3.1 : INTRODUCTION :-

' Population is the point of reference from which all the other elements are observed and from which they all singly and collectively, derive significance and meaning. It is population which furnishes the focus[1]'. This approach has reoriented many geographers and their emphasiz examines or seeks to explain the relationship between man, his environment and his activities. However their views give different weightage to the study of man. This view-point makes population a multidisciplinary theme which ultimately requires an interdisciplinary interactions to resolve population issues and problems, and provide a basis for peace and prosperity, human dignity and social well being.

As it is neither possible nor practical to visualise or consider all the aspects of population, the author has selected some aspects of the population of Sangli district for a detailed analysis and interpretation. They are as below :-

1) Population change,
2) Variations in Spatial Distribution,
3) Sex Imbalance,
4) Magnitude of Literacy,
5) Concentration of Scheduled Casts and Scheduled Tribes.

3.2 POPULATION CHANGE :

The reason for calling this heading as " Population Change " rather than " Population Growth " is that the population of Sangli District decreased in two decades, namely, 1901 - 1911 and 1911 - 1921, whereas it had decreased in 1911 - 1921 only in Maharashtra state. The same argument can be advanced while presenting data at other levels in the district i.e. of tahsil and village. Besically this resultant growth or change is an interaction between the three primary population determinants:-

i) fertility,
ii) mortality and
iii) migration

In the study area they have been operating variously at various locational points.

Population change is an aspect of vital interest in every-day life as well as at other levels of consideration and analysis. This may be expressed as under[2].

$$P.C. = B.R. - D.R. \pm M.$$

Where,

P.C. is Population Change,

B.R. is Birth Rate,

D.R. is Death Rate, and

M. is Migration

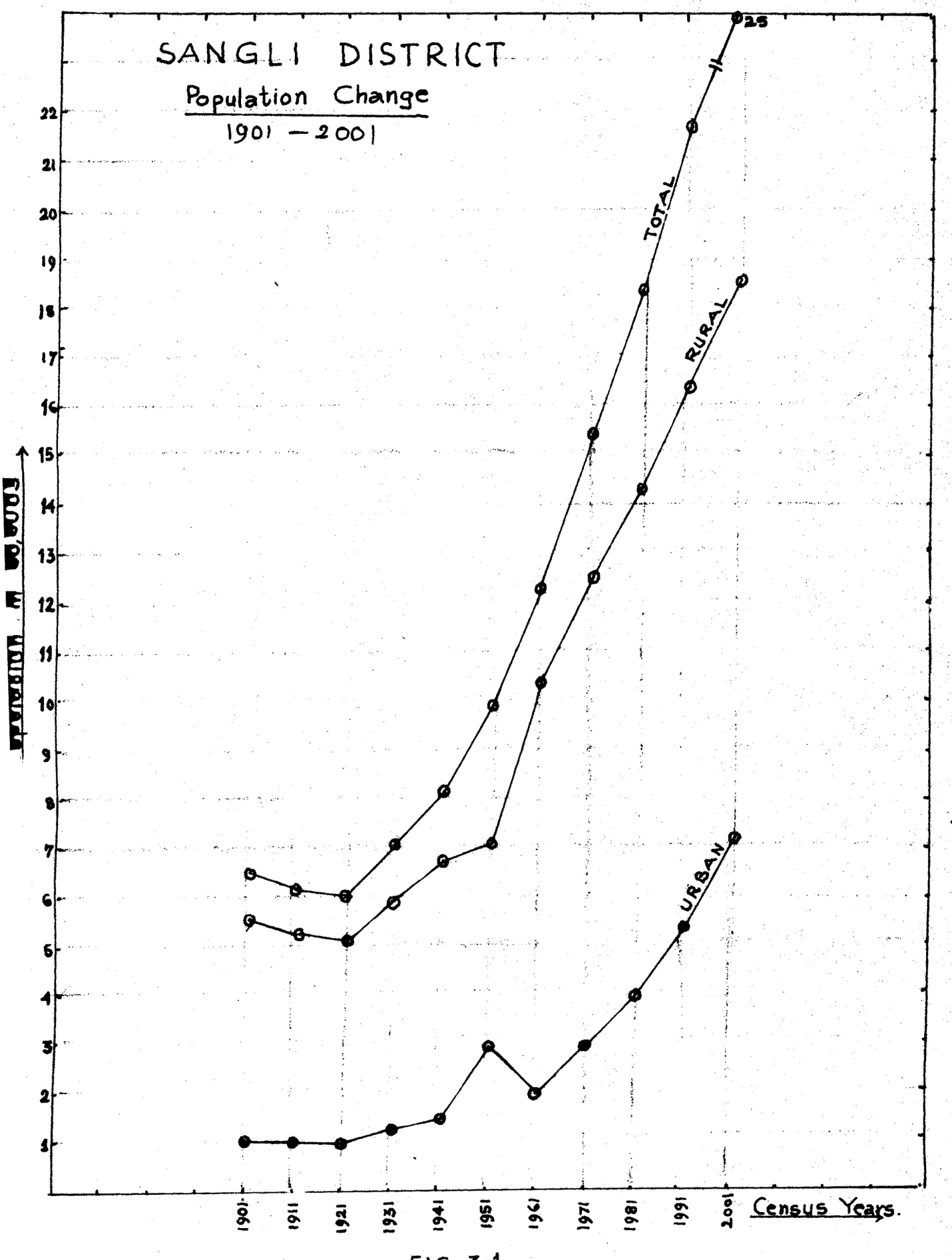

SANGLI DISTRICT
Population Change
1901 – 2001
TOTAL
RURAL
URBAN
25
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
1901
1911
1921
1931
1941
1951
1961
1971
1981
1991
2001
Census Years.

Fig 4.1

TABLE -3.1

SANGLI DISTRICT: CHANGES IN TOTAL, URBAN AND RURAL POPULATION (1901 - 2001)

Census year	Total			Urban			Rural		
	Popula--tion	Decade variation	% Decade variation	Popula--tion	Decade variation	% Decade variation	Popula--tion	Decade variation	% Decade variation
1	2	3	4	5	6	7	8	9	10
1901	644556	-	-	95,016	-	-	549540	-	-
1911	612515	-32038	-4.97	88932	- 6084	- 6.40	523586	- 25954	- 4.72
1921	596199	- 16319	- 2.66	92197	+ 3265	+ 3.67	504002	- 19584	- 3.74
1931	707479	+111280	+18.66	118235	+26038	+28.24	589244	+ 85242	+16.91
1941	812865	+105386	+14.90	139026	+20791	+17.58	673839	+ 84595	+14.36
1951	998434	+185569	+22.83	286930	+147904	+106.39	711504	+ 37665	+ 5.59
1961	1230716	+232282	+23.26	192430	-94500	-32.93	1038286	+326782	+45.93
1971	1539820	+309104	+25.12	286898	+94468	+49.09	1252922	+214636	+20.67
1981	1831212	+291392	+18.92	394089	+107191	+37.36	1437123	+184201	+14.70
* 1991	2177677	+346465	+18.92	535297	+141208	+37.36	1642380	+205257	+14.70
* 2001	2589693	+412016	+18.92	725884	+190587	+37.36	1863809	+221429	+14.70

Source :- 1. Census Handbook of Sangli 1981.

* 2. Calculated by the author himself.

Changes in Total, Urban and Rural Population (1901-2001)

Table No.3.1 and Fig. No.3.1 present decaded variation and percentage of decade variation in population of Sangli district - General, Urban and Rural - from 1901 - 2001. It needs pointing out here that the census records of 1981 mention the time-data as Sunrise of 1st March, 1981, whereas the enumeration for Census of 1971 were recorded on 1st April, 1971. This implies that data pertaining to 1971 - 1981 covers a span of 119 months (9 years and 11 months) instead of 120 months are a complete decade . At the same time population change has been calculated for 1991 and 2001, according to the Geometric Projection method[3], given as below :-

$$Pn = Po \left(\frac{Po}{Pm} \right)^{n/m}$$

Where,

Pn, is the projected population after 'n' years.

Po, is present population on the basis of Census.

Pm, is population of 'm' years earlier.

The major highlights of Table No.3.1 are as below :-

A) TOTAL POPULATION :

i) In the decades 1901 - 1911 and 1911 - 1921, the population of Sangli district has decreased. This is due to high mortality caused by catastrophes Viz. famines and epidemics.. It was during this period that a great famine which had taken a heavy toll of life even prior to the begining of the Census era viz. , 1876-1877. Again during the

Decade 1891-1901, there were a series of severe famines and an epidemic of plague. The All-India Census Report of 1901 also contains a vivid chronological account of the famines during the period from 1891 to 1901, which were mainly attributed to ' Weak mansoons and Mansoon failure[4]'.

But all the fluctuations in the preceding periods pale into insignificance when the population change is considered for 1911 - 1921. This decade was extroordinary in many ways. The natural checks which are known to curb the change of population were found operating during this period. Although Sangli District Gazetteer does not make an elaborate mention of epidemic of plague, yet it is worth-while recording here that this epidemic of plague took a toll of nearly three million lives in India[5].

The first World War also took place during this decade and, most important, after the war, the entire country was swept by distinct waves of World-wide pandemic of Influenza. This epidemic may be considered as the most severe and most deadly of its kind. In the year 1918, the official death rate rose to 63 per thousand population. J.T.Marten reported in the Census Report of 1921 that rural areas were severely affected by this epidemic. Mortality was particularly high among adults between the ages of 20 and 40. Women were the most affected. " In the worst period, whole villages were absolutely laid desolate by the disease. There was sometimes no means of disposing of the dead; crops were left unharvested .....

..... And to add to the distress, the disease came at a period of widespread crop failure and reached its climax in November, when the cold weather sets in; and as the price of cloth happened at time to be the highest, many were unable to provide themselves with the warm clothing that was essential in the case of illness that so readily attacked the lungs[6]."

ii) After 1921, the population of Sangli district started increasing. Thus the year 1921 is designated as " the great divide " in the sense that it is the turning point which marks the begining of regular growth and also the begining of a rapid and massive population increase.

iii) The decennial variation has also increased from 1921 upto 1971. From 1941 onwards, the population has been growing at a phenomenal rate, while during 1931 - 1941, the average decennial variation was 14.90 percent. But from 1941 to 1951 it increased to 22.83 percent, while in 1951-1961 it was 23.26 percent. Evidently the total population has become more than double in a period of 40 years, that is, from 1921 to 1961.

iv) The decennial variation in population during 1961-1971 was 25.12 percent and that during 1971-1981 it was 18.92 percent. Before drawing any inferences from these two figures one important point should be recalled, that is of the time duration of 119 months, as pointed out earlier. In case an adjustment in time duration is made the variation in population during 1961-1971 would be 24.91 percent and in 1971-1981 it will be 19.08 percent, showing a rise of 0.16 percent in the variation.

v) Population change is and has been an inevitable phenomena in the ecosystem of Sangli district. It is hoped or wished that stability in population change may dawn in the next two decades i.e. 1981-1991 and 1991 - 2001 to ensure a bright or happy life and living in the district.

B) URBAN POPULATION :

This term refers to changes in the size of either an urban place or an urban population. This may take place as a result of expansion of the boundaries of an urban area or due to reclassification of areas as urban according to a pre-determined criteria. Changes in urban population may take place because of the consequent growth of an urban place as a result of the above two reasons, or because of a natural increase and net migration. Thus, while considering a change in an urban population during a given period, these two dimensions have to be taken into consideration :-

a) Changes which occur within the localities themselves; and

b) The components of population growth which contribute to changes in an urban population within these localities.

Table No.3.1 shows following aspects in respect of urban population:-

i) The decade 1901-1911 shows negative decade variation (- 6084) and percentage of decade variation (-6.40 %) in urban population. It is due to famines and other calamities.

ii) 1911-1921, decade shows a modest recovery in variation of urban population (+ 3.67 %).

iii) 1921-1931 and 1931-1941, are such two decades when urban population took an upwards march.

iv) The decade 1941-1951 is an extra-ordinary decade as far as the urban population variation is concerned. During this decade the urban population has become more than double, (106.39 %).(This was the First Census of Free India and urban criteria seems to have been applied in a loose way).

v) In 1961 the definition* of urban areas was changed.

---

* Definition of urban areas according to 1961 Census[7].:-

To qualify for an urban area, a place should first be either a Municipal Corporation or a Municipal Area, or under a Town Committee or a Notified Area Committee or a Cantonment Board.

All other places which satisfy the following criteria:-

a) A density of not less than 1,000 persons per sq.miles;

b) A population of 5,000;

c) Three fourths of the occupations of the working population should be outside of agriculture ; and

d) The places should have, according to the Superintendent of the State, few pronounced urban characteristics.

Due to change in the definition of urban places there has been a great decline in the urban population. i.e. the urban population decreased by 94,500, the decadal change to - 32.93 %, and the number of towns decreased from 21 in 1951 to 6 in 1961.

v) During 1961-1971 and 1971-1981 the absolute numbers in urban population have increased but decadal variation in percentage was uneven, viz. 49.09 % in 1961-1971 and 37.36 % in 1971-1981.

C) RURAL POPULATION :-

The analysis of Table 3.1 highlights as under :-

i) The population of Sangli district has shown a decrease in the two decades 1901-1911 and 1911-1921, causal factors being common with the urban areas.

ii) The absolute number of rural population has increased in each decade after 1921 but the variations have never been uniform; highest being +45.93 % in 1951-1961 and lowest being +5.59 % in 1941-1951.

iii) The rural as well as the total population change has followed almost identical patterns ; differences are created only by the erratic growth rate in urban populations.

TABLE 3.2

SANGLI DISTRICT

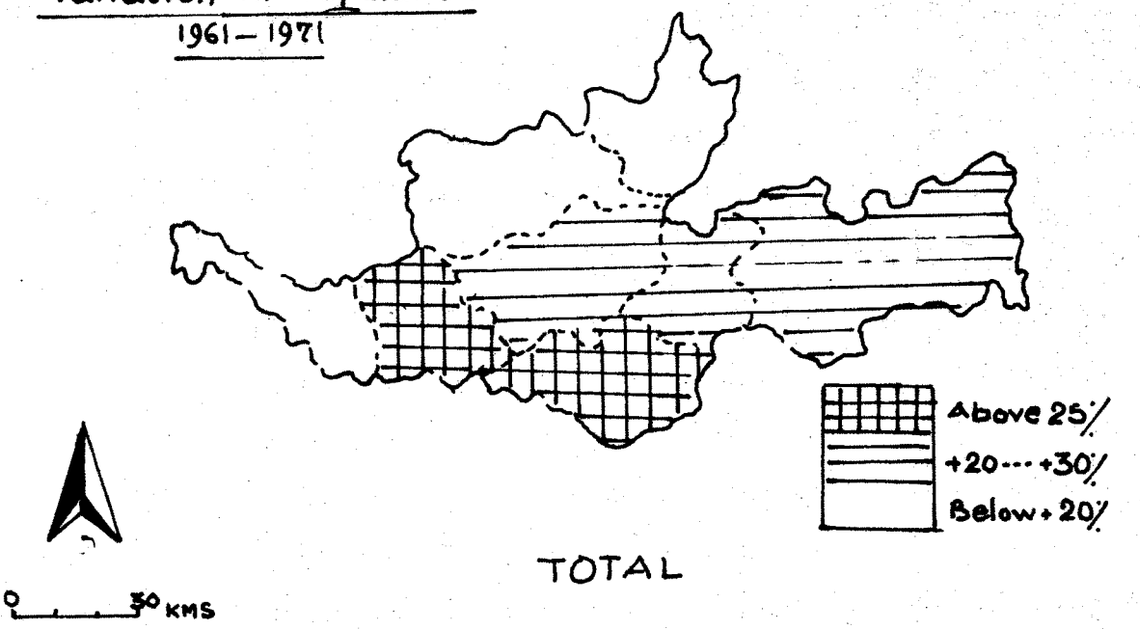
TAHSIL-WISE CHANGES IN TOTAL, URBAN AND RURAL POPULATION (1961-1981)

Tahsil	Census year	Total Pop.	Decade variation	Percentage D.V.	Urban Pop.	D.V.	Percentage D.V.	Rural Pop.	D.V.	Percentage D.V.
1	2	3	4	5	6	7	8	9	10	11
1	1961	373,139	-	-	133,005	-	-	240,134	-	-
Miraj	71	408,806	35,667	32.92	201,597	68,592	58.50	207,207	-32,927	-19.69
	81	506,320	97,514	23.85	268,988	67,391	33.43	237,332	30,125	14.54
2	1961	202,758	-	-	16,649	-	-	186,109	-	-
Tasgaon	71	250,679	47,921	23.63	21,583	4,934	29.64	229,096	42,987	23.10
	81	300,597	49,918	19.91	46,671	25,088	116.24	253,926	24,830	10.84
3	1961	150,802	-	-	13,891	-	-	136,911	-	-
Khanapur	71	186,332	35,530	17.23	18,726	4,835	39.84	167,606	30,695	15.78
	81	217,958	31,626	16.97	24,081	5,355	28.60	193,877	26,271	15.67
4	1961	* 67,972	-	-	-	-	-	67,972	-	-
Atpadi	71	74,580	6,618	9.74						

SANGLI DISTRICT.

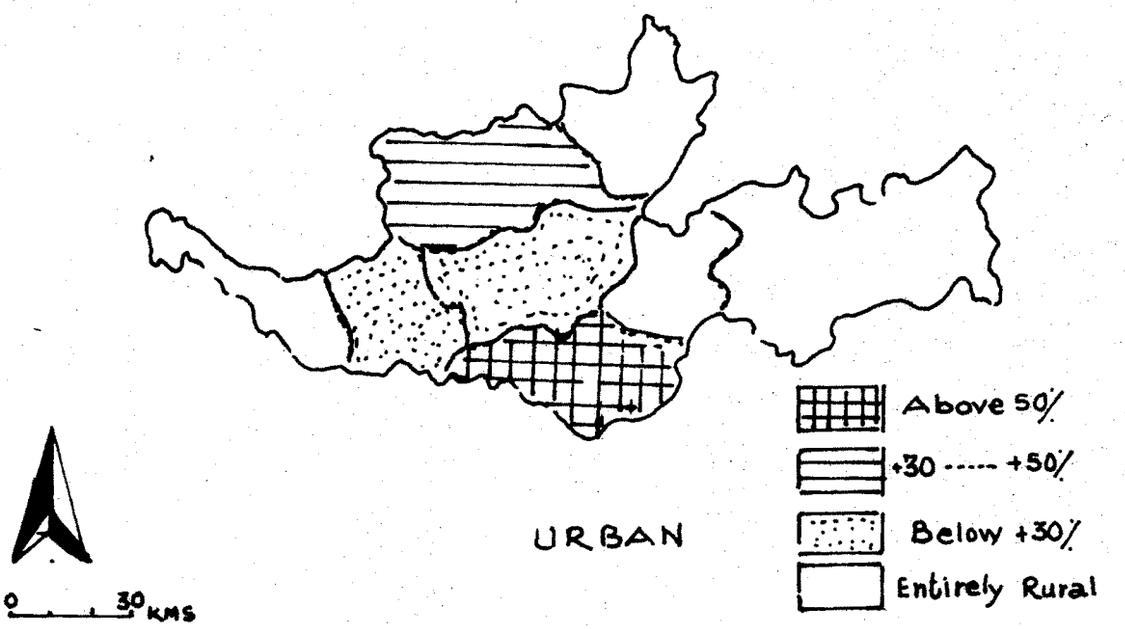
Variation in Population

1961 – 1971



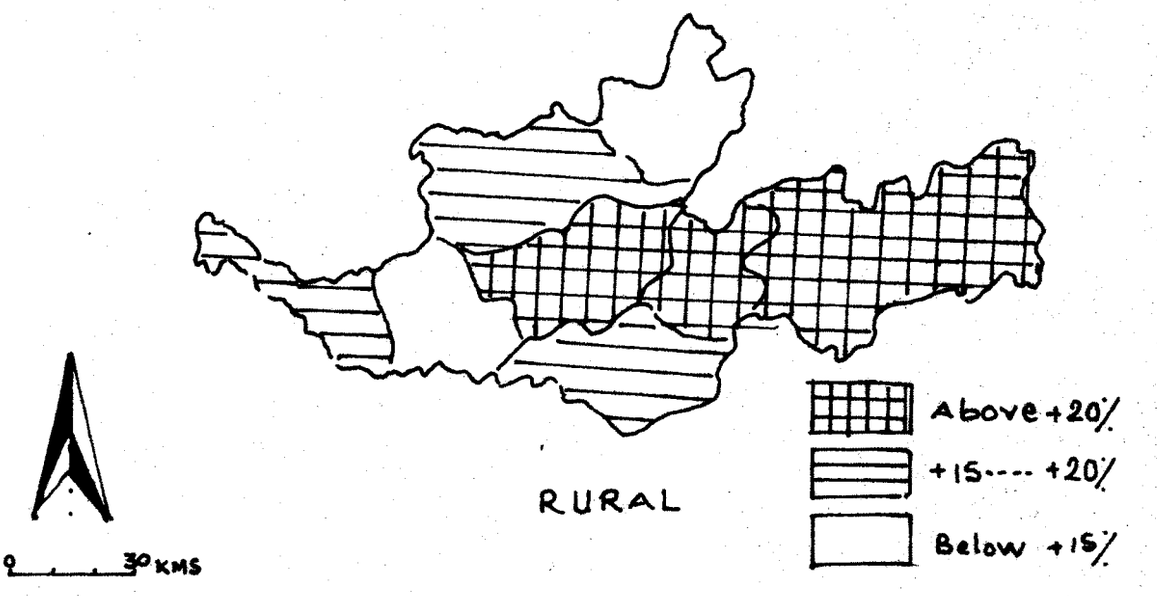
TOTAL

0 30 KMS



URBAN

0 30 KMS



RURAL

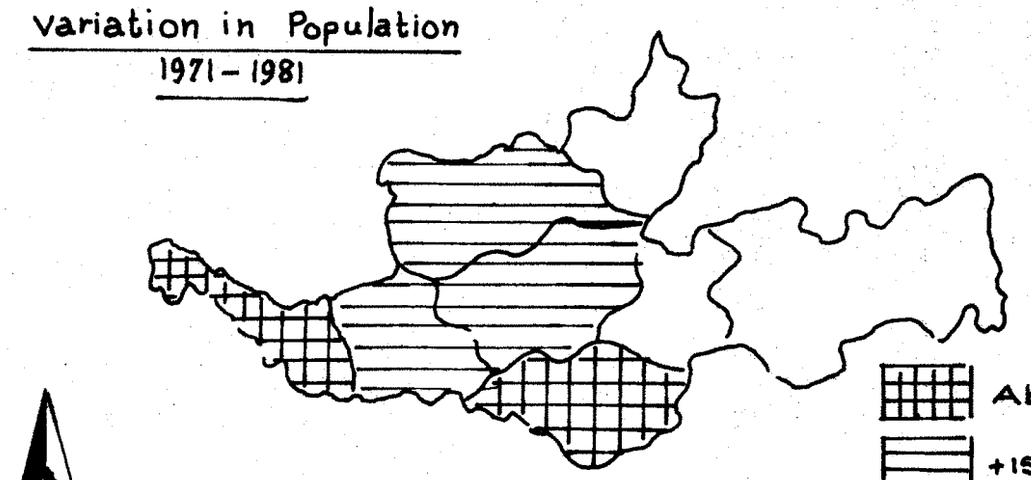
0 30 KMS

FIG 3.7

SANGLI DISTRICT.

Variation in Population

1971 - 1981



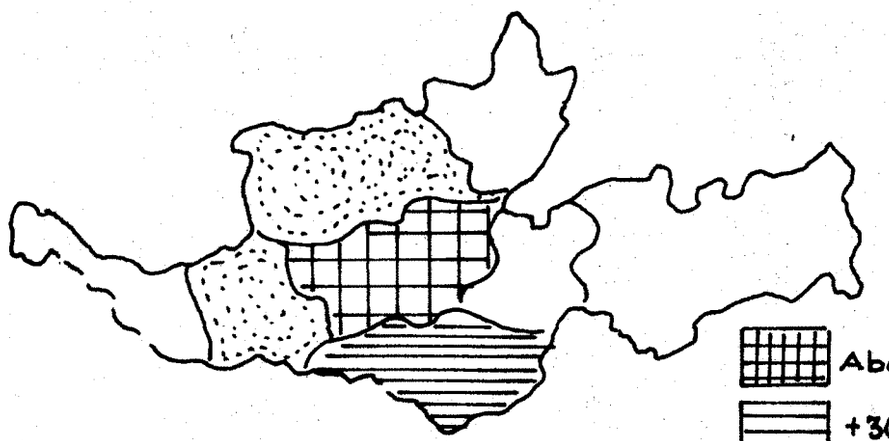
TOTAL

Above +20% — High

+15 ------ +20% — Moderate

Below 15% — Low

0 30 KMS



URBAN

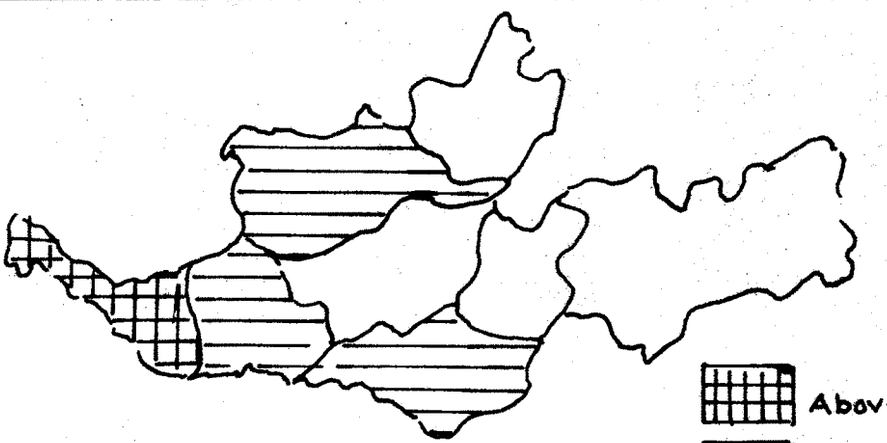
Above 100% — High

+30 ----- 100% — Moderate

Below 30% — Low

Entirely Rural

0 30 KMS



RURAL

Above +20% — High

+15 ---- +20% — Moderate

Below +15% — Low

0 30 KMS

TAHSIL-WISE CHANGES IN POPULATION (1961-1981) (TOTAL,URBAN AND RURAL):

However in studying tahsil-wise populations, it is found that changes in the concept of classification of urban areas and its rigorous implementation in Sangli district have produced some noteworthy results. Another fact worth pointing out again over here is that Miraj and Khanapur were bifurcated in 1964 into Kavathe-Mahankal and Atpadi tahsils respectively. This raised the number of tahsils to eight instead of six in the earlier decades.

Table No.3.2 gives decade variation and the percentage of variation of the Census enumerated in years 1961, 1971 and 1981 respectively. This data has also been shown through Fig. Nos. 3.2 and 3.3 to enhance an insight into this aspect. What is immediately perceived is given as under :-

Category	1961 -1971			1971-1981		
	High	Moderate	Low	High	Moderate	Low
Total	M.,W.	J.,KM.,T	S.,K.,A.	S.,M.	W.,T.,K.	J.,KM.,A.
Urban	M.	K.	W.,T.	T.	M.	W.,K.
Rural	J.,KM.,T.	K.,M.,S.	A.,W.	S.	W.,K.,M.	J.,KM.,T., A.

(M = Miraj, T=Tasgaon, K=Khanapur, A=Atpadi, J=Jat, KM=Kavathe-Mahankal, W=Walwa, S= Shirala)

POPULATION CHANGE IN URBAN CENTRES (1961-1981) :-

TABLE 3.3

SANGLI DISTRICT

POPULATION CHANGE IN URBAN CENTRES, (1961-1981)

S.No.	Urban Centres	Population			Decade variation in %	
		1961	1971	1981	1961-1971	1971-1981
1	2	3	4	5	6	7
1	Ashta	14,390	17,832	21,393	+ 32.92	+ 19.63
2	Kirlo-skar-wadi	Census Town from 1981		20,215	-	-
3	Madhav-nagar	Census Town from 1971	8,853	11,144	-	+ 25.88
4	Miraj	53,345	77,606	105,455	+ 45.48	+ 35.89
5	Sangli	73,838	115,138	152,389	+ 55.93	+ 32.35
6	Tasgaon	16,649	21,583	26,159	+ 28.64	+ 21.20
7	Uran Islampur	20,817	27,160	33,016	+ 30.47	+ 21.56
8	Vita	19.391	18.726	24,081	+ 39.84	+ 28.60

Source : District Census Handbooks of Sangli-1961,1971, 1981.

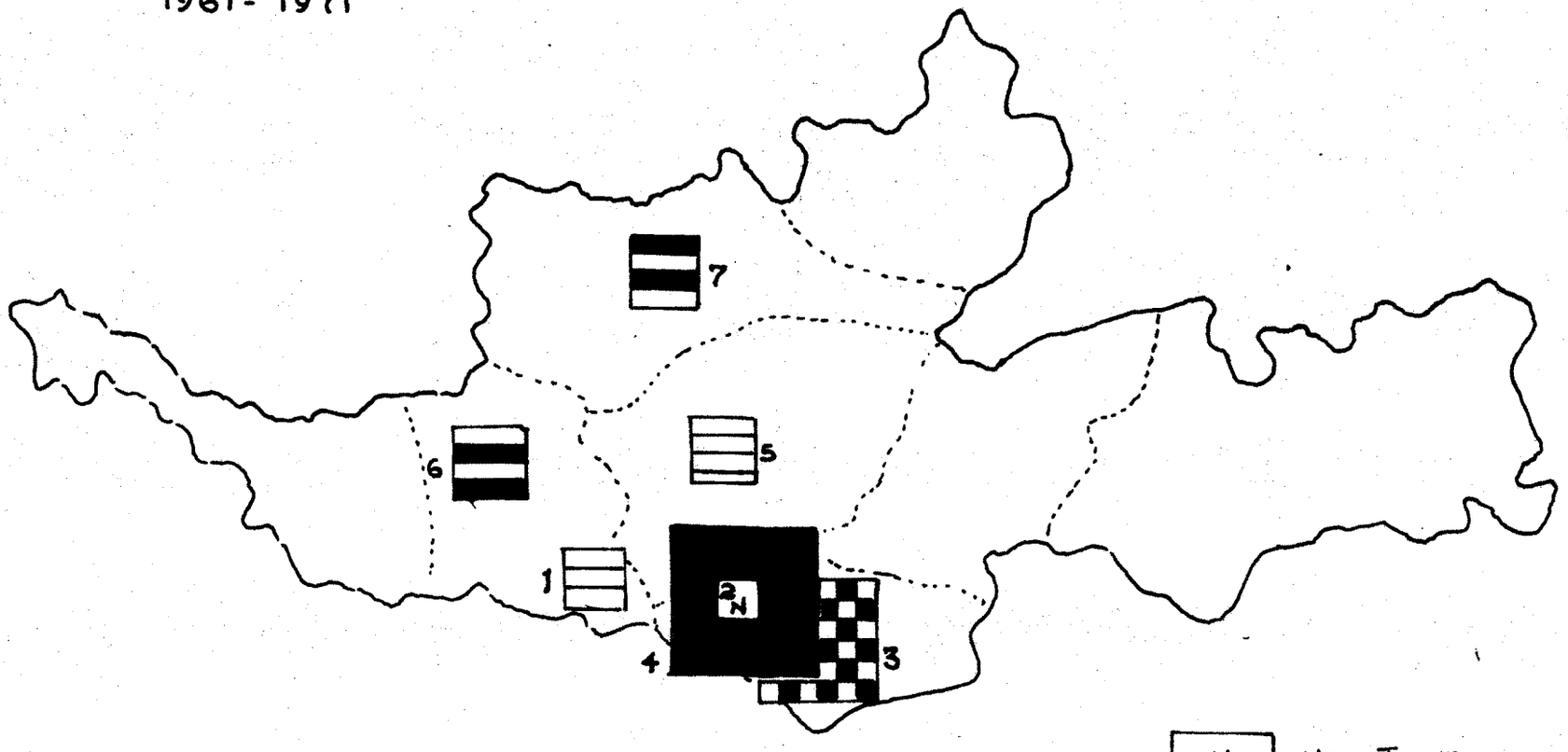
Table No.3.3 and Fig.Nos.3.4 and 3.5 show the decadal variations of all the eight urban centres of the district. They have followed peculiar patterns of change in population size. Thus one may point out the following in support of this statement as under:-

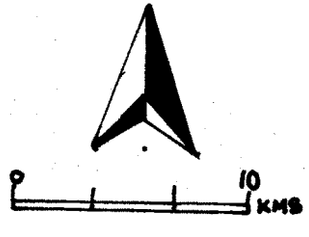
i) The decadal variation of Sangli (+55.93%) was highest in 1961-1971 whereas Miraj (+35.89%) became highest in 1971-1981. Both the urban centres are industrially more developed. (ii) Ashta has been growing rather slowly (+19.63 % in 1971-1981) as it is a less industrialised town. (iii) Vita Tasgaon and Uran-Islampur have depicted moderate growth presumally because they desire to maintain themselves as Service Centres for a limited threshold.

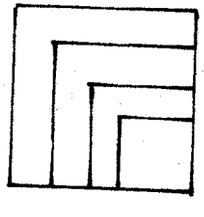
SANGLI DISTRICT

Population Change in Urban Centres

1961- 1971







Population

1,50,000

1,00,000

50,000

25,000

1. Ashta.
2. Madhav- nagar.
3. Miraj.
4. Sangli.
5. Tasgaon.
6. Uran- Islampur.
7. Vita

N New Town

+50 ----- +60%

+40 -----+50%

+30 ---- +40%

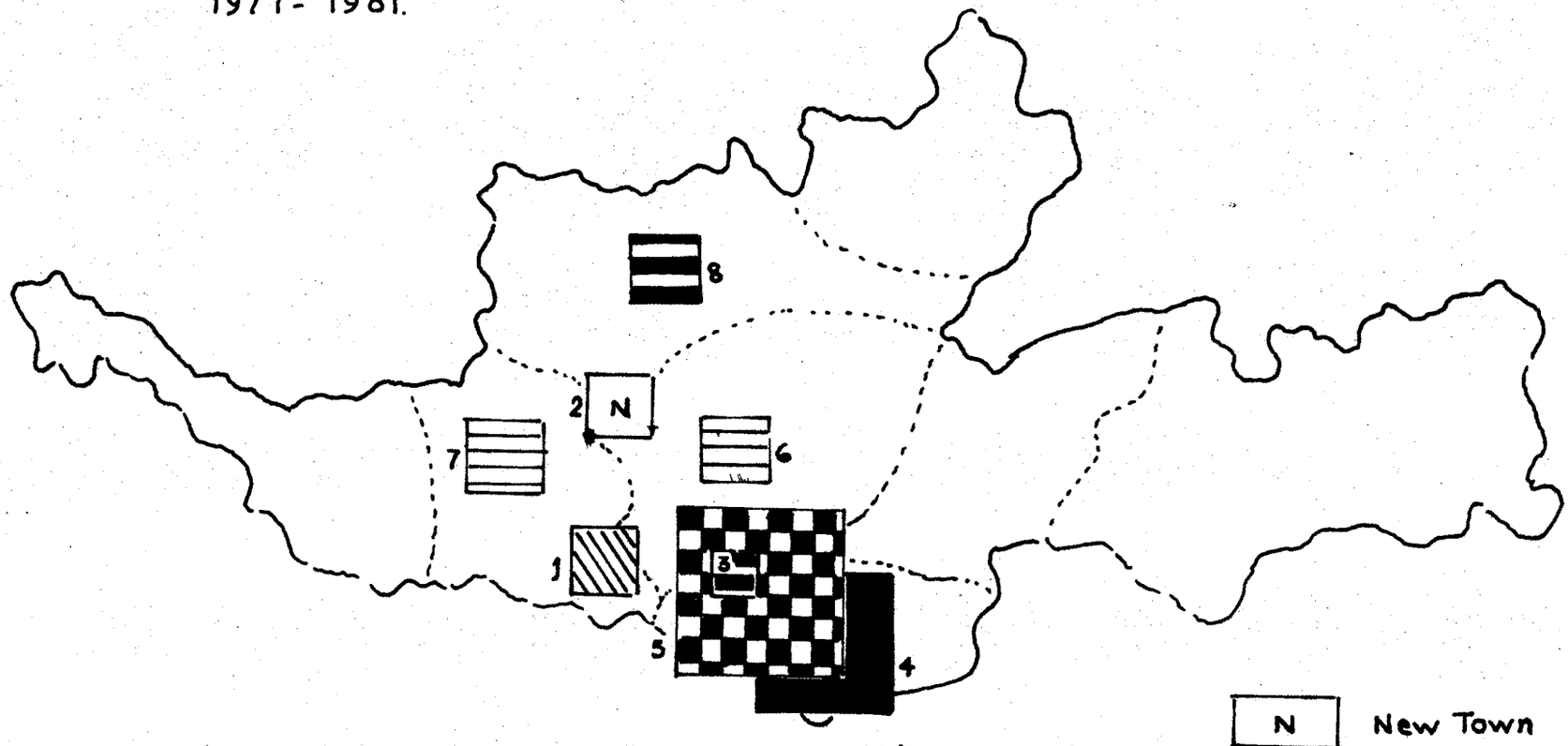
+20 ----- +30%

FIG 3·4

SANGLI DISTRICT.

Population Change in Urban Centres.

1971 - 1981.



1. Ashta.
2. Kirloskar-Wadi.
3. Madhav-nagar.
4. Miraj City.
5. Sangli City.
6. Tasgaon.
7. Uran-Islampur.
8. Vita.

N New Town

+35 ..... +40 %

+30 ..... +35 %

+25 ..... +30 %

+20 ..... +25 %

+15 ..... +10 %

Population

1,50,000

1,00,000

50,000

25,000

0 10 KMS

FIG 3·5

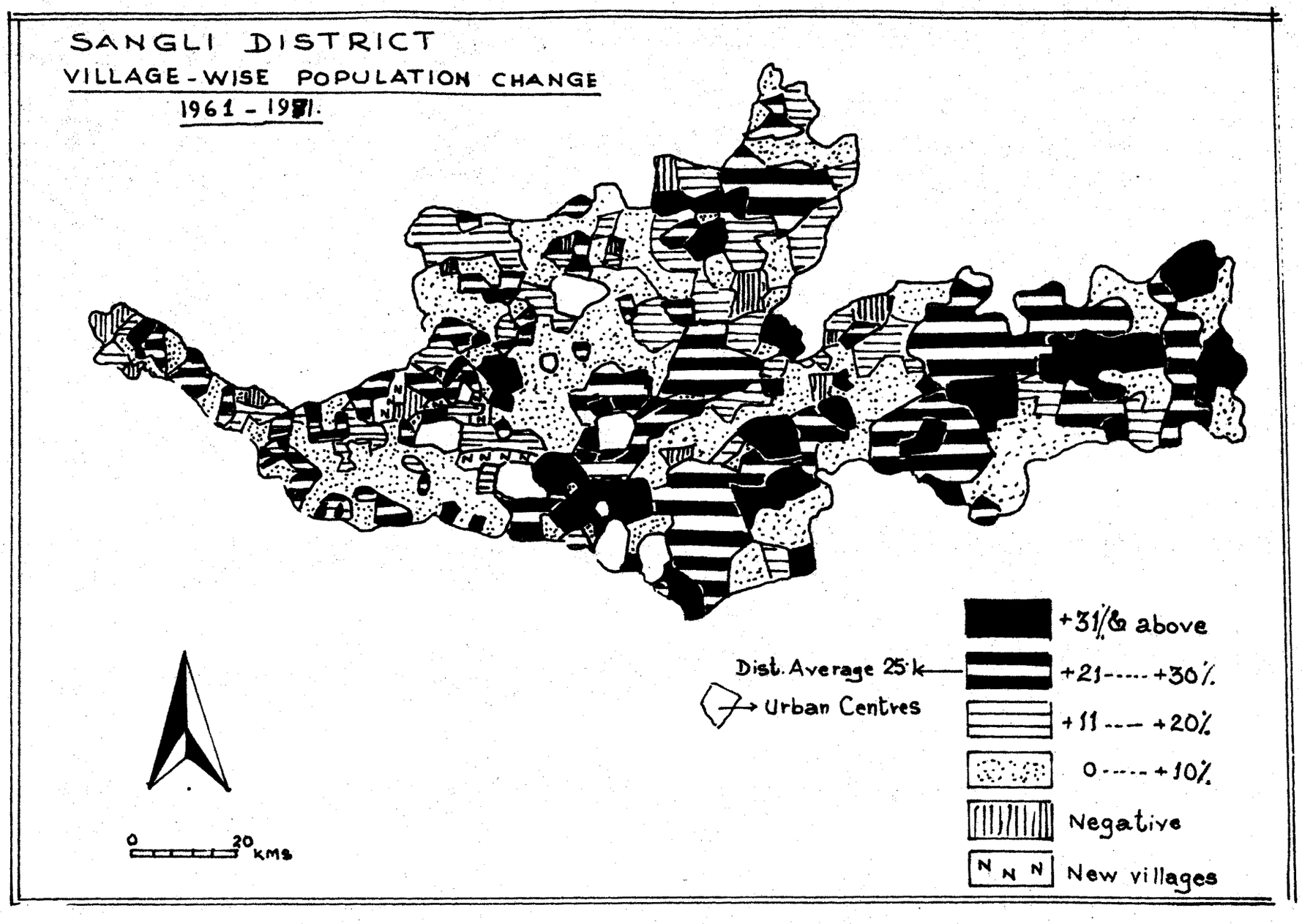

SANGLI DISTRICT
VILLAGE-WISE POPULATION CHANGE
1961 - 1971.
+31% & above
Dist. Average 25·k
+21----+30%
Urban Centres
+11---+20%
0----+10%
Negative
N N N
New villages
0
20 kms

FIG 3·6

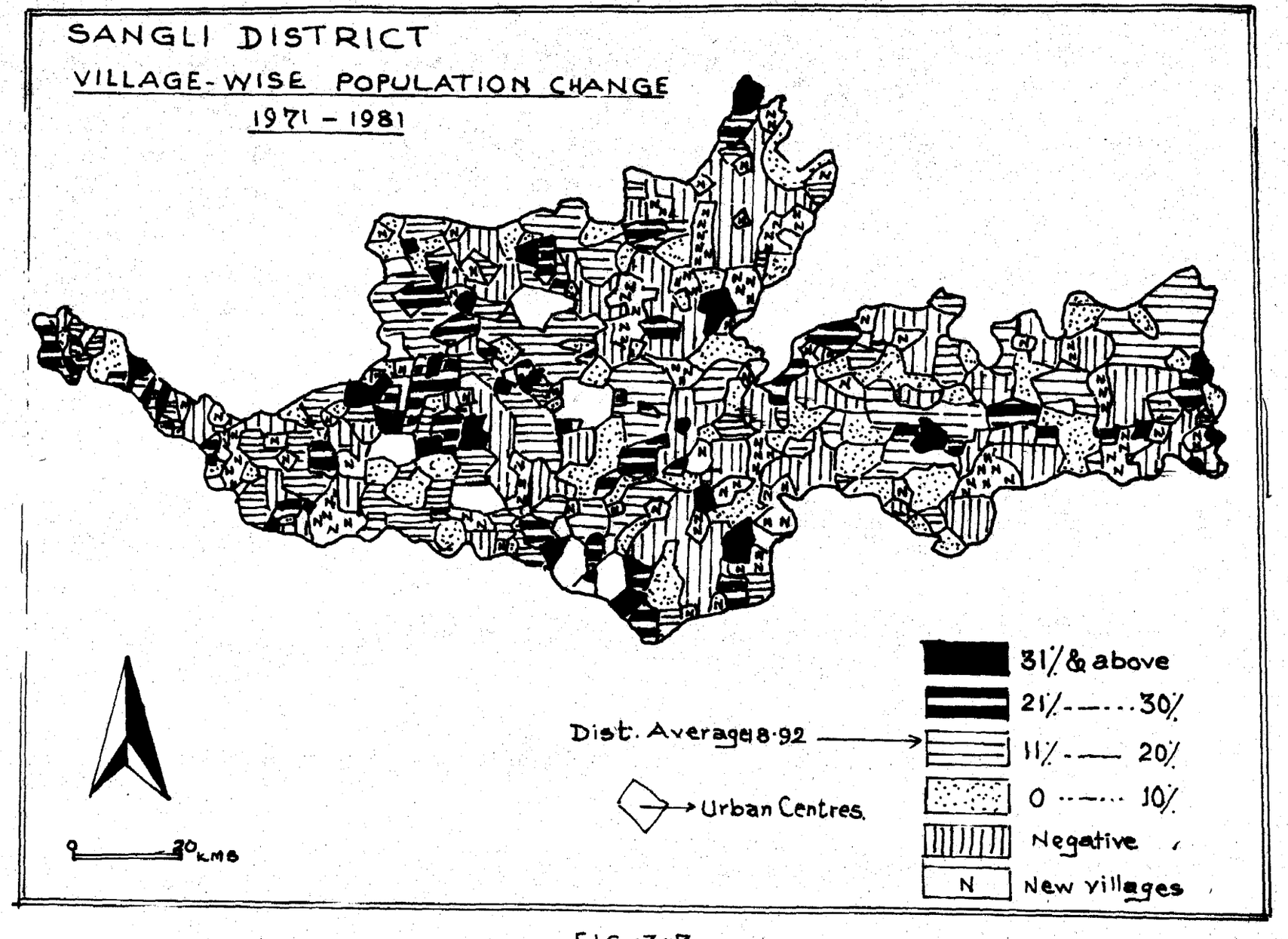

SANGLI DISTRICT
VILLAGE-WISE POPULATION CHANGE
1971 - 1981
31% & above
21% ---- 30%
11% ---- 20%
0 ---- 10%
Negative
N
New villages
Dist. Average 8·92
Urban Centres.
0
30 kms

FIG 3·7

POPULATION CHANGE IN VILLAGES (1961-1981)

Most people continue to live in the rural areas in Sangli district (78.48 % rural population in Sangli district visa-vis 64.97 % in Maharashtra state i.e. above 13.51 %), secondly the village level data is of greater relevance both in study as well as in its application elsewhere. This data has therefore, been assembled for 1961, 1971 and 1981 - the three Censuses recorded after the Birth of Maharashtra in May, 1960. This is adopted because the Census is deemed as the most valuable and authentic source of demography and also of formulating Population Geography.

Table Nos. 3.4 & 3.5 and Fig.Nos. 3.6 & 3.7 are prepared by computing the percentage of decade variations of each village in the district. Thereafter these have been put into 8 groups to generalise inter-group variations. While computing it has been observed that the number of villages increased from 525 in 1961 to 535 in 1971, 1 village merging in urban centre in 1961-1971 and 4 in 1971-1981.

Some of the characteristics taken out from these are as under :-

A) CHANGES IN 1961-1971 :-

i) Villages showing positive (+Ve) decadal variation are much large in number (504 or 95.43 %) than the villages showing negative (-Ve) decadal variation (only 24 or 4.57 %).

ii) 14.09 percent of the villages (74) depict very low decadal variation of 0 - 10% , whereas 35.5 percent of villages (184) exhibit moderate decade variation of 11.20 %.

iii) 29.91 percent of the villages (157) are marked by high decadal variation ranging from 21 % to 30 %.

iv) 16.38 percent of the villages (86) are endowed with a very high decadal variation of + 30 %.

B) CHANGES IN 1971-1981 :-

i) Villages showing negative (-Ve) decadal variation are increased tp 116 (21.68 %) in this decade from 24 (4.57 %) in previous decade. Remaining 419 (78.32 %) villages show positive change.

ii) 119 (22.25 % villages are marked by very low decadal change of 0-10 % whereas 165 (30.84 %) villages endowed with a moderate change of 11-20 % .

iii) 92 (17.19 %) villages depict a high decadal change ranging from 21 to 30.

iv) 43 (8.04) villages only are marked by a very high variation of + 30 %.

C) In the light of the emerging picture in 1961-1971 and 1971-1981 (Fig.3.18) it many be so derived that the villages showing low decade variation become more in numbers and villages having high decade variation become less in number in 1971-1981.

SANGLI District

Village-wise Population Change

1961-1971 & 1971-1981

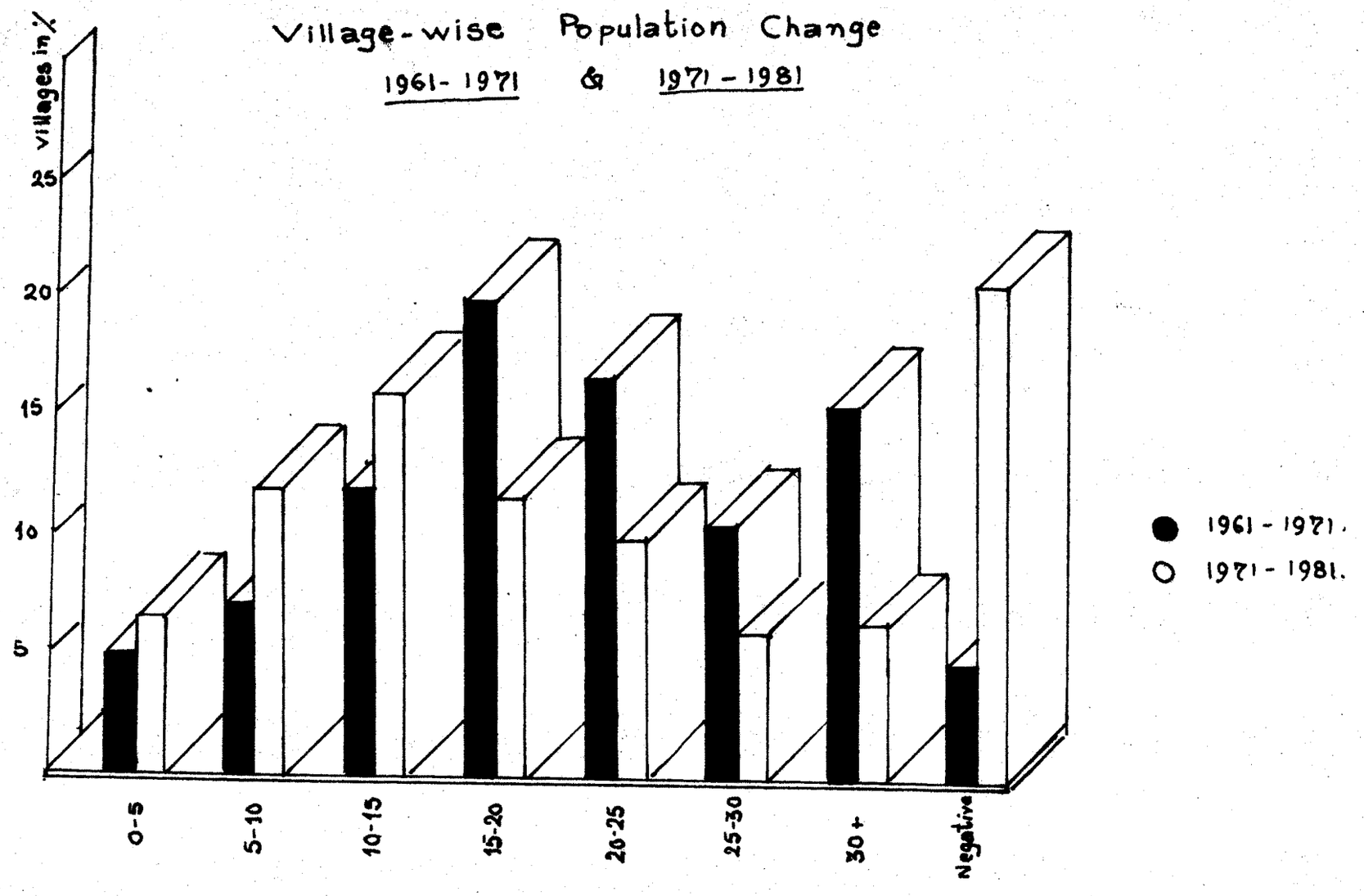


FIG 3.8

D) NEW VILLAGES IN 1981 CENSUS :

TABLE-3.6

SANGLI DISTRICT

TAHSIL-WISE NEW VILLAGES IN 1981 Census

S.No.	Tahsil	No.of new villages	Population of new villages
1	2	3	4
1	Tasgaon	32	32,205
2	Atpadi	29	17,645
3	Shirala	24	13,326
4	Jat	21	14,874
5	Khanapur	21	13,325
6	Walwa	18	19,397
7	Miraj	15	15424
8	Kavathe - Mahankal	13	11,585

Table No.3.6 is provided to show tahsil-wise addition of 173 new villages in 1981 Census. As they have been created by splitting up of 116 old villages, it is inevitable for them to show negative (-Ve) decadal variation in population.

Note :- The aspects of population of these villages are not taken into account separately.

3.3 VARIATIONS IN SPATIAL DISTRIBUTION :

Population Geography is more concerned with Spatial Variations in the nature of places and this is where it distinguishes itself from Demography - the Science of Population- viewed as a single topic. Secondly, areal units present a formidable challenge as to what type of unit to choose i.e. administrative unit or a spatial unit or a combination of the two.

As Population Geographer's main task is to explain Spatial variations in population distribution in terms of all such influences or factors that provide this Spatial pattern in temporal dimensions, the author have assembled the requisite population data both tahsil-wise and village - wise from the District Census Handbook of Sangli, 1981. (A Census has been defined as " the total process of collecting, compiling and publishing of demographic data pertaining, at a particular time, to all persons in a defined territory[8] ").

FACTORS AFFECTING POPULATION DISTRIBUTION :

Although the human body can adopt itself to any natural environment, yet its spread, to a large extent, is governed or related to various influences or factors. These factors provide the necessary explanation for particular pattern of population distribution and are generally grouped into three categories[9]:-

A) GEOGRAPHIC FACTORS :-

i) Climate,

ii) Nature of Terrain,

iii) The quality of Soils,

iv) Mineral Resources, and

v) Location of places.

B) SOCIAL AND ECONOMIC FACTORS :-

i) The type of Economic Activity,

ii) The type of technology employed, and

iii) Social Policy.

C) DEMOGRAPHIC FACTORS :-

i) Fertility,

ii) Mortality , and

iii) Migration.

The grouping of factors is purely arbitrary unlike water-tight compartments. This is purely on account of interactions among the factors, which makes it difficult to identify and recognise the role each one plays in the distribution of population.

To simplify the complexities of areal distribution, the author has employed iso-density lines of 100 persons per Km^2, showing the pattern of distribution of population in Sangli district. (Fig. 3.9) The regional picture that now emerges is as below :-

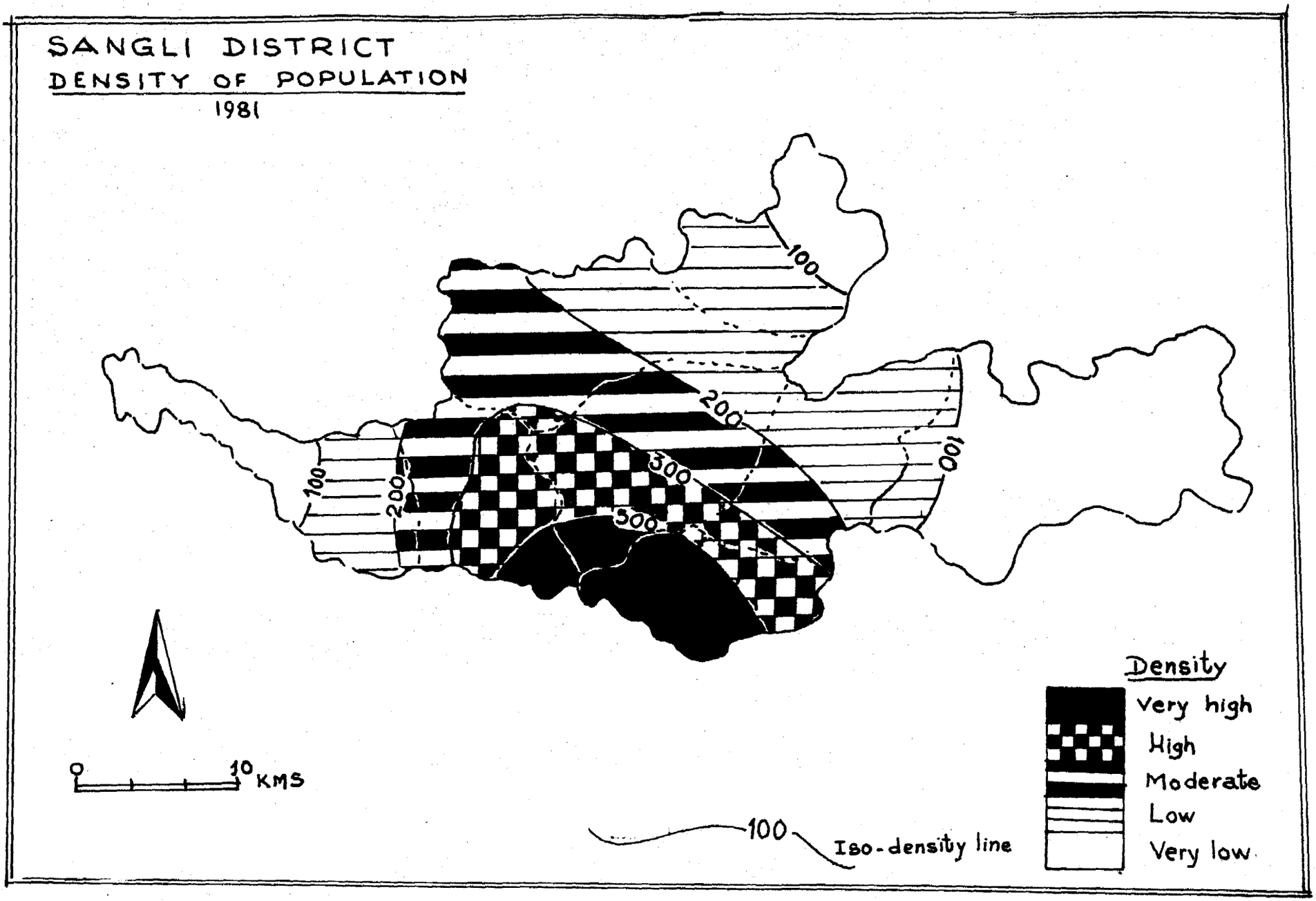

SANGLI DISTRICT
DENSITY OF POPULATION
1981
100
200
300
500
100
200
100
0
10 KMS
Density
Very high
High
Moderate
Low
Very low
100
Iso-density line

FIG 3·9

POPULATION DENSITY REGIONS :

A) Very Low Density Region (Below 100)

B) Low Density Region (100 - 200)

C) Moderate Density Region (201 - 300)

D) High Density Region (301 - 500)

E) Very High Density Region (Above 500)

A) VERY LOW DENSITY REGION (Below 100) :-

This area is delimited by the iso-density line of 100 persons per Km^2. It include two geographically differant areas- one lying in the extreme west of the district and the second on the extreme east.

Most parts of Shirala tahsil lie in this region. Topographically it is a part of the main Sahyadrian rampart whose rugged topography, hill slopes, very high rainfall (1250 - 6000 mm.), reddish lateritic soils, dense mixed forests, small patches of agricultural land, low irrigation potential, very low development index and agricultural efficiency contribute to very thin distribution of population.

This region also includes a large part of Jat tahsil and northern part of Atpadi tahsil. Physically speaking it contains the core of Jat plateau whose undulating topography, shallow yellowish-brown soils, and scanty rainfall (Below 500 mm.). All these factors transform into a drought prone area, It has low irrigation facilities, very low agricultural efficiency and overall low developments. Hence the density of population is very low.

However, the population in this region is mainly concentrated on the banks of Warana, Man and Bor rivers.

B) LOW DENSITY REGION (100 - 200) :-

The region lies between 100 - 200 iso-density lines is the largest in size; its largest part lies on the northern and eastern part of the district, while there is a small ribbon located in Shirala tahsil. The major part includes, the large area of Khanapur plateau lying in Eastern part of Khanapur, Southern part of Atpadi, Eastern part of Tasgaon and North-eastern part of Kavathe-Mahankal tahsils.

The region has a comparatively better physical setting and geographical attributes than the Population Density Region - A.

C) MODERATE DENSITY REGION (201 - 300) :

201 - 300 isodensity lines delimit this Population Density Region. In it lie the outer region of Shirala and Walwa tahsils, Western parts of Khanapur and Tasgaon tahsils and Southern part of Kavathe-Mahankal tahsil.

Topographically it is a mixed type of region where Khanapur plateau merges into Yerala basin giving an assured water supply from the river, an undulating relief and black soils. Cash crops viz. Sugarcane, Grapes, dominate over food crops. It is mainly rural; Vita being the only urban place in it.

D) HIGH DENSITY REGION (301 - 500)

This region gets marked off by 301 - 500 iso-density lines and contain the river plains of Krishna, Warana and Yerala.

Western part of Walwa, Southern part of Tasgaon and Eastern part of Miraj tahsils lie in this region.

It has moderate rainfall (625 mm.) and medium to deep black cotton soils. Irrigation facilities are well developed. All these conditions make this region more important from agricultural view-point. The crops viz. Sugarcane, Grapes, Tobaco, Turmeric, rice, jawar etc. are its major output. It is also distinguished by having four urban centres - Ashta, Uran Islampur, Kirloskarwadi and Tasgaon. Hence, high densities of population prevail in this region.

E) VERY HIGH DENSITY REGION (Above 500) :

This is the smallest population density region in size and is demarcated by 500 iso-density line. Its deep and fertile black soils, well developed irrigation facilities, moderate and favourable rainfall conditions, advanced people, make the region agriculturally most developed. Sangli - the district headquarter, Miraj and Madhavnagar - these three (Urban centres) industrially well developed lie in this region. All these factors make it the most important region of the district.

Note :-

It may be, perhaps, useful to admit that :-

i) interpretation of the influence of factors on the distribution of population is not an easy task;

ii) the " Crowding " of population is seen in and around Sangli-Miraj urban agglomeration situated in the vicinity of Krishna - Warana Doab, and thins out geometrically in all directions; and

iii) these patterns of population density are never static. They keep on changing with time.

TABLE 3.7

SANGLI DISTRICT

TAHSIL-WISE AREA, POPULATION AND DENSITY-(1981)

S.No.	Tahsil	Total Rural Urban	Area in Km^2	Population	Density per Km^2
1	Miraj	T	926.1	506,320	547
		R	841.9	237,332	282
		U	84.2	268,988	3,196
2	Tasgaon	T	1111.5	300,597	270
		R	1068.1	253,926	238
		U	43.4	46,671	1,075
3	Khanapur	T	1326.0	217,958	164
		R	1270.7	193,877	153
		U	55.3	24,081	436
4	Atpadi	T	871.7	84,016	96
		R	871.7	84,016	96
		U	--	- -	- -
5	Jat	T	2246.9	193,096	86
		R	2246.9	193,096	86
		U	--	--	--
6	Kavathe-Mahankal	T	706.7	97,274	138
		R	706.7	97,274	138
		U	- -	--	--
7	Walwa	T	786.7	301,302	383
		R	669.7	246,953	369
		U	117.0	54,349	464
8	Shirala	T	634.9	130,649	206
		R	634.9	130,649	206
		U	--	--	--
9	Sangli District	T	8572.0	1,831,212	214
		R	8272.1	1,437,123	174
		U	299.9	394,089	1,314
10	Maharashtra	T	307690.0	62784,171	204
		R	301802.2	40790,577	135
		U	5887.8	21993,594	3,736

Source : District Census Handbook - SANGLI, 1985, P.3

SANGLI DISTRICT

Tahsil-wise Spatial Variation of Population 1981

General, Rural, Urban

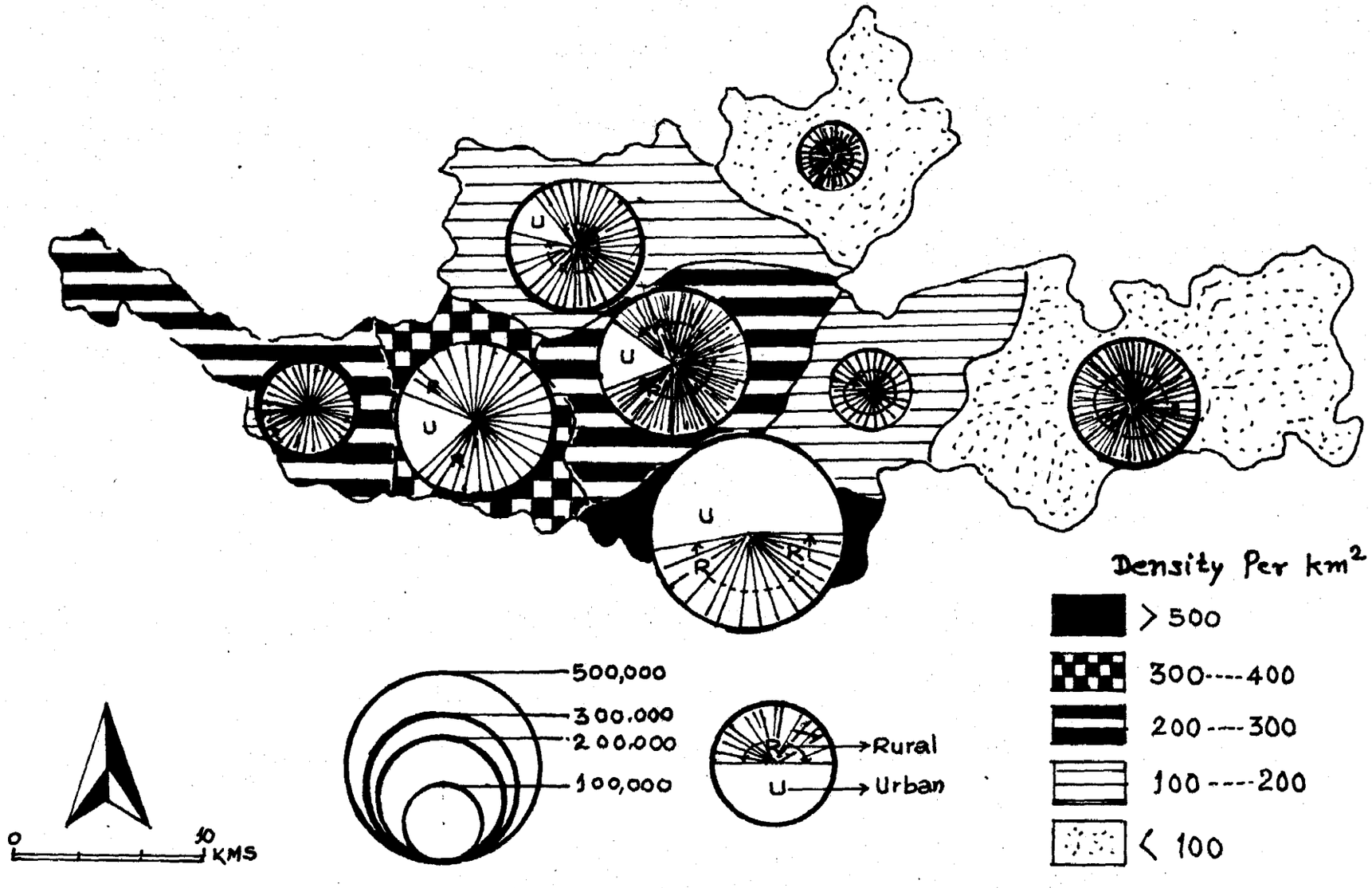


FIG 3·10

TAHSIL-WISE DISTRIBUTION OF POPULATION :

Table No.3.7 and Fig.No.3.10 are shown side by side to emphasize the three major aspects included in distribution of population, namely,

A) General,

B) Urban, and

C) Rural.

A) GENERAL :

This is the stage at which distribution of population in Sangli district has come to in 1981, it is thus a starting point of all enquiries and questions. However these hunches have not followed any rhythm and the subject depends more sharply on our awareness and attitudes as Population Geographers.

Even the simple description, and more advanced studies of the Table and Fig. will ultimately make-believe the following:-

1) The evolution of population in each tahsil in particular and the district in general has followed independent patterns.

2) The average density of 214 does not reveal a true picture of the peopling in the district; the urban being 1314 per Km^2 and the rural being 174 per $Km.^2$

3) Urban population of the district is dominated by the 'Standard Urban Area ' of Sangli City, Miraj city, and Madhavnagar.

4) Miraj (547) and Walwa (383) show high density patterns, while Atpadi (96) and Jat(86) show low density patterns.

5) Miraj, Tasgaon, Khanapur and Walwa tahsils have both urban and rural populations, while Kavathe-Mahankal, Jat, Atpadi and Shirala are purely rural tahsils.

6) As compared to the Maharashtra State, Sangli district shows higher densities in Total and Rural populations.

SANGLI DISTRICT

Population- Space Relationship [Total] 1981

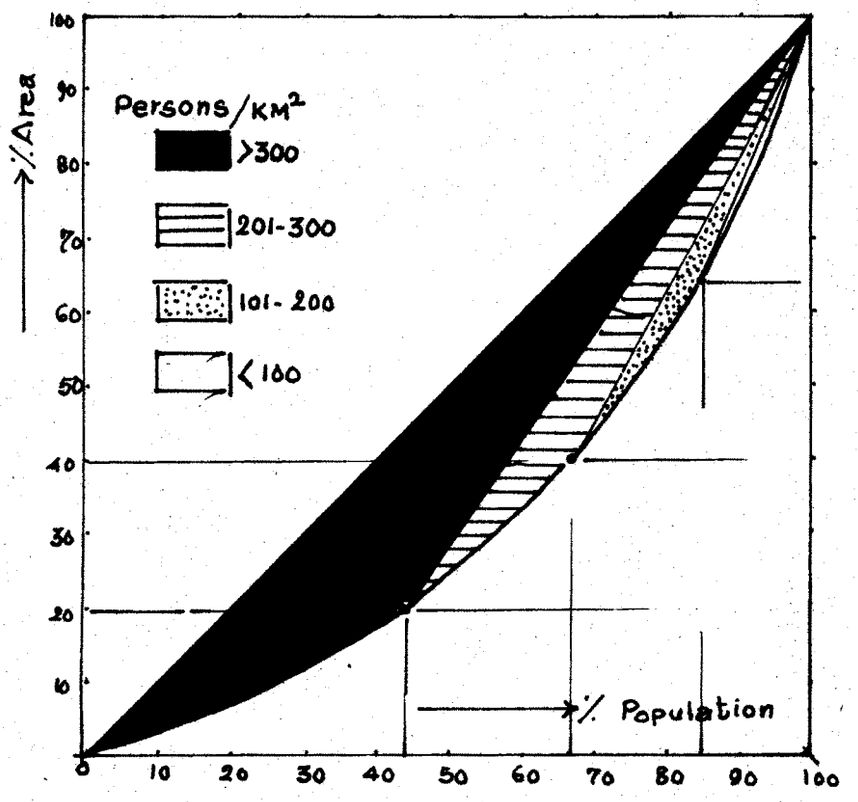


FIG 3·11 (a)

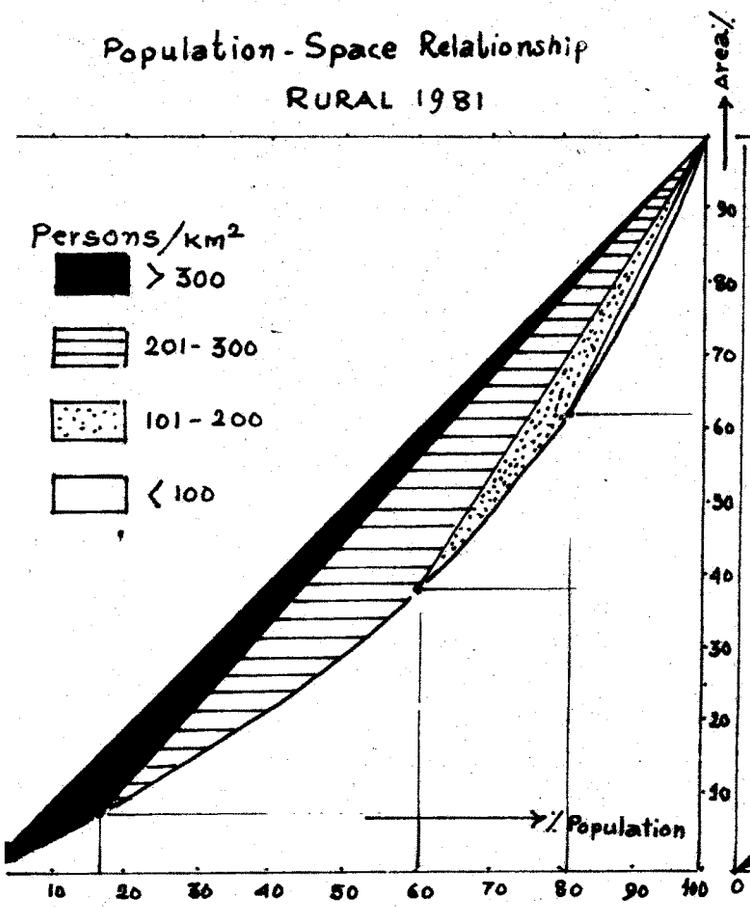


FIG 3·11 (b)

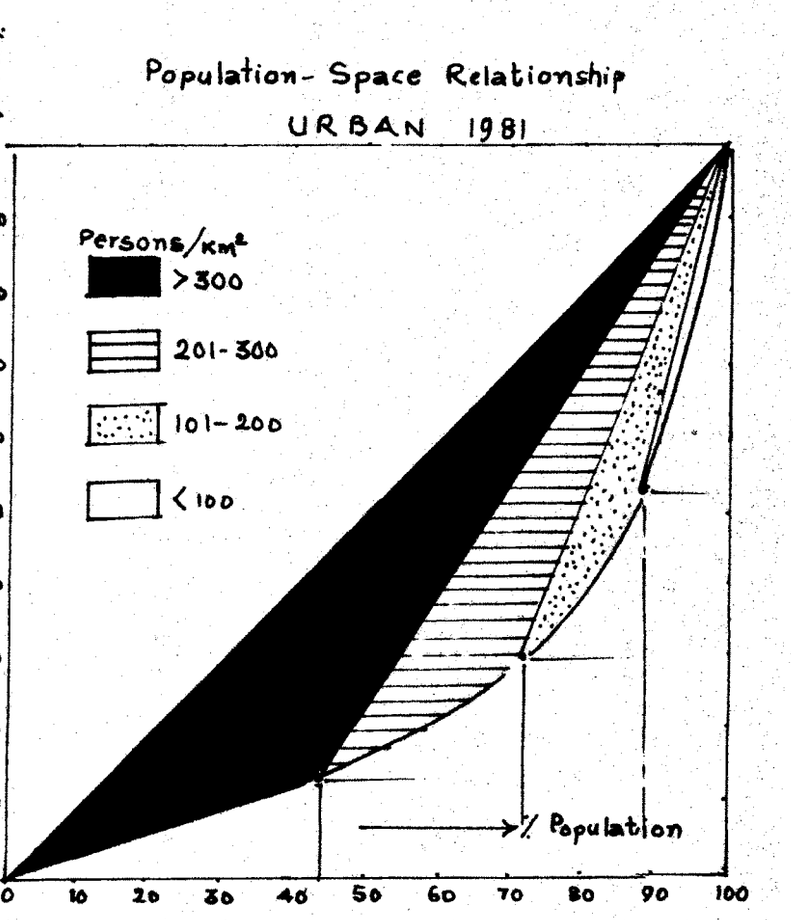


FIG 3·11 (c)

POPULATION -SPACE -RELATIONSHIP :-

TABLE -3.8

SANGLI DISTRICT

TAHSIL-WISE PERCENTAGE OF AREA AND PERCENTAGE OF POPULATION(1981)

S.No.	Tahsil	% of Area	% of Population
1	Miraj	10.70	27.65
2	Tasgaon	12.87	16.42
3	Khanapur	15.37	11.90
4	Atpadi	10.17	4.59
5	Jat	26.21	10.54
6	Kavathe Mahankal	8.24	5.31
7	Walwa	9.13	16.45
8	Shirala	7.31	7.14
	Sangli District	2.92(of the state)	2.79(of the state)

The population-space relationship in general is given in Table No.3.8 and depicted by Larenz Curve in Fig.No.3.11 (a) to emphasize the following :-

1) Miraj and Walwa tahsils contain 44.10 % population of the district, when its total area in the district is 19.83% only.

ii) Tasgaon and Shirala lie in the density range of 200-300 per Km^2 by supporting 23.56 % population over 20.18 % area.

iii) Khanapur and Kavathe Mahankal tahsils are supporting 17.21 % population over 23.61 % area.

iv) Jat and Atpadi are sparcely populated tahsils. Their density is below 100 person per Km^2. They have 36.38 % area of the district but support only 15.13 % population of the district.

v) Sangli district on an average supports 2.79 % population over 2.92 % area of Maharashtra State.

B) VARIATION IN URBAN POPULATION :

" Urban " is the most dominant term in modern times and it has varied connotations. Moreover, these have been changing from Census to Census. According to the Census to India, 1981, Urban centres have been demarcated or identified as below :-

a) All places with a Municipality, Corporation or Notified Town areas;

b) All other places which satisfy the following criteria :-

i) a minimum population of 5,000;

ii) at least 75 percent of male working population engaged in non-agricultural (and allied) activities ;

iii) a population of at least 400 persons per km^2.

In Maharashtra state (Where 35.03 % of the total population is urban), Sangli district is among the less urbanised districts. In 1981, out of 1,831,212 persons in the district, 394,089 (21.52 %) live in 8 urban centres of varying sizes at varying locations. The urban centres or towns may be classified according to their population size into three classes:-

i) Class I (100000 and above) - Sangli and Miraj;

ii) Class II (50,000- 99,999) It is conspicious by its absence;

iii) Class III (20,000-49,999) - Tasgaon, Kirloskarwadi, Vita, Urun Islampur and Ashta;

iv) Class IV (10,000-19,999) - Madhavnagar.

In 1981, Kirloskarwadi in Tasgaon tahsil is considered as a new town for the first time. Secondly Madhavnagar and Kirloskarwadi are non municipal towns.

TABLE-3.9

SANGLI DISTRICT

AREA, POPULATION AND DENSITY OF URBAN CENTRES(1981)

S.No.	Name	Area (in km.^{2})	Population	Density (per km^2)
1	Ashta	83.70	21,333	255
2	Kirloskarwadi	N.A.	20,512	N.A.
3	Madhavnagar	0.52	11,144	21,431
4	Miraj city	42.68	105,455	2,471
5	Sangli city	40.97	152,389	3,720
6	Tasgaon	43.41	26,159	603
7	Uran Islampur	33.33	33,016	991
8	Vita	55.27	24,081	436
	District Total	299.88	394,089	1314

N.A. = Information not available.

Source : Census of India, District Census Handbook, Sangli, 1985, P.105.

Table No.3.9 and fig.No.3.12 present urban centre-wise area, population and density. The map points out the twin nature of Sangli-Miraj cities. It is believed that the two will

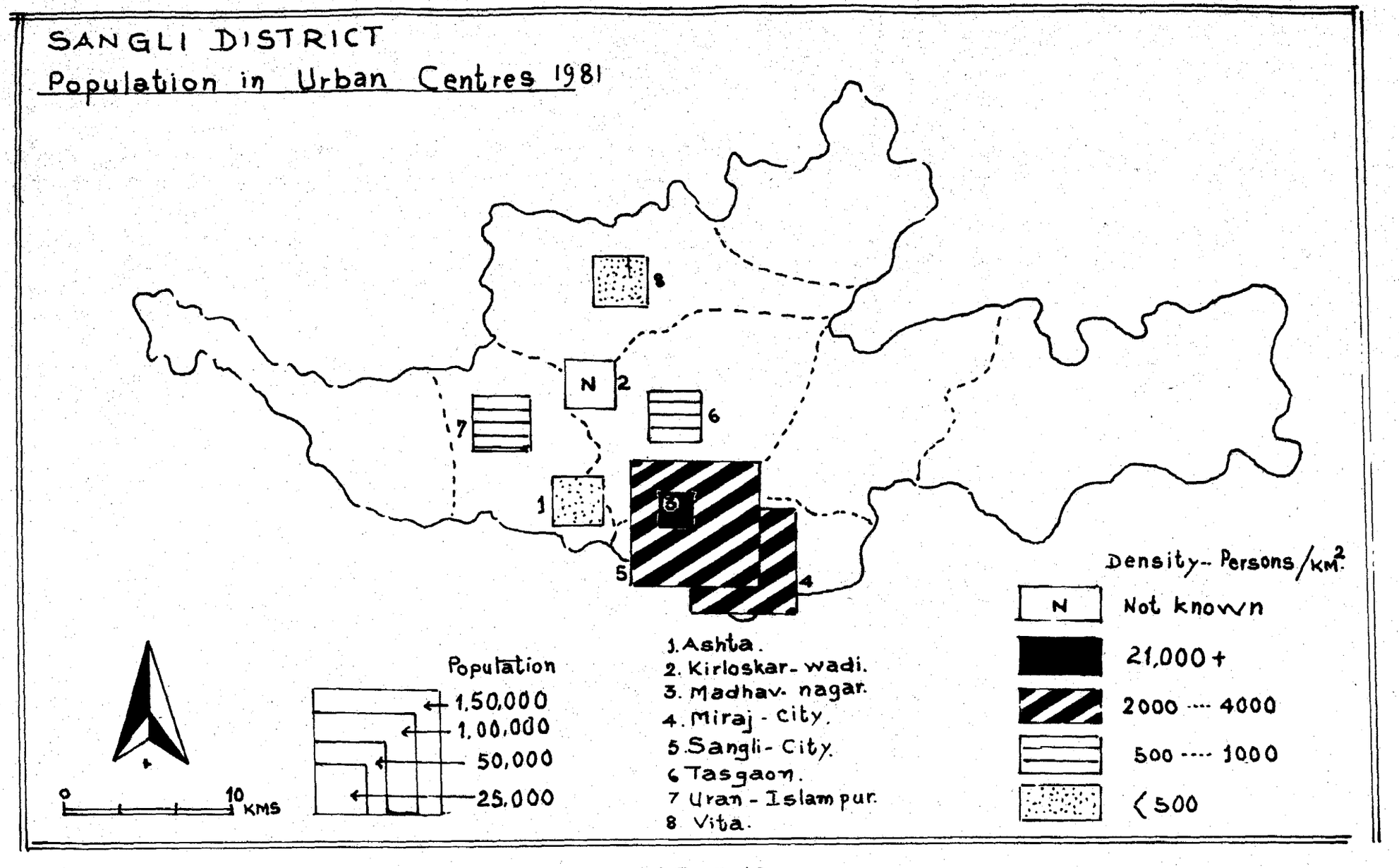

SANGLI DISTRICT
Population in Urban Centres 1981
N
1
2
3
4
5
6
7
8
Density- Persons/km²
Not known
21,000+
2000 ---- 4000
500 ---- 1000
< 500
Population
1,50,000
1,00,000
50,000
25,000
1. Ashta.
2. Kirloskar-wadi.
3. Madhav-nagar.
4. Miraj-City.
5. Sangli-City.
6. Tasgaon.
7. Uran-Islampur.
8. Vita.
0
10 KMS

FIG 3·12

practically merge with each other by A.D. 2001. An in-depth look at the table would lead one to accept that :-

a) Madhavnagar - a class IV and most industralized town has the highest density of 21431 whereas Ashta with 255 only, is less industralized.

b) Tasgaon, Uran-Islampur and Vita have less than 1000 density. They are mainly rural market centres.

c) Both Sangli (3720) and Miraj (2471) have high densities the pride of being state capitals prior to the integration of Princely States in India.

d) The area of Kirloskarwadi is not indicated in the Census Handbook. Perhaps, there are some specific reasons for this!

URBAN AGGLOMERATION :

An Urban Aglomeration may constitute :

a) A city with continuous outgrowith (the part of outgrowth being outside the statutory limits but falling within the boundries of adjoining village or villages);

b) One town with similar outgrowth or two or more adjoining towns with their outgrowths as in (a) ; or

c) A city and one or more adjoining towns with their outgrowths all of which form a continuous spread.

In Sangli district there is only one urban aglomeration (U.A.) i.e. Sangli U.A. and its constituent units are :-

(a) Sangli city (M)
(b) Miraj city (M)
(c) Madhavnagar

STANDARD URBAN AREA :

The essential requirements for the constitution of S.U.A. are :-

a) It should have a core town of a minimum population of 50,000;

b) The contiguous areas made up of other urban as well rural administrative units should have mutual socio-economic links with the core town ; and

c) In all probability this entire area should get fully urbanized within a Span of two or three decades.

Out of 33 standard Urban Areas in Maharashtra, Sangli district possesses only one standard Urban Area, namely " Sangli Miraj Standard Urban Area " .

Its constituent units are given in Table No.3.11 and Fig. No. 3.13.

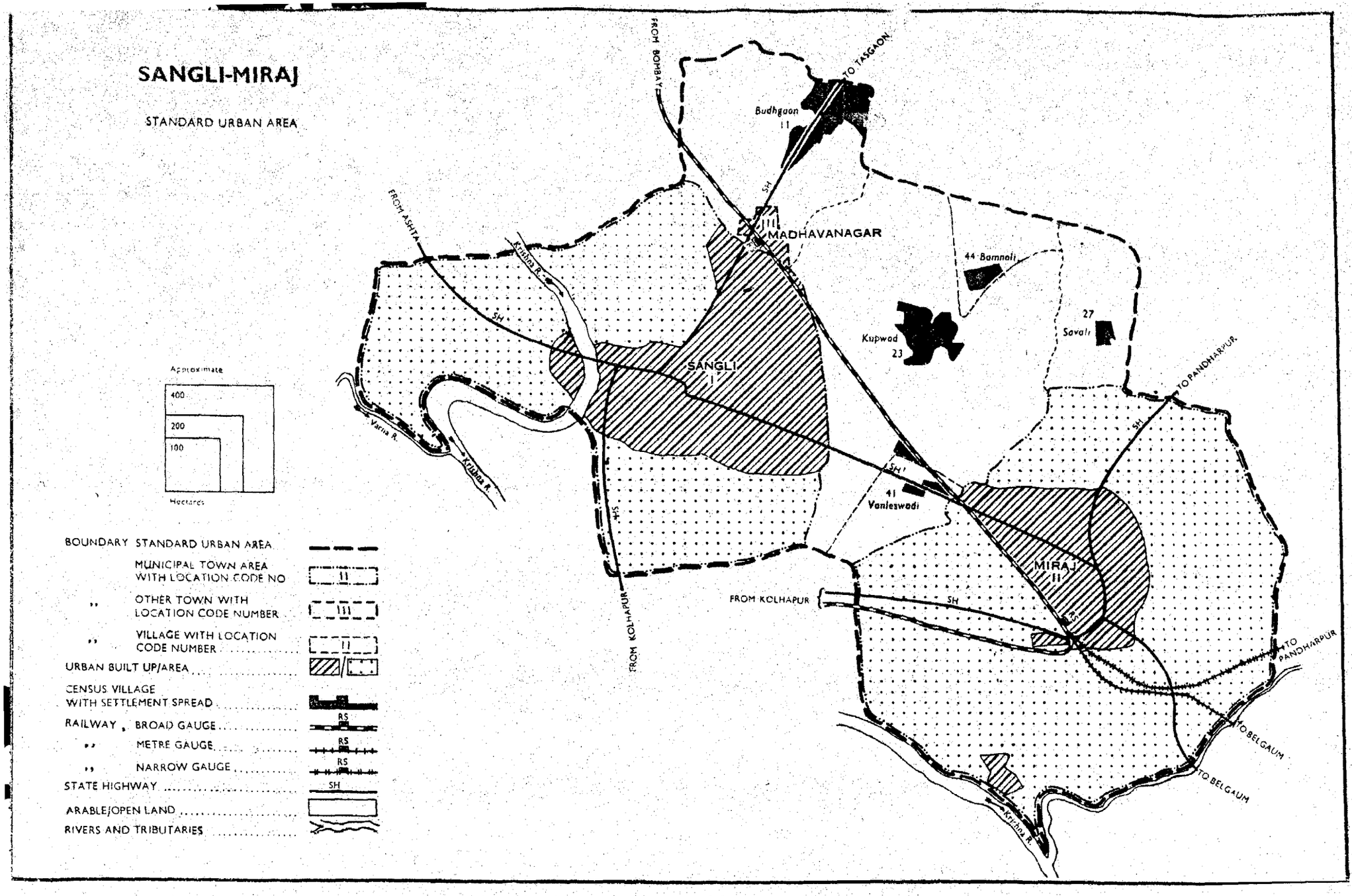

SANGLI-MIRAJ
STANDARD URBAN AREA
Approximate
400
200
100
Hectares
BOUNDARY STANDARD URBAN AREA
MUNICIPAL TOWN AREA WITH LOCATION CODE NO
OTHER TOWN WITH LOCATION CODE NUMBER
VILLAGE WITH LOCATION CODE NUMBER
URBAN BUILT UP/AREA
CENSUS VILLAGE WITH SETTLEMENT SPREAD
RAILWAY , BROAD GAUGE
METRE GAUGE
NARROW GAUGE
STATE HIGHWAY
ARABLE/OPEN LAND
RIVERS AND TRIBUTARIES
FROM BOMBAY
TO TASGAON
Budhgaon
11
SH
MADHAVANAGAR
FROM ASHTA
Krishna R.
44 Bamnoli
Kupwad
23
27
Savali
SANGLI
TO PANDHARPUR
Varna R.
Krishna R.
SH
SH1
41
Vanleswadi
MIRAJ
FROM KOLHAPUR
SH
TO PANDHARPUR
TO BELGAUM
TO BELGAUM
Krishna R.

FIG. 3·13.

TABLE-3.10

POPULATION OF SANGLI-MIRAJ STANDARD URBAN AREA

Name	Area	Popula-tion per (Km^2)	Persons	Males	Females
A) Urban Components					
i) Sangli City (M)	40.97	3720	152,389	79,957	72,432
ii) Miraj City (M)	42.68	2471	105,455	54,534	50,921
iii) Madhavnagar	0.52	21431	11,141	6,005	5,139
Total Urban Group	84.17	3196	268,988	149,496	128,492
B) Rural Components					
i) Budhgaon(11)	10.70	979	10,473	5,462	5,011
ii) Kupwad (23)	20.63	568	11,716	6,539	5,177
iii) Sangli (27)	5.86	255	1,494	802	692
iv) Wanlesswadi N.V.(41)	N.A.	-	1,539	805	734
v) Bamnoli	N.A.	-	574	275	299
Total Rural Group	37.19	694	15,796	13,883	11,913
S.M.SUA. Total	121.36	2,479	294,784	15,4379	14,0405

Source : Census of India, 1981, Series 12, Maharashtra Part II- A General population Table, p.232-233.

POPULATION-SPACE RELATIONSHIP :

Table No.3.10 and Fig.3.11(c) are prepared to show the urban population space relationship in Sangli district. The highlights of the same are below :-

i) Madhavnagar and Sangli city support 43.77 % of Urban population of the district, though its percentage share in total urban area of the district is only 13.84 and the density is more than 3000 persons per Km^2.

ii) Miraj city (density 2471) supports 28.23 % urban population with its 14.23 % Urban area.

iii) Tasgaon and Urban -Islampur are in the density range of 500-1000 and their share in Urban population is 15.84 % and in urban area is 25.59 %.

iv) Ashta and Vita are two msuch urban centres which have very low density i.e. below 500 persons per Km^2. They have 46.34 % of urban area and only 12.16 % urban population.

v) Kirloskarwadi is omitted from the calulations for want of area figures.

TABLE-3.11

SANGLI DISTRICT

PERCENTAGE OF URBAN AREA AND POPULATION OF THE DIST. (1981)

S.No.	Name of Urban Centre	% of Area	% of Population
1	Ashta	27.91	5.71
2	Kirloskarwadi	N.A.	N.C.
3	Madhavwadi	0.17	2.98
4	Miraj	14.23	28.23
5	Sangli	13.67	40.79
6	Tasgaon	14.48	7.00
7	Uran Islampur	11.11	8.84
8	Vita	18.43	6.45
	Sangli district	(of State)	(of State)

C) VARIATION IN RURAL POPULATION :

The term " rural " has, infact, no prime meaning albeit its acceptance in all civilized and advanced contries of the world. The rual populations are engaged primarily in agriculture and their composition includes more of females as compared to the

males. They are also a contrast to the urban areas in other indicators of development viz. high birth and death rates, literacy, low degree of industralization, cultural institutions, etc.etc.

The basic unit for rural area is a revenue village. 'Village' may be defined as a statutory recognised unit having definite boundry and separate land records.[11]

It is true that geographers have done considerable general work on population, but very little work has been done on the intensive spatial studies of the rural population, specially in India. India's development has no meaning, if her vast rural masses are taken into consideration.[10] Sangli district had 1,437,123 rural people out of 1,831,212 in 1981, living in 708 inhabited villages.

Fig.No.3.15 shows classwise percentage of villages and their population. This Figure has been prepared from Table No. 3.13 which is in turn is compressed from Table No.3.12. All of these are important to the population Geographers because they are related to all other features of population such as relative growth, changing pattern of distribution ..... problems and prospects. It concernes, in fact, all the people irrespective of what they are, where, when and how.....

The emergent seenerio points out of the following :-

i) More of the population (34.10 %) lives in village size 2000 - 4999, whereas few people (0.11 %) live in village size 0-200. The later are remote and isolated villages.

SANGLI DISTRICT.

CLASS- WISE PERCENTAGE OF VILLAGES AND THEIR POPULATION

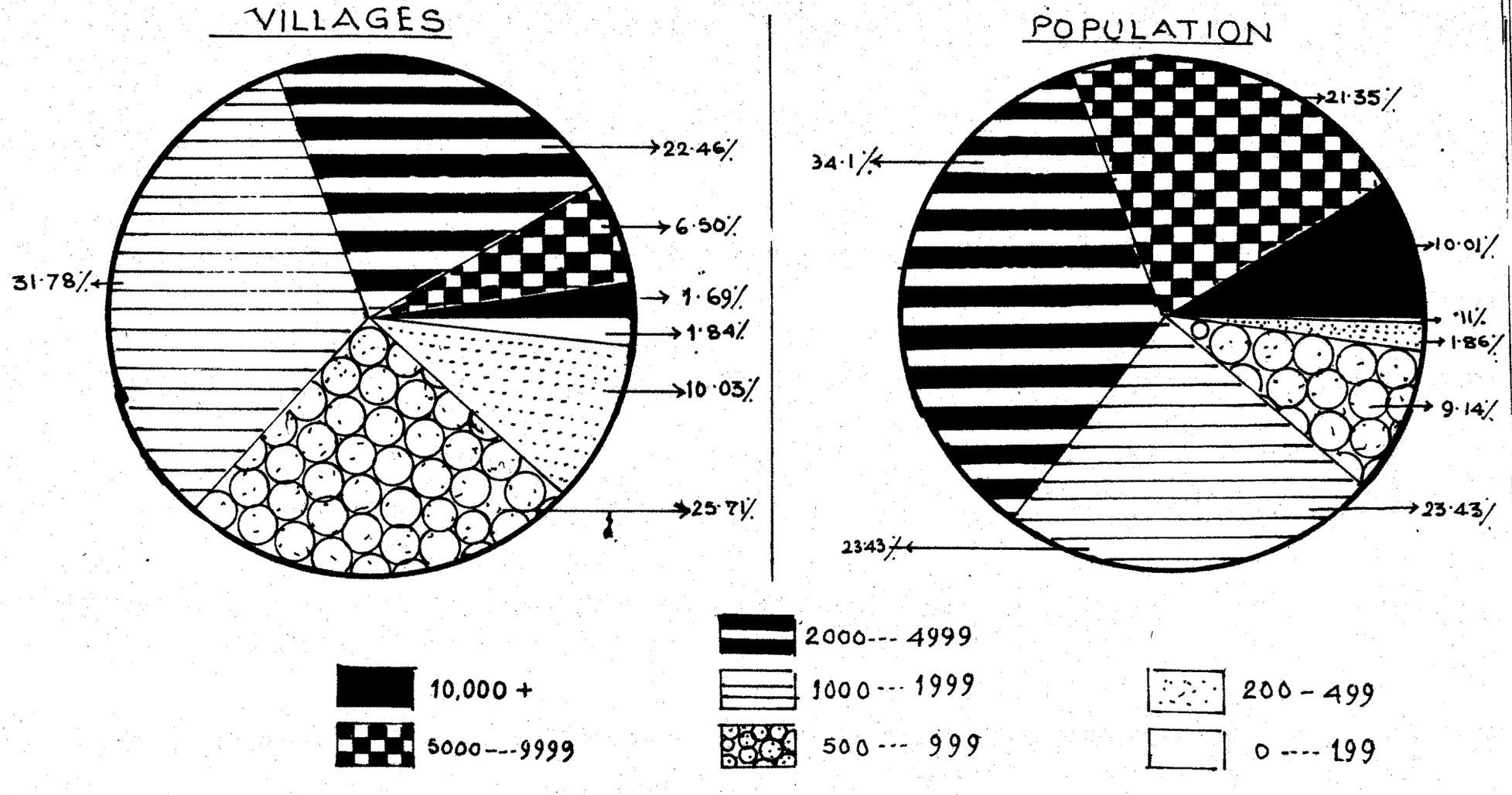


FIG 3·15

ii) About 35 % of the villages come under the following village sizes :-

(i) 200-499 (10.03 %)

(ii) 500-999 (24.86 %)

In contrast their populations are 11% - (i) 1.86 % and (ii) 9.14 % .

(iii) 55 % of the villages come under following two categories :-

(i) 1000 - 1999 (32.63 %) and

(ii) 2000 - 4999 (22.45)

Whereas their respective populations are as 23.42 % and 34.10 % .

(iv) 6.5 % villages come under the category of 5000-9999 and their population is 21.35 %.

(v) However the largest villages are few in number (12) but their populations (1,43,924) are the largest.

(vi) Comparision with the State :-

	Sangli District	Maharashtra State
i) Village below 2000 population.	70 %	89 %
ii) Population of villages below 2000 population	35 %	62 %
iii) Villages above 5000 Population.	30 %	11 %
iv) Population of villages above 5000 population	65 %	38 %

DISTRIBUTION OF VILLAGES BY DENSITY :

Table No.3.14 and fig.3.16 show the " density " of each village in the Sangli district. This indicates a man -land ratio and corresponds to the number of people per-kilometer. These have, later on, been grouped into eight (8) categories.

TABLE-3.14

SANGLI DISTRICT

DISTRIBUTION OF VILLAGES BY POPULATION DENSITY

S.No.	Range of Density (per km^2)	Total no. of villages in each density range	Percentage of villages in each density range.
1	0 - 10	4	0.56
2	11 - 20	7	0.99
3	21 - 50	29	4.10
4	51.- 100	149	21.04
5	101 - 200	217	30.65
6	201 - 300	103	14.55
7	301 - 500	94	13.28
8	500 +	39	5.51
9	Not known	66	9.32
	Total	708	100

Broadly speaking this shows density-wise number of villages as well as their percentage. The main purpose of providing this aspect in the author's work is to suggest that

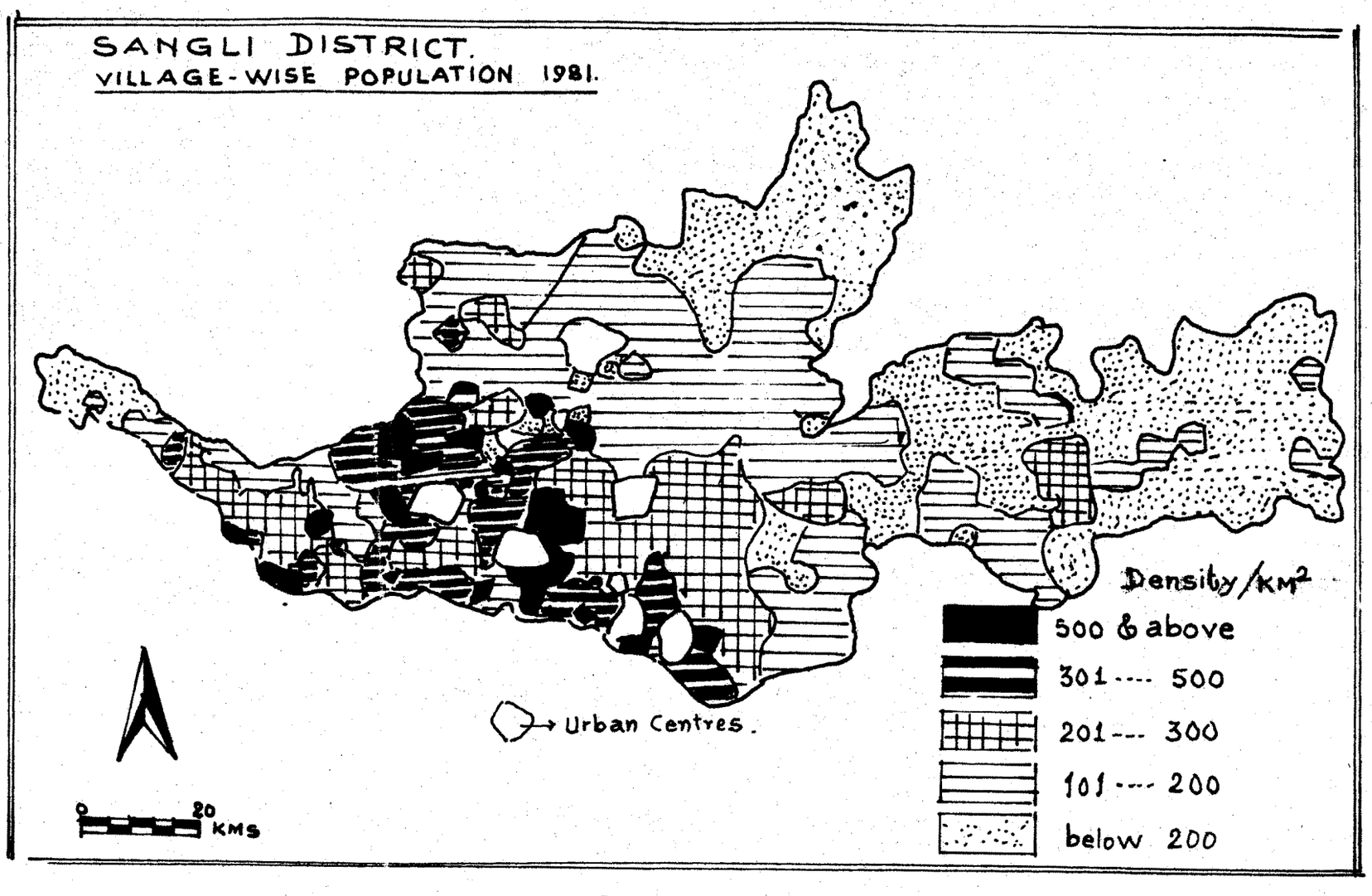

SANGLI DISTRICT.
VILLAGE-WISE POPULATION 1981.
Density/KM²
500 & above
301 ---- 500
201 --- 300
101 ---- 200
below 200
Urban Centres.
0 20 KMS

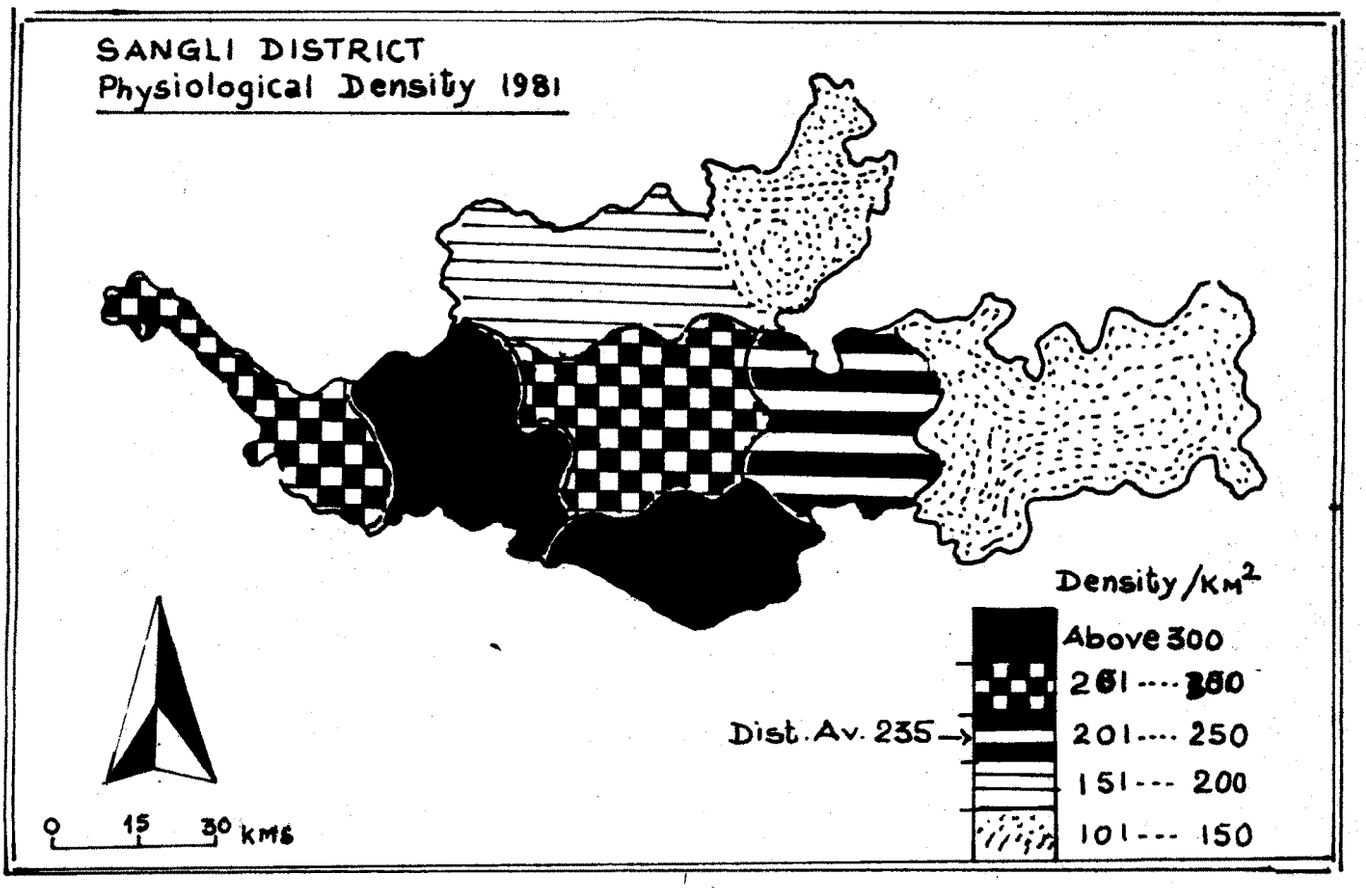
FIG 3·16

village-wise data ought to be made a basis of planned rural development rather than what is happening to-day ! In this regards, it is worthwhile pointing out that the villages with less density, suffer from neglect and the villages with high density get maximum benefits.

Table reveals that about 213 or 66.24 % of villages fall within the density range of 50- 300 persons per km^2. In 40 villages (5.65 %) density is upto 50 persons per km^2. In 94 (13.28 %) villages it varied between 301 - 500 and 39 (5.51 %) villages recorded a very high density of 500 and above persons per km^2. for the remaining 66 (9.32 %) villages, density of population could not be worked out for want of their area figures.

PHYSIOLOGICAL AND AGRICULTURAL DENSITIES :-

The simple man - land ratio only expresses the pressure of population on the unit of the total land. It is not a satisfactory way of depicting the real density or the pressure of population on the resource base and is thus unrealistic and even misleading. For this physiological density and agricultural density are to be taken into account. They are expressed as the number of persons per unit of cultivable area and number of persons engaged in agriculture per unit of cultivated area respectively. Table No.3.15 and Fig. 3.17 are prepared to show tahsil-wise variation in physiological and agricultural densities.


SANGLI DISTRICT
Physiological Density 1981
Density/KM²
Above 300
261 ---- 300
Dist. Av. 235
201 ---- 250
151 --- 200
101 --- 150
0 15 30 KMS

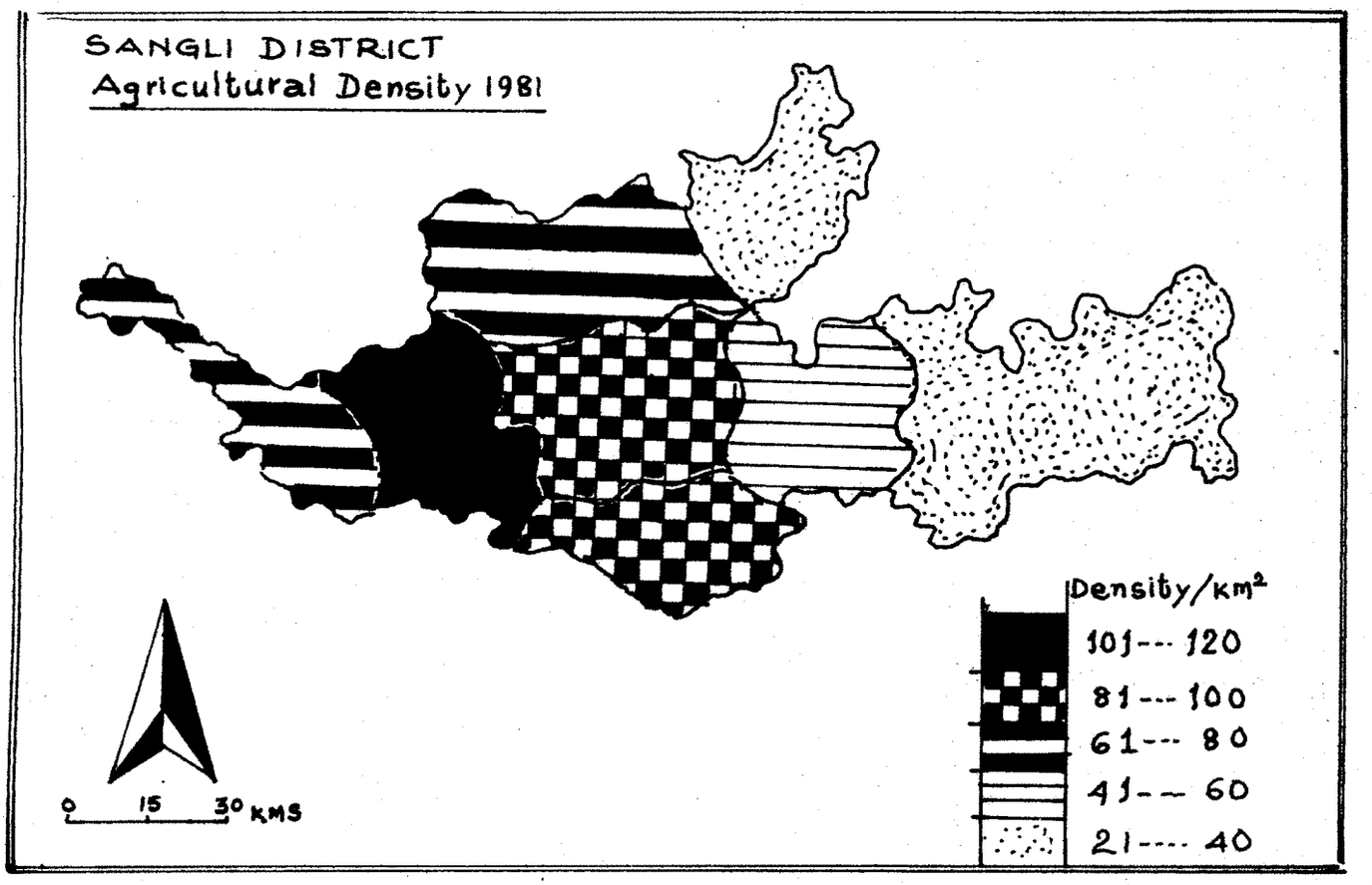

SANGLI DISTRICT
Agricultural Density 1981
Density/km²
101 --- 120
81 --- 100
61 --- 80
41 --- 60
21 ---- 40
0 15 30 KMS

FIG 3-17

TABLE 3.15

SANGLI DISTRICT

TAHSIL-WISE PHYSIOLOGICAL AND AGRICULTURAL DENSITY

S.No.	Tahsil	Physiilogical Density (in Km^2)	Agricultural Density (in Km^2)
1	Miraj	309	91
2	Tasgaon	282	84
3	Khanapur	168	61
4	Atpadi	130	29
5	Jat	143	30
6	Kavathe Mahankal	210	45
7	Walwa	362	117
8	Shirala	277	66
	Sangli District	235	65

Source:-: Calculated by the author.

The highlights of this table are as under :-

1) Walwa tahsil is the best developed and Atpadi falls down to the lowest.

2) Walwa, Miraj, Tasgaon and Shirala tahsils are above, the average district level.

3) Atpadi and Jat tahsils are less than 50 % in the average district agricultural density.

4) The tahsils - Jat, Atpadi and Khanapur - having less physiological density of population have the potentiality of supporting more population pressure on land.

POPULATION-SPACE-RELATIONSHIP (RURAL) :-

TABLE-3.16

SANGLI DISTRICT

PERCENTAGE OF RURAL AREA AND POPULATION(TO THE DISTRICT)

(1981)

S.No.	Tahsil	% of Rueal Area	% of Rural Popula--tion
1	Miraj	10.17	16.51
2	Tasgaon	12.81	17.67
3	Khanapur	15.34	13.49
4	Atpadi	10.44	5.85
5	Jat	27.14	13.44
6	Kavathe Mahankal	8.54	6.77
7	Walwa	8.08	17.18
8	Shirala	7.58	9.09
	Sangli	2.74 %(of the State)	3.52 %(of the State)

Source : Calculated by the author.

Table No.3.16 and fig.No.3.1(b) are prepared to show the Rural Population - Space Relationship in Sangli district. The highlights of this table and fig. are as follows :-

i) Shirala tahsil supports 17.18 % of rural population of the district though its percentage share in total rural area of the district is 8.08 only, and the density is more than 300 persons per Km^2.

ii) Miraj, Tasgaon and Shirala tahsils are in the density range of 201-300 persons per Km^2 and they support 43.27 % of population with 30.56 % area.

iii) Khanapur and Kavathe-Mahankal tahsils lie in the density range of 101 - 200 persons per km^2 and their share in districts population is 20.26 % and 23.78 % in area.

iv) Very low density (0 - 100 persons per km^2) occur in Jat and Atpadi tahsils sharing 37.58 % area and only 19.29 % of population of Sangli district.

v) The district Sangli supports 3.52 % of rural population of the State Maharashtra over only 2.74 % of rural area of the state.

3.4 SEX IMBALANCE :

" A knowledge of how population is distributed amongst the various age- groupings and between the sexes is fundamental to the understanding of that population and the community it forms. A knowledge of the pattern of sex ratio* helps to explain the employment and consumption pattern, social needs of the people and perhaps the psychological characteristics of a community[12]." The sex composition or the relative proportion of males and females in a population at a given instant is the result of preceding hundred years of births, deaths and migration.[13]

Sex ratio is a significant demographic and cultural index and can be of value to the population geographers in a discussion of regional characteristics. Further more, the ratio can reflect the biological, social, economic and migational characteristics of population. Social, economic and community life are affected in many ways by large imbalances in sex composition. A great imbalance in the sex ratio would tend to result in a lowered fertility and slower growth, Important diviations from a balanced sex ratio originate from various social and demographic factors. The major factors which account for the differences in the sex ratio are (i) migation (2) differantial births and (3) differantial deaths among the two sexes.

---

* Sex Ratio means the number of females per thousand males.

According to 1981 census, Sangli District, like other districts of Maharashtra, except Raigarh, Ratnagiri and Satara, showed an overall deficiency in females. The sex ratio in the district was 967 as against 937 in Maharashtra. This disparity between males and females is more striking in urban areas than in rural ones. (sex ratio is 1015 for rural areas and 919 for urban areas)

TABLE-3.17

SANGLI DISTRICT

SEX RATIO (TAHSIL-WISE) 1981.

S.No.	Tahsil	Sex Ratio
1	Shiral	1066
2	Khanapur	1046
3	Atpadi	1002
4	Kavathe Mahankal	986
5	Jat	962
6	Tasgaon	956
7	Walwa	945
8	Miraj	922
	Sangli District	967
	Maharashtra State	937

Source : Census Handbook of Sangli Dist.1981.

TAHSIL-WISE SEX RATIO :

Due to different socio-economic conditions sex ratio varies from one tahsil to another. In 1981 sex ratio varied from 922 to 1066 within the district. Table No.3.17 shows the

SANGLI DISTRICT

TAHSIL-WISE SEX RATIO 1981

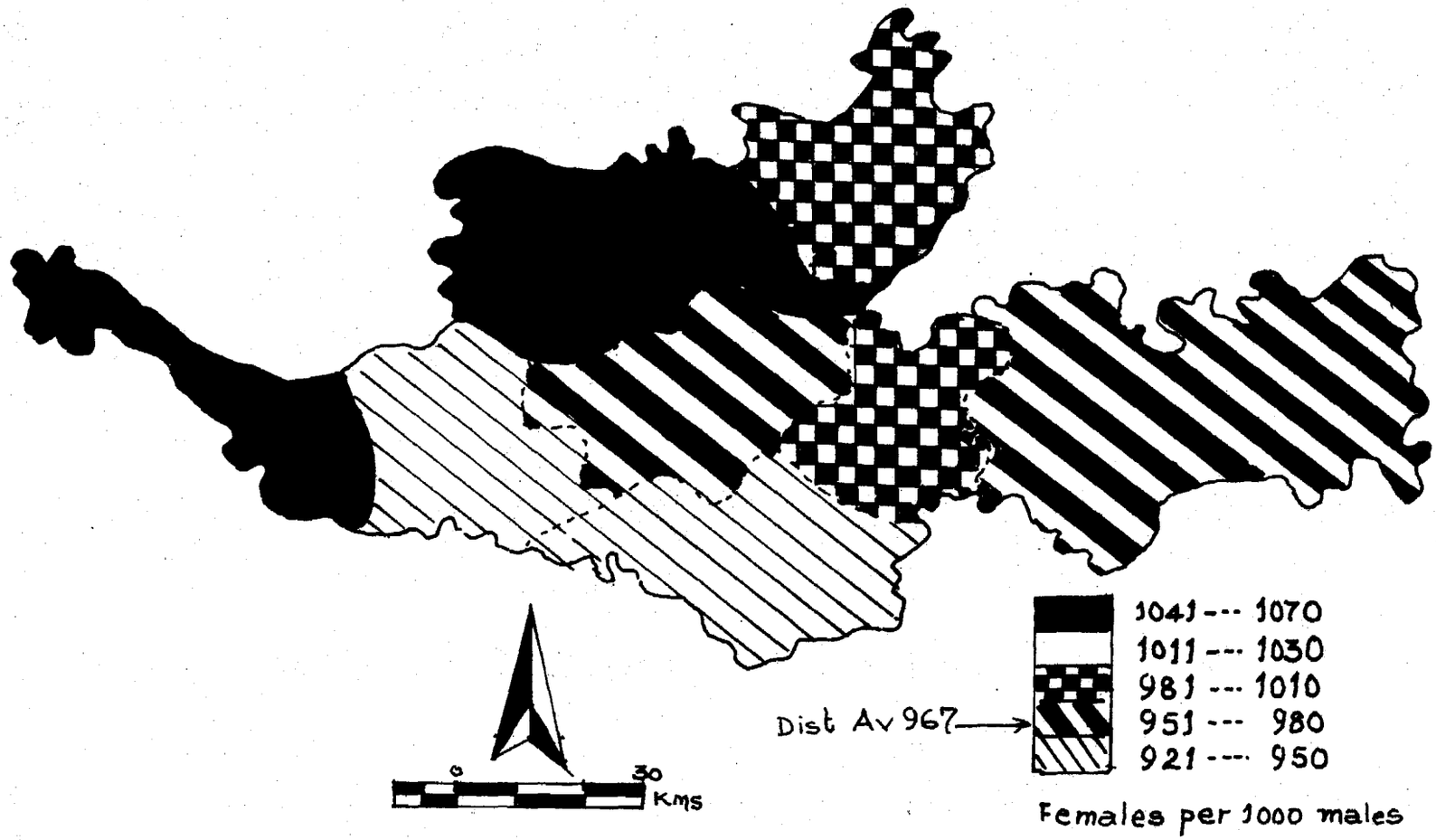


FIG. 3·19

sex ratio of each tahsil and fig. No.3.19 depict four different catergories emerging in the district on plotting the sex ratios of each tahsil.

Very high sex ratio (1066) is found in Shirala tahsil. This tahsil is purely rural and agriculture is the dominant economic activity. More than 75 percent of the workers are engaged in agricultue. As agriculture is less developed in this tahsil it has led to selective male outmigration, thereby resulting in a higher propertion of females.

High sex ratio (between 1001 to 1050) is found in Khanapur and Atpadi tahsils. Atpadi tahsil is also purely rural. Agricultural is the main economic activity in these two tahsils. Poor agricultural economy seems to have exercised as a " push factor " to males in searching employment outside of these two Tahsils.

Moderate sex ratio (951-1000) is found in Tasgaon, Jat and Kavathe Mahankal tahsils. These are purely agricultural communities. Herein family migration, more specially, periodic is more fevoured than the specific " male " migration. Thus the sex ratio is unfavourable or imbalanced. Secondly, " male births" may be more than the female births ?

Very low sex ratio between 901 and 950 is found in Miraj and Walwa tahsils. Miraj has the lowest sex ratio (922). These two tahsils have considerable industrial developments to attract large number of male workers from outside. Unlike the urban centres of U.S.A.[14], the urban centres of Sangli district

TABLE-3.18

SANGLI DISTRICT

SEX RATIO IN VILLAGES (1981)

S.No.	Tahsil	SEX RATIO									
		- 900		901-1000		1001-1100		1101-1200		+ 1201	
		No.of villages	% of Villa-ges	No.of Villa-ges	% of Villa-ges	No.of Villa-ges	% of Villa-ges	No.of Villa-ges	% of Villa-ges	No.of Villa-ges	% of Villa-ges
1	2	3	4	5	6	7	8	9	10	11	12
1	Miraj	10	15.38	49	75.38	4	6.16	2	3.08	0	-
2	Tasgaon	9	8.82	53	51.96	33	32.35	5	4.90	2	1.96
3	Khanapur	1	0.85	19	16.24	53	45.30	31	26.50	13	11.11
4	Atpadi	3	5.00	23	38.33	27	45.00	5	8.33	2	3.34
5	Jat	12	10.17	74	62.71	30	25.42	2	1.70	0	-
6	Kavathe mahankal	2	3.77	26	49.05	21	39.62	3	5.66	1	1.89
7	Walwa	11	12.36	59	66.29	17	19.10	2	2.25	0	-
8	Shirala	3	2 .88	16	15.38	20	19.23	31	29.81	34	32.70
	Sangli District	51	7.20	319	45.06	205	28.95	81	11.44	52	7.35

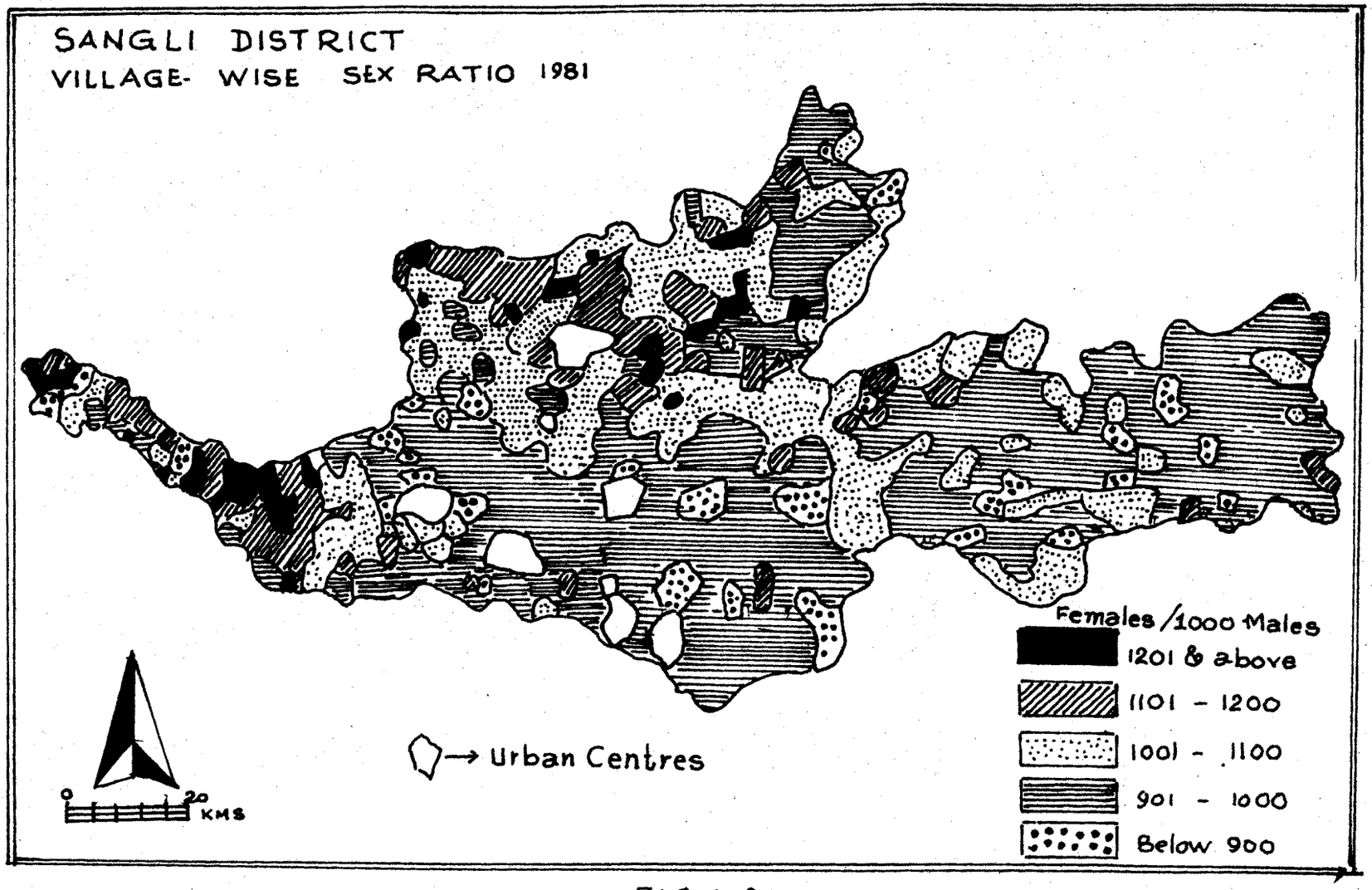

SANGLI DISTRICT
VILLAGE- WISE SEX RATIO 1981
Females /1000 Males
1201 & above
1101 - 1200
1001 - 1100
901 - 1000
Below 900
Urban Centres
0
20
KMS

FIG 3·20

do not provide much employment opportunities for women. Naturally only male workers are attracted, resulting in a male-dominated adult migration and low sex ratio.

SEX RATIO IN VILLAGES :

Since sex ratio has an important place in the study of population Geography and it has relevance in Applied Population Geography at all levels, the author has computed the sex ratio of all the villages in each tahsil- (Table No.3.18) and has shown the same in fig.No. 3.20.

While studying this the author has come across some striking features in the rural habitats and they are as below :-

i) Proportion of females to males is 3:2 in two villages of Shirala tahsil, namely, Shirsatwadi (1555) and Gave (1500),

ii) While it is 3:4 in four villages namely, Gatadwadi (Walwa), Lakdewadi (Jat), Kundal (Tasgaon) and Kupwad(Miraj)

iii) 62.51 % villages (65) in Shirala tahsil show a very high sex ratio of more than 1100 females per 1000 males.

iv) In Miraj tahsil 49 (75.38 %) villages show a low sex ratio (901 - 1000).

SEX RATIO IN URBAN CENTRES :

In western contries especially in U.S.A. the urban areas are after dominantly feminine in character but this is not the case in India where a different kind of culture has produced urban areas that are dominantly masculine[15]. Sex ratio is also low in urban areas of India compared to rural areas[16].

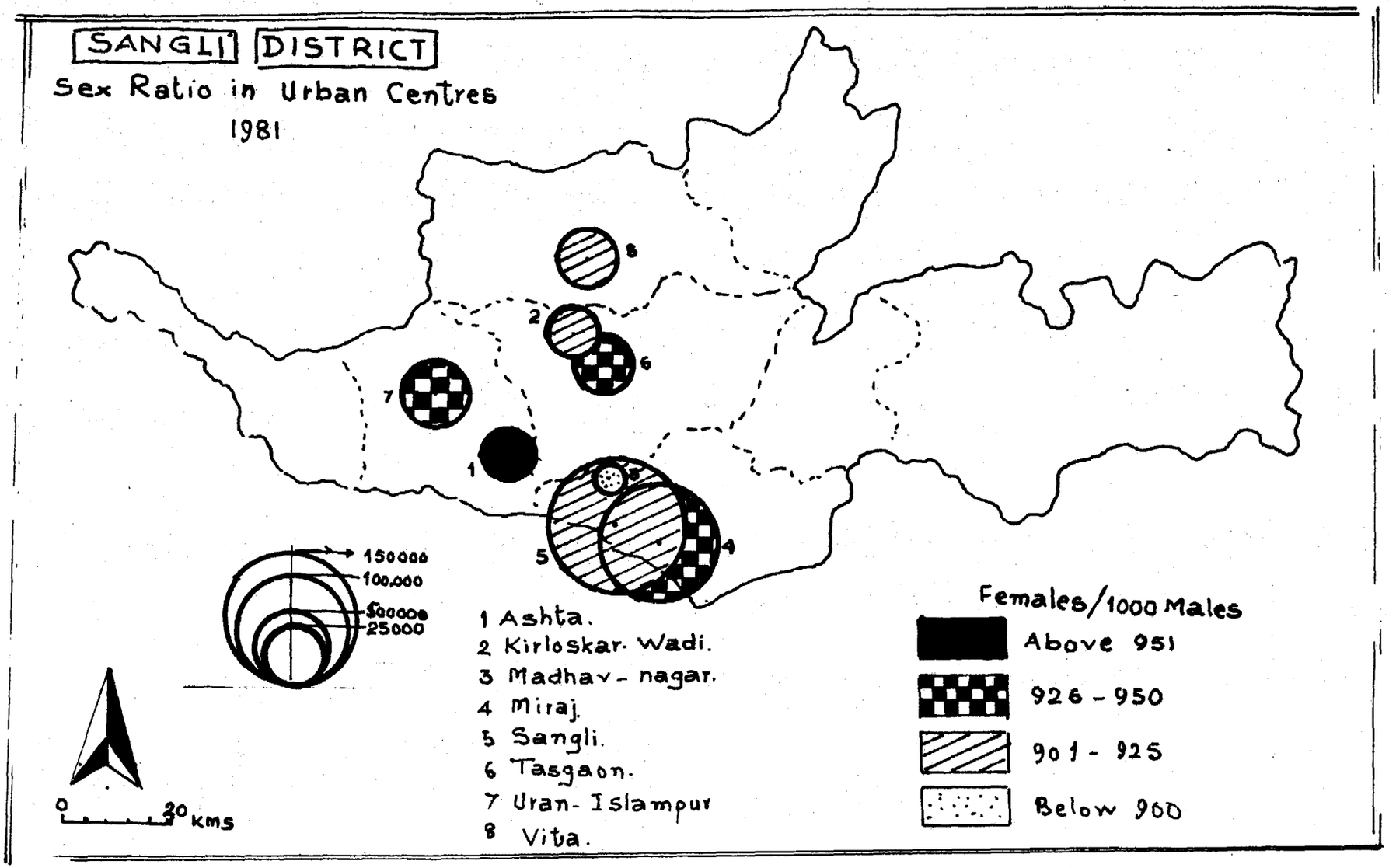

SANGLI DISTRICT
Sex Ratio in Urban Centres
1981
150000
100,000
50000
25000
0
20 kms
1 Ashta.
2 Kirloskar- Wadi.
3 Madhav- nagar.
4 Miraj.
5 Sangli.
6 Tasgaon.
7 Uran- Islampur
8 Vita.
Females/1000 Males
Above 951
926 - 950
901 - 925
Below 900

FIG 3.21

The urban areas of Sangli District are no exceptions. Female participation in urban activities like industry, construction, transport, trade and commerce and other services is very low in Sangli District.

TABLE- 3.19

SANGLI DISTRICT

SEX RATIO IN URBAN CENTRES (1981)

S.No.	Name	Sex Ratio
1	Ashta	955
2	Miraj	934
3	Tasgaon	931
4	Uran-Islampur	931
5	Vita	926
6	Kirloskarwadi	911
7	Sangli	906
8	Madhavnagar	856

Table No.3.19 and Fig.No.3.21 show the sex ratio of urban centres in Sangli district. It is observed that :-

i) Sex ratio decreases with increase in the size of urban settlement. Thus Sangli is having very low sex ratio(906), and Ashta is having very high sex ratio of 955.

ii) All other centres have moderate sex ratio.

3.5 MAGNITUDE OF LITERACY :

While for an archaeologist or anthropologist, the term literacy may refer to a cultural fact pertaining to the development of a society's capability to make use of writing for various specific purposes, for a population geographer literacy is that qualitative attribute of population which is fainly reliable index of the socio-economic development of an area[17]. Literacy is essential for eradicating poverty and mental isolation, cultivating peaceful and friendly internation--al relation and permitting the free play of demographic processes. Thus, literacy is essential for economic development, social advancement and democratic growth of a country. Being extraordinary, one has to shout loudly that " India's destiny is shaped in her classrooms[18]".

As a matter of convenience, literacy is defined as the ability to read and write one's name in one's own mother tongue. In India all those persons who can both read and write a simple message with understanding in any language are classified as literate - a definition proposed by the United Nations Population Commission[19].

In 1981 census, it was found that the general literacy rate in Sangli district was 46.87 percent, while in Maharashtra state it was 47.18 percent and in India it was 36.17 per cent. Not much progress has been achieved in the field of literacy, despite the Directive Principles enshrined in the " Indian constitution", that there should be free and compulsory education for all children below the age of 14.

TABLE -3.20

SANGLI DISTRICT

TAHSIL-WISE PERCENTAGE OF LITERACY (1981)

S.No.	Tahsil	Total/ Rural/ Urban.	Persons	Male	Female
2	2	3	4	5	6
1	Miraj	T	55.82	55.82	44.12
		R	49.33	61.37	36.38
		U	61.54	71.17	51.01
2	Tasgaon	T	49.79	62.94	36.03
		R	47.90	61.41	33.87
		U	60.05	71.11	48.06
3	Khanapur	T	45.86	59.33	32.99
		R	44.21	57.64	31.56
		U	59.22	72.00	45.37
4	Atpadi	T/R	35.31	49.75	20.89
5	Jat	T/R	27.91	39.37	16.01
6	Kavathe Mahankal	T/R.	42.03	55.64	28.23
7	Walwa	T	50.96	64.72	36.40
		R	49.73	64.01	34.64
		U	56.72	67.92	44.39
8	Shirala	T/R	36.86	52.82	21.88
	District Average	T	46.87	59.70	33.60
		R	43.13	56.57	29.41
		U	60.53	70.77	49.39
	State Average		47.18	58.79	34.79

Source : Computed by the author.

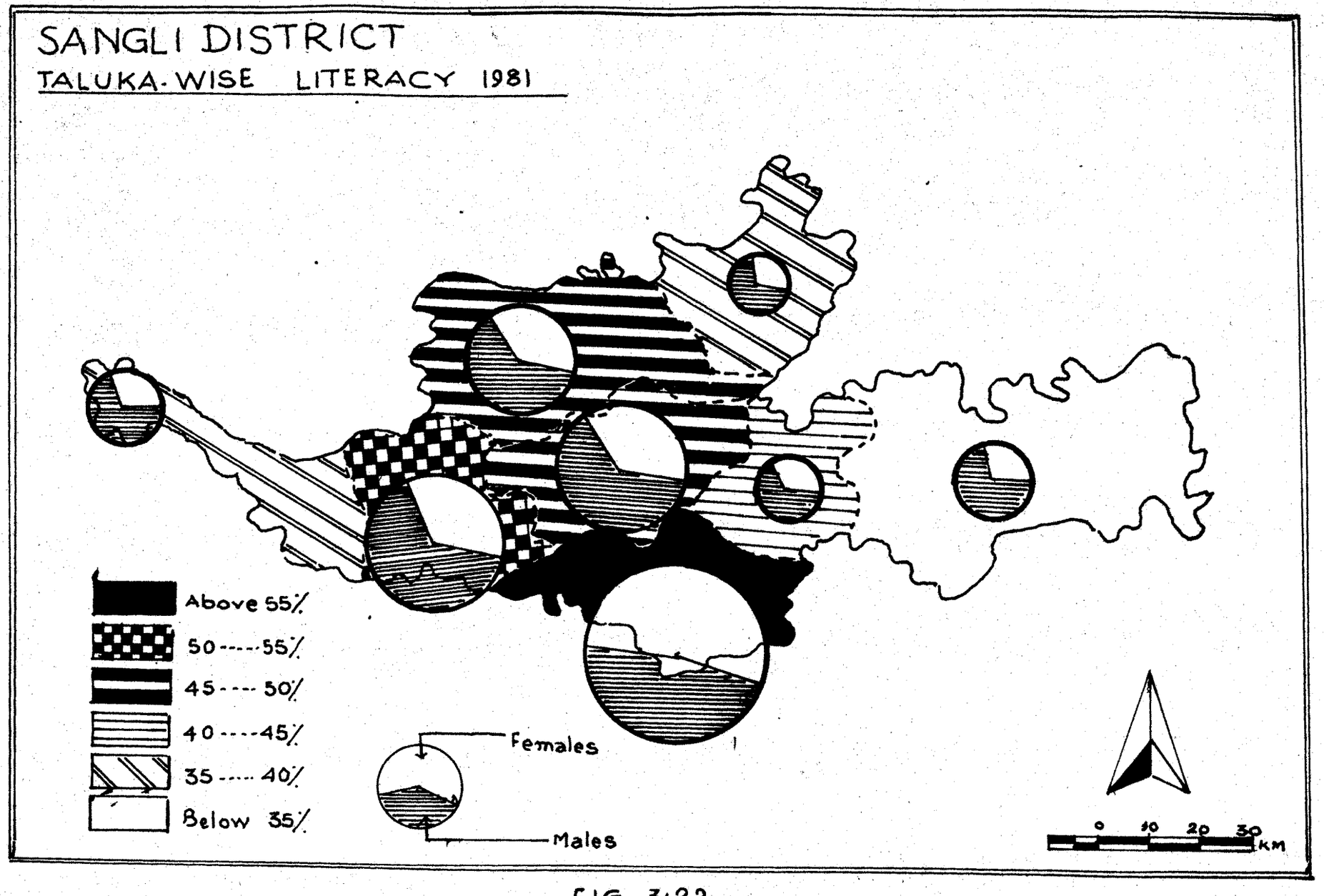
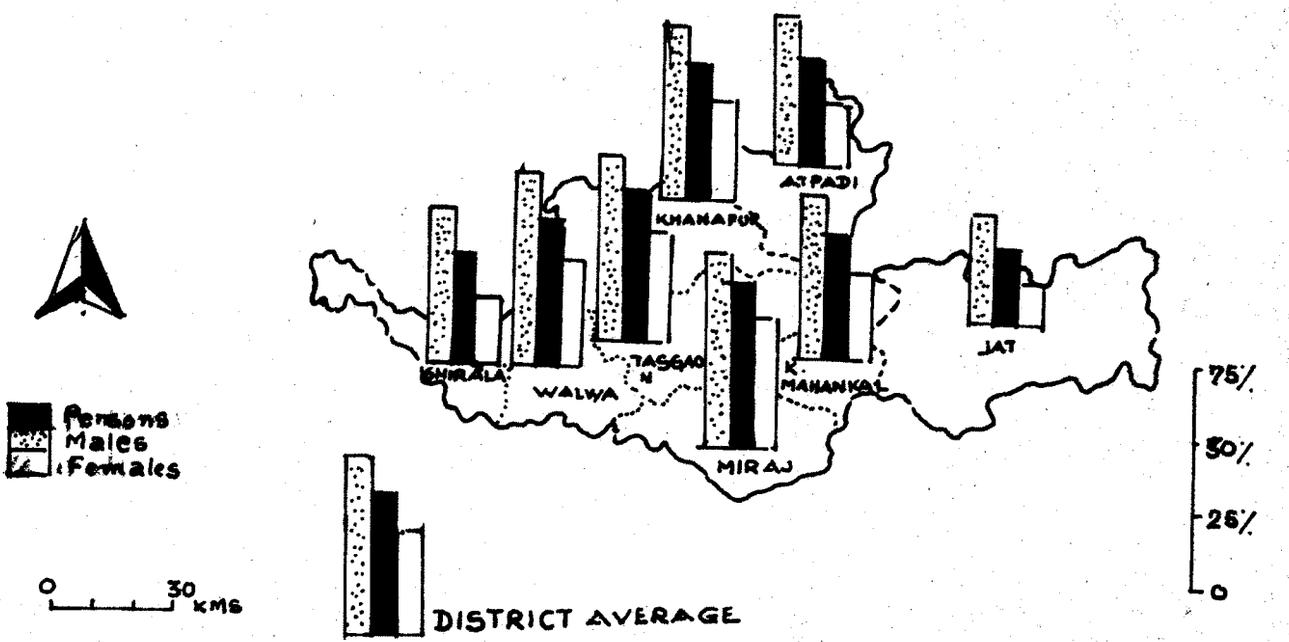

SANGLI DISTRICT
TALUKA-WISE LITERACY 1981
Above 55%
50 ----- 55%
45 ---- 50%
40 ---- 45%
35 ----- 40%
Below 35%
Females
Males
0 10 20 30 KM

FIG 3·22

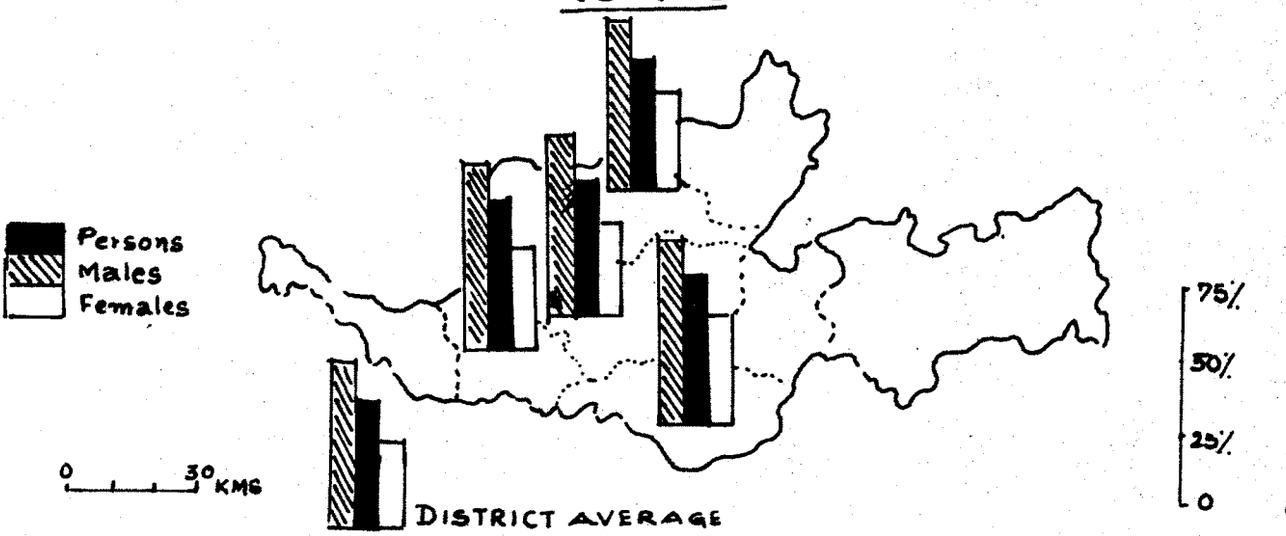
SANGLI DISTRICT

LITERACY (TALUKA-WISE) 1981

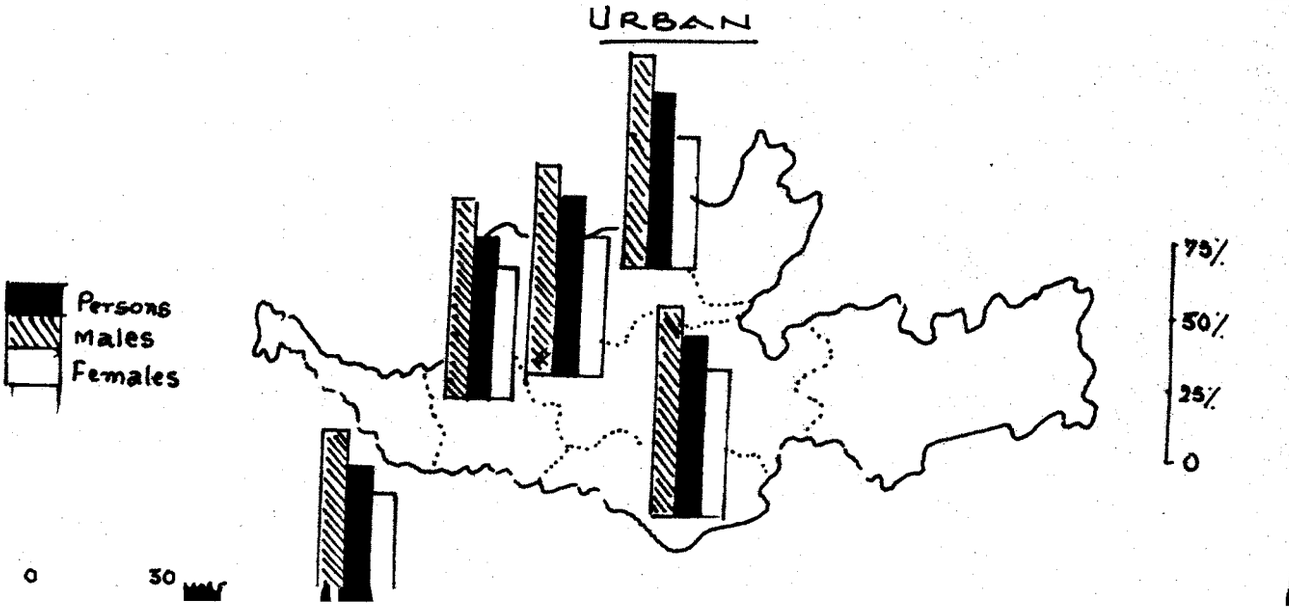
TOTAL



RURAL



URBAN



TAHSIL-WISE LITERACY RATE :

Sangli district ranks 11th in terms of literacy in Maharashtra State. This is partly due to change in the definition of literacy and also due to greater emphasiz on schooling.

Table No.3.20 and Fig.No.3.22 show Total, Urban and Rural literacy rates in each tahsil of Sangli district. They indicate the following :-

I) Very high literacy rate is found in Miraj tahsil (55.82 %) and very low in Jat tahsil (27.91 %) Miraj tahsil have double literacy rate than that of Jat tahsil, Miraj and Walwa tahsils are more urbanised and industrially well developed resulting higher literacy rates. Atpadi, Shirala and Jat are purely rural tahsils having very low literacy rates (below 40 %). Tasgaon, Khanapur and Kavathe Mahankal have moderate literacy rates.

II) The rural population has a lower literacy rate (43.13 %) than that of urban (60.53 %). The rural people do not get sufficient opportunities to get themseleves educated in a fermal way. The Urban people, on the other hand, get sufficient opportunities for getting education. The urban population is socially more awakened and economically better off. The socio-economic pattern of urban places requires higher level of education for jobs and vacations. Occupation play an import--ant role in literacy. Agricultural occupation does not require much higher level of literacy and education. In Sangli district the main occupation is agricultural in rural areas thereby the literacy rates are very low.

III) Generally speaking, males are more literate than the females. This is particularly true in the developing countries like India, where females are comparatively less free and do not have the opportunities for formal schooling. The females over here have low status, lower mobility, lower freedum early marriage and larger amount of domestic work. Moreover, female education in rural areas does not get social approval. The females in urban areas enjoy relatively higher status than their counter parts in the rural areas. Therefore they get higher education and freedom. The gap between the rural and urban literacy rates, however, in gradually narrowing down. In Sangli district 59.70 % males (70.77 % urban and 56.57 % rural) are literate and only 33.60 % females (49.39 % urban and 29.41 % rural) are literate.

LITERACY IN URBAN CENTRES :-

TABLE-3.21

SANGLI DISTRICT

LITERACY RATES IN URBAN CENTRES (1981)

S.No.	Name	Literacy Rate in %	S.No.	Name	Literacy rate in %
1	2	3	1	2	3
1	Sangli	63.37	6	Miraj	58.97
2	Kirloskar--wadi	60.90	7	Uran Islampur	59.79
3	Madhavnagar	59.39	8	Ashta	53.01
4	Tasgaon	59.39	District average		60.53
5	Vita	59.22			

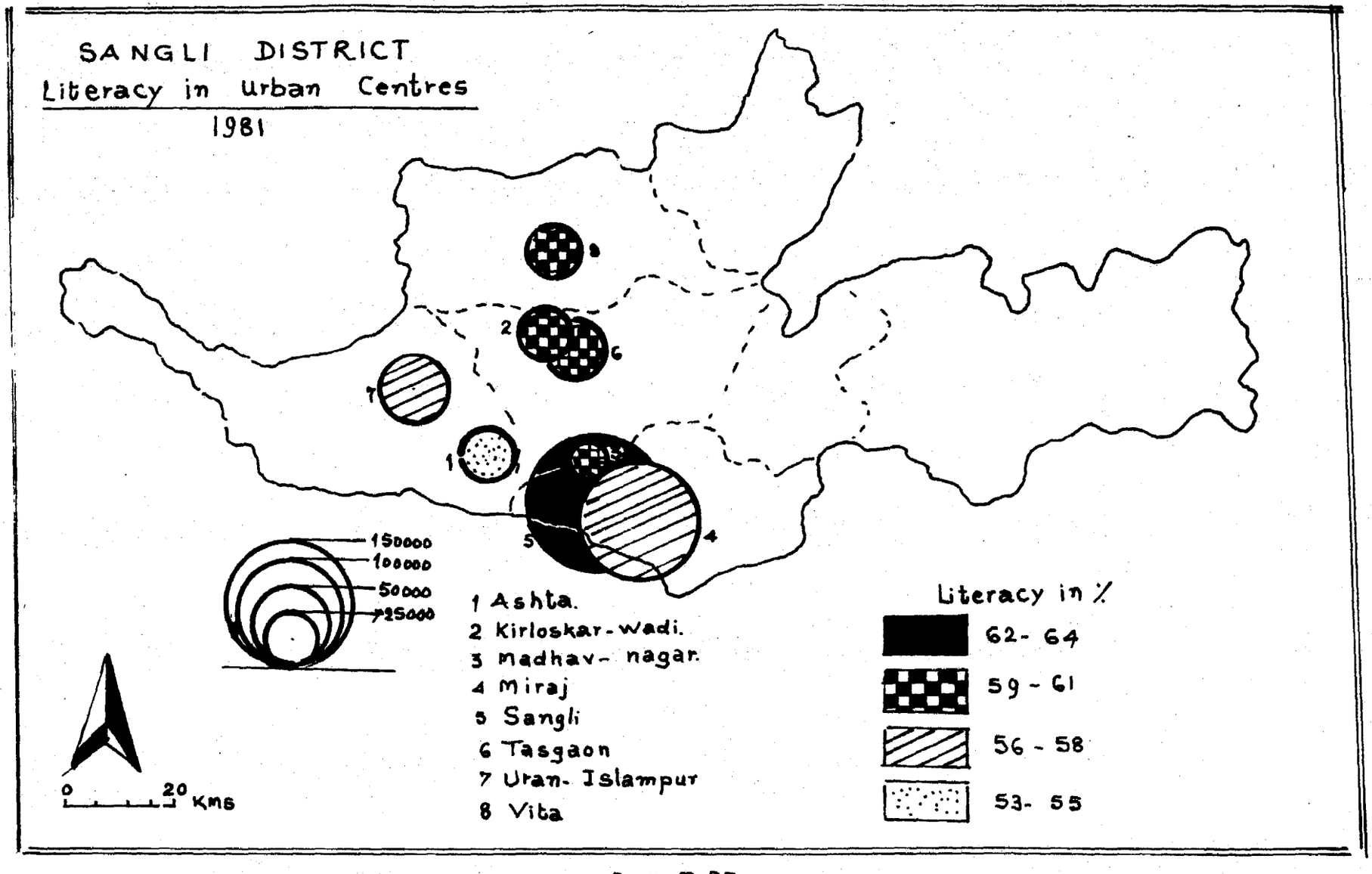

SANGLI DISTRICT
Literacy in urban Centres
1981
150000
100000
50000
25000
1 Ashta.
2 Kirloskar-wadi.
3 madhav- nagar.
4 Miraj
5 Sangli
6 Tasgaon
7 Uran- Islampur
8 Vita
Literacy in %
62- 64
59 - 61
56 - 58
53- 55
0
20 Kms

FIG 3·23.

Table No.3.21 and Fig.No.3.23 show the literacy rates of urban centres in Sangli district. The highlights of the table and figure are as below :-

i) More than 60 % persons are literate in Industrial urban centres viz. Sangli, Kirloskarwadi and Madhavnagar.

ii) Literacy ratio is very low (53.01 %) in Ashta, as it is a less industralized urban centre.

iii) All other centres have moderate literacy rates.

LITERACY IN VILLAGES :

Village-wise literacy rates have been computed into six (6) categories for showing village-wise variation in literacy in the rural areas of this study area (Table No.3.22). In a similar way the fig.No.3.24 has been prepared to show the same. Some of the striking features of this map and table are as below-

i) In 19 (2.68 %) villages more than 90 per cent population is illiterate. Gave village is unique (Walwa tahsil) in having 100 % illiteracy. 11 villages namely, Chandoli (Kh.) Javali, Siddheshwar, Bhogive, Lotive, Nivale, Vetti, Kadamwadi, (all in Shirala tahsil), Khilarwadi (Jat) Shere Dudhondi (Tasgaon), and Gulewadi (Atpadi) have 100 % famale illiteracy. This is mainly on account of their smallness in size and also due to inaccessibility.

ii) 71 villages (10.03 %) are found to have 11-20 % literacy, largest being in Jat tahsil. Miraj and Walwa tahsils have no village below 20 % literacy rate.

iii) 264 (37.29 %) villages in Sangli district are moderate (20-40 %) from literacy view-point, largest being in Atpadi tahsil (68.33 % villages).

iv) High literacy rates (40-50 %) were recorded in 240 (33.90 %) villages; higher being in Khanapur and Tasgaon tahsils.

v) 114 (16.10 %) villages in Sangli district have more than 50 % of their population is literate. Most of the villages in this category are from Miraj and Walwa tahsils. Three villages from Miraj tahsil namely Savalwadi, Kupwad and Bisur have more than 60 % literate people.

In concluding one can very convincingly advocate that " Literacy decreases with the decrease in village-size or increases, With increase in village-size " (Table No.3.23 and Fig.No.3.24).

TABLE 3.23

SANGLI DISTRICT

POPULATION SIZE OF VILLAGES AND LITERACY RATES

(1981)

S.No.	Population Size	No.of villages	Literacy Rate in %
1	0-200	13	14.63
2	200-499	71	26.93
3	500-1999	407	37.12
4	2000-4999	159	43.39
5	5000-9999	46	49.41
6	10000 +	12	51.72
	Total	708	43.13

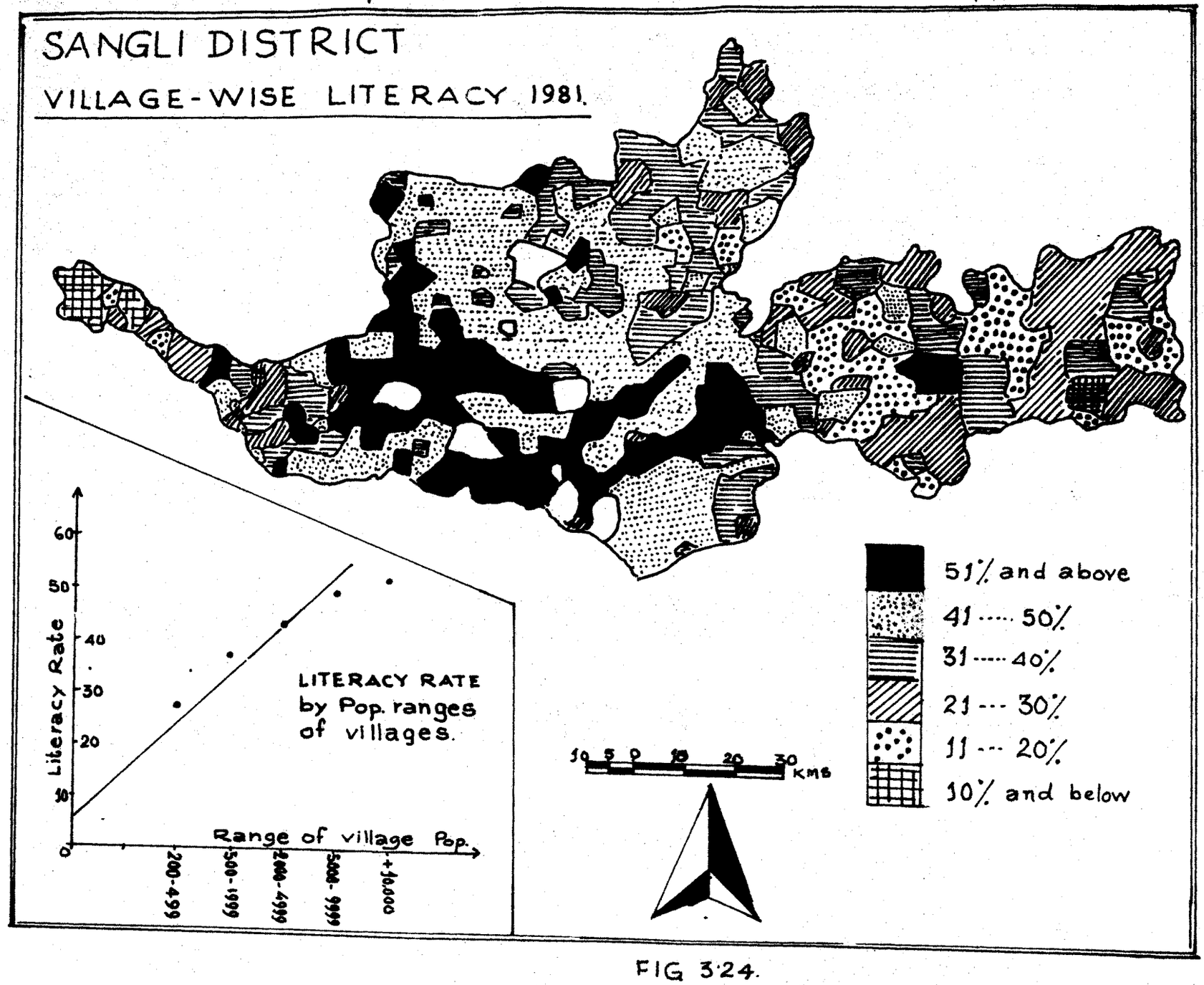

SANGLI DISTRICT
VILLAGE-WISE LITERACY 1981.
51% and above
41 ..... 50%
31 ..... 40%
21 --- 30%
11 --- 20%
10% and below
10 5 0 10 20 30 KMS
LITERACY RATE
by Pop. ranges
of villages.
Literacy Rate
60
50
40
30
20
10
0
Range of village Pop.
200-499
500-1999
2000-4999
5000-9999
+10000

FIG 3·24.

3.6 CONCENTRATION OF SCHEDULED CASTES AND SCHEDULED TRIBES :

As constitutional safeguard and Administrative machinary for the " WELFARE " of Scheduled Castes and Scheduled Tribes has been enshrined, it is felt necessary to give them a status in the study of " Some Aspects of Population Geography of Sangli District".

SCHEDULED CASTE :

In the Hindu Society several castes whose names vary in differant parts of the country have been associated with unclean occupations, social restrictions, poverty and exploition by the strong and advanced sections of the Hindus for centuries,[20] Sudras, Panchamas, Antyajas, Chandalas and a few other names figure frequently in several documents. The term ' Depressed classes ' was used freely for these low castes. In 1933 Mahatma Gandhiji coined the new term ' Harijans ' meaning ' Children of God '. Dr. B.R.Ambedkar demanded inter-alia a change of in their nomenclature. He proposed the words ' Protestant Hindus ' or ' Non-conformist Hindus '. Finally as recommended by the Simon Commission, the term ' Scheduled Caste ' was adopted by the Government[21].

The term ' Scheduled Caste ' has not been described or defined anywhere in the Constitution. Article 341 of the Constitution reads as follows :- The President of India has the power to issue the list of scheduled castes as has been published in the Scheduled Caste order of 1950 after consulation with the Governor of any State.

SANGLI DISTRICT

Taluka-wise Scheduled-Caste Population 1981

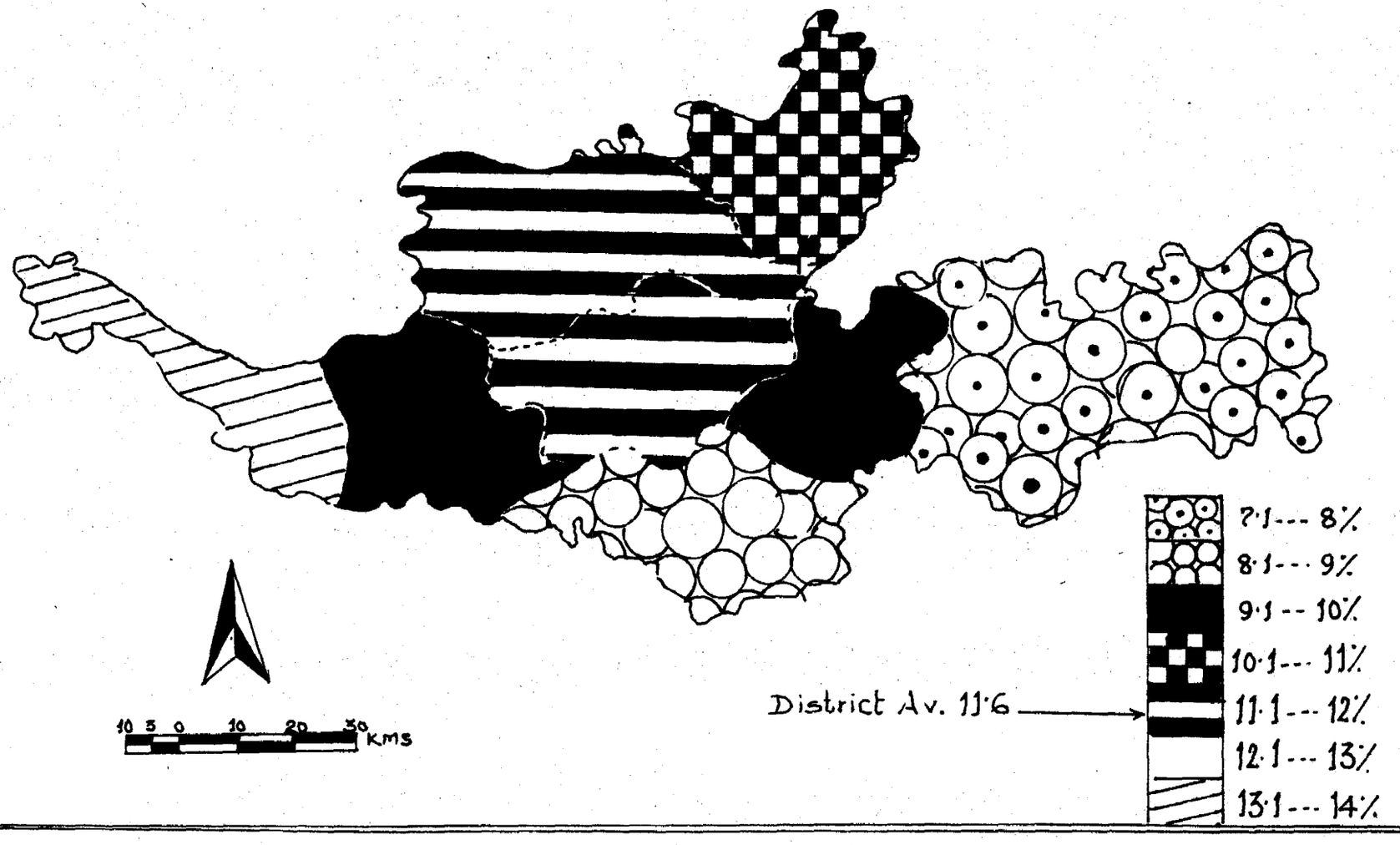


FIG 3·25

At the time of 1981 Census, Scheduled Caste population in Sangli district was 204, 352 including 104, 141 males and 100, 211 females. The constitute 11.46 % . This proportion is higher than the average of Maharashtra State (7.14 %). Of the total Scheduled Caste population in the district 159,664 (78.13 %) live the rural areas and 44,688 (21.87 %) in the urban areas.

TABLE 3.24

SANGLI DISTRICT

TAHSIL-WISE % OF SCHEDULED CASTE POPULATION

TO TOTAL POPULATION (1981)

S.No.	Tahsil	Total	Rural	Urban
1	2	3	4	5
1	Jat	13.36	13.36	-
2	Miraj	12.66	13.54	11.89
3	Kavathe Mahankal	11.94	11.94	-
4	Walwa	11.91	11.98	11.61
5	Atpadi	10.13	10.13	-
6	Tasgaon	9.93	9.97	8.16
7	Khanapur	9.18	8.98	10.78
8	Shirala	7.49	7.49	-
	Sangli District	11.16	11.11	11.34

Source : Calculated by the author.

Table No.3.24 and fig.No.3.25 show that in Jat tahsil the concentration of scheduled caste population is very high (13.36 %) and in Shirala tahsil it is very low (7.49 %) and in the remaining tahsils it is moderate.

The Scheduled castes order of 1950 was amended by the Scheduled castes and Scheduled Tribes order (Amendment) Act L x III 1950), Section 41 of the states Registration Act of 1966).

TABLE 3.25

CONCENTRATION OF SCHEDULED CASTE POPULATION IN VILLAGES (1981)

Taluka	No. S.C.Pop		0-5 %		6-10 %		11-15 %		16-20 %		21 % +	
	No.of Villa-ges	%of villa-ges	No.of Villa-ges	% of villa-ges	No.of Villa-ges	% of villa-ges	No.of Villa-ges	% of villa-ges	No.of Villa-ges	% of villa-ges	No.of Villa-ges	% of villages
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Miraj	4	6.15	8	12.31	20	30.77	16	24.62	7	10.77	10	15.38
2. Tasgaon	5	4.90	30	29.41	28	27.45	24	23.53	12	11.76	3	2.95
3. Khanapur	7	5.98	38	32.48	36	30.77	24	20.51	9	7.69	3	2.57
4. Atpadi	11	18.33	18	30.00	14	23.33	10	16.67	4	6.67	3	5.00
5. Jat	6	5.08	25	21.19	23	19.49	40	33.90	14	11.86	10	8.48
6. Kavathe Mahankal	4	7.55	10	18.87	14	26.42	14	26.42	7	13.21	4	7.54
7. Walwa	10	11.24	19	21.35	22	24.72	20	22.47	10	11.24	8	8.98
8 Shirala	41	39.42	29	27.88	15	14.42	14	13.46	2	1.93	3	2.89
District Average	88	12.43 %	177	25%	172	24.29 %	162	22.88 %	65	9.18 %	44	6.24

Source : Calculated by the author

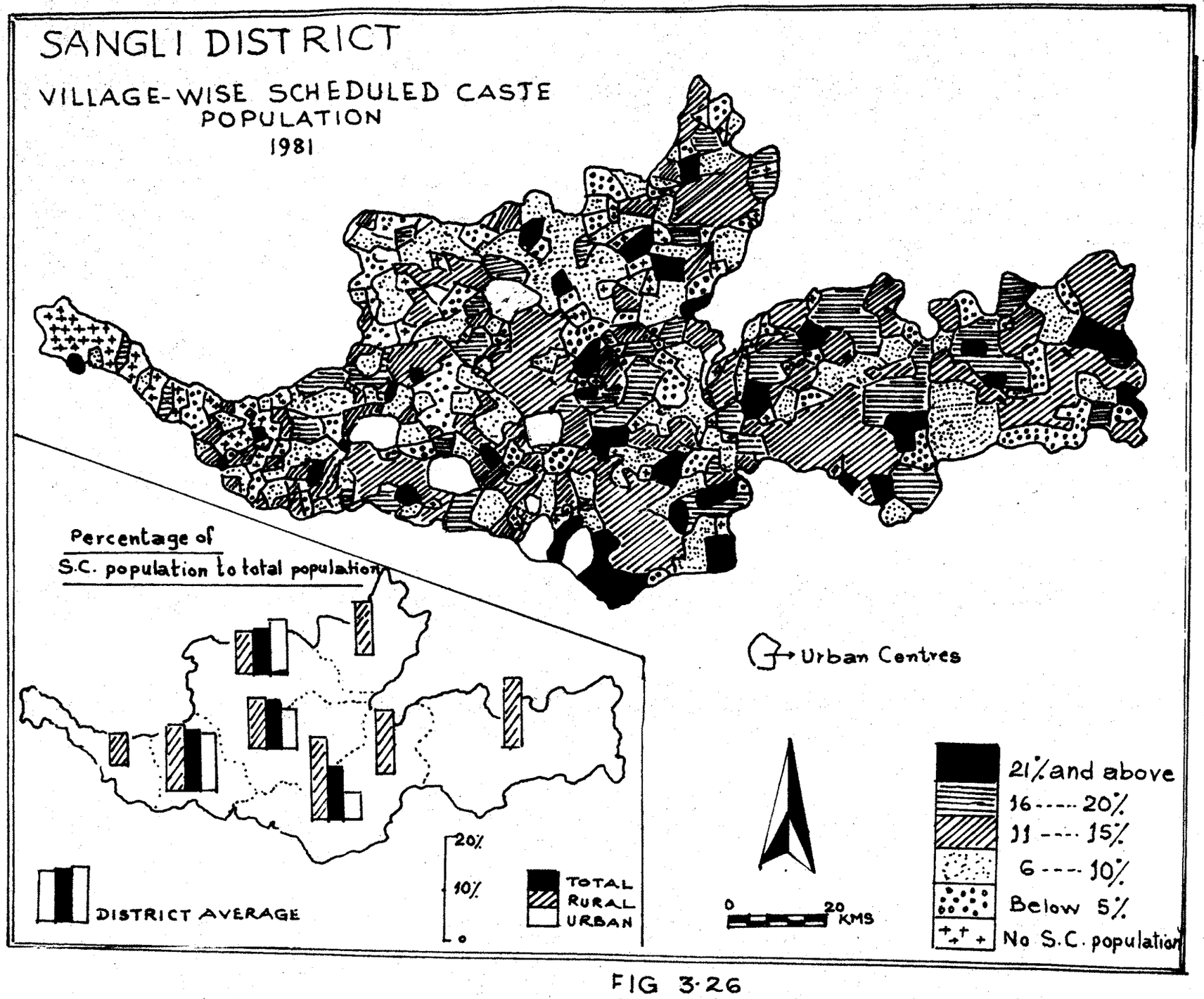

SANGLI DISTRICT
VILLAGE-WISE SCHEDULED CASTE POPULATION
1981
Percentage of
S.C. population to total population
Urban Centres
DISTRICT AVERAGE
20%
10%
0
TOTAL
RURAL
URBAN
0
20
KMS
21% and above
16 ---- 20%
11 ---- 15%
6 ---- 10%
Below 5%
No S.C. population

FIG 3·26

Table No.3.25 and fig.No.3.26 show the concentration of scheduled caste population in the villages of Sangli district. Table reveals that :-

There are 88 villages in the district having no scheduled caste population. Among the remainging 620 villages, the proportion of S.C. population to the total population is less than 5 % in 177 (25 %) villages; 6 - 10 % in 172 (24.29 %) villages; 11 to 15 % in 162 (22.88 %) villages; 16 to 20 % in 44 villages. Beradwadi village in Walwa tahsil has the highest S.C.population (86.71 %).

SCHEDULED TRIBES :

Ordinarily Scheduled Tribes or Tribes included in the Schedule mean all such tribal communities or sub-tribes or groups thereof, which are declared by the President of India and included in the Schedule under Article 342 (i) of the Indian Constitution.

Their population in Sangli district in 1981 was 15,535 (0.85 %) including 8,004 males and 7,531 females. This proportion (0.85 %) in very much lower than the State (9.19 %). Of the total Scheduled Tribe population in the district 13,199 (85 %) live in the rural areas and 2,336 (15 %) in the urban areas.

Table No.3.26 and fig.No.3.27 indicate that the concentration of Scheduled Tribe population is more in Jat (2.19%) and Miraj (1.06%) tahsils and is less (below 1 %) in remaining all tahsils.

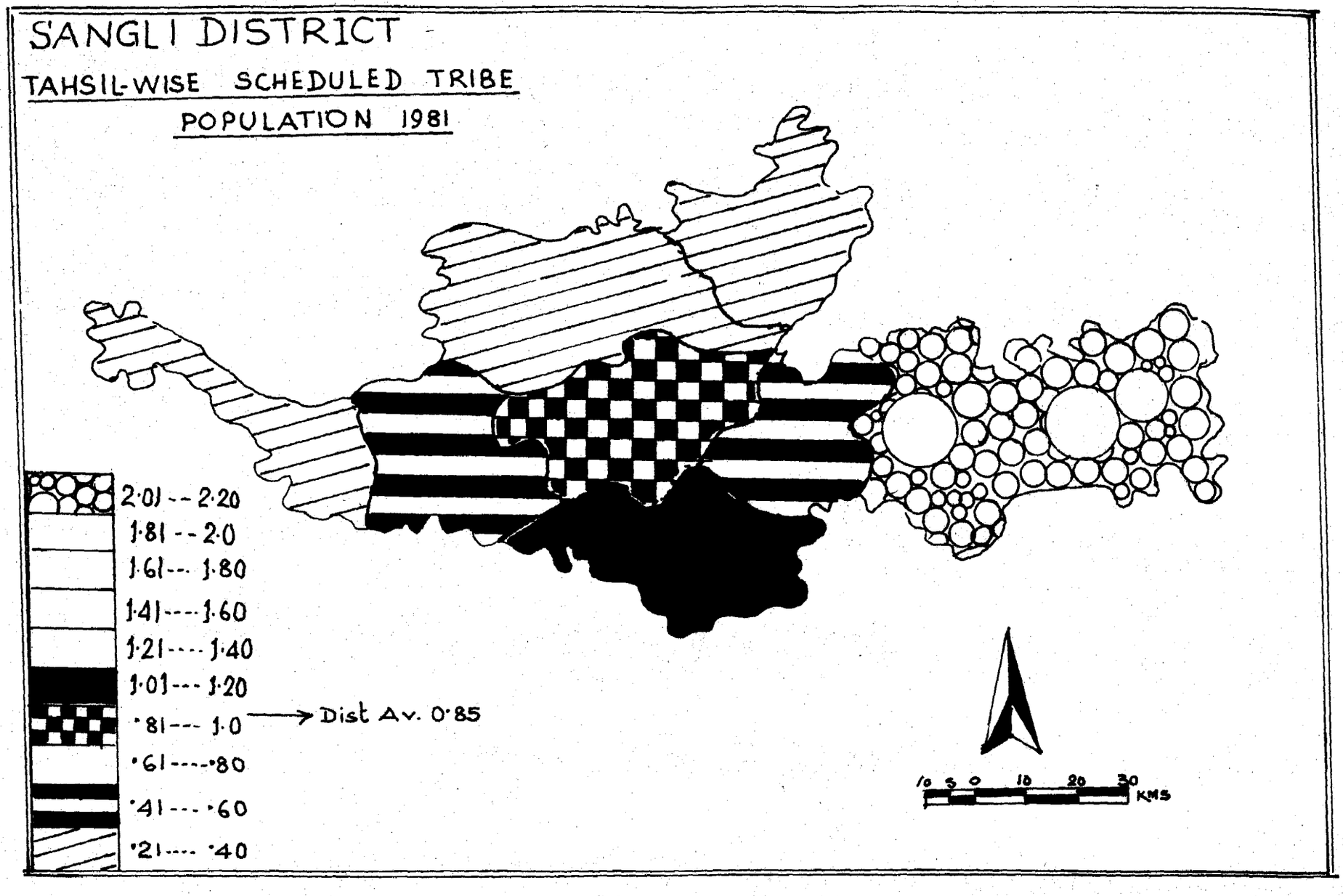

SANGLI DISTRICT
TAHSIL-WISE SCHEDULED TRIBE
POPULATION 1981
2·01 -- 2·20
1·81 -- 2·0
1·61 -- 1·80
1·41 --- 1·60
1·21 --- 1·40
1·01 --- 1·20
·81 --- 1·0
·61 ---·80
·41 --- ·60
·21 --- ·40
Dist Av. 0·85
10 5 0 10 20 30 KMS

FIG 3·27

TABLE-3.26

SANGLI DISTRICT

TAHSIL-WISE % OF SCHEDULED TRIBE POPULATION TO TOTAL POPULATION (1981)

S.No.	Tahsil	Total	Rural	Urban
1	2	3	4	5
1	Jat	2.19	2.19	-
2	Miraj	1.06	1.64	0.54
3	Tasgaon	0.87	0.90	0.73
4	Walwa	0.55	0.48	0.86
5	Kavathe Mahankal	0.41	0.41	-
6	Atpadi	0.35	0.35	-
7	Khanapur	0.33	0.33	0.33
8	Shirala	0.23	023	-

Source :- Calculated by the author.

TABLE 3.27

CONCENTRATION OF SCHEDULED TRIBE POPULATION IN VILLAGES (1981)

Tahsil	No. of Pop.		0-5 %		6-10 %		11-15 %		16-20 %		21 % +	
	No.of villa-ges	%.of villa ges	No.of villa-ges	%.of villa-ges	No.of villa-ges	%.of villa-ges	No.of villa-ges	%.of villa-ges	No.of villa-ges	%.pf villa-ges	No.of villa-ges	% of villa-ges
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Miraj	20	30.77	41	63.08	3	4.62	0	-	0	-	1	1.53
2. Tasgaon	54	52.94	47	46.08	0	-	0	-	0	-	1	0.98
3. Khanapur	84	71.79	33	28.21	0	-	0	-	0	-	0	-
4. Atpadi	48	80.00	12	20.00	0	-	0	-	0	-	0	-
5 Jat	52	44.07	55	46.61	5	4.24	4	3.39	2	1.69	0	-
6 Kavathe	30	71.70	15	28.30	0	-	0	-	0	-	0	- -
7 Walwa	56	62.92	33	37.08	0	-	0	-	0	-	0	-
8 Shirala	92	88.46	11	10.58	0	-	0	-	0	-	1	0.96
District Average	444	62.71 %	247	34.89 %	9	1.13 %	4	0.57 %	2	0.28 %	3	0.42 %

Source : Computed by the author

SANGLI DISTRICT

VILLAGE-WISE SCHEDULED TRIBE POPULATION 1981

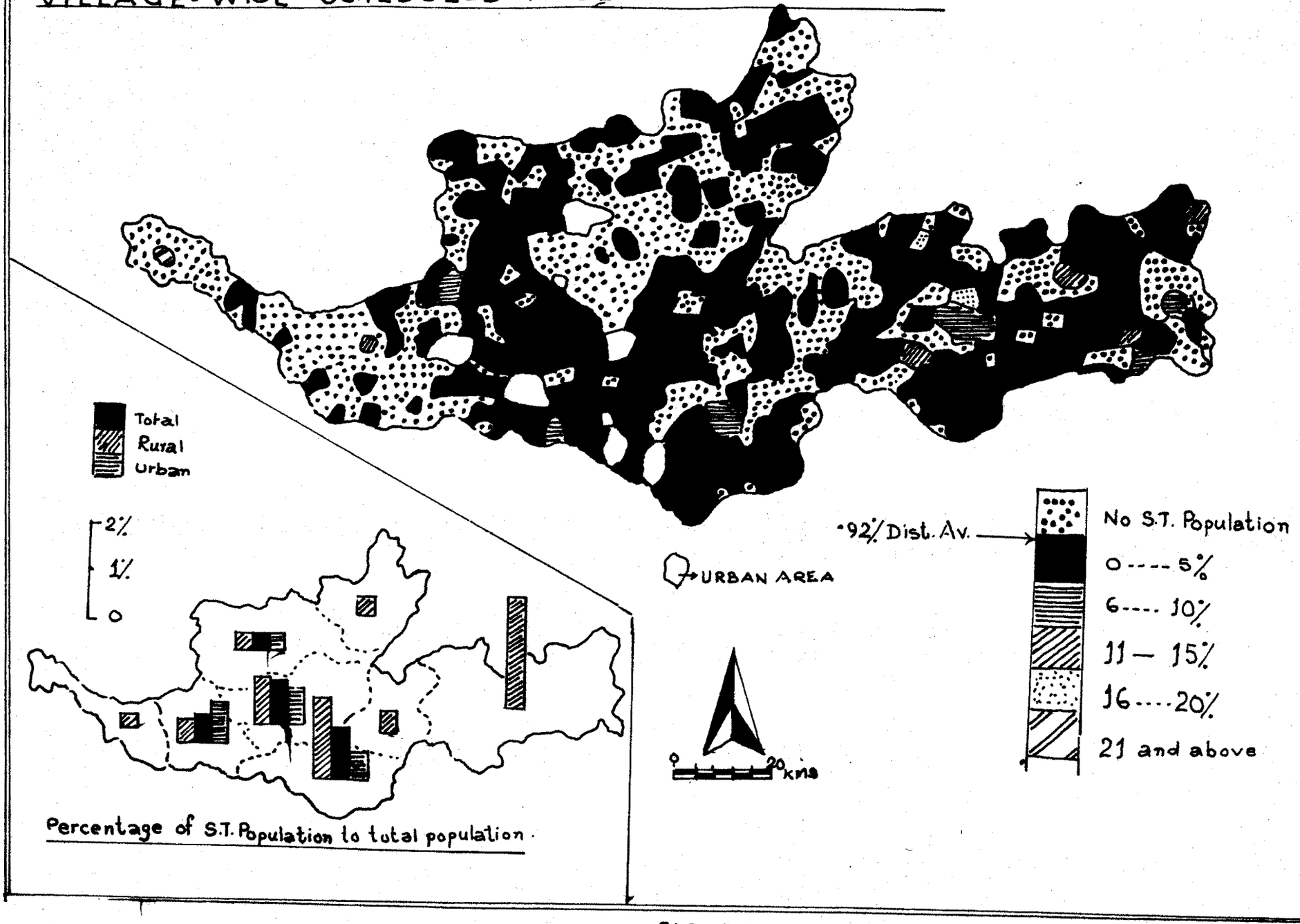


FIG 3·28

Table No.3.27 and fig.No.3.28 show the concentration of Scheduled Tribe Population in the villages of Sangli District.

At the village level the picture is more interesting, for example 444 villages (62.71 %) have no scheduled Tribe population; and among the remaining 264 (37.29 %) villages the proportion of Scheduled Tribe population to total population is much less. In 247 villages (34.89 %) it is less than 5 % ; in 12 villages it is 6 to 15 % ; only in 2 villages it is between 16 and 20 % and only in 3 villages it is more than 21 %.

Village Aloli (Shirala tahsil) is unique in the district in having the highest (28.91 %) percentage of Scheduled Tribe Population. Presumally this is due to the rugged nature of the area having low density of population.

The enumeration of Scheduled Caste and Scheduled Tribe population has been and is a complex task. Though their names are statutorily provided, yet it is not always easy to ascertain their identities. This poses a great challenge to Population Geographers who do not have ample background of Ethnic diversities of Indian Population.