

CHAPTER - II
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POST - INDEPENDENCE TRENDS OF URBANIZATION

AND PATTERNS OF URBAN GROWTH

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- Growth of population : Comparative analysis
- Growth of urban population
- Relative growth of urban population
- Gains and lossess of urban population
- Levels of urbanization
- Temporal changes in number and size of towns
1951-81.
- The trends of classwise share of urban population
- Mean size of urban centers
- Variations in urban population
- Degree of urbanization
- Growth rate of urban population
- Urban growth characteristics of districts

Although urbanization is a process of agglomeration of people and activities in geographic space, the measurement of urbanisation in India is mainly on the basis of demographic criteria (Ashish Bose). Urban areas differ from the rural in administrative, economic, social and physical aspects. The convergence and intensity of movement of people and goods further strengthen the basis of distinction between rural and urban. The causes of the disproportionate rural urban distribution of people may be linked up uneven process of urbanisation in both developed and developing countries. Urbanisation is geared with industrialization and proceeds in two ways, the enlargement of existing urban units and the multiplication of points of agglomeration.

The present chapter is an attempt to bring out the salient features of the trends of urbanisation and growth patterns of urban system of the state of Maharashtra since independence. With this objectives, the spatial and temporal trends of urbanisation have been studied. To identify growth pattern, the comparative trends of urban growth, stages of urbanization, spatial analysis of urban growth, degree of urbanisation, and the urban growth characteristics of districts have been analysed.

Growth of urban population of a region may be explained as absolute growth or percentage growth. In present study to identify trends of urbanisation the period of 1951 to 1981; post

independence is considered. For comparison the trends of urban growth at national level have also been considered.

Growth of population : Comparative analysis :

A comparative analysis of the growth of total and urban population of India and Maharashtra reveals that the general trends of population growth in India is speedily increasing since independence. India has total population of 361 millions in 1951; it has increased to 439 millions and 548 millions in 1961 and 1971 respectively. In 1981 total population became 685 millions. This clearly shows that 324 millions are net increased during the three decades. The growth rate of Indian total population shows 21.64 percent for the year 1951-61; 24.80 percent (61-71), and 25 percent for 1971-81. The growth for 1951-81 period indicates 89.76 percent. Comparatively Maharashtra's total population growth is increasing with faster rate. The state of Maharashtra has 32 millions population (1951) which has speedily increased to 39 millions (1961). 50 millions in 1971 and 62 millions in 1981. The decadeal growth rates are higher than national figures for the 1951-61 and 1961-71 decades (Table 2.1).

The year 1971-81 has witnessed the growth rate of 24.54 percent. The percentage growth rate of total population of Maharashtra for the year 1951-81 has 96.18 percent which is more than national growth rate for same period. This indicates that

in the study region the growth rate of total population is rapid than the national growth rate.

Table 2.1 : Growth of population (1951-81).

Region	1951-61	1961-71	1971-81	1951-81
<u>MAHARASHTRA</u>				
Total	23.60	27.45	24.54	96.18
Urban	21.32	40.75	39.99	71.92
<u>INDIA</u>				
Total	21.64	24.80	25.00	89.76
Urban	25.41	38.23	43.14	229.38

Growth of urban population :

From the demographic point of view urbanisation means the proportions of total population of the region. The growth trend of urban population of India indicates a gradual increased since independence. Indian urban population has rapidly increased since independence. In 1951 it was 62 millions, it has increased to 78 millions, and 109 million in 1961 and 1971 respectively. In the year 1981; 159 millions are the Indian urbanites. The decadal growth rates of Indian urban population are 25.41 percent (1951-61), 38.23 percent and 43.14 percent (1971-81). The net percentage increased of urban population is 229.38 percent during the period 1951-81.

The comparative analysis of study area indicates that the absolute growth of urban population during the period 1951 to 1981 is 12 millions i.e. 71.92 percent growth. The decade wise urban population growth rate in Maharashtra reveals the oscillating trend. For the year 1951-61 growth rate was 21.32 percent and 40.75 percent in 1961-71, however the growth rate has decreased by 0.76 percent in 1971-81. The rate of growth of urban population of Maharashtra has increased by 31.93% during the decade 1951-61 and 1971-81 (Table 2.1). The growth of total population, and urban population of India and Maharashtra has been indicated in Fig.2.1. Table 2.1 gives the details of the decadal growth rate of total and urban population of India and study region.

Relative growth of urban population :

The comparison of the trend of growth at national level is not sufficient to give the clearcut idea where the urbanisation is apparently increasing in the study area. Therefore, the study of pattern of regional urban growth in the context of national level growth is essential. In the present study Fuchi's Method (1962) of calculating relative gains and losses has been used. Methodology :- The modified mathematical equation of Shift Method is :

$$GP = YP - HP \quad \dots\dots\dots I$$

$$HP = XP \frac{Y}{X} \quad \dots\dots\dots II$$

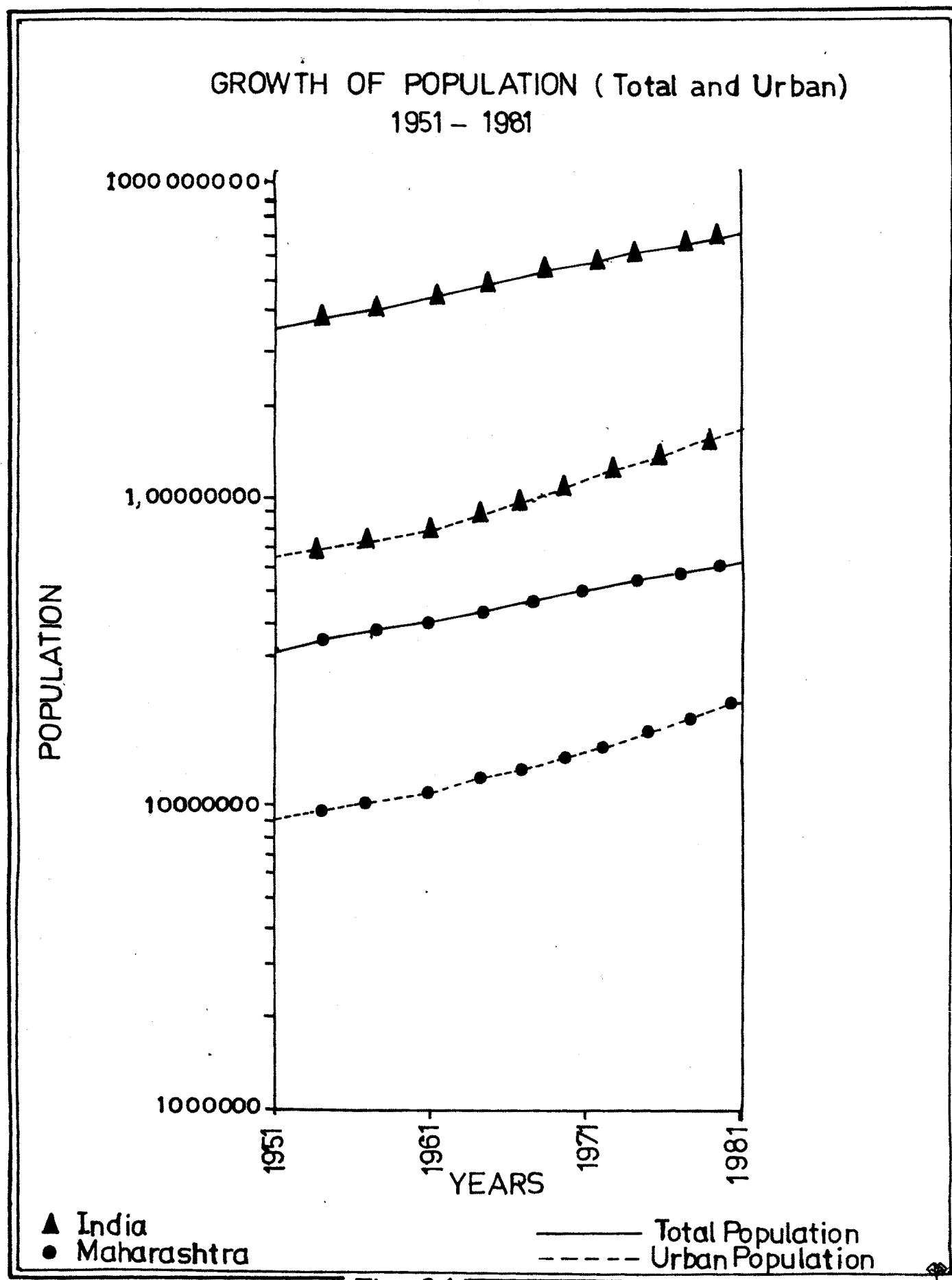


Fig. 2-1

Where, GP = Gain or loss

XP = Urban population of initial
year in the study area

YP = Urban population of final year
in the study area

X = Urban population of state/country
in the initial year

Y = Urban population of state or
country in the final year

HP = An abstract value respectively the
value of urban growth in the study
region that would exist if the region
has growth at national level. The
difference between actual value YP &
HP can be converted into percent gain
or loss by the following equation -

$$\frac{(YP - HP)}{YP \text{ or } HP} \times 100 \dots\dots\dots III$$

The larger of two terms (YP or HP) in the numerator is
always used in denominator. When YP is denominator then there
is gain and when HP is denominator then there is loss.

Gains and lossess of urban population :

With the application of above techniques gains and
losses of urban population in the study region have been calcul-
ated at national level. The details of decadewise gains and
losses and net gain or loss in urban population is shown in
Table 2.2 and the trends of gains and losses have been shown in
Fig.2.2.

Table 2.2 : Decadewise percent shift of urban population of the region at national level (1951-81).

Region	1951-61	1961-71	1971-81	1951-81
Maharashtra	Gain - Loss	Gain - Loss	Gain - Loss	Gain - Loss
	00.00-4.02	1.78-00.00	28.56-00.00	00.00-0.07

The growth of urban population of the state of Maharashtra when compared with national level it obviously indicates that there is loss of urban population during the first post independence decade (1951-61). The loss is - 4.02 percent. In the next decade there is gain of 1.78 percent at national level. A noteworthy gain of 28.56 percent has been witnessed by the decade 1971-81. The trend of gains and losses of urban population after independence shows that there is loss of urban population at the beginning, however in the successive of decades there is a considerable gain at the national level. The net gain or loss in urban population of study region analysed by considering the period of 1951-81. Where at national level it indicates 00.07 percent of loss.

Levels of urbanisation :

The levels of urbanisation and the urban growth of a region may be studied by the analysis of data of percentage of urban population to total population. The proportion of urban population

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SHIFT OF URBAN POPULATION AT NATIONAL
LEVEL 1951-1981

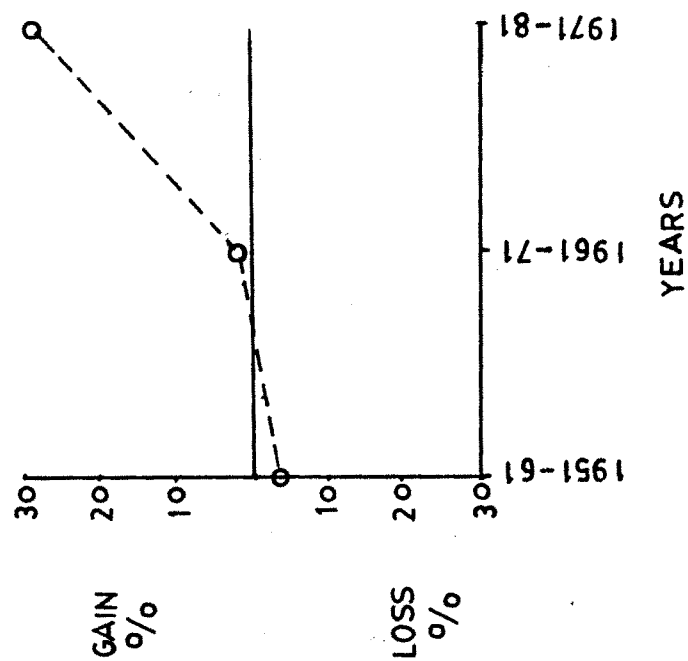


Fig 2:2

URBAN POPULATION SHARE 1951-81

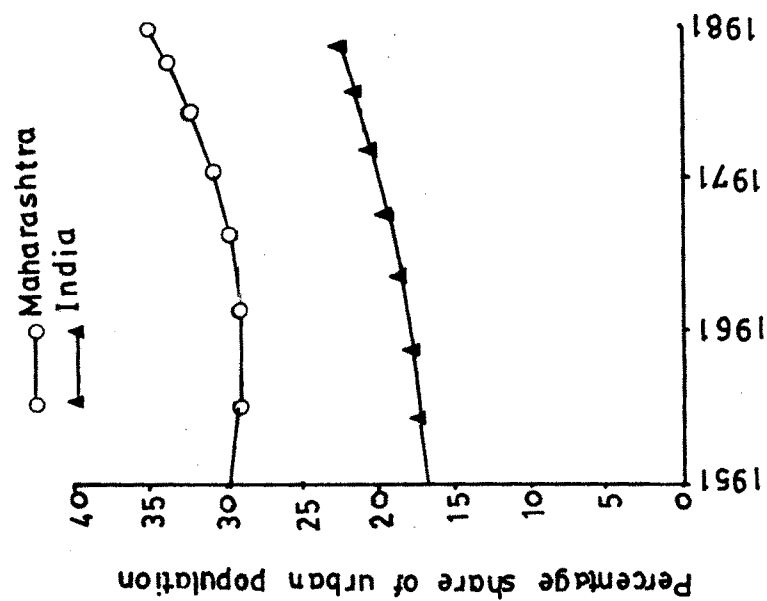


Fig 2:3

to the total population brings out salient features of the region's stages or levels of urbanisation. When the regional urban population is compared with national level percent of urban population to total population, it indicates that the percentage of urban population to total population for India was 17.29 percent in 1951; at the same time the percent of urban population in the region was 28.75 percent. In the next decade (1961) Maharashtra had 28.22% whereas India had 17.97 percent of urban population. In the year 1971 there was considerable increase (1.94 percent) in the percent of urban population during the same period. The comparative study of the levels of urbanization (degree of urbanisation) among the twenty federal states of India reveals that there is wide gap between them. Himachal Pradesh, the lowest level of urbanisation (7.72 percent) preceded by Tripura (10.98 percent) and Orissa (11.82 percent). The state of Maharashtra tops the list with highest level of urbanization (35.03 percent) among the federal states of India (1981). So far as percentage share to India's urban population is concerned Maharashtra also ranks first with the contribution of 14.06 percent in 1981. The national level of urbanisation is 23.31 percentage. Table 2.3, gives details of percent of urban population to total population for the state and country.

Table 2.3 : Decadewise percentage share of urban population.

Region	1951	1961	1971	1981
Maharashtra	28.75	28.22	31.16	35.03
India	17.29	17.97	19.91	23.31

Fig.2.3 visualise the trend of urbanisation particularly percent share of urban population to total population. Fig.2.3 shows that Maharashtra has a short fall of degree of urbanisation in 1961. Since 1961 there is steadily upward growth of urbanisation. The degree of urbanisation at Maharashtra level is 35.03% in 1981. A sharp rise in percent share of urban population after independence is due to the economic and industrial development in the region. Industrialization has undoubtedly accelerated the process of urbanisation by way of rapid growth of urban population. The growth is by two ways; by the rapid growth of older cities and due to the emergence of new urban units. Table 2.3 clear the fact that the state of Maharashtra has higher level of urbanisation than the country as a whole.

Temporal changes in number and size of towns 1951-81 :

The distribution of towns in different size ranges in relation to total urban population during the census years 1951-81 provides an overview of the degree of imbalance and a pattern of urban population distribution in different size of towns. A study of the distribution of the urban centres of different classes has reveals that, since independence the total number of towns in Maharashtra has decreased. In 1951 out of 383 towns, five towns where class I towns sharing 1.31 percent of total towns. Class V contain~~s~~s 196 towns sharing 51.17 percent to total towns. The class II, III, IV and VI have percentage share of 4.18, 10.80, 21.93 and 11.23 respectively. In the year 1961 there is a net

increase of 7 class I towns; of 8 class III towns and 5 class IV towns. The class II towns have decreased by one in number; class VI towns decreased by 28 towns. Thus there is declassification of 117 towns in year 1961, this is because the adoption of the new definition of towns by the census of India.

Table 2.4 : Distribution of towns by size class 1951-81.

Size of class	1 9 5 1		1 9 6 1		1 9 7 1		1 9 8 1	
	No.of town	% of town	No.of town	% of town	No.of town	% of town	No.of town	% of town
I over 100,000	5	1.31	12	4.51	17	5.88	29	9.45
II 50,000-100,000	16	4.18	15	5.64	25	8.65	25	8.14
III 20,000- 50,000	39	10.18	47	17.67	65	22.69	89	28.99
IV 10,000- 20,000	84	21.93	89	33.46	98	33.91	100	32.57
V 5,000- 10,000	196	51.17	88	33.08	70	24.22	48	15.64
VI below 5,000	43	11.23	15	5.64	14	4.85	16	5.21
All Classes	383	100.00	266	100.00	289	100.00	307	100.00

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Distribution of Towns by size and class
1951 ——— 1981

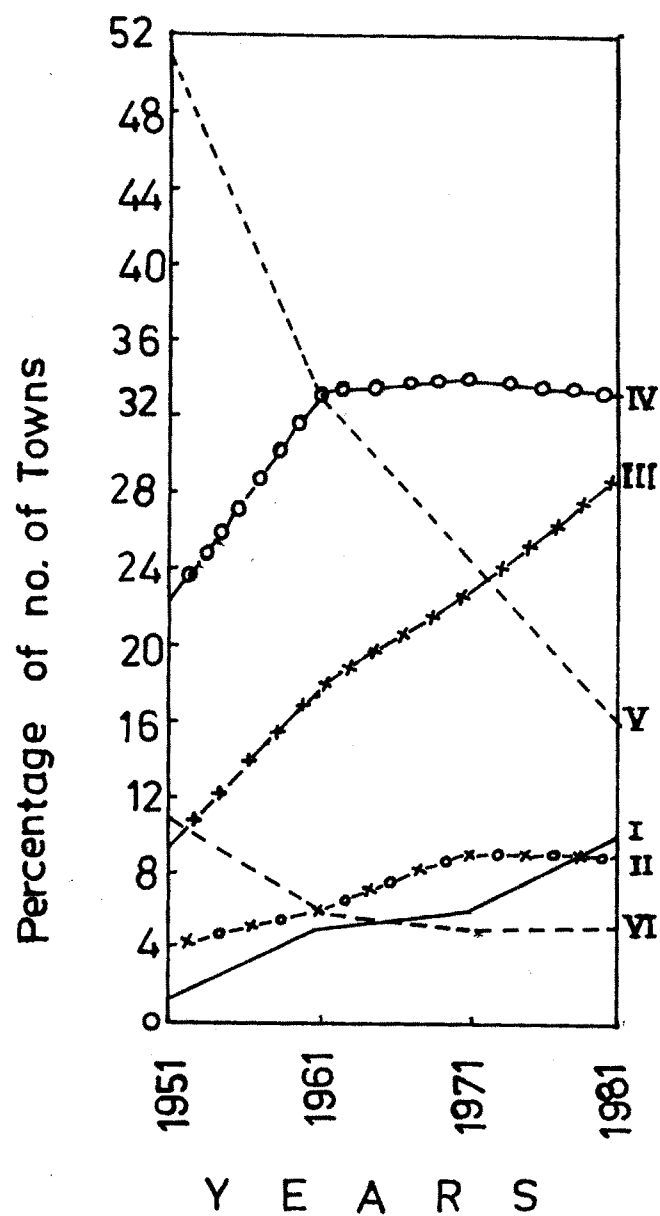


Fig. 2.4

According to 1971 census, there are 289 towns in Maharashtra of these 17 cities have a population of over one lakh persons. Class II towns are 25 and class III towns are 65 in number. The small towns are relatively larger in number e.g. 98 towns are class IV towns and 70 towns are class V towns (Fig. 2.4). The statistics regarding towns in Maharashtra shows that 9.45 percent of the towns are class I towns; 8.14 percent towns of II category. The absolute number of class II and class III towns are 89 and 100 respectively (Table 2.4).

Lower class of towns is relatively small in number sharing 5.21 percent of towns.

It is worthy to note that there is a decreased in the total number of towns in the state of Maharashtra since independence; however there is an increase of 12.8 million urban population during 1951-81.

The trend of classwise share of urban population :

The percent share of urban population in different class orders of towns in Maharashtra shows that class I towns have shared 45.47 percent of urban population and the remaining class II to VI towns shares the rest of the percentage (54.53) in 1951. In 1961 class I towns remain dominant sharing with 60.49 percent of state's urban population. However, the medium towns, class II, III, IV towns; remained stagnant, and the small towns have declined in the percentage share of urban population.

In 1971; out of the total urban population 64.75 percent is concentrated in class I cities. The class II and III togetherly shares a little bit 1/4 of urban population, whereas the class IV, V, VI towns shares 12.47 percent of population (Table 2.5). The 1981 census shows that out of the total urban population nearly 80 percent is concentrated in large size towns (over 50,000 population) medium size towns (10,000 - 50,000) shares 18.60 percent of population. The small size towns (below 10,000) have a very little (2.01%) share of urban population (Fig.2.5).

Table 2.5 : Percent share of urban population in different class order of towns 1951-81.

Class of towns	1951	1961	1971	1981
I	45.47	60.49	64.75	71.57
II	11.87	9.17	11.07	7.82
III	13.03	13.00	11.71	11.90
IV	12.80	11.17	8.78	6.70
V	15.05	6.65	3.39	1.76
VI	1.80	0.52	0.30	0.25
All classes	100.00	100.00	100.00	100.00

In general we may say that higher class towns have more share of urban population and hence more dominance as compared to the lower size class. The bigger cities are growing rapidly.

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Percentage share of urban population in-
different class order of towns 1951-1981

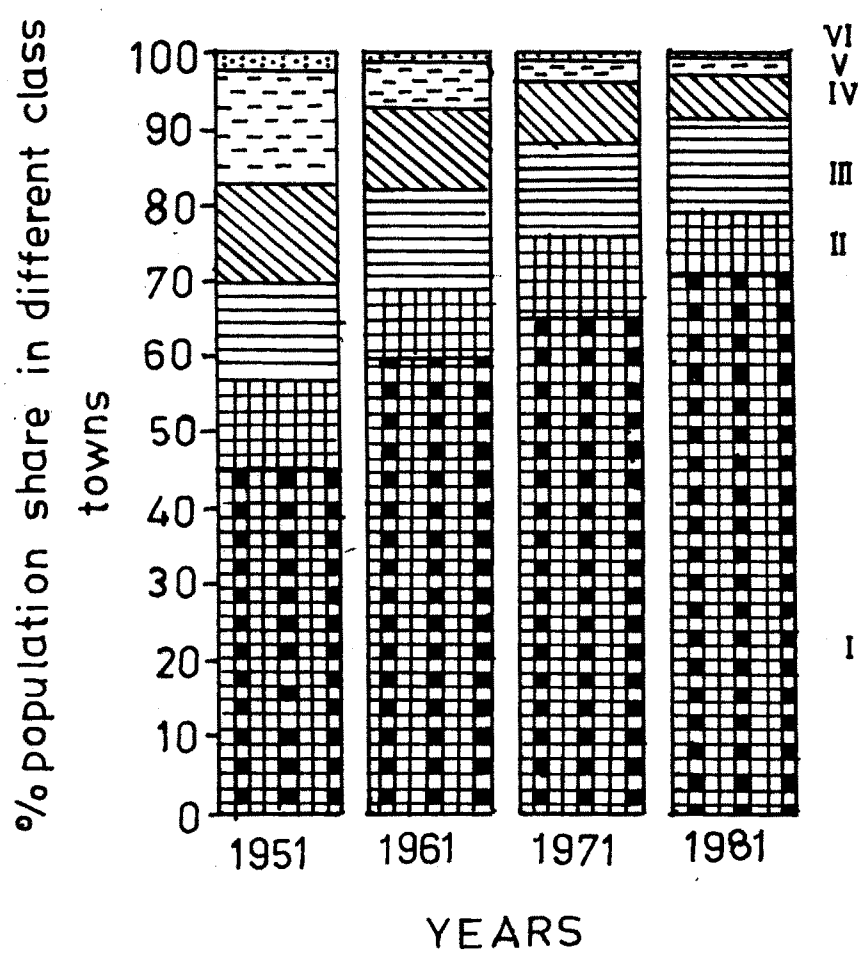


Fig 2-5

The main trend of an accelerated urbanisation process resulting in emergence of larger cities and the relative stagnation of small towns has already been discussed under the study of temporal change in number and size of towns.

Mean size of urban centers :

The study of mean size of urban centres in different class order during the period 1951-81 shows that the general trend of average size of towns shows the continuous growth in mean size of all towns. The mean size of individual class order towns analysis indicates that class I towns have decreased in their mean size considerably from 8.36 lakh in 1951 to 5.42 lakhs in 1981 (Fig.2.6). In respect of class II towns the steady growth in mean size is upto 1971. In 1981 the mean size of these towns has declined. Class III towns indicates the 30,000 as the mean size for the census years 1951 and 1961. The mean size has below the 30,000 for years 1971 and 1981. A very striking feature is the similar mean size of class IV towns. These towns have not experienced a much more fluctuations in the mean size (Table 2.6).

Generally, 14,000 population is mean size of class IV order urban centres. In respect of small towns in category of class V and VI towns the mean size seems similar for each decade.

Table 2.6 : Mean size town population.

Class	1 9 5 1	1 9 6 1	1 9 7 1	1 9 8 1
Class I	836,654.60	562,694.60	598,453.80	542,783.55
Class II	68,121.56	68,215.47	69,595.20	68,790.84
Class III	30,751.95	30,884.26	28,308.31	29,411.17
Class IV	14,019.69	14,005.60	14,070.32	14,730.29
Class V	7,065.95	7,172.80	7,597.83	8,077.60
Class VI	3,857.86	3,848.67	3,345.50	3,422.00
All Classes	24,023.53	41,964.52	54,364.05	71,640.37

Variations in urban population :

In the study area all the twenty six districts are more or less urbanised. The post-independence growth of urban population at regional level in Maharashtra broadly shows an accelerated trend. The urban population of the state was 9.2 million in the year 1951 and has increased upto 21.9 million in the year 1981. With a net increase of 12.7 million population. The net urban population increase is 139.03 percent. Table 2.7 highlights districtwise urban population for the year 1951 and 1981 with net increase and percentage increase.

From the analysis it has observed that Ratnagiri district has the lowest increase (33,875), whereas Gr.Bombay district is topping the list with net increase of 52.7 lakhs of urban population

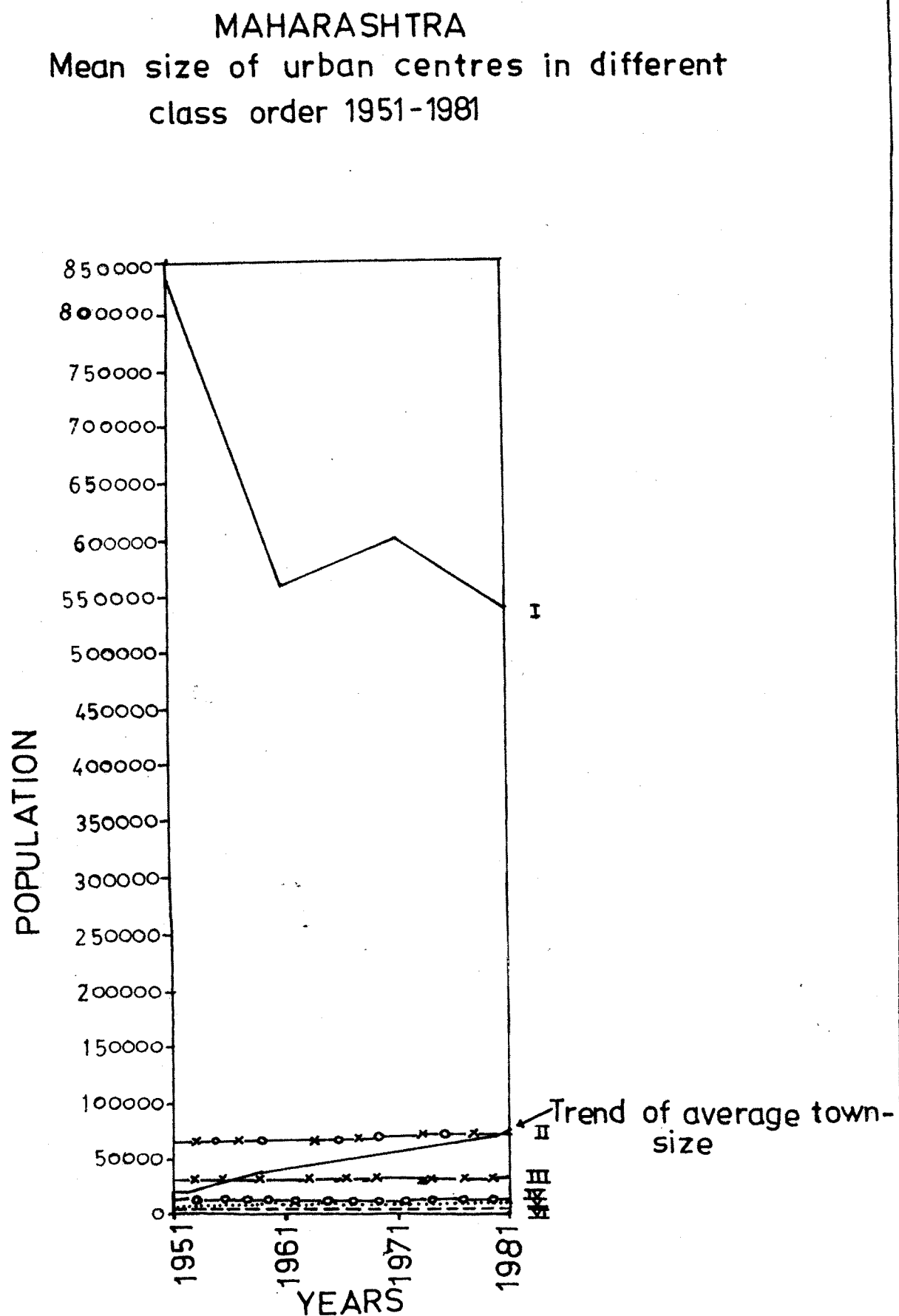


Fig 2.6

Table 2.7 : Districtwise net increase and percentage increase in urban population.

Sr. No.	State/ District	1951	1981	Net increase	% increase
.	Maharashtra	9,201,013	21,993,594	12,792,581	139.03
1.	Gr.Bombay	2,966,500	8,243,405	5,276,503	177.85
2.	Thane	378,500	1,486,220	1,107,720	292.66
3.	Raigarh	96,028	209,876	113,848	118.56
4.	Ratnagiri	137,042	170,917	33,875	24.72
5.	Nashik	369,950	928,145	558,195	150.88
6.	Dhulia	195,471	400,181	204,710	104.73
7.	Jalgaon	467,433	658,257	190,824	40.82
8.	A.Nagar	214,832	351,368	136,536	63.55
9.	Pune	834,723	1,971,082	1,136,359	136.14
10.	Satara	160,339	265,795	105,456	65.77
11.	Sangli	286,930	394,089	109,159	37.35
12.	Solapur	470,218	767,466	297,248	63.21
13.	Kolhapur	277,457	622,022	344,565	124.19
14.	Aurangabad	116,615	537,535	420,920	360.95
15.	Parbhani	154,322	342,822	188,500	122.15
16.	Bid	86,506	229,771	143,265	165.61
17.	Nanded	138,307	327,849	183,542	132.71
18.	Osmanabad	159,036	343,237	184,201	115.82
19.	Buldhana	143,597	278,986	135,389	94.28
20.	Akola	210,232	454,662	244,430	116.27
21.	Amaravati	282,939	544,499	261,560	92.44
22.	Yavatmal	111,732	262,135	150,403	134.61
23.	Wardha	125,852	231,510	105,658	83.95
24.	Nagpur	577,650	1,469,279	891,629	154.35
25.	Bhandara	91,965	240,754	148,789	161.79
26.	Chandrapur	96,435	261,735	165,300	171.41

during the past three decades. Two districts namely Thana and Pune have more 11 lakhs of urban population as a net increase since 1951. Nagpur ranks fourth in the net increase of nearly 9 lakhs of urban population. Four to six lakhs of population have been added in the districts of Nashik (5.5 lakhs), and Aurangabad (4.2 lakhs). Dhulia, Solapur, Akola, and Amaravati districts have net increase of urban population between 2 to 4 lakhs. The rest of fourteen districts have comparatively lower number of (below 2 lakh) net increase. Districtwise growth of urban population has been shown in Fig.2.7.

Degree of urbanization :

Degree of urbanisation is the proportion of urban population to total population of the region, it can be expressed in terms of percentage. Degree of urbanisation is the most important characteristic of urbanisation. The Maharashtra as a whole was having 28.75 percent of urbanisation in 1951. The degree of urbanisation of the state is steadily increasing. It was 31.16% in 1971 and has increased upto 35.03 percent in 1981.

The decadewise degree of urbanisation in the districts has been shown in Table 2.8. A cursory glance at the Table 2.8 indicates that for every decade the degree has been calculated and the districts have arranged in rank order. It is worthy to note that Ratnagiri is the district at the lowest order with exception in 1961. At the other end of the scale, Greater Bombay is ranking first with 99.08 percent (degree of urbanisation) in

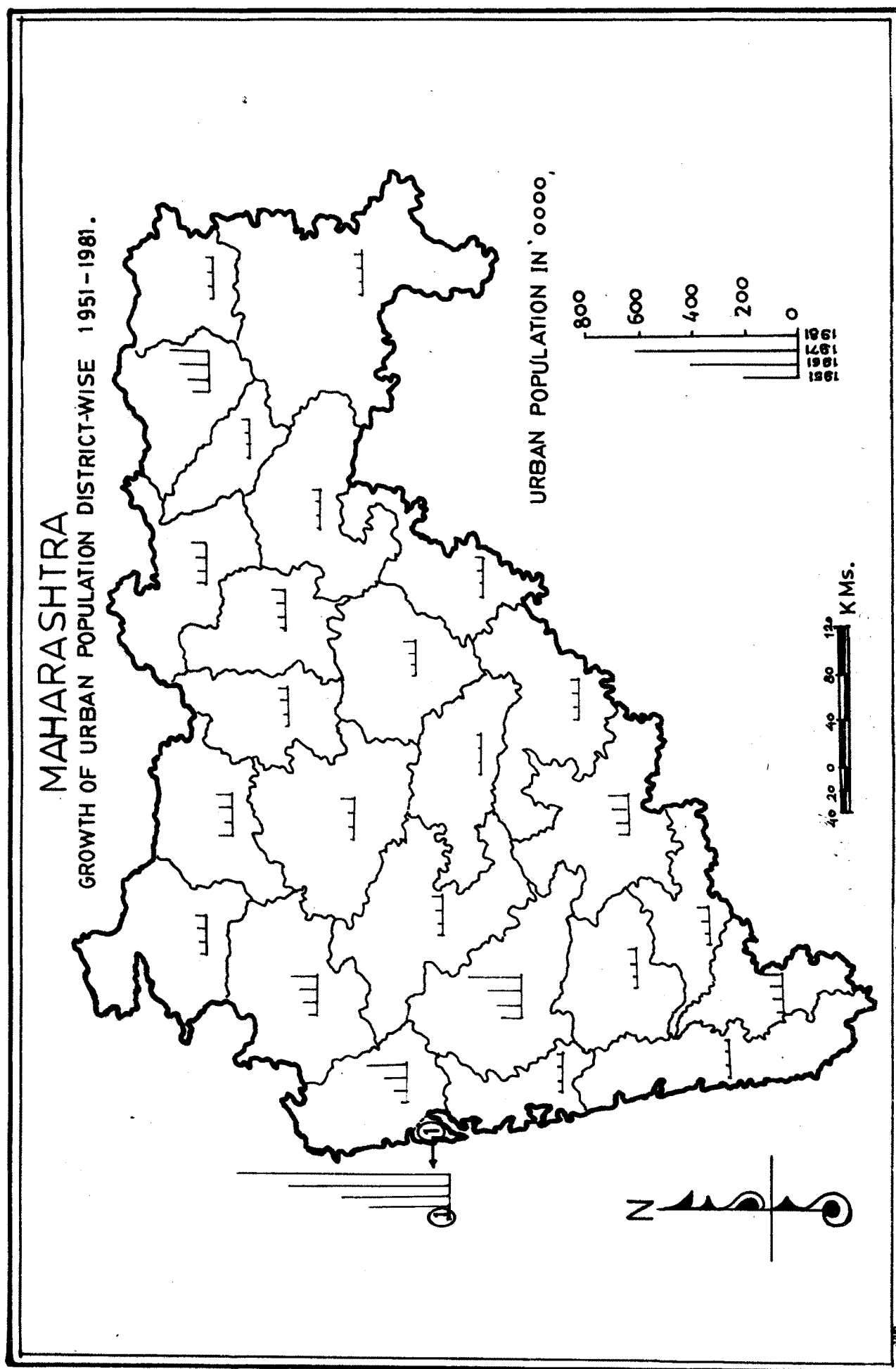


Fig 2.7

1951. Since 1961 Greater Bombay district with its 100.00 p.c. degree of urbanisation, maintain the same top ranking position in the rank order of degree of urbanisation. Nagpur and Pune districts have occupying the second and third rank for last three decades so far as the rank of degree of urbanisation is concerned (Fig.2.8). Degree of urbanisation at district level, with change in it and the level of urbanisation for the four decades have been represented in Fig.2.9.

Growth rate of urban population :

The growth rate of urban population of individual district in the study region gives the correct picture of the trends of urbanisation of districts influenced by their locational and regional setting. The rate of urban growth shows the speed at which the process of urbanisation taking place and it provides a good statistic for comparative analysis. The growth rate of urban population (r) has been calculated by the following formula.

$$r = \frac{\frac{(P2 - P1)}{t}}{\frac{(P2 + P1)}{2}} \times 100$$

where, P1 is the urban population size in the initial period of time.

P2 is the urban population at later period

t is the number of years or decades over the period.

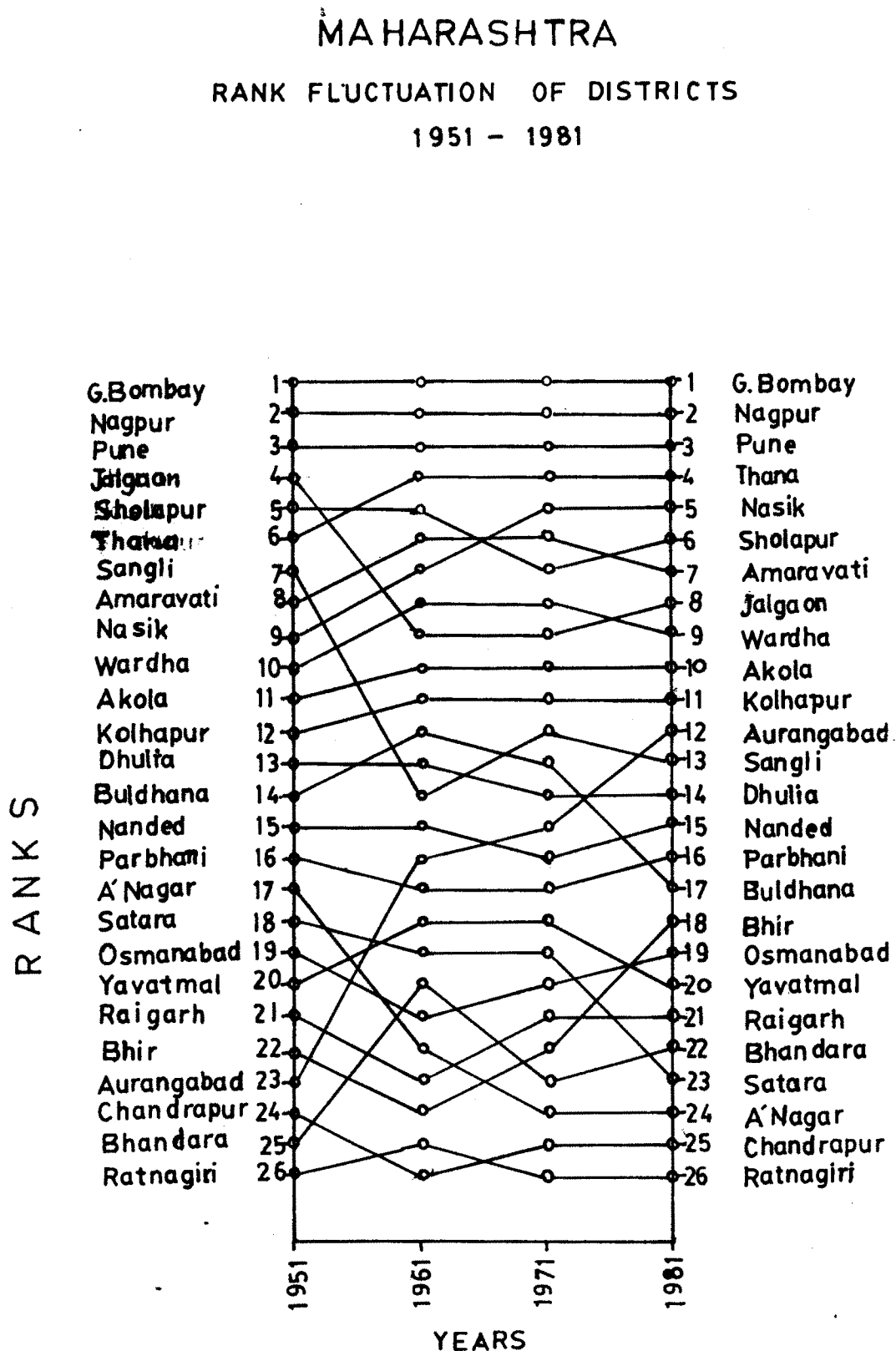


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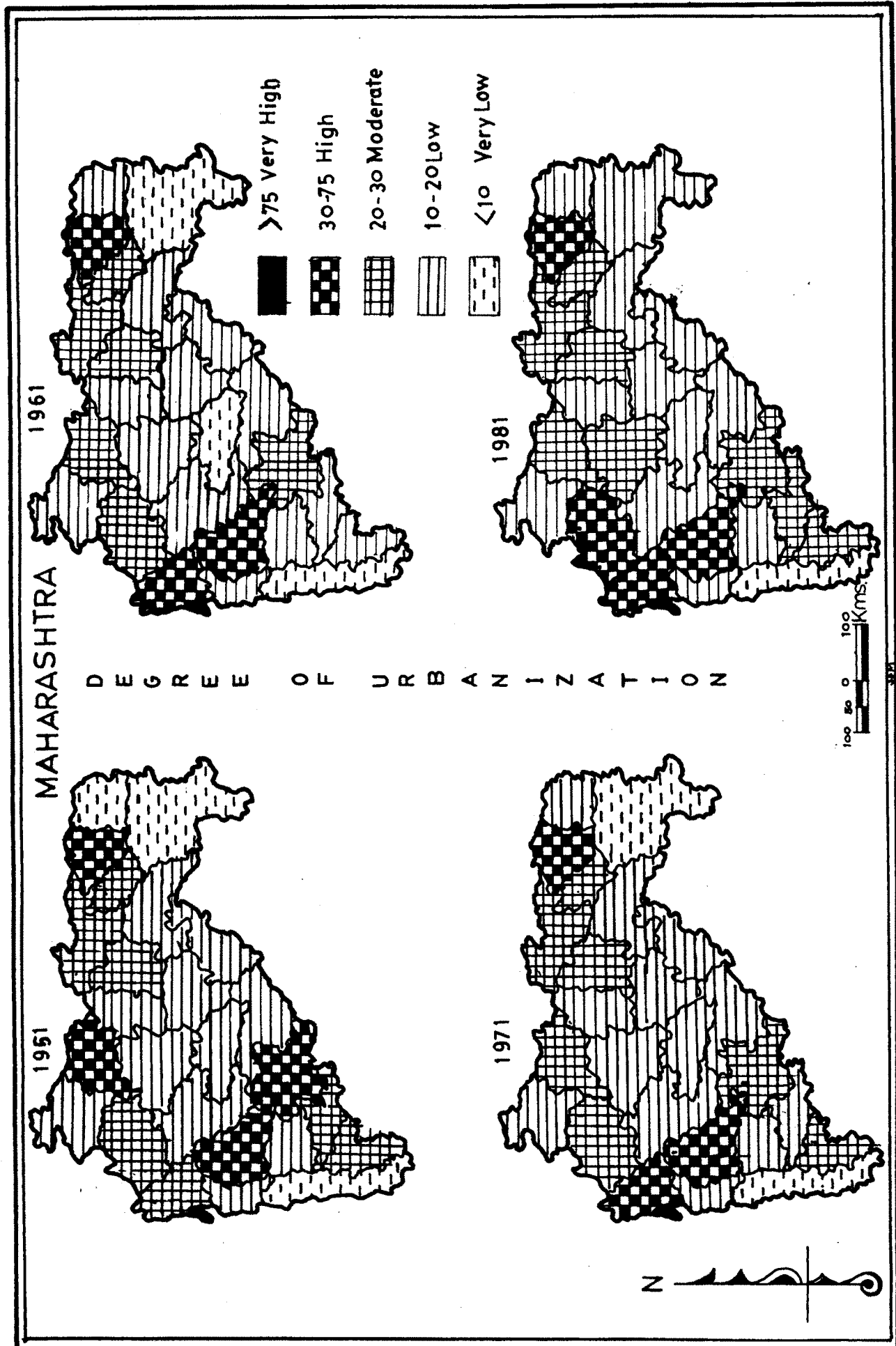


Fig2.9

Table 2.9 : Decadewise growth rate of urban population
(District level).

Sr. No.	District	1951-61	1961-71	1971-81
	Maharashtra	5.48	10.11	11.10
1.	Gr. Bombay	33.27	35.92	31.98
2.	Thana	27.53	49.38	57.03
3.	Raigarh	10.51	35.41	31.61
4.	Ratnagiri	7.59	12.27	2.21
5.	Nashik	24.86	35.28	31.08
6.	Dhulia	9.91	28.55	32.69
7.	Jalgaon	16.24	23.33	26.91
8.	A. Nagar	13.69	29.25	33.13
9.	Pune	11.85	34.35	38.86
10.	Satara	1.20	35.69	15.63
11.	Sangli	39.43	39.42	31.48
12.	Solapur	10.03	17.01	21.81
13.	Kolhapur	10.36	35.42	34.22
14.	Aurangabad	60.06	41.22	48.06
15.	Parbhani	7.70	36.82	34.50
16.	Bid	13.12	39.27	42.46
17.	Nanded	11.94	37.66	35.89
18.	Osmanabad	1.76	41.05	36.62
19.	Buldhana	19.96	23.35	22.84
20.	Akola	22.24	27.38	25.08
21.	Amaravati	12.97	27.44	24.73
22.	Yavatmal	21.41	33.34	29.90
23.	Wardha	17.52	24.09	19.12
24.	Nagpur	30.77	28.09	32.79
25.	Bhandara	38.82	27.94	28.60
26.	Chandrapur	0.80	5.44	31.77

(Gibb's -"Urban Research Methods") With the help of this formula the decadewise growth rate of 26 districts of state has been calculated. Table 2.9 shows the decadewise growth rate of individual district. It shows that Thana, Dhulia, Jalgaon, Pune, Ahmadnagar, Solapur, Bid and Chandrapur districts are having a continuous upward growth in urban population during the post-independence decades. The remaining districts have fluctuation in their growth rate. The growth rate for 1971-81 census year shows that Thana district has the highest growth rate of urban population (57.03 percent) whereas; Ratnagiri district has the lowest growth rate of urban population (2.21 percent). Aurangabad and Bid, districts have more than 40 percent growth rate and are comparatively urbanising littlebit faster than the rest of the districts.

Urban growth characteristics of districts :

For the study of comparative growth characteristics of the districts, the post-independence mean growth rate of individual district has been computed and their growth characteristics have been analysed. It is observed that in the study region there are three districts namely Aurangabad, Thana and Nagpur are very rapidly growing so far as urbanisation is concerned. They are having 49.78 percent, 44.65 pc., 40.55 pc., mean growth rate respectively (Fig. 2.10). Five districts are in the rapidly growing urbanisation category whose mean growth rate ranges in between 30 to 40 percent. There are thirteen districts with moderate urbanisation. Slow urbanisation is found in districts of Wardha, Satara, Solapur, and

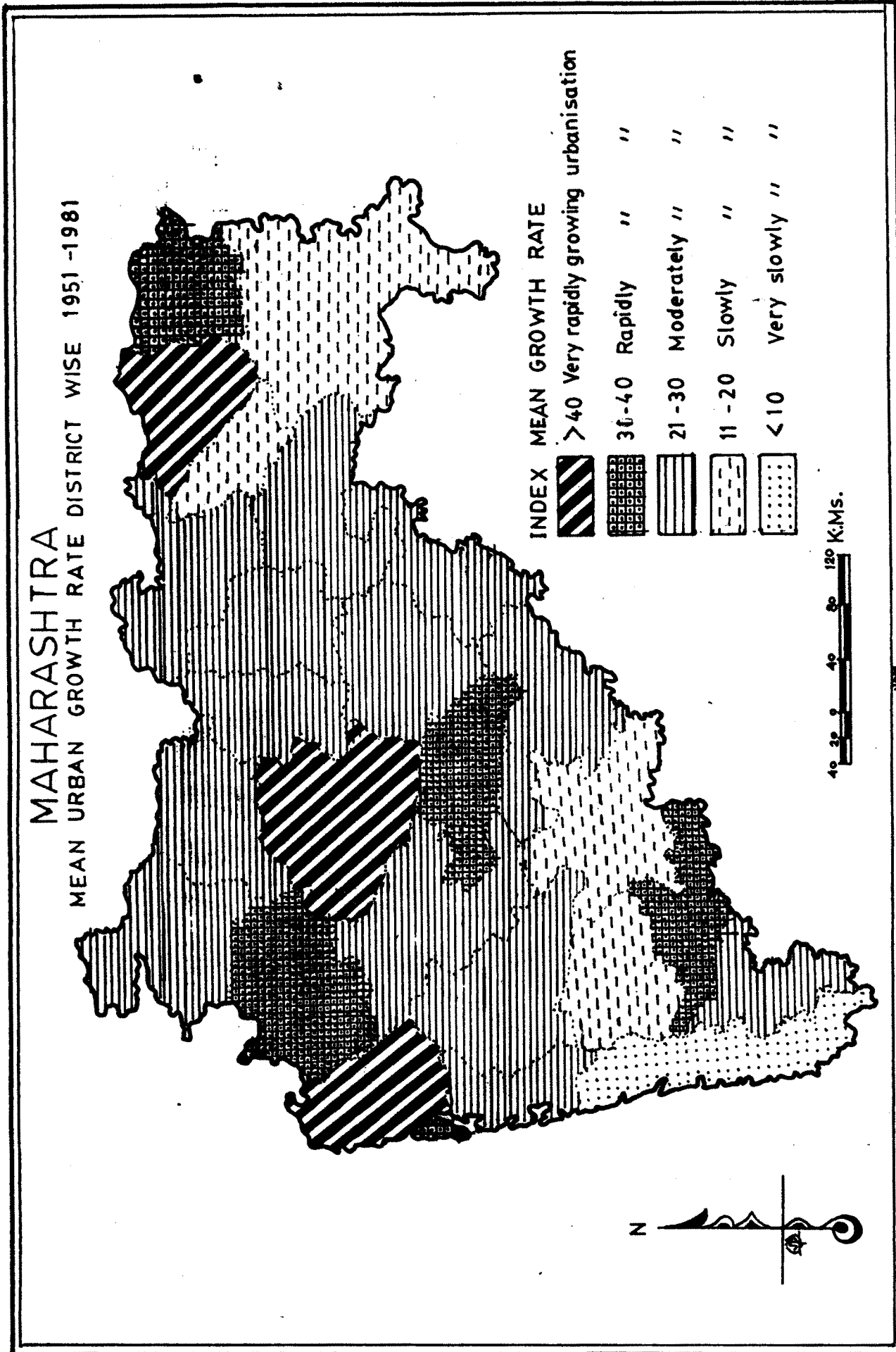


Fig 2-10

Table 2.10 : Districtwise mean growth rate 1951-81.

Rank	District	Mean growth rate
	Maharashtra	34.02
1	Aurangabad	49.78
2	Thana	44.65
3	Nagpur	40.55
4	Sangli	36.78
5	Gr. Bombay	33.72
6	Bhandhara	31.79
7	Bid	31.62
8	Nashik	30.41
9	Nanded	28.50
10	Poona	28.35
11	Yavatmal	28.22
12	Kolhapur	26.67
13	Parbhani	26.34
14	Osmanabad	26.14
15	Raigarh	25.84
16	A. Nagar	25.36
17	Akola	24.90
18	Dhulia	23.72
19	Jalgaon	22.16
20	Buldhana	22.05
21	Amaravati	21.71
22	Wardha	20.24
23	Satara	17.51
24	Solapur	16.28
25	Chandrapur	12.67
26	Ratnagiri	7.36

Chandrapur. Ratnagiri is a district where very low urbanisation is an experience since independence (Table 2.10).

The process of urbanisation and its growth pattern is influenced by various factors particularly two of them are very significant factors, rural to urban migration as well as additions of new settlements in urban category. In the present chapter the trends of urbanisation and patterns of urban growth have been analysed. The area under the study is a part of developing country, experiences the impact of historical, socio-economic and natural conditions on the growth of urbanisation. The region as a whole had shown much higher degree of urbanisation and experienced much faster rate of progress in urbanisation during 1971 and 1981 decades than the 1951 and 1961 decades in post-independence period. The degree of urbanisation which was 28.75 percent in 1951 has been increased upto 35.05 percent in 1981. Thus the region has experienced a net increase of 6.20 percent in degree of urbanisation during post-independence period. It is evident that the average size of urban centres accelerated a progressive upward trends.

Post independence mean growth rates of the districts of the state when considered it has observed that the districts namely Aurangabad, Thana and Nagpur are very rapidly growing in urbanisation, at the other end of scale very low urbanisation is an experience in the district of Ratnagiri.

Generally speaking larger urban centres, though few in number, accounted for higher proportion of the urban population

of the region. In 1981 there were 29 class I towns in Maharashtra which accommodated about 71.57 percent of the total urban population. The state of Maharashtra comprises three metropolitan cities viz. Bombay, Puna, Nagpur. Bombay ranking first not only in the state but in the whole country in several spheres. The spread and level of urbanisation in the state is however not uniform. Bombay which is primate city dominates in the urban statistics and there are considerable regional disparities in the levels of urbanization within the state.

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