 - 400

Above 400

SCALE

FIGURE No. 4.2 A

N

KOREGAON TALUKA
VILLAGEWISE POPULATION DENSITY
1991

INDEX

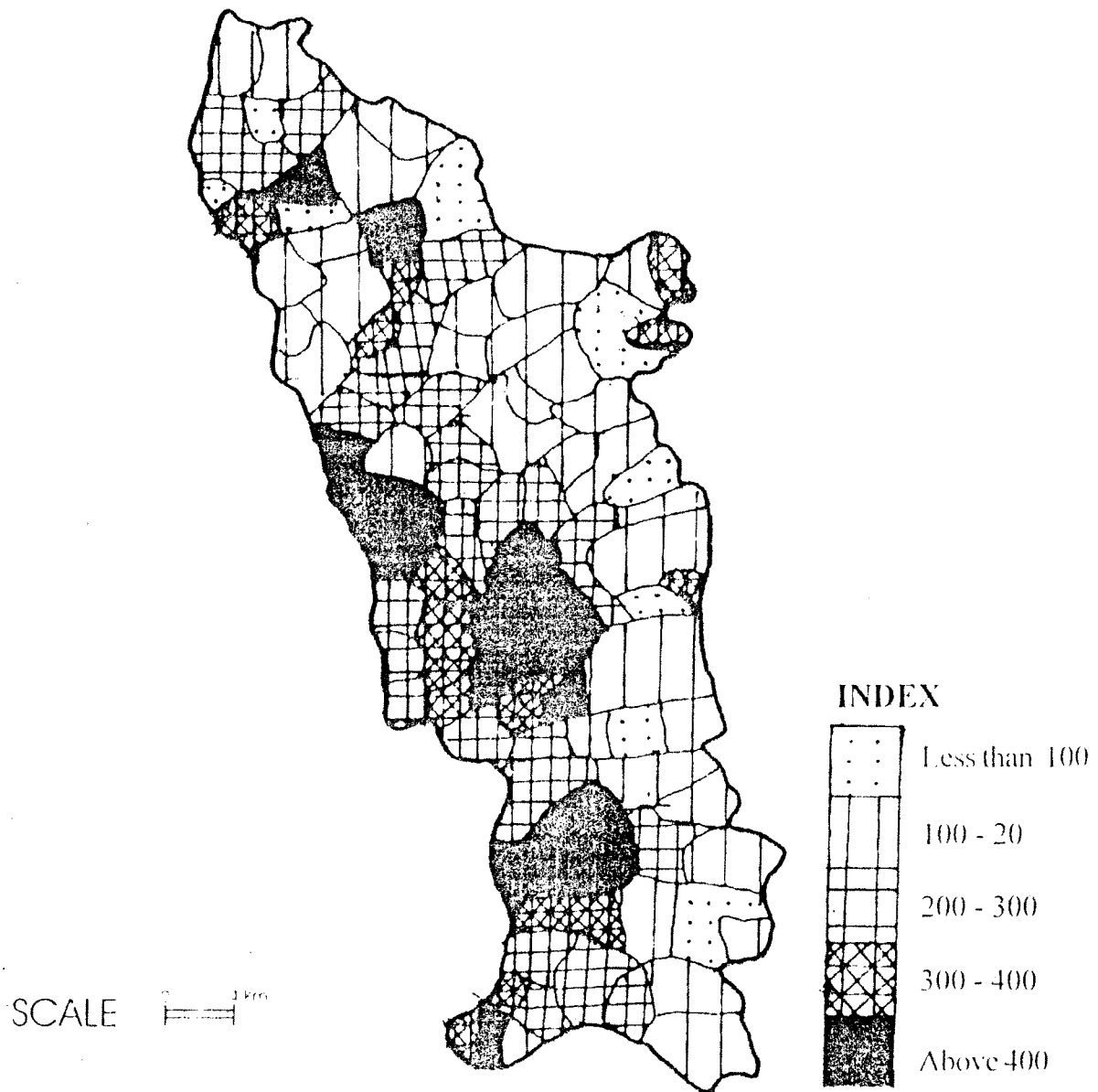|	
: : :	Less than 100
	100 - 20
	200 - 300
	300 - 400
	Above 400

SCALE

N

FIGURE No. 4.2 B

tion density, exception of towns and nearest villages of the towns. Kumthe, Bhose, sangvi, Jalgaon, Dhumalwadi, Khed etc. villages have medium population density.

4) **High Population Density - (300-400 persons per sq,km)-**

Those villages have high population density found i.e. near to the towns. Tadawale S. Koregaon, Jarewadi, Manglapur, Durgalwadi, Nagewadi, Dahigaon, and sonake, these villages are near to the main market place and well connected with network of transport. Here, the development of agriculture is found more.

5) **Very High Density of Population- (Above 400 persons per sq.km)-**

In the decade 1991 there has been tremendous increase in population, So number of villages which have higher of population density observed. These villages are found in the middle-western part of the study region. Towns of these regions have also very high density of population. Sarkalwadi, Shirambe, Durgalwadi, Kumthe, sonake, Ghigewadi etc. villages have very high density of population. Development of markets, transport facilities, development in agriculture affects on the growth of population.

It is observed that the eastern part of the study region have low density of population as compare to western part of the study area.

The fig. No. 4.2 A and 4.2 B shows the clear picture of the population density for the decade 1981 and 1991.

A) **Physiological Density -**

The physiological density means the ratio between population and cultivable land of the study region. For indicating the economic condition of the study region physiological density is more important.

Mainly, the western part of the study region have more physi-

ological density i.e. above 400 persons per sq. km. Sonake, Dahigaon. Dhumalwadi, Shirambe etc. villages have more physiological density in the decade 1981 and 1991. This area having more fertile cultivable land, here drainage density is also high. Mainly middle and western part of the taluka have high physiological density. Near the very high population density areas, high Physiological density areas are found.

The density between 300 to 400 persons per sq.km is found at middle part of the study region, which is located near the towns. Randullabad,Jatapwadi, Wagholi and Anpatwadi villages have high physiological Density.

The density between 200 to 300 persons per sq. km is found at solashi, Naygaon, Nandwal, Deur and Kawadewadi etc.

The Physiological Density between 100 to 200 persons per sq.km is found at chawaneshwar, Rautwadi, Anpatwadi, Hivare, kinhai etc. villages have low Physiological density.

Very low Physiological density i.e. less than 100 persons per sq.km is found at Chaudharwadi, Bhadale, Jaygaon. These area is covered with mountain spurs. So most of the agricultural land is follow, development of irrigation facilities are found less, so density is also less.

As compare to 1981 and 1991 there is change in physiological density. Physiological density is increased in the decade 1991, because of irrigation facilities and agricultural techniques are developed and so many people turn to agriculture because of lack of vacancies in secondary and tertiary occupations. So Physiological density has been found increased.

The fig. No. 4.3 A and 4.3 B shows the clear picture of physiological density of the study region for the decade 1981 and 1991.

KOREGAON TALUKA
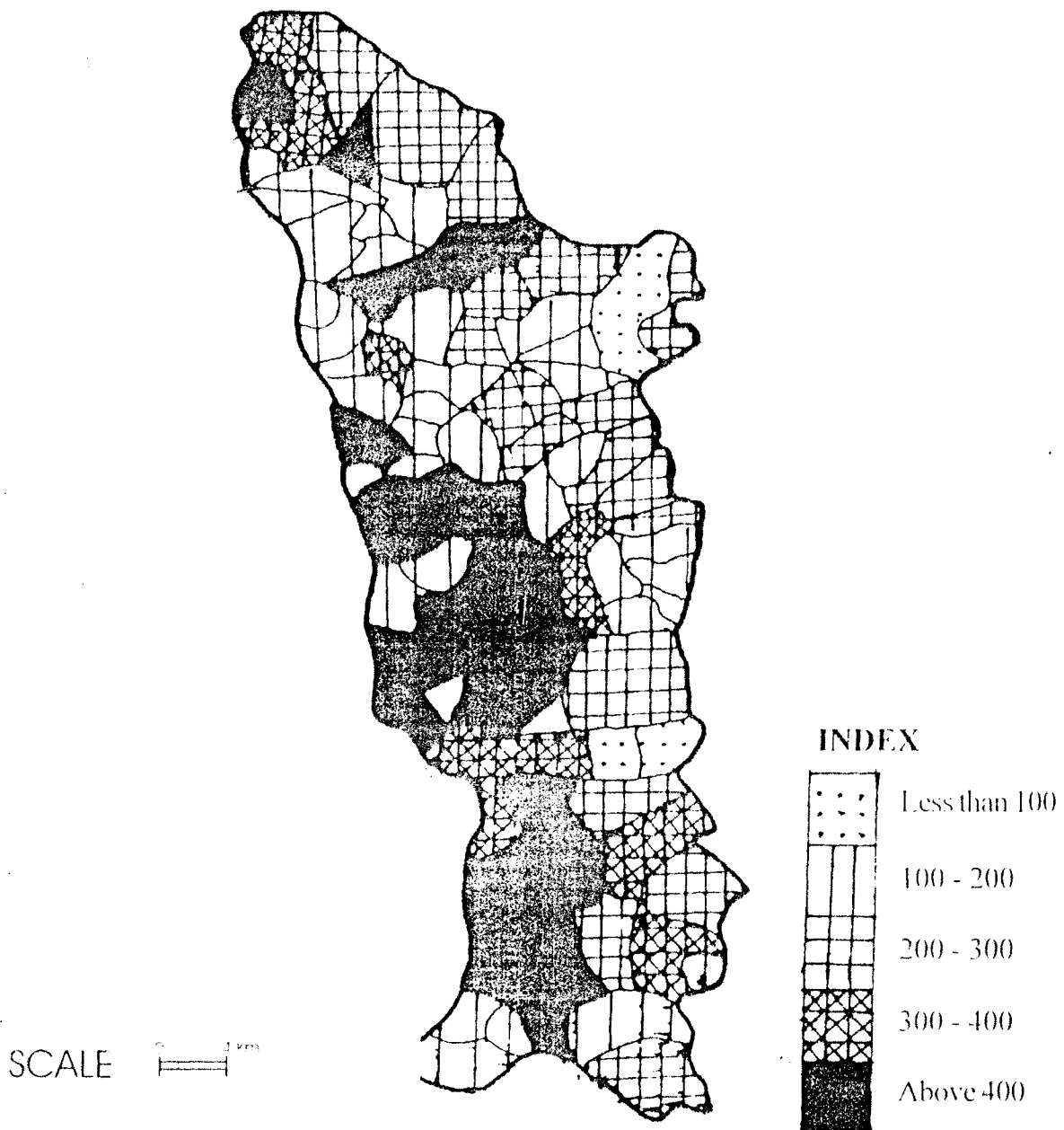## PHYSOLOGICAL POPULATION DENSITY PER SQ. KM.
1981

INDEX

Less than 100

100 - 200

200 - 300

300 - 400

Above 400

SCALE

N

FIGURE No. 4.3 A

KOREGAON TALUKA
PHYSOLOGICAL POPULATION DENSITY
1991

INDEX

Less than 100
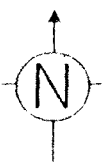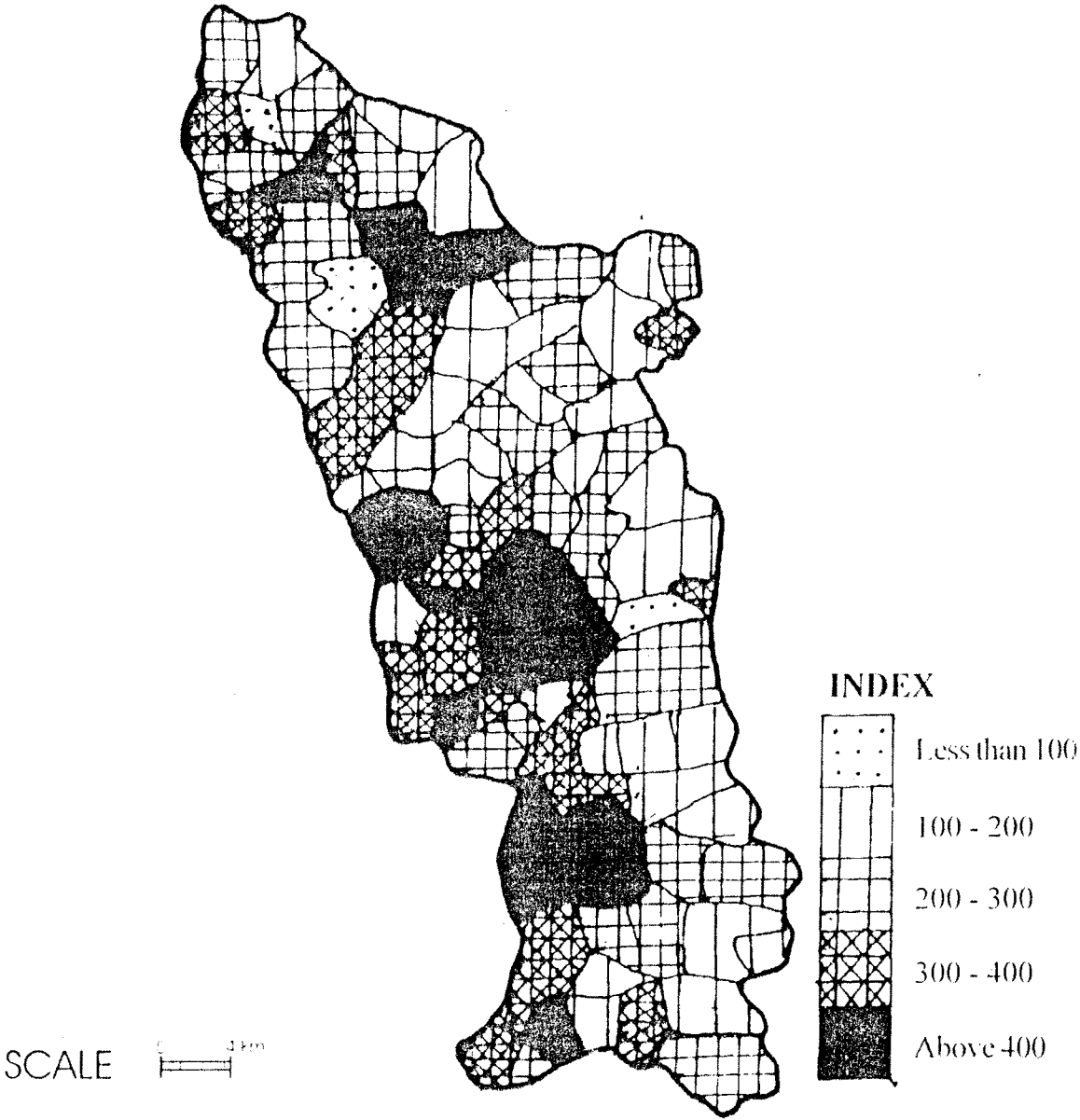
100 - 200

200 - 300

300 - 400

Above 400

SCALE

FIGURE No. 4.3 B

N

B)   Agricultural Density -

Population engaged in primary activities mainly agriculture and cultivable land of the area denotes the agricultural density. As compare to 1981 decade there is tremendous increase of population in 1991. North-eastern part of the study region and also some patches of the study region shows very less agricultural density, because here mountainous area is found, so very less land is come under agriculture. But in the year 1991, shows decrease in these category, i.e. less than 25 persons per sq.km.

In the second category i.e. 25 to 50 persons per sq.km is found mostly in the northern and western part of the study region.

In the third category, near the towns, agriculture density is high, i.e. 50-75 persons per sq.km.
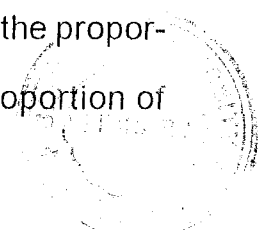
The forth and fifth category of the density of agriculture i.e. 75-100 and above 100 persons per sq.km is found at western part of the study region. Here development of agriculture and irrigation facilities are more.

It is observed that, there is tremendous increase in agricultural density in the study area, in the decade 1981 to 1991, because of development in irrigation facilities, and agricultural techniques, development of market near the villages and many people turn towards the agriculture, so the agricultural density has been found increased in the decade 1991.

The fig No. 4.4 A and 4.4 B shows the clear picture of the agricultural density for the decade 1981 and 1991.

4.5   THE SEX STRUCTURE -

An account of sex ratio is also significant for regional planning. It is obvious that in case there are more males than females, than the propor-tion of men who can marry will be lower, birth rate as well as proportion of

KOREGAON TALUKA
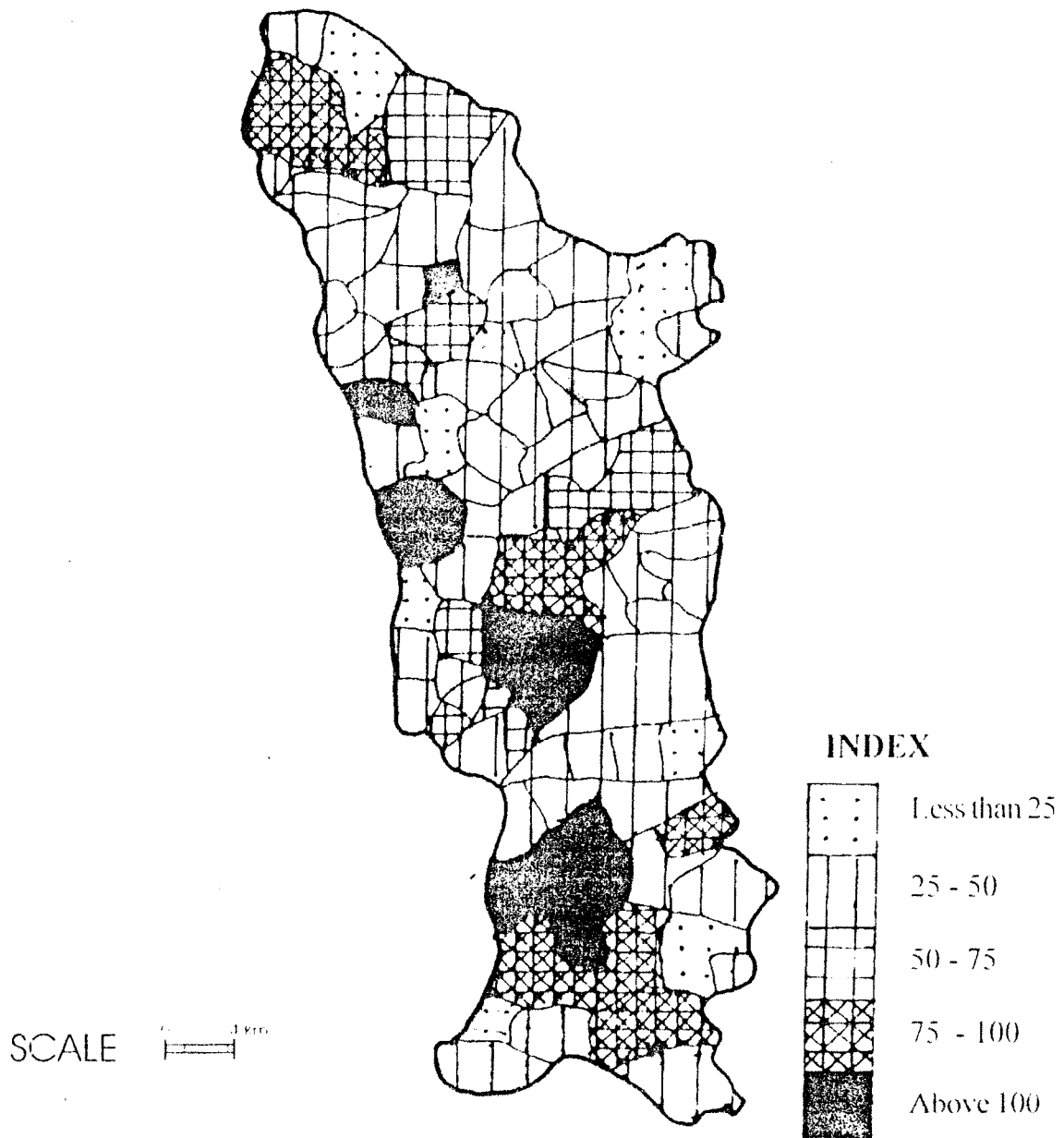## AGRICULTURAL POPULATION DENSITY
PER SQ. KM. 1981

INDEX

Less than 25

25 - 50

50 - 75

75 - 100

Above 100

SCALE |⊢===⊣| 1 km

N

FIGURE No. 4.4 A

KOREGAON TALUKA
AGRICULTURAL POPULATION DENSITY
1991

INDEX

Less than 25
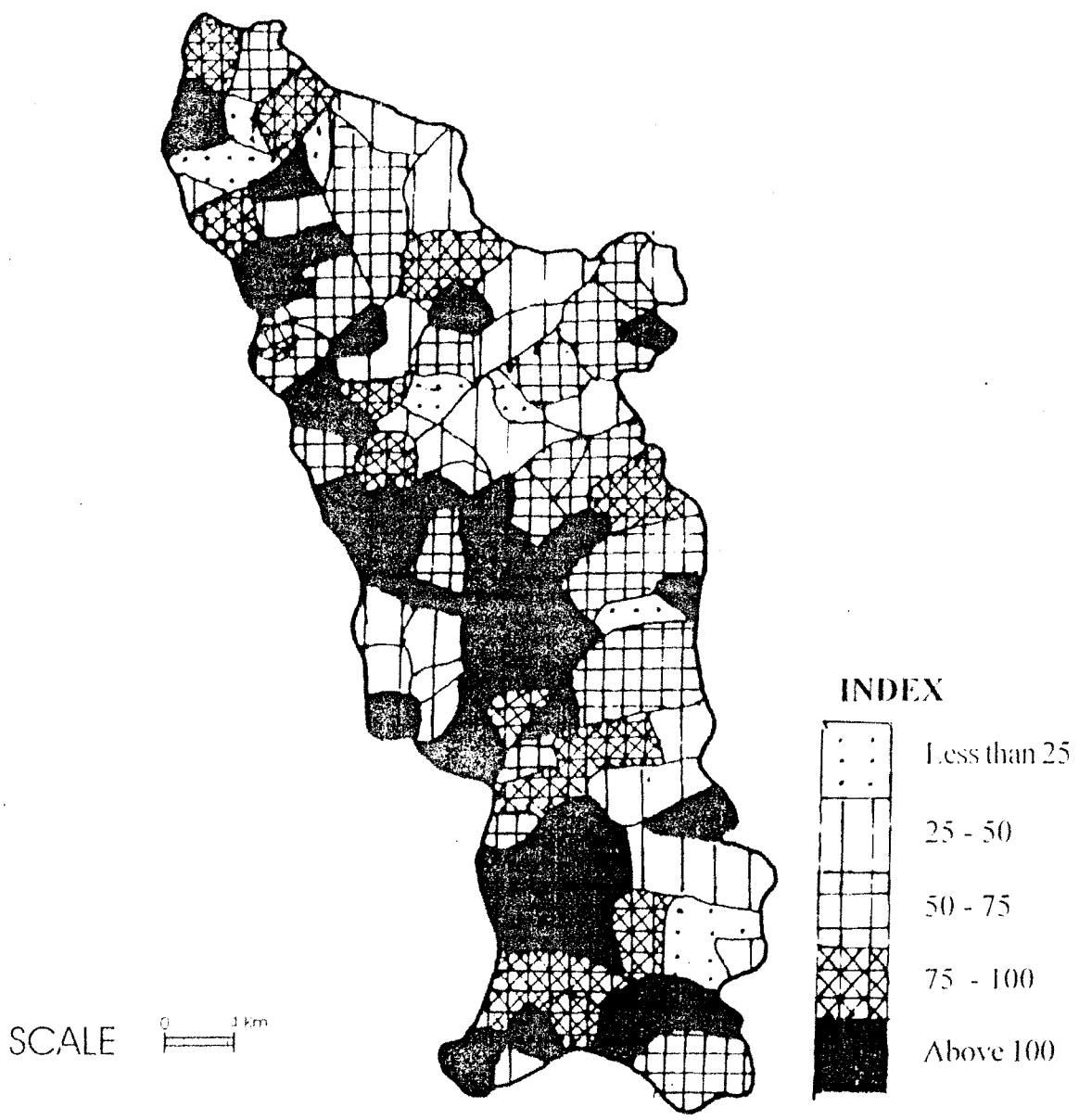
25 - 50

50 - 75

75 - 100

Above 100

SCALE

N

FIGURE No. 4.4 B

Children group will be lower, and number of workers will be higher. In case the number of females is higher than males, then there will larger proportion of unmarried woman, birth rate may not be higher, but proportion of dependent population will increase. On the other hand, if sex ratio is even, then the birth rate is likely to be comparatively higher and proportion of Children group will increase. (singh, 1988).

For the purpose of studying the sex composition of given population demo-graphic variable used most frequently. In India, females per thousand male is called as sex ratio. In India, productive age groups of male migrate to urban areas, and its results is higher sex ratio in rural areas.

Sex ratio , affects on the different aspects of population, because it influences the form of the life, it affects marriage, birth rate, death rate and population growth. Study of sex ratio is also essential for the planning regarding educational and medical services etc. Sex ratio also affects on the labour supply of the study region. Sometimes adverse sex ratio, the society loose the morally and so the study of sex composition reveals several things.

The following table No. IV-II and fig. No. 4.5 shows the sex ratio of the total population since 1951 to 1991.

Table -IV-II

Koregaon Taluka

Sex Ratio - 1951-1991

Sr.	Year	Male	Female	sex Ratio
1	1951	56,000	50,000	893
2	1961	67,000	72,000	1074
3	1971	80,000	84,000	1050
4	1981	91,000	1,00,000	1099
5	1991	1,10,000	1,15,000	1046

source - Census of India, District census Handbook,Satara District 1991

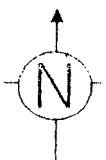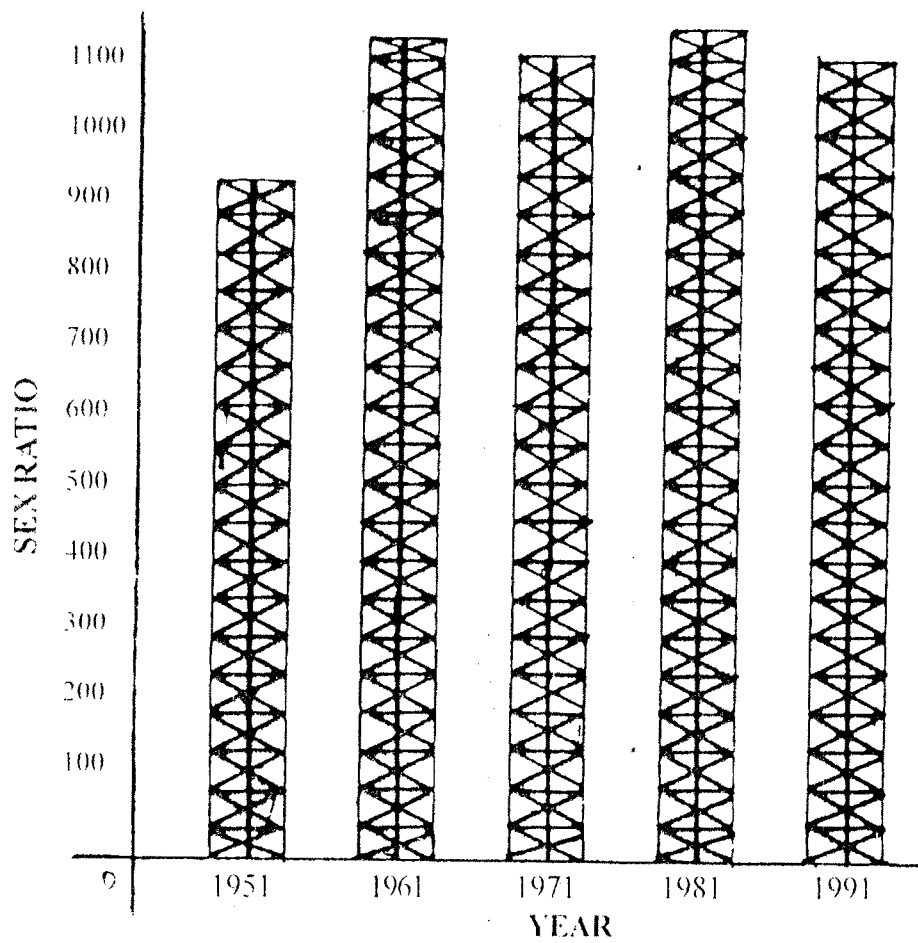# KOREGAON TALUKA
SEX RATIO·
1951 - 1991

FIGURE No. 4.5

The table IV-II shows the sex ratio of the study region since 1951 to 1991. According to 1951 census figure, there are 893 females per 1000 males. After 1951, there is increase in the sex ratio of the study region. In the decade 1961 and 1971 sex ratio was 1074 and 1050 per thousand males respectively. In the decade 1981 sex ratio was increased i.e. 1099 females per thousand males. In the decade 1991, as compare to past decade sex ratio has found decresed i.e. 1046 females per thousand males.

As compare to sex ratio of India, here sex ratio is higher, because, in the rural areas many males migrate to the urban areas for the purpose of work. So only females are live in the rural areas, that is why sex ratio is found large in rural areas of the study region.

4.6 LITERACY STRUCTURE :-

Literacy structrue is one of the most important indicator of social development. Literacy is an important thing, which affects on the demographic structure of the study area. i.e. marriage, fertility, mortality, skilled and unskilled labour force, crude literacy rate is expressed as follow-

crude literacy Rate = L/P x 100

Where, L= literate Population

P= Total Population

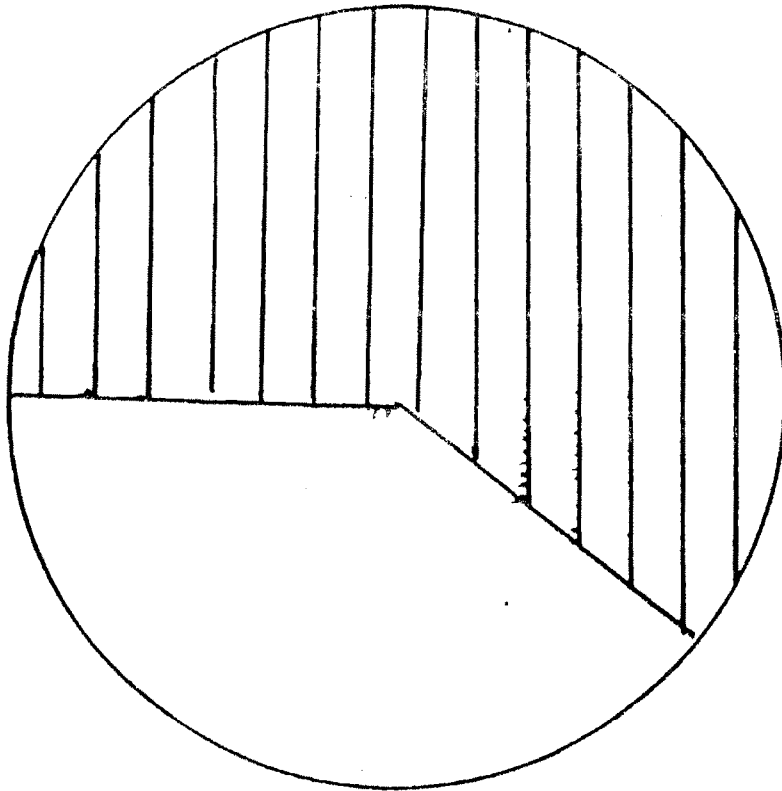The table IV-III and fig. 4.6 shows the litercy structure of the study region.

Table-VI-III

Koregaon Taluka

Literacy Structure

1981-1991

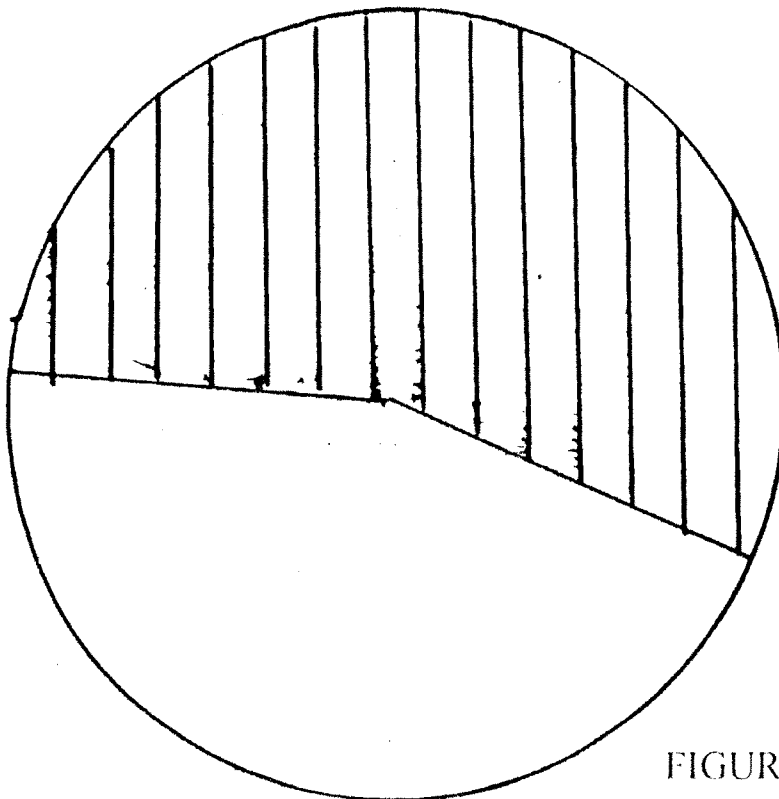| r. o	Year	Literate Population	Literarcy Rate	Literate M Population	Literacy Ratio	Literate F Population	Literacy Ratio
	1981	79737	52.12	46166	30.17	33571	21.94
	1991	125684	69.43	71147	30.50	54537	30.13

ce - Census Hand book of Satara District. Year 1981-1991

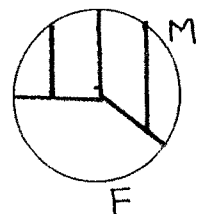# KOREGAON TALUKA
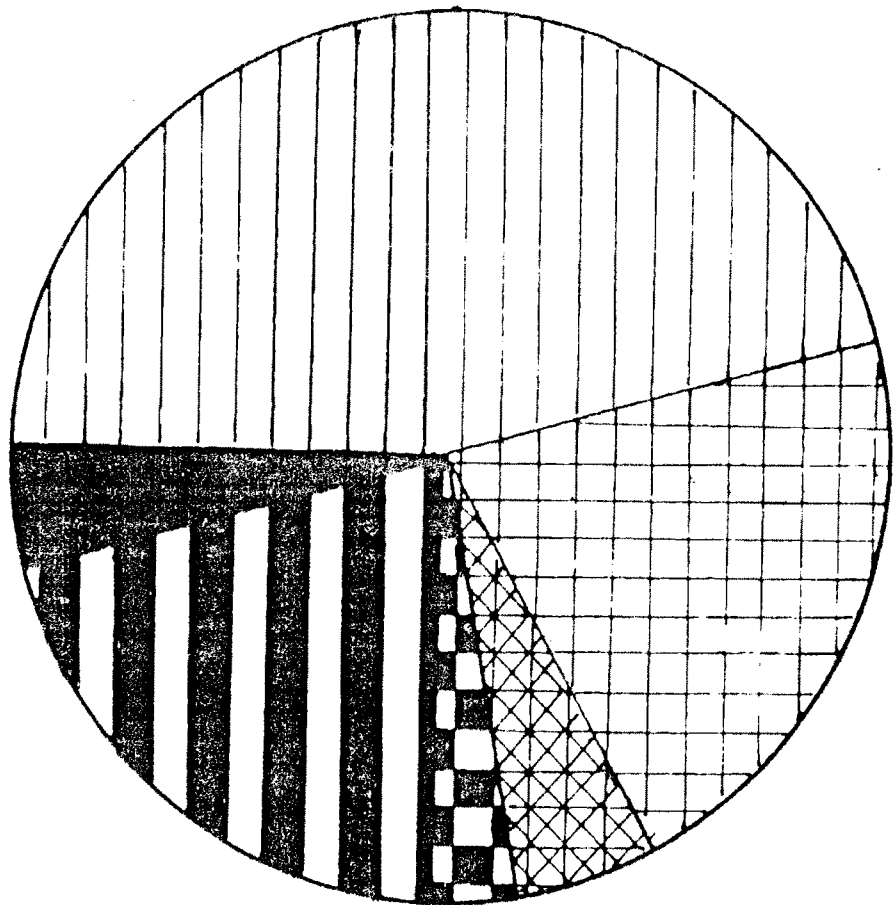## LITERACY STRUCTURE

1981

1991

INDEX

M

F

FIGURE No. 4.6

The table IV-III shows the literacy structure of the koregaon taluka. The minimum level of literacy skill is refers to literacy. In India, the ability of reading and writing is called as literacy. There is difference in literacy rate in male and female population. Literacy rate is increasing in each decade. According to 1981 census nearly 52.12 percent of the total populaiton is literate. Out of which 30.17 percent was male and 21.94 percent female population. In the decade 1991, literacy rate show increase i.e. 69.43 percent population of the total is literate, out of which 30.13 percent was female and 39.50 percent was male pupulation. Development of many new schools in the study areas, development of transportation facilities and rural people change their traditional thought so literacy rate was increased in the study region.

4.7   OCCUPATIONAL STRUCTURE -

A person performs by engaging himself in some activity is called occupation. Occupation indicates the earner's nature of work. The number of persons engaged in different activities, such as primary, secondary and tertiary is called as occupation structure. Occupational structure is an important social characteristics and it influencing mans life. Occupation structure indicates the degree of employment and unemployment population of the study region.

The table No. IV-IV and figure No. 4.7 shows the clear picture of occupational structure of the koregaon taluka.
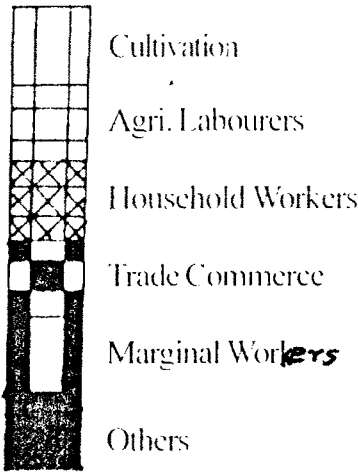
KOREGAON TALUKA
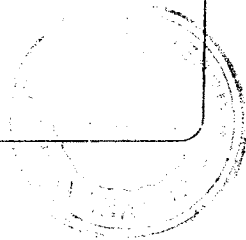## OCCUPATIONAL STRUCTURE
1991

INDEX

Cultivation

Agri. Labourers

Household Workers

Trade Commerce

Marginal Workers

Others

FIGURE No. 4.7

N

Table IV-Iv

Koregaon Taluka

Occupational Structure 1991

Sr.	Occupation	No. of workers	% to total
1	Cultivators	37,072	47.3
2	Agri labourers	16,728	21.3
3	House hold workers	3,045	3.9
4	Trade and commerce	1,718	2.2
5	Marginal works	16,090	20.5
6	Others	3,759	4.8

Source-Census Handbook of satara District-1991

It is observed that, in the study region out of the total population 67.5 percent population is working population, in the year 1991. Out of total working population 68.8 percent population is engaged in agriculture and related activities. Nearly 3.9 percent population is engaged in house-hold activities and 2.2 percent and 20.5 percent workers engaged in trade and commerce and marginal workers respectively.

4.8 DISTRIBUTON OF SCHEDULED CASTE AND SCHEDULED TRIBE POPULATION IN KOREGAON TALUKA-

The distribution of scheduled caste and scheduled tribe population has been studied for the year 1991. It is observed that higher percentage of scheduled caste population is found the year 1991 i.e 10.7 percent. In the decade 1981, it is found 4.8 percent. It means there is a increasing trend in the scheduled caste population in koregaon takuka.

Scheduled tribe population is 0.6 percent in the decade 1981, it has been increased by 1 percent in the decade 1991. There is not much more increase in the scheduled tribe population in the study region.

A) **DISTRIBUTION OF SCHEDULED CASTE POPULATION DENSITY - 1991**

1) **Very low scheduled Caste Population Density -** (less than 50 persons per sq.km) In the Decade 1991 scheduled caste population density is found in the villages Nandwal. Randullabad, sarkalwadi, Ghigewadi, Anpatwadi. Asangaon, Chilewadi, Madanpurwadi, etc. In these villages have observed schedulal caste population density less than 5o persons per sq. km.

2) **Low density of Scheduled Caste Population** (50-100 persons per sq.km)

In this category i.e. density between 50 to 100 persons per sq.km is found in the villages Dahigaon, Vikhale, Hivare, Jamb kh. Dhumalwadi, Khed etc.

3) **Medium Density of scheduled caste population -** (100-50 persons per sq.km- In this category i.e. density between 100 to `150 persons per sq.km is found in the villages Rui, Ambawade S. Wagholi, Bhose, Asangaon, Naygaon etc.

4) **High Density of Scheduled caste Population** (150-200 persons per sq.km) the density between 150-200 persons per sq.km is found in the more villages i.e. sonake, Rautwadi, kawadewadi, khadkhadwadi, Tadawale S. Koregaon etc.

5) **Very High Density of Scheduled Caste Population -** (Above 200 persons per sq.km) In this category, density of scheduled caste population above 200 persons per sq.km is found in the more number of villages i.e. koregaon, Wathar-station, satara Road Karanjkhop, kinhai, khed, Pimpode kh. etc.

KOREGAON TALUKA
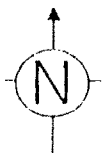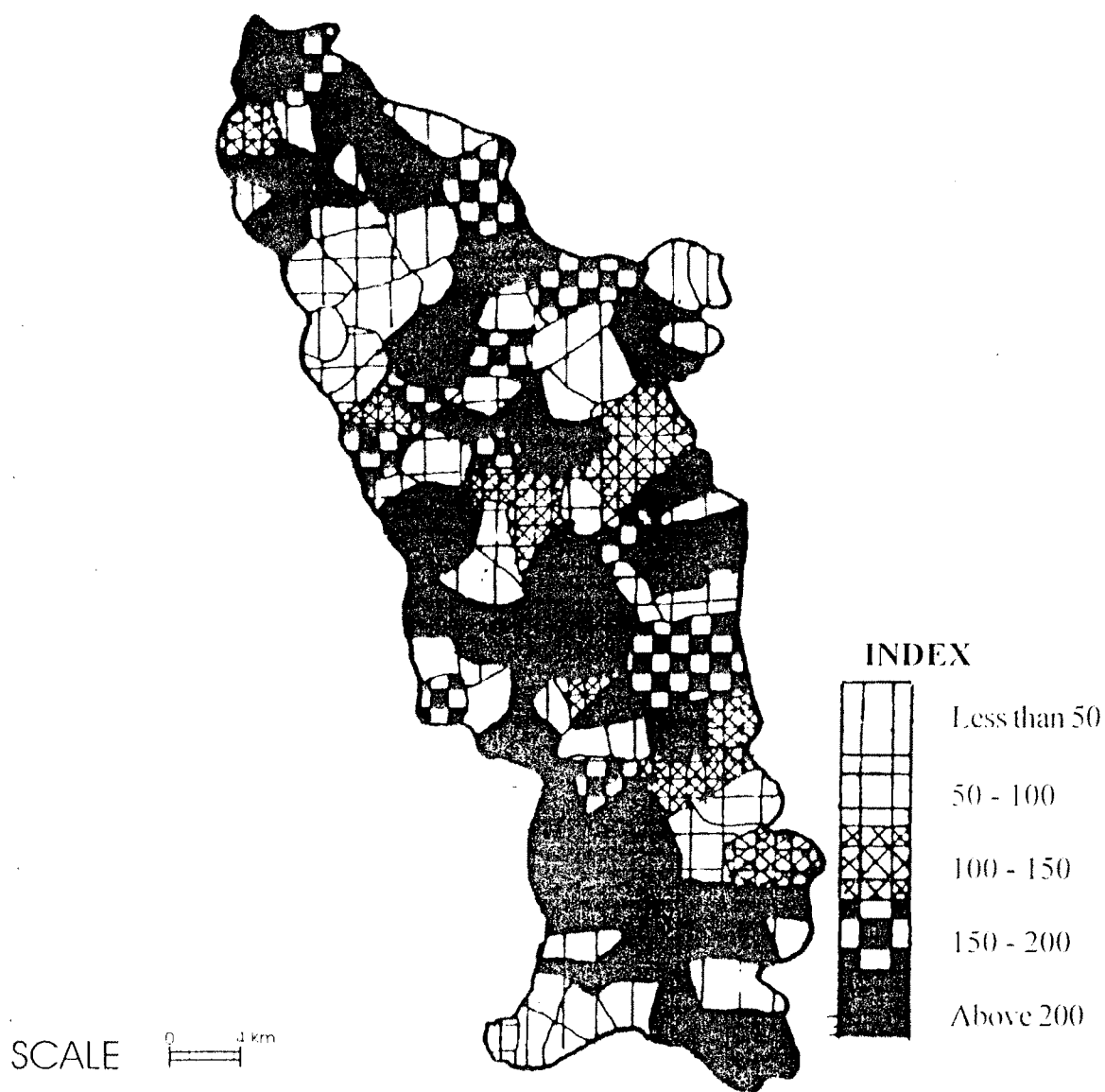VILLAGEWISE DENSITY OF S. C. POPULATION
1991

INDEX

Less than 50

50 - 100

100 - 150

150 - 200

Above 200

SCALE

FIGURE No. 4.8

The table No. IV-V and figure 4.8 shows clear picture of density of scheduled caste population.

Table - IV-V

koregaon Taluka

Scheduled caste population Density &

No. of settlements - 1991

Sr. No.	S.C. Population Density per sq.km	No. of settlements	% to total
1	less than 50	16	14.6
2	50-100	10	9.1
3	100-150	12	10.9
4	150-200	11	10.0
5	Above 200	43	39.1

sources - census Handbook of satara District -1991

It is observed that the scheduled caste population is scattered all over study region. Western side of the study region have more scheduled caste population Density. High scheduled caste density region is near the towns, Because of low literacy rate, traditions and customs of scheduled caste population, density of scheduled caste population is found more in the study area.

B) Distribution of scheduled Tribe Population -1991

The scheduled tribe population is very rarely found in the koregaon taluka. In some villages scheduled tribe population is not observed and it is also uneven. This population is found in the northern and middle part of

KOREGAON TALUKA
VILLAGEWISE DENSITY OF S. T. POPULATION
1991

INDEX

Less than 15
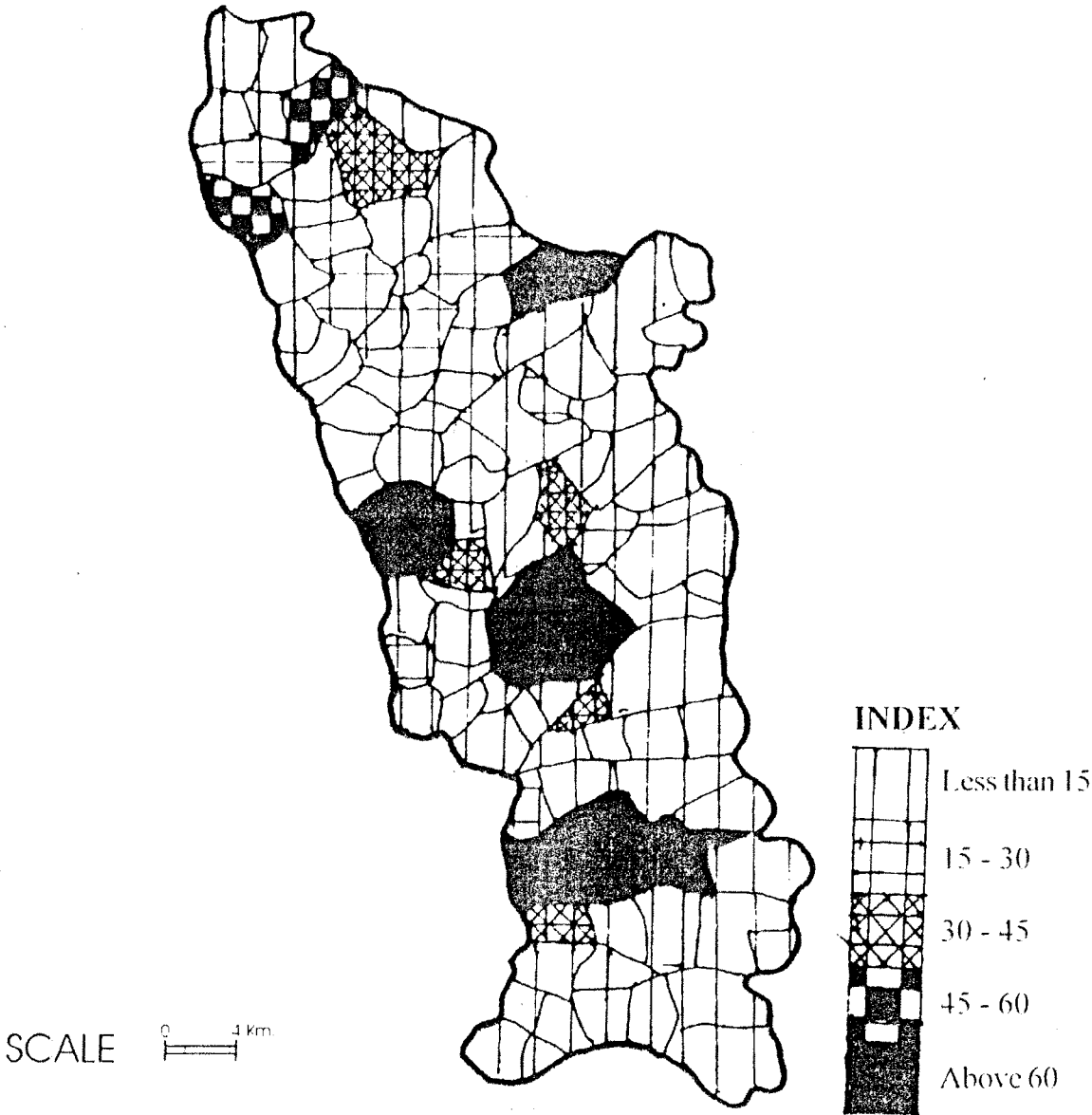
15 - 30

30 - 45

45 - 60

Above 60

SCALE

N

FIGURE No. 4.9

the study region. In the large villages scheduled tribe population is found more i.e. Nandwal, chawaneshwar, wagholi, vikhale, chanchali, Jalgaon, Kumthe, Borgaon, Rahimatpur, koregaon, Satara Raod, wather-kiroli and Lhasurne and many villages have scheduled tribe population is not observed.

The table No. IV-VI and figure No. 4.9 shows the clear picture of density of scheduled tribe population.

Table - IV-VI

Koregaon Taluka

scheduled Tribe population and No. of settlements - 1991

Sr. No.	Schedule Tribe. Population	No. of settlements	% to total
1	less than 15	18	16.4
2	15-30	09	8.2
3	30-45	05	5.0
4	45-60	03	2.7
5	Above 60	07	6.4

Source - Census Handbook of satara district. -1991

References -

1) Sawant And Athavale, 'Population Geography, 1994

2) Singh S. (1988), ' Rural Development And Planning'

3) Gibbs, J. P. (1966), Urban Research Methods, Low Prised Edition.

4) District Census Handbook of Satara District - 1991.