

## CHAPTER--III

### TRENDS OF URBANIZATION AND PATTERNS OF URBAN GROWTH

- 3.1 Introduction.
- 3.2 Concept of Urbanization.
- 3.3 Process of urbanization.
  - 3.3.1 Components of Urbanization dynamics.
- 3.4 Growth and population.
- 3.5 Urban-Rural population ratios.
- 3.6 Growth of urban population.
- 3.7 Growth rate of urban population.
- 3.8 Growth trends of urban population.
- 3.9 Spatial patterns of urban growth.
  - 3.9.1 Urban growth at the district level.
  - 3.9.2 Urban growth at the tehsil level.
- 3.10 Progress of urbanization.
- 3.11 Rate of urbanization.
- 3.12 Changing pattern of urbanization.
  - 3.12.1 Variation in urbanization at the district level.
  - 3.12.2 Variation in urbanization at the tehsil level.
- 3.13 Changes in number of urban centres.
- 3.14 Changes in number of towns by size-class.
- 3.15 Distribution of urban population by size-class.
- 3.16 Mean-Size and urban centres.
- 3.17 Rank order fluctuation of urban centres.
- 3.18 The phenomenon of new towns.

Summary.

References.

## CHAPTER-III

### TRENDS OF URBANIZATION AND PATTERNS OF URBAN GROWTH.

#### 3.1 INTRODUCTION :-

Towns and cities have long been extremely important parts of the fabric of human settlement on the earth. Cities are the world's most crowded places. The population of the world is increasingly urbanised since the middle of the twentieth century. It has been caused mostly by the rapid increase in urban population and the sprawling urban growth especially, in the developing countries of the world. The tremendous growth of urbanization and diffusion of urbanism is one of the most conspicuous characteristic features of the modern world. The cocentration of population in human settlements larger than villages gives rise to urban centres, urbanization and the continuation of the process of urbanization.

Urbanization is a worldwide phenomenon which develops urban character of settlement in the process of time. A continuing increase in the number and size of towns and cities forms the focus on the developmental impulses in any regional study. Urbanization process clearly reflects the development stae of any region and thus it is characteristic feature of social and economical development throughout the world.

In this chapter, an attempt has been made to bring out the salient features of the trends in urbanization and patterns of urban growth in Western Maharashtra Plateau. With this

objective, an analysis is attempted of the spatial and temporal variation of various urban factors such as urban population, progress of urbanization, number of urban settlements and population of various classes of towns etc. at district and tahsil level. In the present study, to identify the trends of urbanization, the period of 1901 to 1981 is considered. The growth of urban population and trends of urbanization in the study region may be explained as absolute growth or per cent growth and for comparison, those have also been considered at State level.

### 3.2 CONCEPT OF URBANIZATION :-

Urban centres have always been considered the focal points of economic, cultural, administrative, and other activities of society. They have markedly diversified functions and services which promote the socio-economic development of a region. An increase in the number and size of towns and cities, forming the rapid urban growth, is the most important indicator of the development of the country and its region. Urbanization as a process of economic development is necessary for improving the social and economic conditions of the people. It also involves the influence of demographic, ethnic and social processes. Hence, urbanization is a complex and many sided process; and its study requires a comprehensive approach.

The term 'urbanization' is used by sociologists, economists, urban planners and geographers from different view points. Most of the studies relating to

urbanization have been made in social, economic and demographic context.

In general, there are three approaches of urbanization namely, the behavioural, the structural and the demographic. The behavioural concept is concerned with the experience of individuals over time and with patterns of behaviour.

Lynch (1963) while commenting on some aspects of rural-urban continuum in India has defined 'urban', 'urbanism' and 'urbanization' in the following words : 'Urban' is defined as that complex which makes up the characteristic mode of life in cities", and 'Urbanism' is the process of urbanism or the adoption of man to urban life, it is a process that is internal to the urban or city setting itself.: 'Urbanization', on the other hand, is "the development and extension of these (urban) factors."

The behavioural concept of urbanization is well known and usually related to Louis Wirth's paper "urbanism as way of life." In which he defines an urban centre as a relatively large, dense and permanent settlement of socially heterogeneous individuals.

Economically, urbanization relates to the movement of people out of agricultural communities into non-agricultural communities. This concept is based on the fact that there is a direct correlation between the phases of economic development and the urbanization.

Stamp (1961) denotes the term 'urbanization' as :

"Urbanization is characterised by movement of people from small communities concerned chiefly or solely with agriculture to other communities, generally larger, where activities are primarily centered in management, manufacturing trade and allied interest."

Alam and Pokshishevsky (1974) claim that the concept of urbanization implies changes in the nature of people's activities in the ratio between the population engaged in agricultural activities and rest of the population. Urbanization can be represented as a process leading to a spatial concentration of activities in a relatively few areas where urban efficiency is the highest.

The concept of urbanization in demographic sense postulates that urbanization is a process of population concentration.

Hauser (1965) defines : "Urbanization is a process of population concentration which occurs by increase in the number of points of concentration or agglomeration and by increase in the size of individual population concentrations or agglomerations. Assessment of the extent of urbanization implies the study of the number of urban places and their respective sizes, the absolute number of persons living in urban places and the proportion of the total population in urban places."

Davis (1962) states that urbanization usually is said to be taking place when the proportion of total population that is

residing in places defined as urban is rising or when urban population is growing at faster rate than the average rate of growth for a nation.

Bose (1973) while studying the process of urbanization in India, contends 'urbanization in demographic sense, is an increase in the proportion of the urban population(U) to the total population (T) over a period of time. As long as  $U/T$  increases there is urbanization."

It is quite evident from the above discussion that not a single but a combined sets of socio-economic and demographic factors are used in measuring the process of urbanization in a region.

Misra (1978) defines urbanization as "a process which reveals itself through temporal, spatial, and sectoral changes in the demographic, social, economic, technological and environmental aspects of life in a given society. These changes manifest themselves in the increasing concentration of population in human settlements larger than villages, in the increasing involvement of the people in secondary and tertiary production functions, and in the progressive adoption of certain social traits which are typical and traditional rural societies."

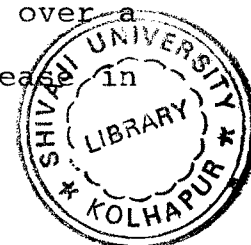
David Drakakis-Smith (1987) while examining the character of the urbanization process in the Third World states urbanization, and more particularly the urbanization process, thus refers to much more than simple population growth and

involves an analysis of the related economic, social and political transformations. However, the dimensions of urban population growth do form an essential background to the distribution and extent of the urbanization process.

Thus, urbanization is very complex phenomenon. It combines in itself several behavioural, structural and demographic components which require to employ all possible variables to explain the process of urbanization. Urbanization connotes changes in the demographic, economic and social structure of the society (Thakur, 1980). There is, however, no universally acceptable definition of urbanization. Sociologists, economists, and geographers differ considerably in this regard. Therefore, McGee remarks, "It is a balloon into which each social scientist blows his own meaning."

### 3.3 PROCESS OF URBANIZATION :-

In the demographic sense, urbanization refers to the proportion of a nation's population living in urban areas. While studying the process of urbanization, the increase in urban population is generally recognised and commonly taken as an important index of measuring the level of urbanization in any region. But urbanization should be distinguished from urban growth. Urban growth merely refers to an increase in total urban population, whereas urbanization refers to an increase in the percentage of urban population to total population. Urban growth may sometimes take place without urbanization. Thus, urbanization implies an increase in the urban population over a period of time at a rate higher than that of the increase in



the total population. The measurement of urbanization in India is mainly on the basis of demographic criteria required to be fulfilled by a particular settlement to become 'urban.'

Urbanization refers to the concentration of population at a centre. The process of urbanization takes place when the proportion of urban population is increasing. In cases where the rate of increase in the urban population, exceeds the regional rate of increase, especially by a considerable margin, the condition of urbanization exists. It might be said that urbanization is an accelerated form of urban growth (Northam, 1975). The process of urbanization indicates an increase in the proportion of urban population to the total population at a faster rate. So long as there is an increase in this proportion of urban population to total population, there is urbanization. It is argued that the increase or growth of urban population may be the result of natural growth, increase in the number of towns and migration of people from rural to urban areas.

### **3.3.1 COMPONENTS OF URBANIZATION DYNAMICS :-**

The term 'urbanization' itself is used to describe the urban phenomena as well as the urban processes and changes. The dynamics of urbanization is reflected in its various facets which show spatial and temporal changes. Thus, it might be useful to understand the forces and factors fueling the rapid growth of urbanization. By and large, the urban population growth is a result of three components :



- i) Natural increase due to excess births over deaths (i.e. Representative change).
- ii) Census classification of rural centres as new urban centres i.e. Reclassification of rural settlements into urban settlements.
- iii) Population increase due to net in migration i.e. excess and immigration over out migration.
- iv) Territorial change.

i) NATURAL INCREASE :-

Reproductive change means natural change in population due to excess of births over deaths. The proportion of urban population may increase when the rate of natural increase in population, i.e. the excess of births over deaths, in urban areas is higher than in rural areas. But it has been found that in many countries, that the rate of natural increase in population in the urban areas is lower than in the rural areas due to the better socio-economic conditions of the city dwellers. A number of factors tend to keep urban fertility at a comparatively lower level. Natural increase is not an important factor for the growth of urban population. Actually, the natural growth of urban population is only partially responsible for the rapid growth of urbanization and it pushes a little to urbanization. Hence, there can be very little urbanization from vital process of reproductive change alone.

ii) RECLASSIFICATION OR NEW TOWNS :-

Urbanization also increases due to reclassification of rural settlements into urban settlements. The upgrading of the

previously rural settlements into urban settlements when they fulfil the required conditions to make themselves eligible to receive urban status, may be a factor in the growth of urbanization. An increase in the number of towns either by origin of new towns or by rural urbanization supports the process of urbanization at some extent. But the total urban population gained from redefinition or re-classification of rural settlements as urban centres and inclusion of their population in total urban population forms segment of the total gain to the urban population.

iii) NET IMMIGRATION :-

Urbanization and migration have been closely inter-related processes. The most important source of urban growth has been the migration of rural population to urban centres. Migration is a strong factor which constitutes the very foundation of the process of urbanization. It is recognised as the chief mechanism by which urban centres continue to grow. Generally, urban centres grow partly by natural growth and mostly by migration. Therefore, rural to urban migration is the moving force behind the progress of urbanization.

The most important way in which the process of urbanization may take place is by a shift of population from rural to urban areas. The real change in urban growth character is thus, due to the net in migration of rural population. The rural-urban migration is by far the major component of urbanization and is the chief mechanism by which all of the

world's great urbanization trends have been accomplished (Reddy,1970). The more rapid is the rate of urbanization, the greater shall be the role of rural to urban migration in the growth of the urban centres. Many advanced and developing countries have become predominantly urban though the great shift of people towards towns from the rural population.

Similarly, many third world countries have experienced the urban explosion. Migration is responsible to a considerable extent, for this surge in urban population (Cherunilam,1984). In India, the process of urbanization is taking place with the migration of people from rural to urban area in search of employment and it is also taking place due to continuous change in life style of people with its attendant values, attitudes and behaviours.

The causes of migration may also be discussed in terms of 'push' and 'pull' factors. Rural poverty and unemployment push people to urban areas while availability of socio-economic services, civic facilities, wages and better living pull the population to migrate in the towns and cities. But the causal relationship underlying rural-urban migration is quite complicated and can not be completely explained by the rural push factors (Sovani,1966).

The role of rural-urban migration in urban growth as compared to the role of natural increase in urban population is considered to be very significant. The fact that rural-urban migration induces not only rapid urban growth but also differential rate of growth in towns of various classes. The

drift of rural migrants is directed more towards cities and bigger towns than smaller ones because of increasing concentration of economic activities in and around the cities.

#### ROLE OF INDUSTRIALIZATION :-

Industrialization is, perhaps, the most important element to be considered in the process of urbanization. The role of industrialization involves different aspects. In the process of industrialization and urbanization, rural to urban migration has been overemphasised. Industrialization is an adjunct to urbanization process by absorbing a large number of the rural migrants, who are pushed into urban areas by rural poverty and unemployment. Big industries are generally established in and around the urban places which attract so many people to work in. As a result, the rural population tends to concentrate in urban areas which promote urbanization. On the other hand, industrialization seeks to expand secondary and tertiary activities which in turn, may promote further urbanization in other areas.

There is a very close and positive correlation between industrialization and urbanization. In developed countries of the West, industrialization was the mainspring of urbanization in past and has been effectively reinforced by modernization. It is evident that urbanization in those countries has been largely promoted in modern times by industrialization and the resultant development of trade and commerce. In developing countries of the Third World, in general and India in particular, where urbanization does not keep pace with the rate of

industrialization. But this does not mean that the role of industrialization in urbanization is not important.

A healthy feature of Indian urbanization during last two decades is the growth of industrial centres. The major impetus to urban growth has undoubtedly been the expansion and diversification of industry and a strong industrial base of the largest cities. Findings of various empirical investigations have clearly shown that industrialization is an adjunct to urbanization process in India (Mandal, 1982).

A brief account of components of urban dynamics explains that urbanization is the process by which villages turn into towns and towns into cities. It may be defined as to the tendency of concentration of people in towns and cities as a result of their large scale movement from rural to urban areas. The impact of migration and industrialization on urbanization can be treated from the early phase of urbanization. More and more people are leaving the countryside to live in cities. The increase in the size of cities with the increase in the proportion of people living in them is called urbanization.

Urbanization is a continuous and complex process. It connotes changes in the demographic, economic and social structure of the society. The urbanization process thus, relates to concentration of people engaged in non-agricultural occupations and concentration of non-agricultural landuses in a specialised area. A net rural to urban migration is fundamentally an important component of both urban growth and the dynamics of urbanization.

### 3.4 GROWTH OF POPULATION :-

According to the 1981 census, the population of Western Maharashtra Plateau is 19,974,020. This forms over 31 per cent of the total population of the State. Population of the study area has increased by 3.17 times since the beginning of the present century and if the present rate of growth continues, the region will double its present population by the turn of this century (Fig.3.1).

Western Maharashtra Plateau has been experiencing a continuous increase in population since 1901 except in 1921 (Table 3.1).

TABLE 3.1  
SIZE AND GROWTH OF POPULATION IN WESTERN  
MAHARASHTRA PLATEAU, 1901-1981.

Year	Total Population	Decade Variation	Percentage Decade Variation.
1901	6,301,478	---	---
1911	6,536,999	+235,521	+3.74
1921	6,099,581	-437,418	+ 6.69
1931	7,241,657	+1142,076	+18.72
1941	8,314,597	+1,072,940	+14.82
1951	10,345,384	+2,030,787	+24.42
1961	12,933,454	+2,588,070	+25.02
1971	16,284,128	+3,350,674	+25.91
1981	19,974,020	+3,689,892	+22.66

Source : Census of India (1981), Series 12, Maharashtra, Part-II-A  
'General Population Tables.'

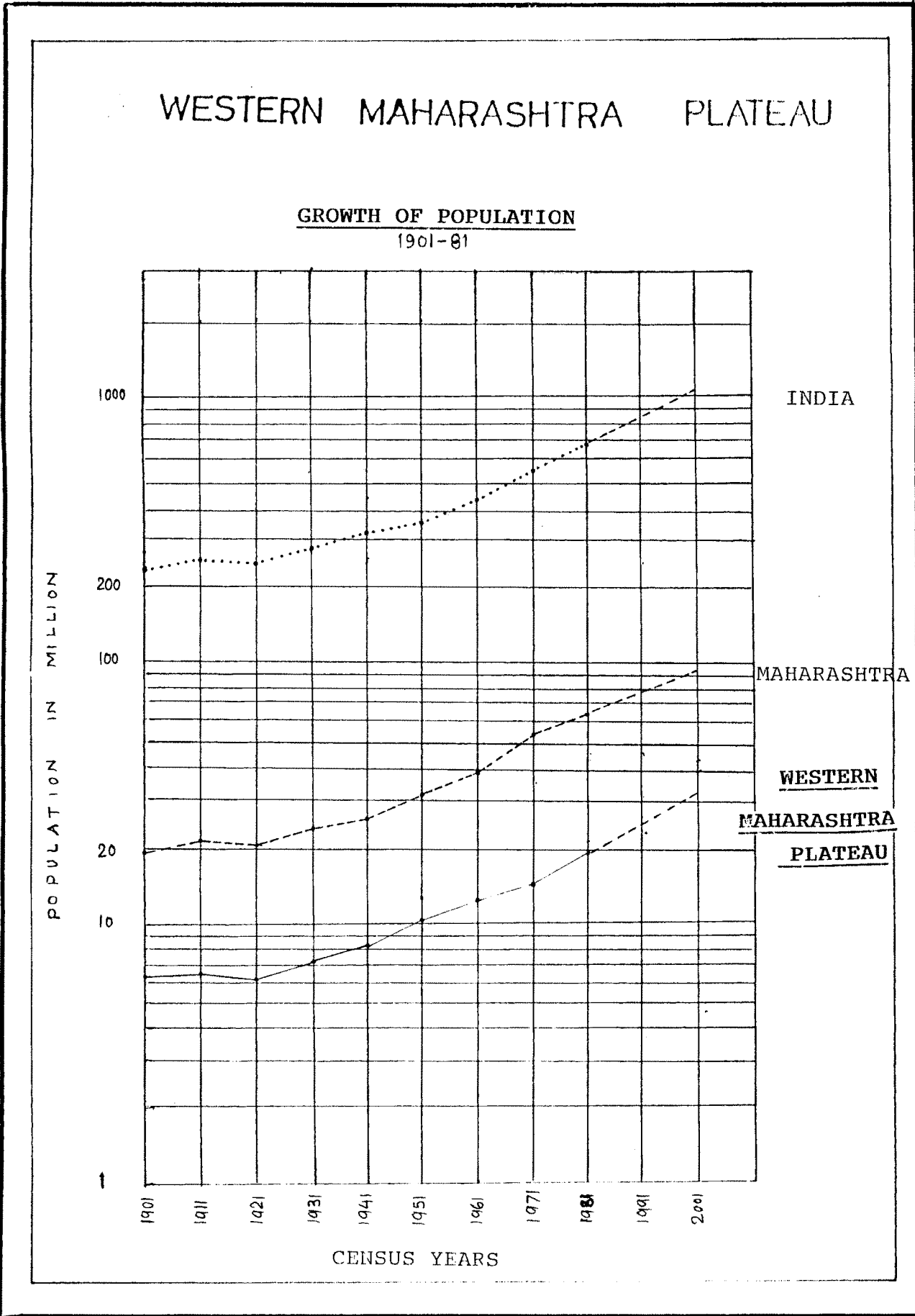


FIG.3. 1

From the perusal of Table 3.1, two distinct phases of population growth can be identified i.e. the period of mild growth from 1901 to 1941 and the period of accelerated growth after 1951. The population of the study region has increased by 216.97 per cent during the eighty years period. The growth rate from 1901 to 1941 lingered around 1 per cent per annum and it showed a decline in the second decade of the present century. A decline in the population of the region during this decade seems to have resulted from the commulative effect of the famine and the plague epidemic.

The region has registered striking growth since 1951. There has been a progressive increase from 2.4 per cent per annum for 1941-51 to 2.6 per cent per annum for 1961-71. The annual growth rate is brought down to 2.3 per cent from 2.6 per cent in the previous decade. The growth trends of the population show a quick upward trend, rising annually at a rate of over 2 per cent. It is perhaps caused by the natural increase resulting from a considerable decrease in death rate and a phenomena of migration. A critical analysis of overall growth trend reveals that the study region experienced the increase in population from 64.17 per cent during the decades 1901-51 (i.e. 50 years) to 93.07 per cent during 1951-81; accounting for the 1.45 time gain during the last three decades.

An analysis of decadal variation of population during 1901-81 shows that the variation is not uniform throughout the region. The study region has experienced much regional variation in population growth depending on the fertility of soils, urbanization, industrialization, accessibility and



out or in migration.

The districtwise growth data for 1971-81 reveal certain regional patterns in population growth. Those districts which are relatively more urbanized and industrially developed, such as Pune and Nashik show faster growth of population i.e. over 25 per cent decennial growth in population.' While the districts with sound agriculture base, better irrigation facilities and developed network of transport and communication; like the districts of Kolhapur, Ahmadnagar and part of Dhule and Jalgaon show a moderate growth rates which are slightly above the region average of 22.66 per cent decennial growth in population. Contrarily, districts like Solapur, Satara and Sangli suffering from frequent droughts and equally from out-migration, they record a lower population growth i.e. below 20 per cent decadal increase in population.

A comparative analysis of the growth of total population of India, Maharashtra State and Western Maharashtra Plateau reveals that the general trend of population growth was normal upto 1941. After 1941, the trend of general population growth has accelerated considerably. But in case of the study region, the trend of growth is slow as compared to the growth rate of Maharashtra State. During the decade 1911-21, there was a decline in the population of both the State and the study region and the rates of decline were 2.91 per cent and 6.69 per cent respectively.

### 3.5 URBAN-RURAL POPULATION RATIOS :-

A very large proportion of Western Maharashtra Plateau's

population lives in rural areas. There are as many as 9968 villages in Western Maharashtra Plateau accounting for 72.11 per cent of its total population in 1981. As against this, there are 95 urban centres accounting for 27.89 per cent of population. Thus, each town serves about 105 villages. It is obvious that the rural and urban population of the Western Maharashtra Plateau has gradually increased during the eight decades except the second and third decades of the twentieth century (Fig.3.2). The rural population of the region has increased by 166.68 per cent during 1901-81, but its percentages to total population show a decreasing trends from 85.74 per cent in 1901 to 72.11 per cent in 1981 (Table 3.2).

The urban population of the region was 14.25 per cent in 1901; it has nearly doubled itself to 27.89 per cent in 1981. It increased very slowly from about 14 percent to about 19 per cent over the period 1901 to 1941. But, the decade 1941-51 showed an unprecedented growth from 18.70 per cent in 1941 to 26.31 per cent in 1951. In fact, during this decade, the urban population increased by 74.95 per cent. There was a decrease in rural population of the study region in the decade of 1921 and a decrease in urban population was marked in 1911.

Urban and Rural dualism is sharp in demographic and economic characteristics (Prakasa Rao, 1983). A study of the urban-rural population ratios brings to light the relative proportions of urban and rural population in their spatial distribution. It also deviously indicates the degree of urbanization from a different angle. But it provides a different approach to the study of the degree of urbanization

TABLE 3.2

GROWTH OF RURAL-URBAN POPULATION AND VARIATION OF  
URBAN-RURAL POPULATION RATIOS IN  
WESTERN MAHARASHTRA PLATEAU, 1901-81.

Year	Rural Population	Percentage of Rural Population	Urban Population	Percentage of Urban Population	Urban-Rural Population Ratios
1901	5,403,149	85.74	898,329	14.26	166
1911	5,697,323	87.16	839,676	12.84	147
1921	5,092,513	83.49	1,007,068	16.51	198
1931	6,026,121	83.21	1,215,536	16.79	202
1941	6,758,942	81.30	1,555,655	18.70	230
1951	7,623,710	73.69	2,721,674	26.31	357
1961	10,019,572	77.47	2,913,882	22.53	291
1971	12,274,581	75.38	4,009,547	24.62	327
1981	14,403,955	72.11	5,570,065	27.89	387

# WESTERN MAHARASHTRA PLATEAU

GROWTH OF RURAL AND URBAN POPULATION

1901-81

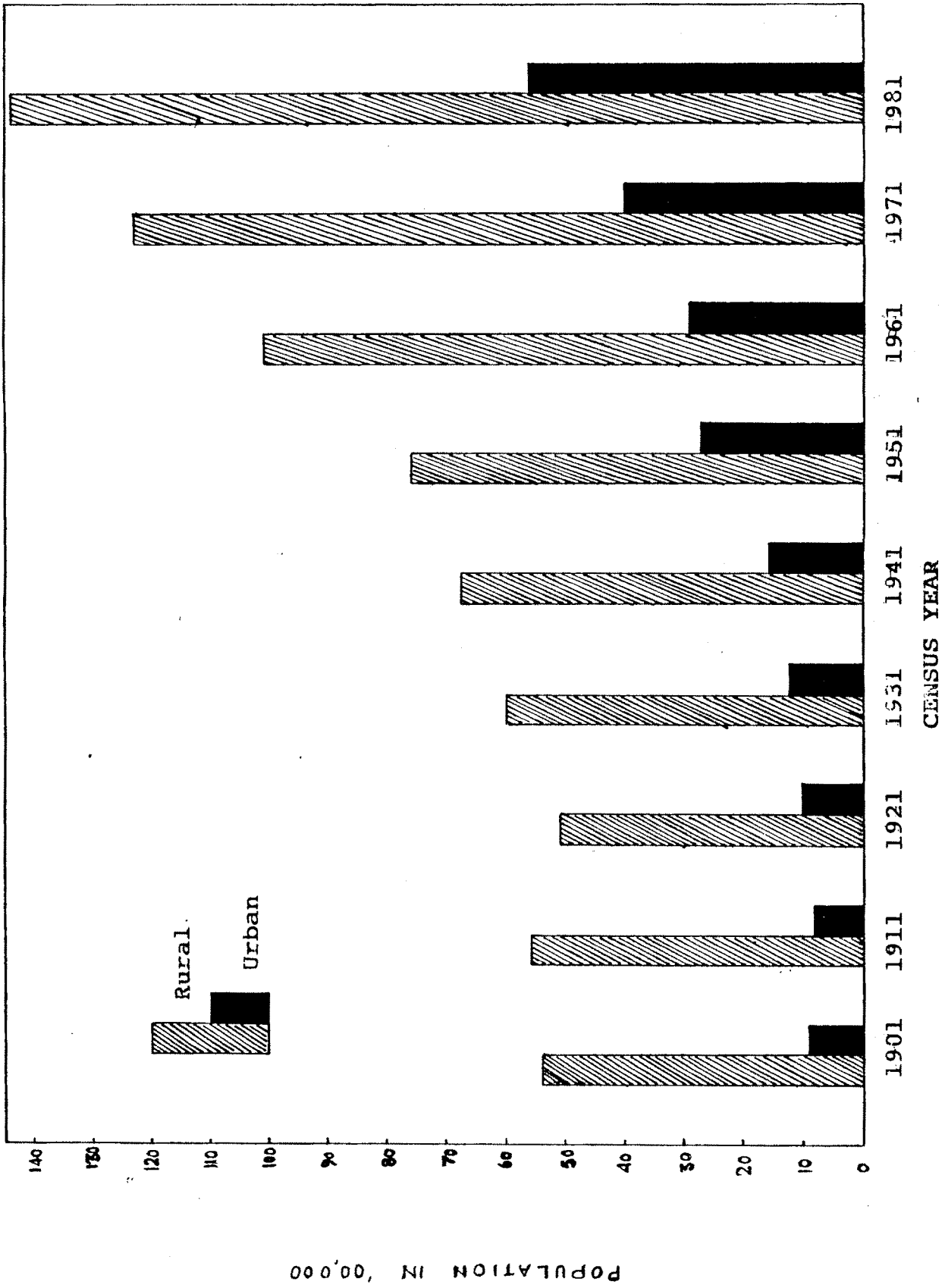


FIG. 3.2

of a region. In addition to this, the urban-rural population ratios may confirm the preceding analysis of the urban phenomena.

The urban-rural population ratio is expressed as the number of urban dwellers in a given area per 1000 or 100 of rural population in that area. Broadly speaking, the Western Maharashtra Plateau has much lower urban-rural population ratio than the Maharashtra State. The urban-rural population ratio of the region under study is 387 per 1000 of rural population, as against 539 per 1000 of rural population of the State. An examination of the urban-rural population ratios at district level reveals that Pune district has the highest value of urban rural population ratio i.e. 899 per 1000 of rural population. This seems to have resulted from the major contribution of Pune metropolitan area. The districts of Nashik, Solapur and part of Dhule District have a moderate ratios well above the regional average ratio. While the southern plateau districts like Kolhapur, Sangli and Satara as well as Ahmadnagar and its adjoining part of Jalgaon district show low urban-rural population ratios, ranging from 149 to 330 per 1000 of rural population.

There are wide variations in the urban-rural population ratios from one tahsil of the region to another. Pune city tahsil has the highest urban-rural population ratio of 134028 per 1000 of rural population. It is followed by Solapur North (5110), Nashik (2541) Karvir (1380), Haveli (1160), Miraj (1133) and Malegaon (1003) tahsils. All these tahsils show high

ratios of the region and we can find preponderance of urban population over the rural population. At the other end, the tahsils of Baglan and Chandvad of Nashik district; Khed, Junner and Shirur of Pune district and Panhala and Shahuwadi and Kolhapur district have low urban-rural population ratios, mostly below 100 per 1000 of rural population. Among them, Panhala tahsil has the lowest ratio of 35 per 1000 of rural population in the study region.

### **3.6 GROWTH OF URBAN POPULATION :-**

According to 1981 census, the total population of the Western Maharashtra Plateau was 19.97 million, while urban population was 5.57 million. It remained 27.87 per cent of the total population. In 1901 urban population of the study region remained 0.89 million which increased to 5.57 million during last eighty years. Thus, the absolute growth of urban population was 4.67 million with a positive increase of 520.04 per cent, while the growth of urban population of Maharashtra and India was recorded 583.62 per cent and 517.91 per cent respectively during the same period. The growth of urban population in the study region was less in comparison to the state but slightly above the country.

A comparative analysis of the urban population growth in India, Maharashtra and Western Maharashtra Plateau shows that the urban population in the study region was decreased by 6.53 per cent. But the growth of urban population in Maharashtra and India has been always positive, though it was only 0.99 per cent and 0.35 per cent respectively during the same decade (Table 3.3.).

TABLE 3.3

SIZE AND GROWTH OF URBAN POPULATION IN WESTERN  
MAHARASHTRA PLATEAU, 1901-81.

Year	Urban Population	Increase of urban population	Percentage increase of urban population	Percentage increase of urban population	
				Maharashtra	India
1901	898,329	--	--	--	--
1911	839,676	-58,653	-6.53	+0.99	+0.35
1921	1,007,068	+167,392	+19.94	+18.72	+8.27
1931	1,215,536	+208,468	+20.79	+15.54	+19.12
1941	1,555,655	+340,119	+27.98	+27.11	+31.97
1951	2,721,674	+1,160,019	+74.95	+62.42	+41.42
1961	2,913,882	+192,208	+7.06	+21.32	+26.41
1971	4,009,547	+1,095,665	+37.60	+40.74	+38.23
1981	5,570,065	+1,560,518	+38.92	+39.99	+46.39

Source : Census of India, 1981.

The growth trend of urban population in India and Maharashtra indicates a gradual increase upto 1931. The rate of urban growth was higher in the study region than the state and country during the pre-independence period except the rate of urban growth in India during 1931 - 41 decade. While the nation and Maharashtra State experienced high growth rates of urban population than that of the study region after post-independence period. During 1911-21, the growth of urban population was 19.94 per cent which was almost equal to the Maharashtra (18.72 per cent), but it was much higher than the country (8.27 per cent). In the decade 1921-31 the urban population of the region was increased by 20.70 per cent, as against 15.54 per cent in Maharashtra and 19.12 per cent in India. It steadily accelerated in the next decade to 27.98 per cent. A sharp rise in the growth of urban population is seen during the decade 1941-51; where the urban population was increased by 74.95 per cent which was highest growth rate of urban population since 1901. On the contrary, during the same decade, the urban population of the State and country was increased by 62.42 per cent and 41.42 per cent respectively. This sudden rise in the growth of urban population is the result of change in the criteria in the definition of the term 'town' on one hand and the setting of refugees from neighbouring countries in the urban areas on the other.

After the independence, especially during 1951-61, the region experienced a minor increase of 7.06 per cent in the urban population. This was due to the definitional change of



# WESTERN MAHARASHTRA PLATEAU

## GROWTH OF URBAN POPULATION

1901-81

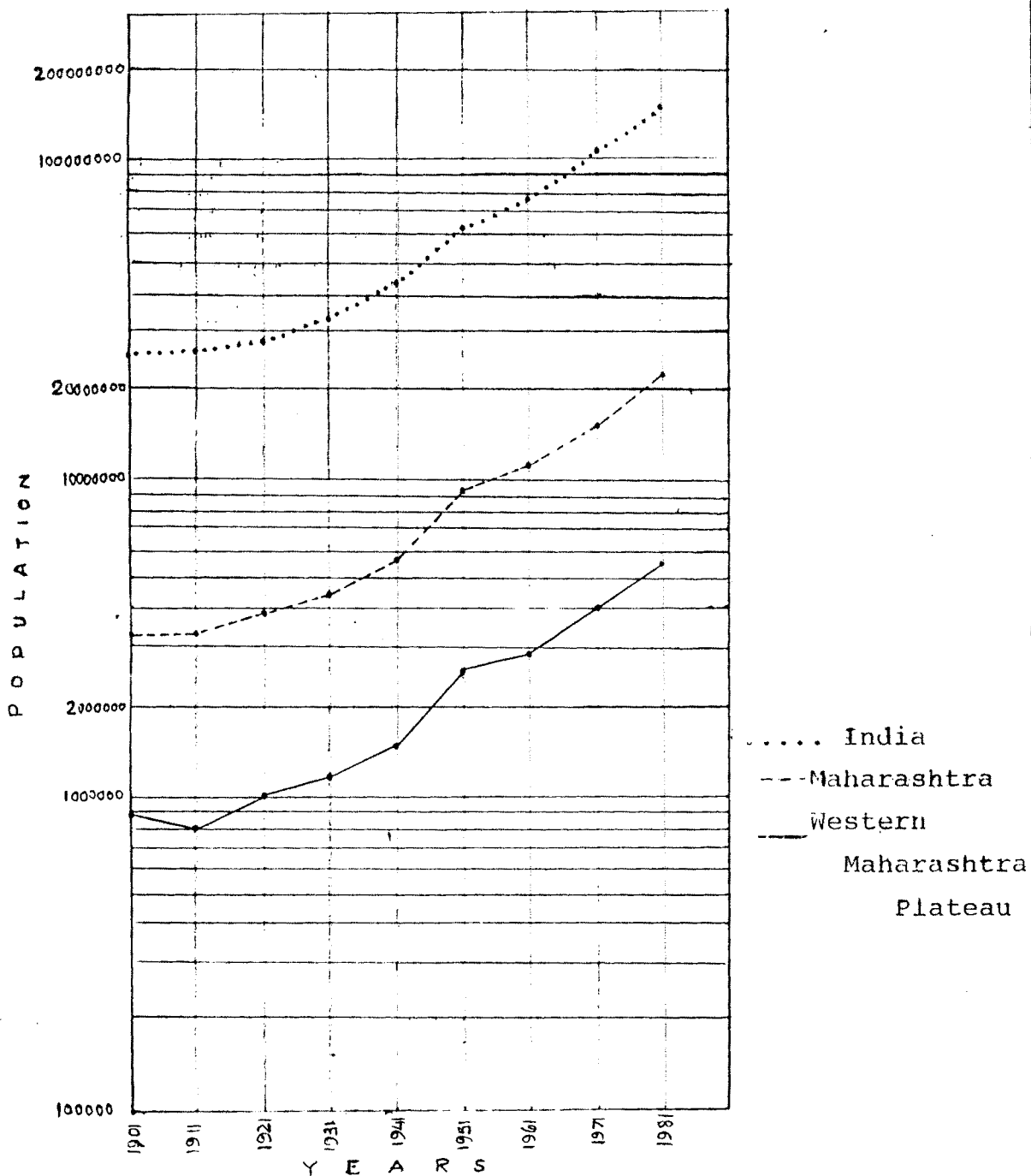


FIG.3.3

urban centres adopted in 1961 census and many urban centres of 1951 census were declassified as rural in 1961 census. But the state and National urban growth were 21.32 per cent and 26.41 per cent respectively which were much higher than the study region. However, in 1971-81, the growth rate was surprisingly increased to 37.60 per cent which was also less as compared to the State and country. in the last decade (1971-81) the urban population was progressed by 38.92 per cent. During the same decade the percentage variation of urban population was 39.99 per cent and 46.39 per cent in the state and country respectively. The growth trend of urban population in India, Maharashtra and Western Maharashtra Plateau shows a gradual increase during pre-independence period while post-independence period is a clear indication of a rapid growth trend of urban population (Fig.3.3).

### 3.7 GROWTH RATE OF URBAN POPULATION :-

The pulsatory character of the region's urban population may be noted from the Table 3.4 showing the growth rates during different decades.

An examination of the growth rate of urban population shows that the growth rate fluctuated between a minimum of 0.67 per cent per annum in 1901-11 and a maximum of 5.45 per cent per annum in 1941-51. While the State registered a minimum growth rate of 0.09 per cent and a maximum of 4.76 per cent per annum in the same decades.

TABLE 3.4

GROWTH RATE OF URBAN POPULATION IN THE STUDY REGION, 1901-81.

Decade	Annual Growth rates(percent)	
	Western Maharashtra Plateau	Maharashtra.
1901-11	-0.67	0.09
1911-21	1.81	1.71
1921-31	1.87	1.44
1931-41	2.45	2.39
1941-51	5.45	4.76
1951-61	0.68	1.93
1961-71	3.16	3.38
1971-81	3.26	3.32

The rate of growth declined by 0.67 per cent per annum in 1901-11 because the famine and the plague epidemic during this decade scourged the population of entire country. After this decade, both the study region and the State present a gradual increase in the growth rate till 1951.

However, during the decade 1941-51, both the study region (5.45 per cent) and the State (4.76 per cent) witnessed the highest growth rates of urban population since 1901. This was mainly resulted from the change in the criteria in the

definition of town and consequently emergence of new towns.

During 1951-61, decade, the rate of urban growth fell abruptly to 0.68 per cent per annum against 1.93 per cent per annum growth rate in the State. This decline in the growth rate of urban population was chiefly due to the exclusion of 69 towns of 1951 census after classifying them as rural due to the change in the definition of an urban centre for the 1961 census.

The urban population of the region has increased at a rate of 3.16 per cent and 3.26 per cent per annum during the next two decades i.e. 1961-71 and 1971-81 respectively. But the growth rate trend of urban population in the State indicates a slight decline from 3.38 percent to 3.32 per cent per annum during the same decades.

Temporal changes in the growth rates of urban population is the outcome of the inter-play of several factors and forces. In the region, after the independence, the introduction of modern transport facilities, industrial development, availability of health and other civic amenities, changing cultural outlook and employment opportunities in the urban centres leading to urban migration from rural areas and natural growth of the population have sustained the fast growth rate of urban population.

### **3.8 GROWTH TRENDS OF URBAN POPULATION :-**

During the last 80 years (1901-81) the urban population of the region has increased from 0.89 million to 5.57 million. The increase was 520.04 per cent while for the State, it was

it was 583.62 per cent. A perusal of the Table 3.3 which shows the absolute urban population with its decade variation, reveals that there has been accelerated growth in urban population with some intermittent fluctuations. Despite the decade 1901-11 which has registered the declining trend, there has been an overall increase in the urban population but the growth throughout the decades has never been at a uniform rate. The trend of urban population growth can be divided into the following three periods :-

- i) Beginning of the Twentieth Century (1901-21).
- ii) Pre-Independence period (1921-51)
- iii) Post-Independence period (1951-1981)

Figure 3.4 shows the growth trend of urban population from 1901 to 1981. It is clear that there is a close fit in the actual growth curve of urban population and the regression line plotted on the equation  $y = a + bx$ . The computed equation for the trend line is  $y = 23.04 + 5.59X$ . A high degree of positive correlation exists between the line of best fit and the actual growth, the coefficient of correlation ( $r$ ), being +0.93.

It is observed from the Figure 3.4 that the urban population of the region experienced negative deviation from the trend line during 1921-1961. While there was a positive deviation in urban population from the trend line during 1901-11 and 1971-81.

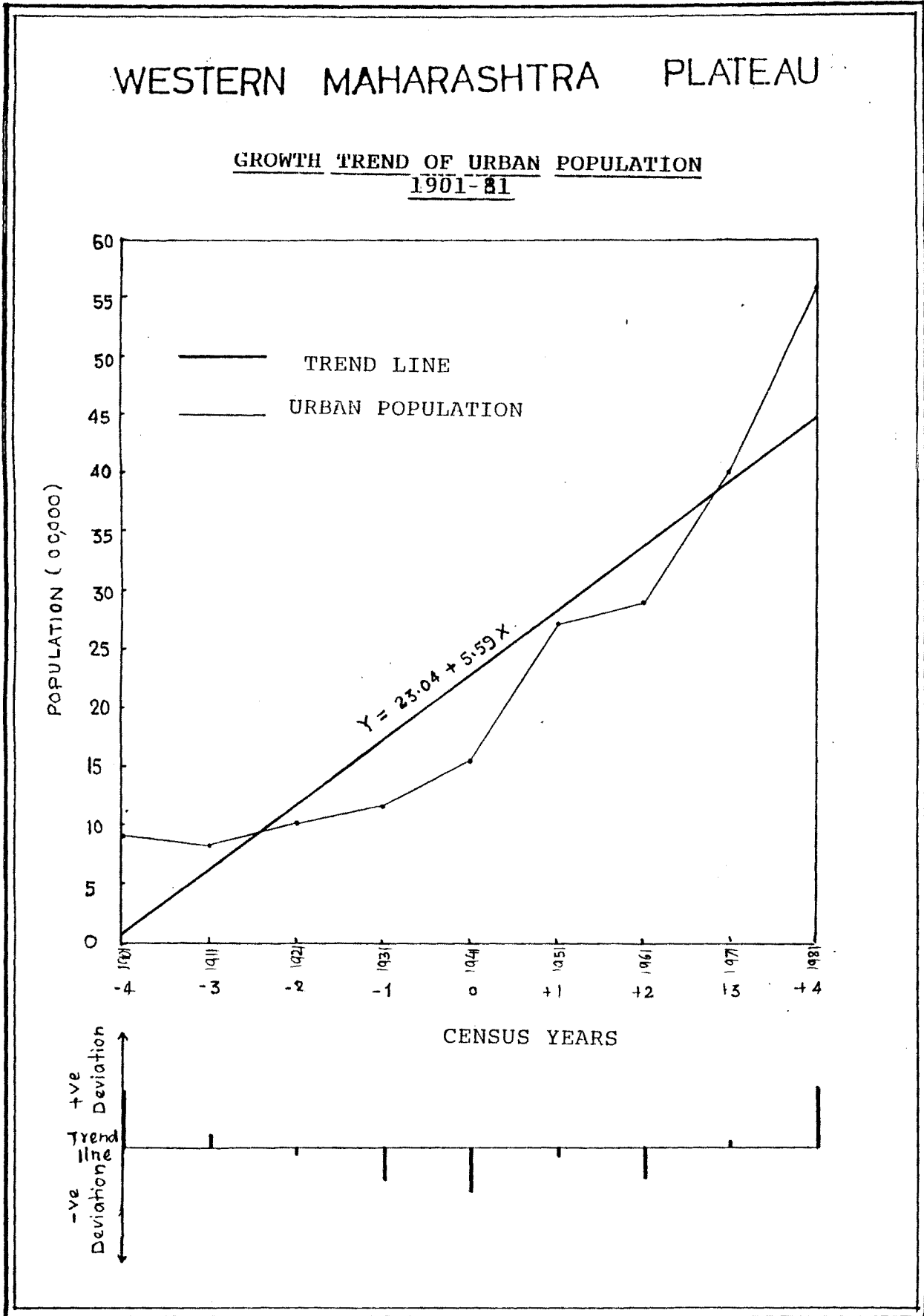


FIG. 3.4

### 3.9 SPATIAL PATTERN OF URBAN GROWTH :-

In absolute terms, urban population of the study region increased from 898,329 persons in 1901 to 5,570,065 persons accounting an increase of 520.04 per cent within eight decades. The decennial growth of urban population in the region during the period of 1901-1981, reveals an accelerated trend despite intermittent fluctuation in 1911. The urban population of the region grew by 38.92 per cent during the decade 1971-81. In order to understand the regional disparities in urban growth, an attempt has been made to present the spatial patterns of urban growth at the levels of districts and tahsils.

#### 3.9.1 URBAN GROWTH AT THE DISTRICT LEVEL :-

Taking district as a spatial unit of analysis, the changing patterns of urban growth have been attempted here. The study region experienced considerable regional variations both in absolute urban growth and urban growth rates. Fig.3.5 shows districtwise absolute growth of urban population during the decades 1901-81. Despite this absolute growth of urban population, changes in decadal urban growth rates give better insights into spatial patterns of urban growth. There were remarkable regional variations in decadal urban growth rates over eighty years period, beginning from the current century (Fig.3.6). To understand spatial patterns of urban growth, districts have been grouped on the basis of their urban growth rates (Table 3.5).

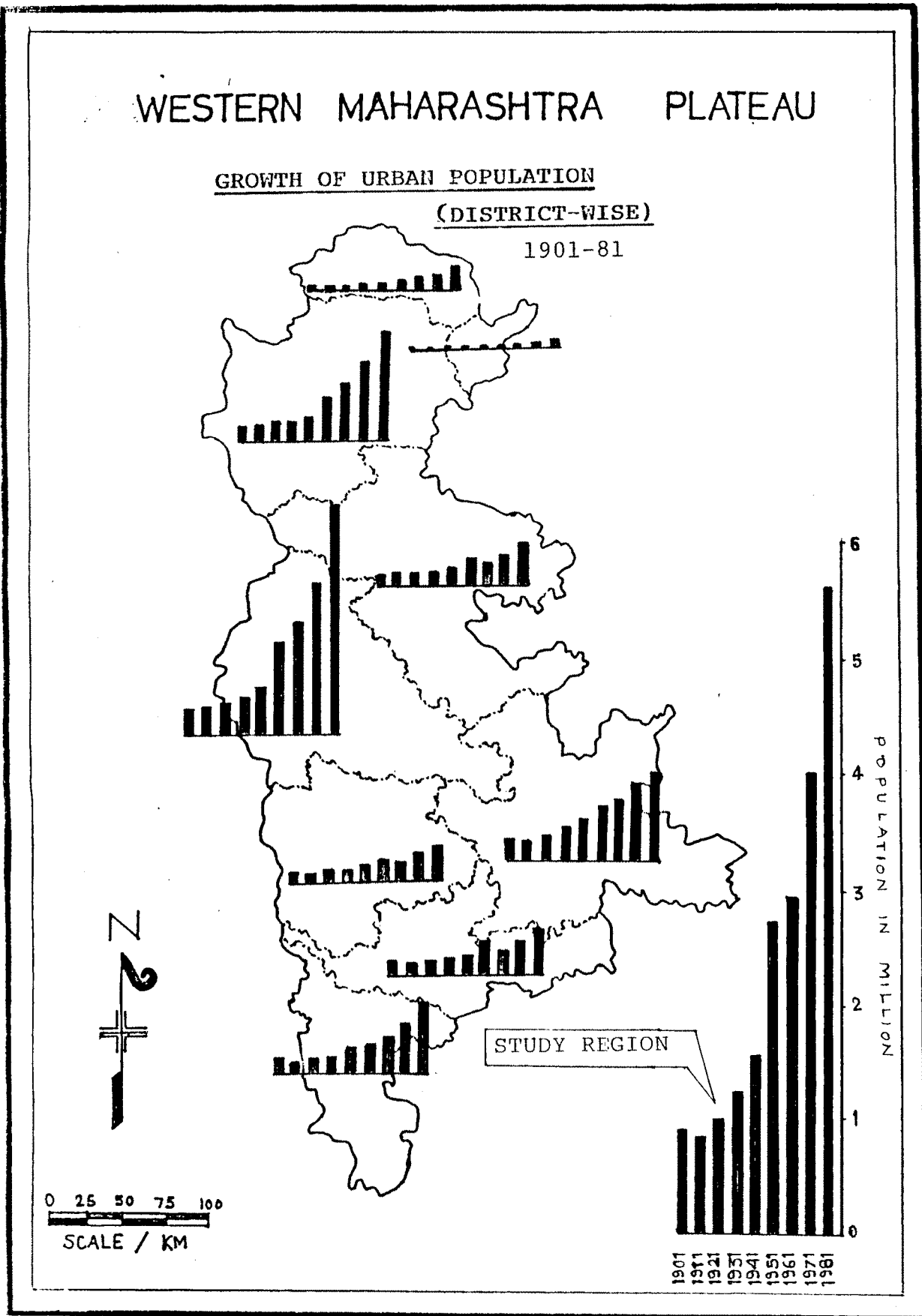


FIG. 3.5



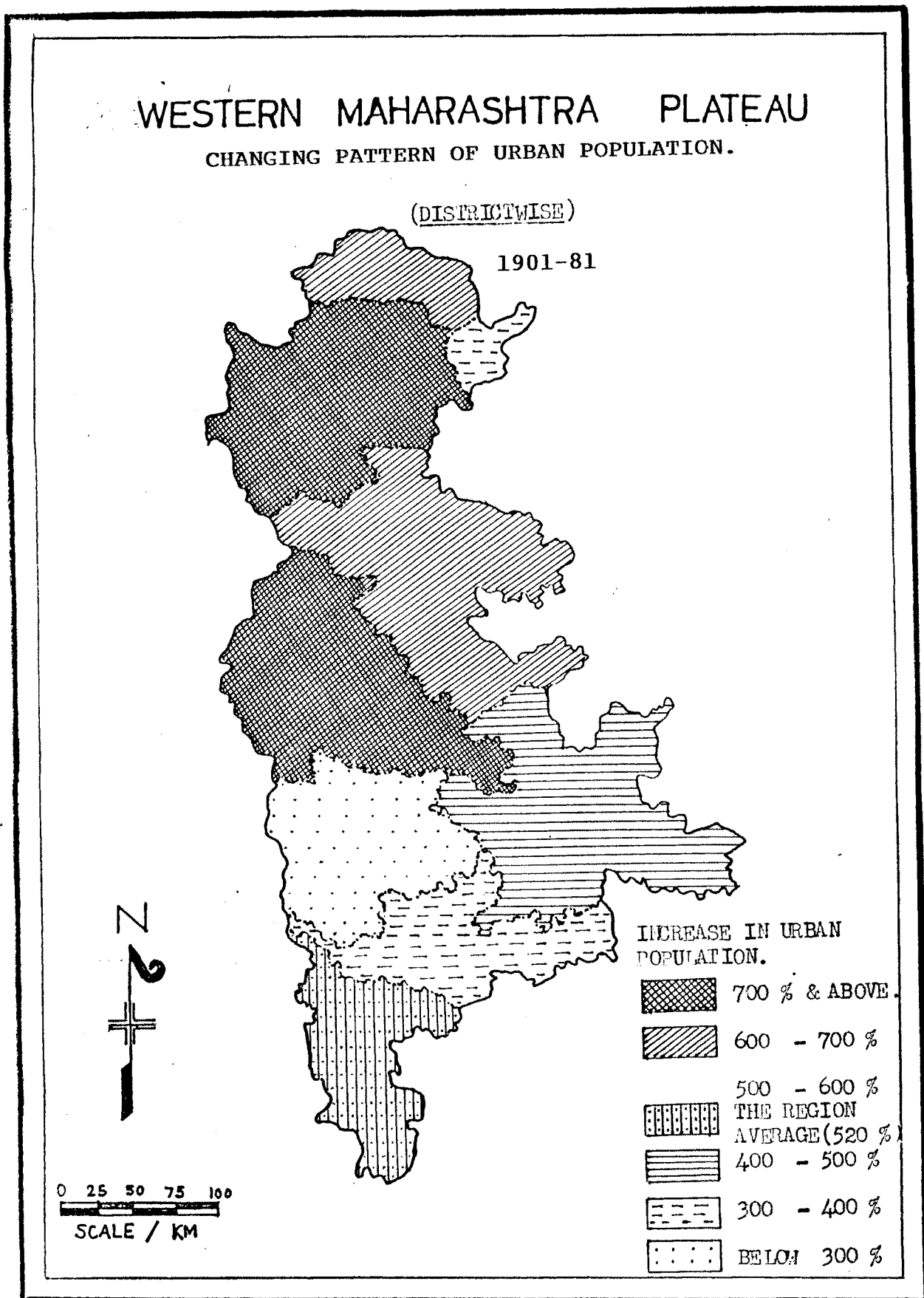


FIG. 3.6

TABLE 3.5

CLASSIFICATION OF DISTRICTS BY URBAN GROWTH RATE IN  
WESTERN MAHARASHTRA PLATEAU, 1971-81.

Growth rate (in percentage)	Number of districts	Percentage to total Districts.
45-60 (High)	2	22.22
30-45 (Medium)	5	55.56
15-30 (Low)	2	22.22
-----		
TOTAL	9	100.00

Source : Census of India (1981), Series 12, Maharashtra  
Part-II, A 'General Population Tables.' (computed by researcher)

Urban growth rate varies among different districts (Fig.3.7) Among the districts, Pune and Satara, with urban growth rates of 48.23 and 16.96 per cent respectively, are at the two extremes. Pune district is at the top among the districts in urban growth rate. It is followed by Kolhapur district with urban growth rate of 41.29 per cent. These two districts recorded relatively a fast urban growth in the region. This development was associated mainly with industrial concentration and with the number of a sizeable towns in the districts.

# WESTERN MAHARASHTRA PLATEAU

## CHANGING PATTERN OF URBAN POPULATION

(DISTRICT-WISE)

1971-81

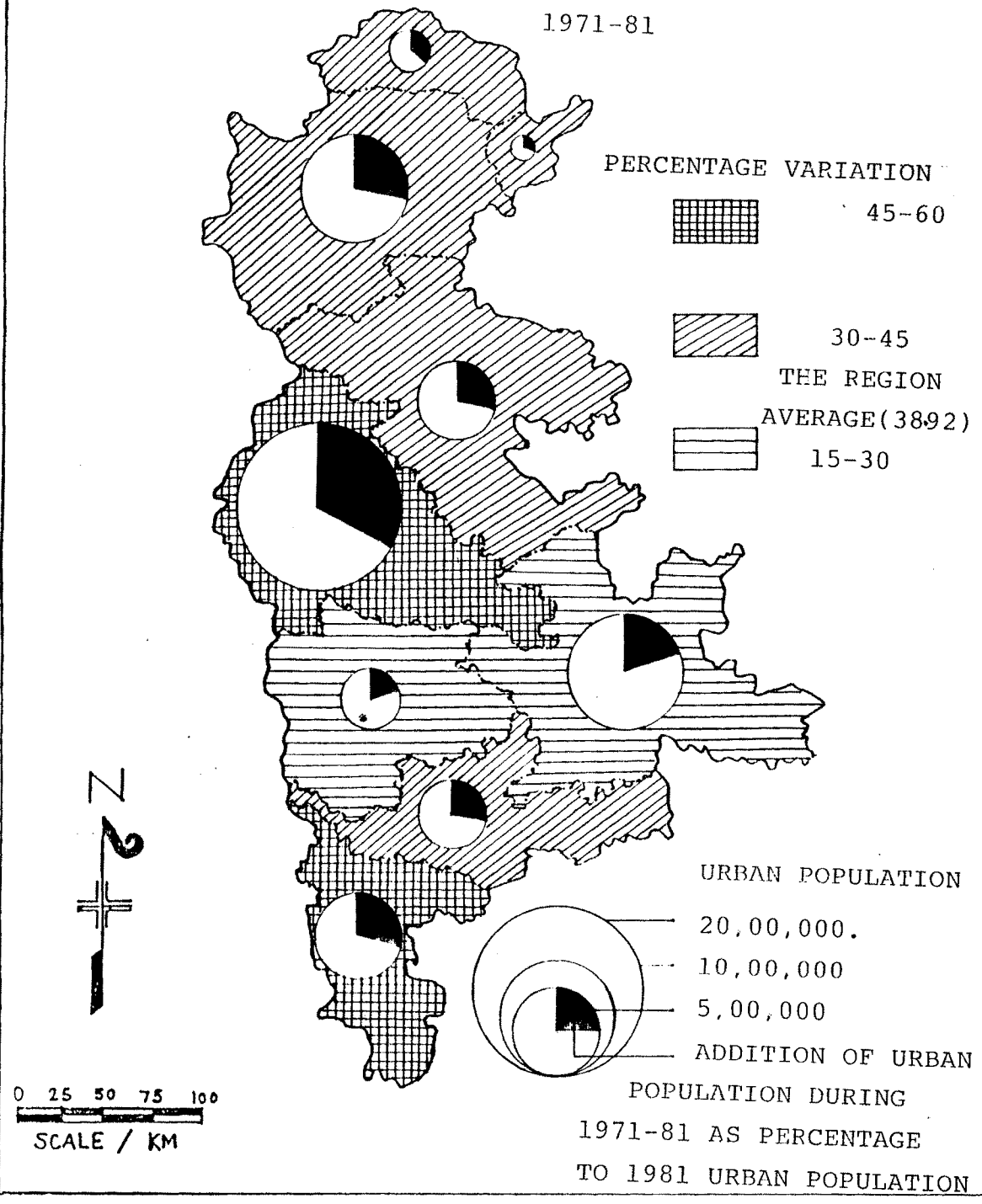


FIG. 3.7

The relatively less urbanised districts of Nashik, Sangli, Ahmadnagar and parts of Dhule and Jalgaon, are noted for areas of medium urban growth. This may be due to rural-urban migration, a higher rate of natural increase of population both in urban and rural areas and the partly the emergence of new towns.

The urban growth rate was between 15 to 30 per cent only in two districts. These included Satara and Solapur in the region. These are the areas of low urban growth because of their neighbouring districts have advanced in industrialization and these districts lost migrants from their both rural and urban segments. This was reflected in slow urban growth in particular.

In addition to the district values of percentage growth of urban population in 1981 over the urban population in 1971, Fig.3.7 also shows the addition of urban population during the decade 1971-81 as the percentage rise to the urban population in 1981. Circle drawn within each district is proportionate to its total urban population in 1981 and the shaded segment has been shown therein to denote the proportion of the addition of urban population during the decade 1971-81, to the total urban population in 1981.

### 3.9.2 URBAN GROWTH AT TAHSIL LEVEL :-

A more detailed picture is obtained if urban growth is examined at the level of tahsil. Absolute urban growth at tahsil level during the decades 1901-81, presents a imbalanced state of urban growth in the region (Fig.3.8). The tahsil

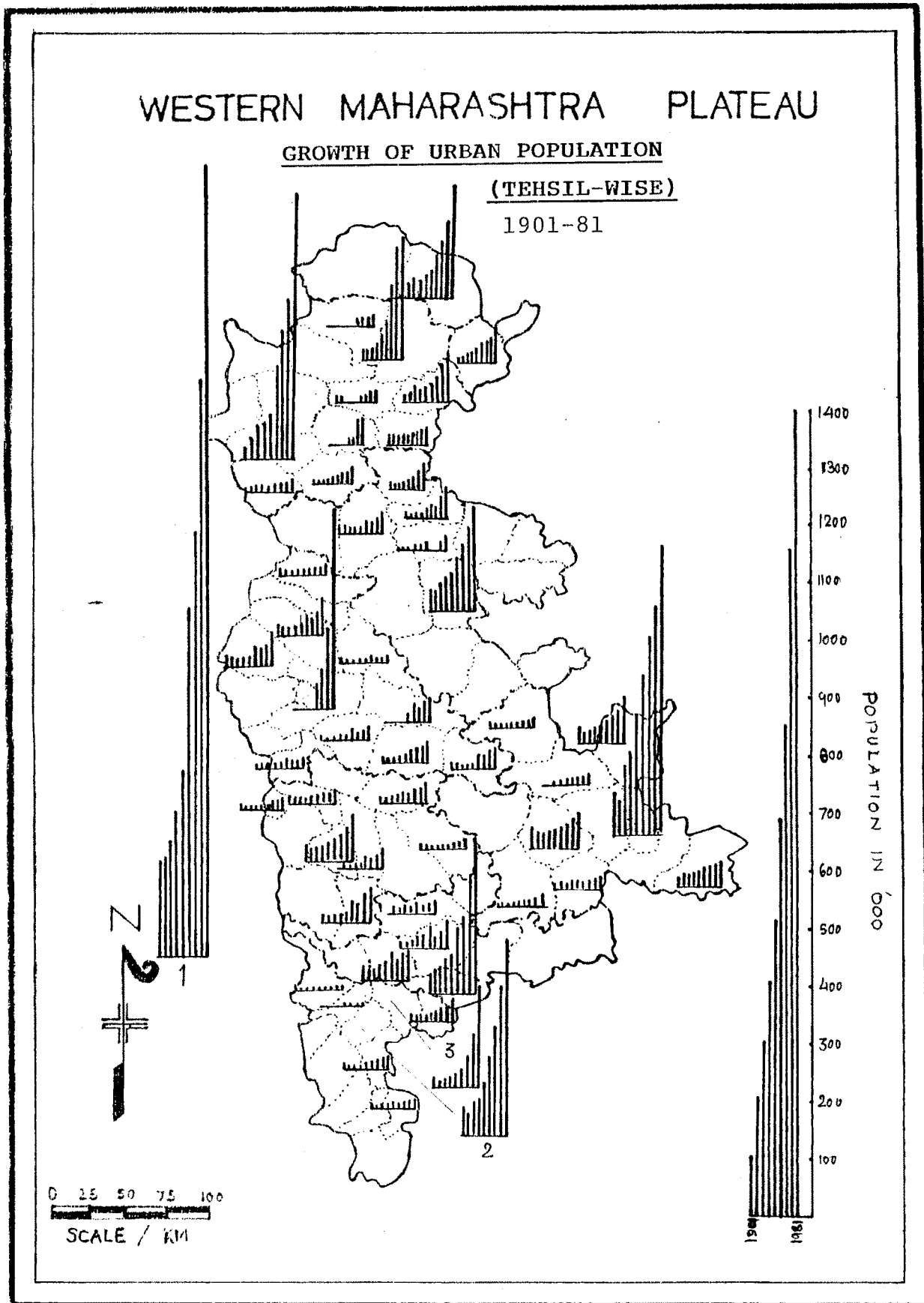


FIG. 3.8

values of percentage growth of urban population in 1901, over the urban population in 1981, have been grouped into five categories, suggesting the tahsils of very high, high, moderate, low and very low urban growth (Fig.3.9). In the study region, Nashik tahsil (1523.40 per cent) registered the highest percentage growth of urban population. It is followed by the tahsils of Malegaon (1260 per cent), Hatkangale (886.60 per cent), Dhule (752.38 per cent) and Pune city (734.88 per cent). These tahsils attained high urban growth due to the emergence of new towns, development of industries and their concentration at larger cities and a continuous shift of rural migrants to cities. While Shahuwadi tahsil (46.51 per cent) in Kolhapur district showed the lowest percentage of urban growth, followed by Shirur, Yevla, Chandvad, Wai, Junnar and Pandharpur tahsils.

In order to study the recent patterns of urban growth, tahsils have been grouped on the basis of their decadal urban growth rates (Table 3.6).

It is clear from the Table 3.6 that nine among the eighty six tahsils of the region registered an urban growth rate of 50 and above during 1971-81. Nearly half of these show moderate growth rate of 50 - 75 per cent and the remaining show high to very high growth rates (Fig.3.10). Two tahsils namely, Haveli (159.47 per cent) in Pune district and Tasgaon (116.24 per cent) in Sangli district registered an urban growth rate of 100 and above during 1971-81. The highest percentage variation recorded in these tahsils is mainly due to the addition of four new towns in Haveli tahsil, accounting over 16 per cent of the

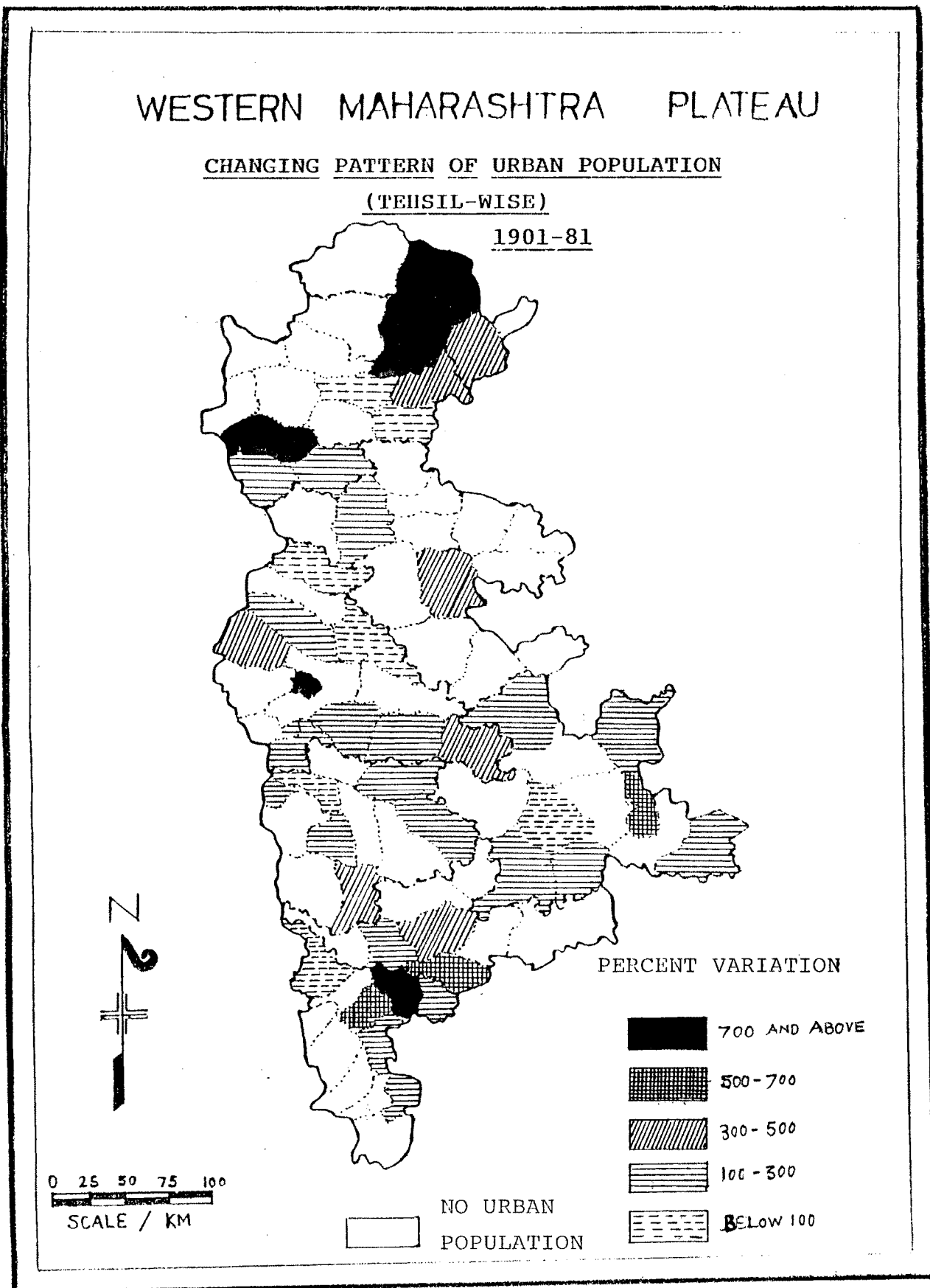


FIG. 3.9

total urban population of the tahsil and Kirloskarwadi in Tasgaon tahsil, classified as town first time in 1981, contributing 43.95 per cent of the total urban population of the tahsil.

TABLE 3.6

CLASSIFICATION OF TAHSILS BY URBAN GROWTH RATE IN  
WESTERN MAHARASHTRA PLATEAU, 1971-81.

Growth rate (in percentage)	Number of Tahsils.	Percentage to total Tahsils.
100 and above (very high)	2	2.32
75-100 (High)	2	2.32
50-75 (Moderate)	5	5.81
25-50 (Low)	20	23.36
Less than 25 (Very Low)	23	26.75
Entirely Rural	23	26.75
Urban Population in 1971 only	04	4.65
Urban Population in 1981 only	07	8.14
-----		
TOTAL	86	100.00

Source : Census of India (1981), Series 12, Maharashtra, Part-II-A  
'General Population Tables'. (computed by researcher)

Urban growth is high in Koregaon tahsil (70.60 per cent) of Satara district and Hatkangale tahsil (80.87 per cent)



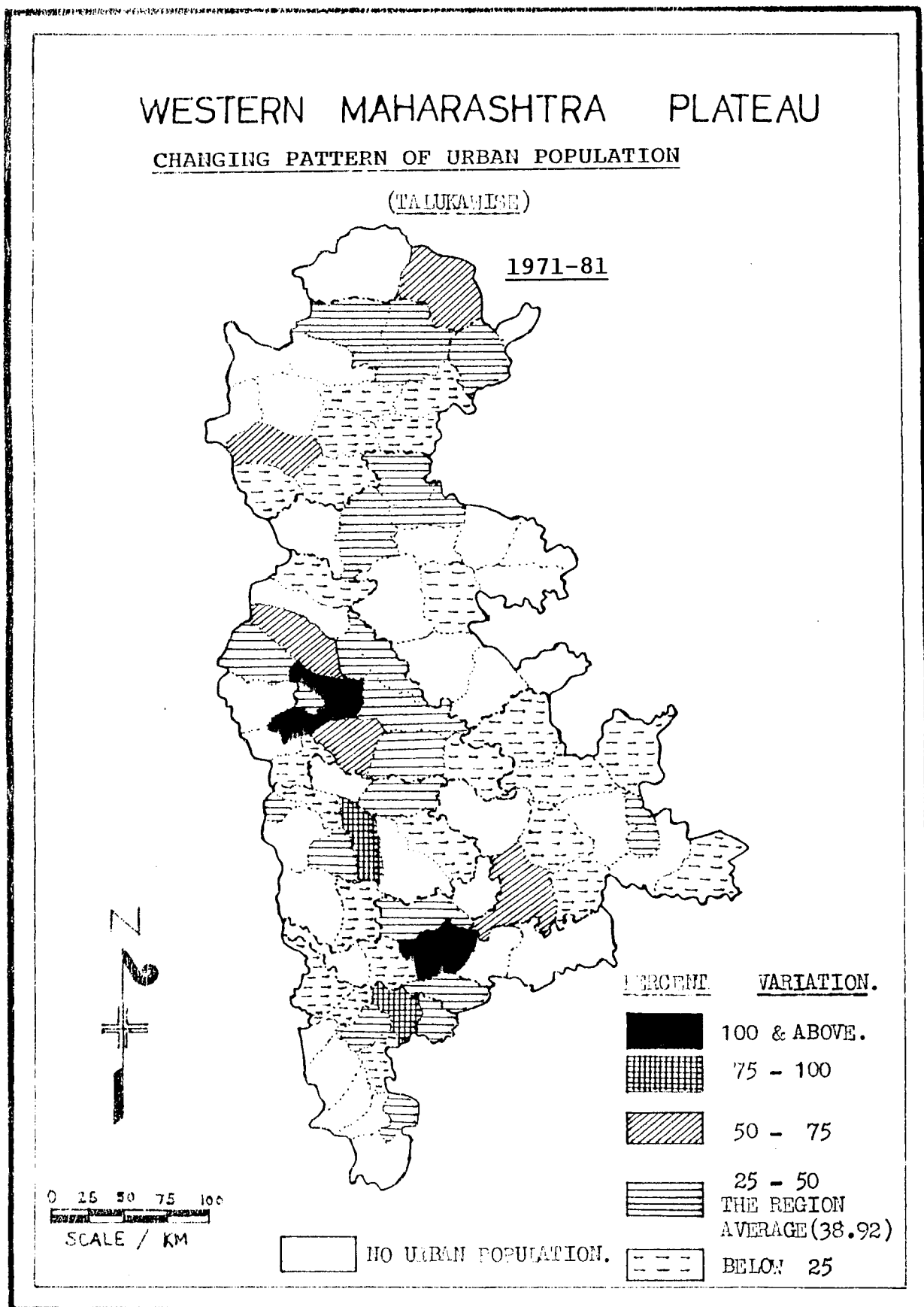


FIG. 3.10

of Kolhapur district. They attained high growth rate because of the addition of considerable urban population through the emergence of new towns like Koregaon and Kabnur respectively.

Nearly half of the total tahsils marked low to very low growth rate of less than 50 per cent. Twenty three among the eighty six tahsils show a growth rate of less than 25 per cent, representing net out migration from their urban places. Six each of these belong to Solapur and Nashik districts, three each to Satara, Kolhapur and Pune districts and one each to Ahmadnagar and Sangli districts. Seven tahsils in the region recorded urban growth rate of less than 10 per cent. Shahuwadi tahsil (6.88 per cent) in Kolhapur district marked the lowest growth rate of urban population.

Low urban growth found in twenty tahsils of relatively more urbanised. The number of rapidly urbanising tahsils is distinctly high in the range of 25 to 50 per cent growth rate. Nearly fourteen tahsils from this range obtained their urban growth rates below the region average of 38.92 per cent in this regard.

Rapid urban growth, 50 per cent and above is observed in the areas of agriculturally developed tracts, along the main rail/road transport routes and in and around some prominent administrative and industrial cities. But on the other hand, as much as 23 tahsils in the region are entirely rural.

### 3.10 PROGRESS OF URBANIZATION :-

From a demographic point of view, urbanization is the proportion of urban population to the total population of the

region. The process of urbanization is said to be taking place when the proportion of urban population is increasing or if the rate of growth of urban population is faster than the rate of growth of total population of the region.

An increase in the proportion of urban population to the total population of a region is affected essentially by the cumulative effect of rural to urban migration as well as the reclassification of rural settlements as urban centres or the emergence of new towns. Natural increase in urban population does not show up any significant variation in the progress of urbanization of the same region.

Demographically, progress of urbanization is expressed by increase of the proportion of urban population to the total population for a given period. If the percentage has increased the region is considered to be urbanizing. For, Western Maharashtra Plateau the percentage increased from 14.26 per cent in 1901 to 27.89 per cent in 1981 (Table 3.7).

The process of urbanization in Western Maharashtra has been relatively slow since the beginning of this century. It is quite evident from Table 3.7 that in 1901, 14.26 per cent of the total population of the region was residing in urban centres. It declined to 12.84 per cent in 1911 and further increased to 16.51 per cent in 1921. This fluctuation had been taken place due to higher death rate in urban areas comparatively, resulted from epidemics and famines. Again it rose to 16.79 per cent and 18.70 per cent in 1931 and 1941 respectively.

TABLE 3.7

PROGRESS OF URBANIZATION IN WESTERN  
MAHARASHTRA PLATEAU, 1901-81.

Year	Urban Population (in million)	Decadal urban growth (in percent)	Percentage of urban population to total population -----	
			Western Maharashtra Plateau	Maharashtra
1901	0.89	--	14.26	16.59
1911	0.84	-6.53	12.84	15.13
1921	1.01	+19.94	16.51	18.50
1931	1.21	+20.70	16.79	18.60
1941	1.55	+27.98	18.70	21.11
1951	2.72	+74.95	26.31	28.75
1961	2.91	+7.06	22.53	28.22
1971	4.01	+37.60	24.62	31.17
1981	5.57	+38.92	27.89	35.04

In 1951, 26.31 per cent population was urban which observed slight decline during the next decade (22.53 per cent) in 1961. This trend of urbanization was closely associated with the change in the definition of urban place.

However, the urban proportion of population was recorded as 24.62 per cent and 27.89 per cent in 1971 and 1981 respectively; as against 31.17 per cent and 35.04 per cent respectively for Maharashtra (Fig.3.11). The table also shows that the growth trend of urbanization in the study region as well as in the State was smooth and steady upto 1941. But thereafter, the region experienced a much more higher rate and accelerated trend in urbanization as a result of which urban centres recorded 74.95 per cent increase in their population during 1941-51. The region witnessed a downward trend of urbanization in the decade 1951-61. and since then it registered almost an accelerated progress. The study region had shown a net increase of 13.63 per cent in its urbanization during 1901-81. A comparative study of urbanization in Western Maharashtra Plateau and Maharashtra State reveals the fact that the former had shown a lower degree of urbanization than the State since 1901. But, urbanization had progressed almost at double the rate in both cases.

### **3.11 RATE OF URBANIZATION :-**

In order to study the progress stages and changing pattern of urbanization in the region, it needs to be looked into rate of urbanization more closely. The rate of urbanization is the variation in urban proportion. A

## WESTERN MAHARASHTRA PLATEAU

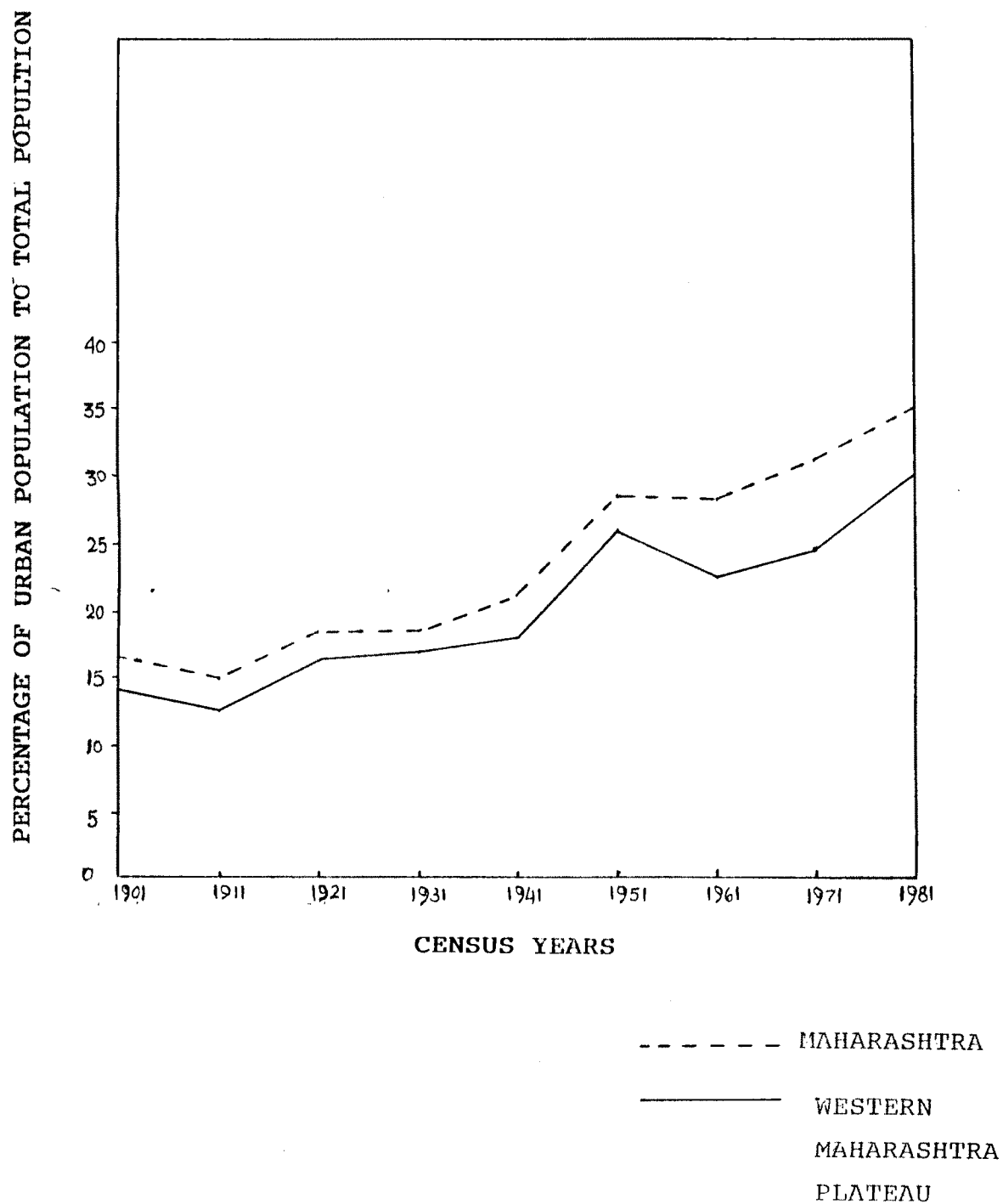
PROGRESS OF URBANIZATION  
(1901-81)

FIG.3.11

comparative picture of the rate of urbanization in the Western Maharashtra Plateau and the Maharashtra State is given (Table 3.8).

TABLE 3.8

RATE OF URBANIZATION IN THE STUDY REGION, 1901-81.

Decade	Rate of urbanization	
	Western Maharashtra Plateau	Maharashtra
1901-11	-1.42	-1.46
1911-21	3.67	3.37
1921-31	0.28	0.10
1931-41	1.91	2.51
1941-51	7.61	7.64
1951-61	-3.78	-0.53
1961-71	2.09	2.95
1971-81	3.27	3.87

The rate of urbanization does not run up and down just at random but it occurs in cycles. It exhibits a pattern in which the rate of change is slow at first, then rises steeply as the early stages of industrialization are reached and tapers off gradually when the proportion of urban population begins to reach a saturated point (Davis, 1962). This rule holds good in the case of Western Maharashtra Plateau.

The decadelwise gain in urban proportion in the study region has been given in Table 3.8. A look at the table makes it clear that, till now, the rate of urbanization has been very slow as the ~~decadelwise~~ gains in urban proportion of the region are very small. It points to the fact that the process of industrialization with its full vigour is yet to begin in many parts of the region.

The rate of urbanization has always been slower in Western Maharashtra than in the State since 1901, as well except during the 1911-21 and 1921-31 decades. But despite of these minor differences, with exception of 1941-51 decade, the rates of urbanization are almost alike in all the decades. While concluding the temporal-spatial pattern of the Indian urbanization, Raj Bala observed that the pace of urbanization was consistently fast in some areas, sluggish in many and fluctuating in the remaining. The same situation of urbanization has been found in the study region also.

### 3.12 CHANGING PATTERN OF URBANIZATION :-

Maharashtra is statistically the most industrialised and most urbanized state in India. But in spatial terms, if the lion's share of Bombay Metropolitan Region and the Bombay Pune belt are excluded from the statistics then what left is the more backward areas of the State. A recent study concerning urbanization has revealed that Western India, that is under the influence of Bombay, the economic capital of the country, is one of the fast developing regions of India (Malshe, 1986). On this background, an attempt has been made to identify the changing pattern of urbanization in Western Maharashtra Plateau during the decades 1901-81.



### 3.12.1 VARIATION IN URBANIZATION AT DISTRICT LEVEL :-

Urbanization is such a complex spatial process that we can only hope to understand it region by region (Haggett, 1983).

A striking feature of urbanization in the study region has been remained a wide range in the ratios of urban population to total population. There were wide variations in urbanization from one area of the region to another during 1901-81 (Fig. 3.12)

Taking the district as a unit of analysis, we find that Pune district (27.22 per cent) recorded the highest variation in the percentage of urbanization during past eighty years, pointing out the rapid growth of urbanization. While the districts like Nashik (19.28 per cent) and Kolhapur (13.68 per cent) crossed well the average mark of the region in this regard. But Solapur and Sangli districts were marginally below the regional average of variation in urbanization during the same period. Satara (4.41 per cent) among the remaining four districts of less urbanized recorded the least change in urbanization, representing very slow progress of urbanization.

A comparison of variation in urbanization during 1901-81 with the decade 1971-81 reveals certain points to consider. The changing pattern of urbanization in 1971-81 decade, shows that Pune district remained top among the districts with 5.49 per cent variation in urbanization on one hand, and Satara district recorded negative variation of 0.12 per cent on the other (Fig. 3.13).

The region as a whole registered 3.27 per cent change in the proportion of urban population to total population. The

# WESTERN MAHARASHTRA PLATEAU

VARIATION IN URBANIZATION  
(DISTRICT-WISE)  
1901-81

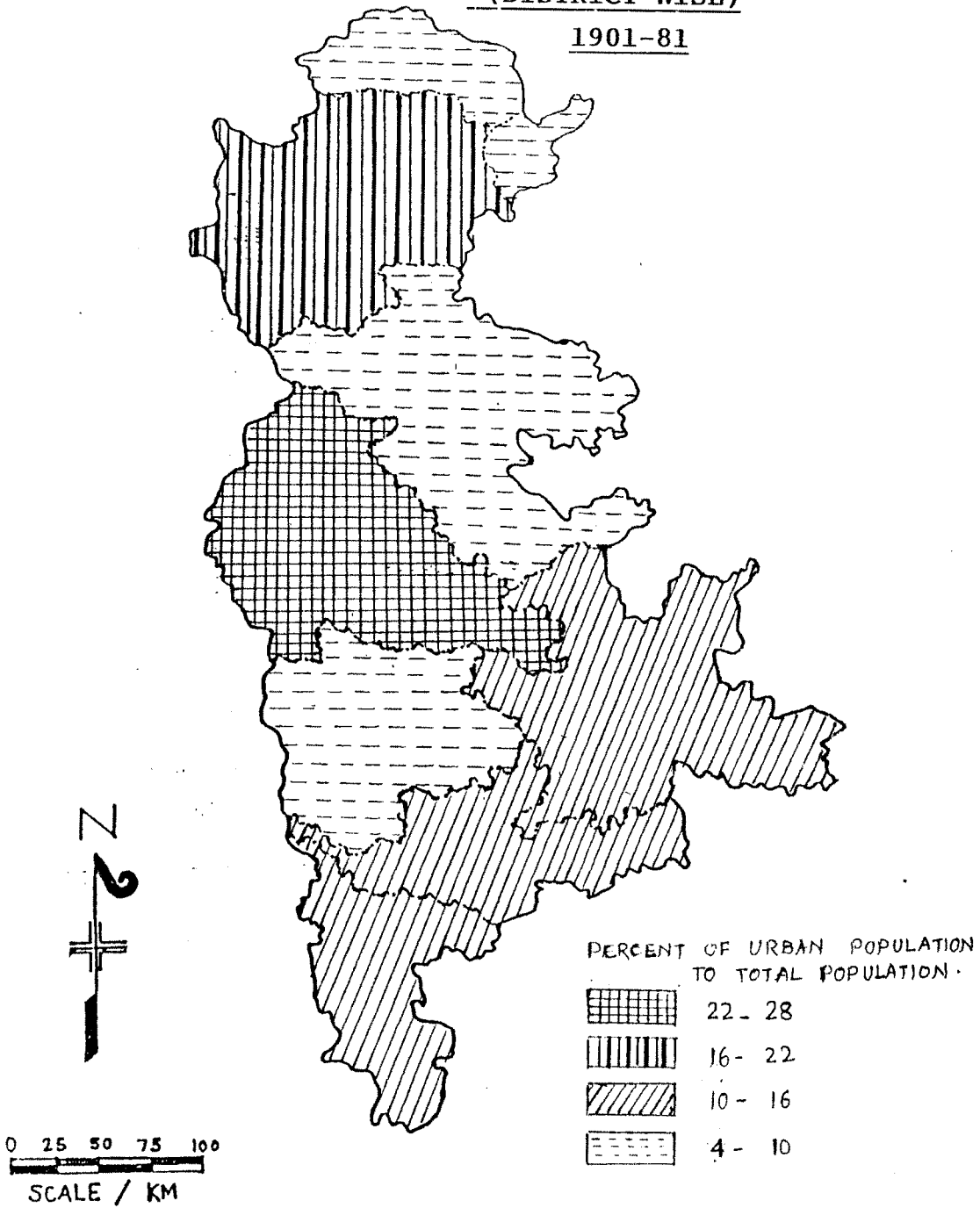


FIG. 3.12

# WESTERN MAHARASHTRA PLATEAU

## VARIATION IN URBANIZATION

(DISTRICT-WISE)

1971-81

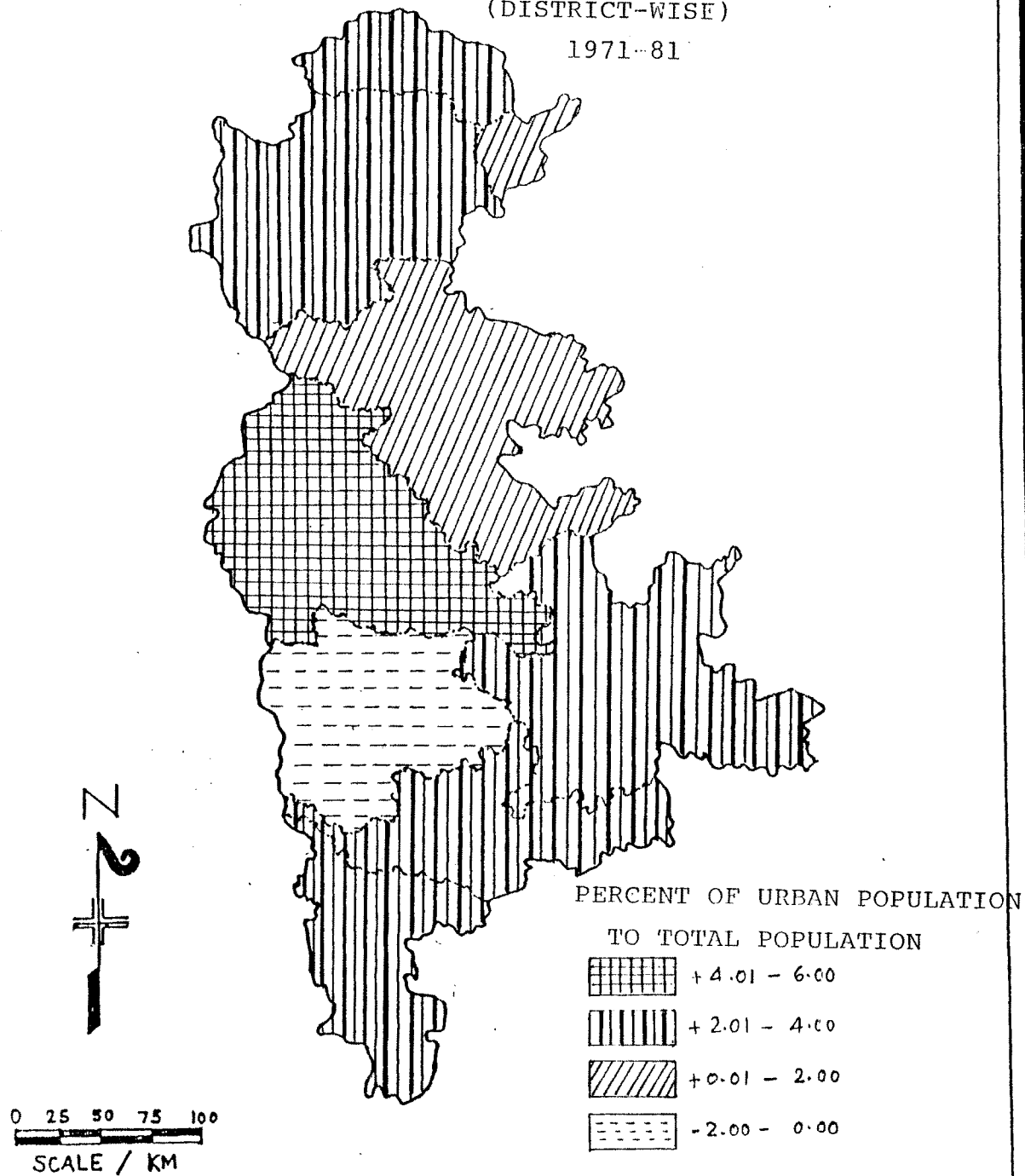


FIG.3.13

districts have been grouped on the basis of rate of urbanization, indicating variation in urbanization (Table 3.9).

TABLE-3.9  
CLASSIFICATION OF DISTRICTS BY VARIATION IN  
URBANIZATION IN WESTERN MAHARASHTRA PLATEAU,  
1901-1981.

Rate of urbanization (variation in urbanization)	Number of Districts.	Percentage in total Districts.	Name of Dist.
4.01-6.00(High)	1	11.11	Pune, B
2.01-4.00(MOderate)	5	55.56	Nashik, Dhule,
0.01-2.00(Low)	2	22.22	Sangli. Solapur
-2.00-0.00(Very low)	1	11.11	Kolhapur, Ahmad- -nagar, Jalgaon Satara.
<hr style="border-top: 1px dashed black;"/>			
Total	9	100.00	

Table 3.9 reveals that the more urbanized districts of the region attained more change in urbanization. Pune, most urbanized district of the region, has 41.84 per cent and 47.33 per cent of its population in urban areas in 1971 and 1981 respectively, giving the highest variation in urbanization. Kolhapur district stands next with 3.32 per cent variation.

The districts like Nashik Solapur, Sangli and part of Dhule recorded variations ranging from 2.01 to 4.00 per cent. They were the areas of moderate variation in per cent of urban population. The trend of variation among these districts indicates that they are gradually advancing towards better urbanization.

Ahmadnagar and part of Jalgaon districts were the areas of less urbanized, indicating less variation in urbanization. It resulted from a slow increase in the proportion of urban population to total population.

Satara was the only district which recorded a negative change in urbanization. This was the result of the fact that nearly five rural settlements emerged as new towns in 1971, were all declassified as towns in 1981.

### 3.12.2 VARIATION IN URBANIZATION AT TAHSIL LEVEL :-

The rates of urbanization at tahsil level offer better insight into the changing pattern of urbanization in the region. For this purpose, tahsils have been grouped on the basis of rates of urbanization (Table 3.10).

Among the tahsils, Haveli in Pune district and Nandgaon in Nashik district, with urbanization rates of 16.62 percent and -2.24 per cent respectively are at the two extremes (Fig.3.14).Haveli tahsil is at the top among the tahsils in the rate of urbanization. It has 37.09 percent and 53.71 per cent of its population in urban centres in 1971 and 1981 respectively, representing the highest variation in percentage

TABLE 3.10

CLASSIFICATION OF TAHSILS BY VARIATION IN URBANIZATION  
IN WESTERN MAHARASHTRA PLATEAU, 1971-81.

Rate of Urbanization (variation in urbanization)	Number of Tahsils	Percentage of total Tahsils.	Name of Tahsils.
12.1 and Above(High)	1	1.16	Haveli
9.01-12.00 (Moderate)	1	1.16	Hatkanagale
6.01-9.00 (Medium)	4	4.65	Nashik, Tasgaon, Dhule, and Koregaon.
3.01-6.00 (Low)	3	3.49	Miraj, Shrirampur, and Purandhar.
0.01-3.00 (Very Low)	29	33.72	Baglan, Malegaon, Chalisgaon, Ahmadnagar, Sangamner, Kopargaoon, Khed Junnar, Shirur, Baramati Bhor, Mawal, Satara, Wai, Phaltan, M' Shwar, Khanapur Walwa, Solapur (N), Akkalkot, Mangalvedha, Sangola, Karmala, Madha, Karvir, Shirol, Kagal & Gadhinglaj
<u>Decrease :-</u>			
2.99-2.00(High)	2	2.32	Nandgaon & Niphad
1.99-1.,00(Medium)	3	3.49	Sinnar, Karad and Pandharpur.
0.99-0.00 (Low)	9	10.47	Chandvad, Yevla, Igatpuri, Indapur
Entirely rural	34	39.54	Daund, Pune City, Man, Panhala and Shahuwadi.
Total	86	100.00	

# WESTERN MAHARASHTRA PLATEAU

## VARIATION IN URBANIZATION

(TEHSILWISE)

1971-81

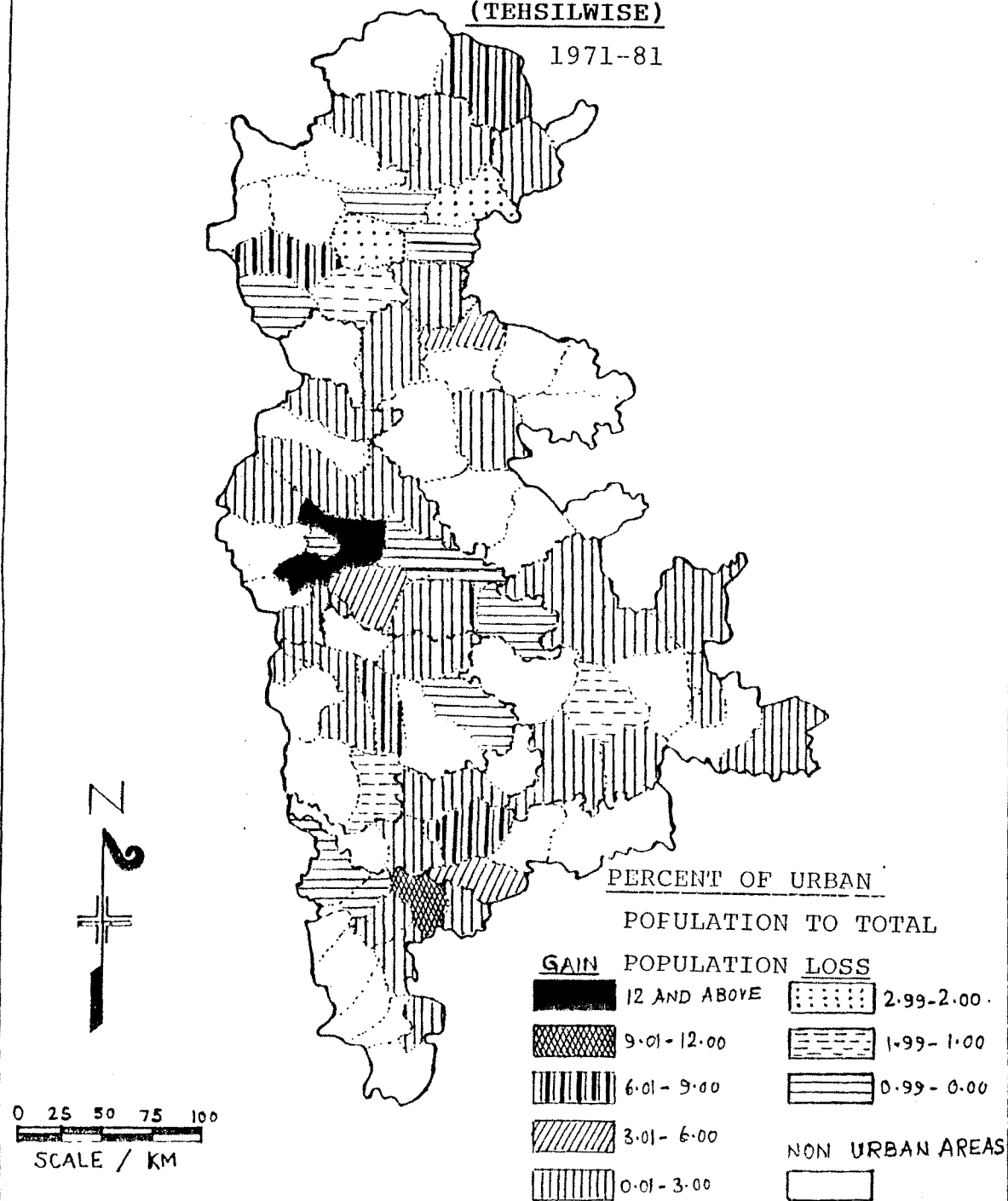


FIG. 3.14

of urban population. It is followed by Hatkanangale with 10.57 percent variation in proportion of urban population to total population. Thus they are experiencing rapid urbanization.

Tahsils like Nashik, Tasgaon, Dhule and Koregaon recorded moderate change in their urbanization. Tahsils except Dhule, showing high in moderate change in percentage of urban population, experienced the addition of urban population through the emergence of new towns in 1981.

Miraj, Shrirampur and Purandhar tahsils registered less variation in urbanization. Nearly twenty-nine tahsils witnessed very low rate of urbanization. Among these, seven in Solapur district, six in Pune district, four each in Satara and Kolhapur districts, three in Ahmadnagar district, two each in Nashik and Sangli and one in Jalgaon district were less urbanized tahsils in the region.

Surprisingly, during the decade 1971-81, the rate of urbanization considerably declined in almost 14 tahsils of the region. Among these, six in Nashik district, three in Pune district, two each in Satara and Kolhapur districts and one in Solapur district experienced negative change in urbanization. It is probably due to the dominance of the neighbouring big cities. This has been true especially in the case of the tahsils surrounding the neighbouring big cities like Pune and Nashik in particular.

Tahsils like Pune city, Nashik, Solapur North, Miraj, Ahmadnagr, Karvir and Malegaon are more urbanized but they have recorded low rate of urbanization because they could not exceed considerably their percentage of urban population in the decade 1981 over the previous decade.



**3.13 CHANGES IN THE NUMBER OF URBAN CENTRES :-**

Western Maharashtra Plateau has seen a number of changes in the number of urban settlements during 1901-81. In the region the total number of urban centres have been on the increase during the present century.

There were 70 urban centres in the region at the beginning of this century. According to the 1981 census, the study region consisted of 95 urban centres among which six were urban agglomerations comprising 22 urban centres. The growth in the number of urban centres and temporal variation of urban centres may be observed from Table 3.11.

TABLE 3.11  
NUMBER OF URBAN SETTLEMENTS IN  
WESTERN MAHARASHTRA PLATEAU, 1901-81.

Year	1901	1911	1921	1931	1941	1951	1961	1971	1981
Western Maharashtra Plateau	70	76	78	83	85	150	81	92	95
Maharashtra State	219	232	238	258	266	283	266	289	307

Cont.....

TEMPORAL VARIATION OF URBAN SETTLEMENTS

Decade	1901-11	1911-21	1921-31	1931-41	1941-51	1951-61	1961-71	1971-81
Western Maharashtra Plateau	+6	-2	+5	+2	+65	-69	+11	+3
Maharashtra State	+13	+6	+20	+8	+117	-117	+23	+18

It is evident from Fig.3.15(A) that the number of urban centres remained almost static till 1941. During the period 1901-41, the number gradually increased from 70 to 85; thus registering a net increase of 15 urban centres. In 1951, there were 150 urban centres—a maximum number since 1901. It was the result of change in the criteria in the definition of the term 'town.'

In 1951-61, the number of urban centres fell more abruptly and reached upto 81 because many urban centres were declassified by the census. It is obvious from the table that only 11 towns added during 1961-71. The total number of towns increased from 92 in 1971 to merely 95 in 1981. The growth in number of urban centres during 1901-81 was 35.71 percent. The addition of 25 towns within a span of eighty years, has not been any significant change in the number of urban centres in the study region.

# WESTERN MAHARASHTRA PLATEAU

## TRENDS OF URBANIZATION

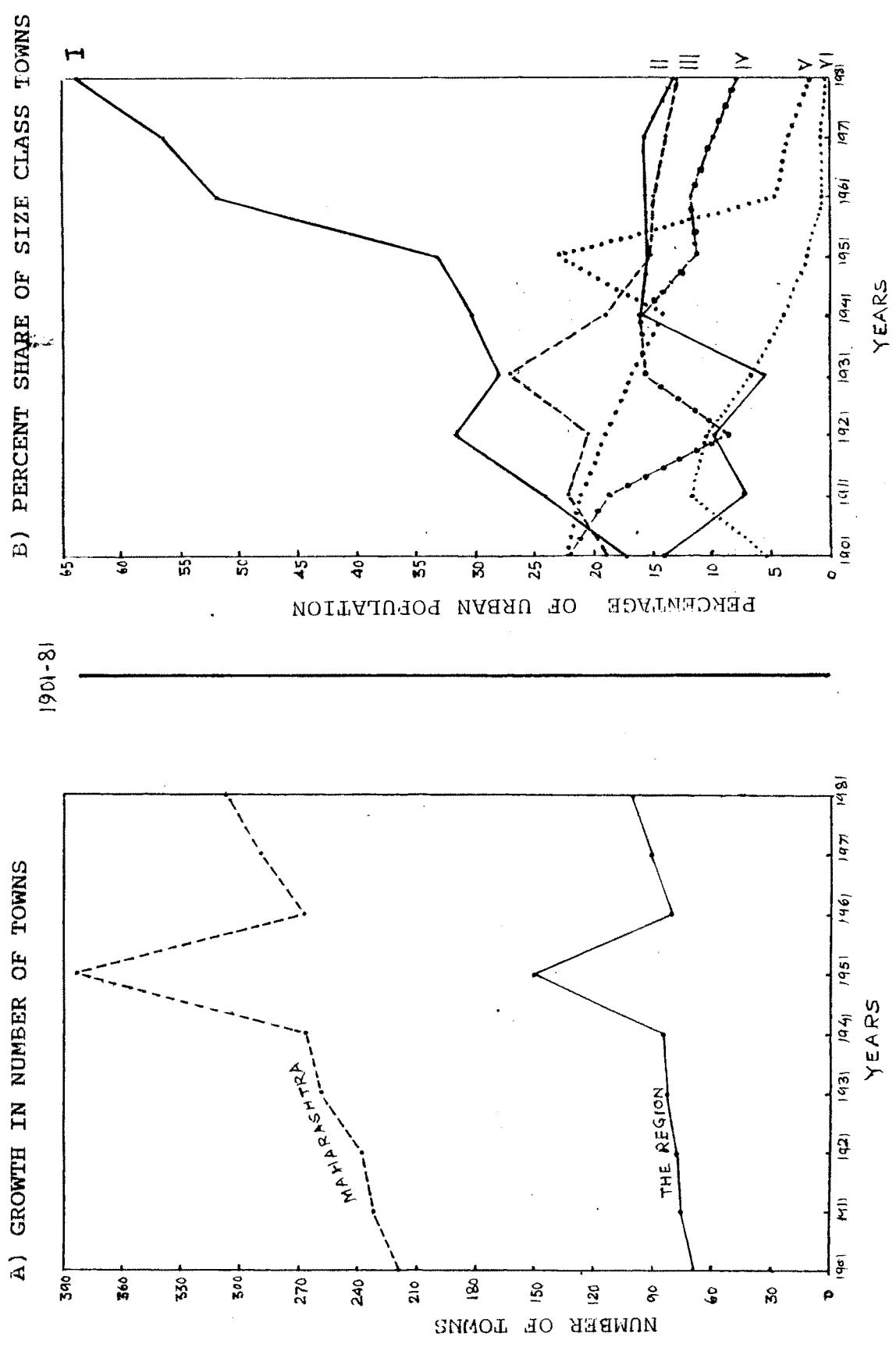


FIG. 3.15

### 3.14 CHANGES IN NUMBER OF TOWNS BY SIZE CLASS :-

Besides the changes in the number of urban settlements, a considerable variation occurred in the number of towns of various size classes in the region, during 1901-81. This variation during different decades may be noted from Table 3.12

In 1901 there was only one Class I town in the region and the number gradually increased to 11 by 1981. During the period 1901-81 there was 1000 percent increase in the number of Class I cities and 450 per cent growth in the number of Class II towns in the study region.

The increase in the number of class III and Class IV towns have also been spectacular during the period 1941-81; with an addition of 17 and 13 towns respectively. During 1901-31, there was gradual increase in the number of Class III towns and a steady decrease in the number of Class IV towns.

The Class V and Class VI towns showed a decline in numbers during post-independence period. the number of Class V towns decreased, significantly from 90 in 1951 to 12 in 1981; while the number of Class VI towns declined considerably from 16 to 4 during the same period. During the pre-independence period, the number of Class V towns observed almost static but there was a fluctuation in the number of Class VI towns during the decades 1901-41. But still, the trend in the number of Class VI towns appeared declining with an exception of the first two decades period.

The analysis of the pattern of growth of the towns of

TABLE 3.12

NUMBER OF TOWNS IN DIFFERENT SIZE CLASSES IN  
THE STUDY REGION, 1901-81.

Size class of Town:	1901	1911	1921	1931	1941	1951	1961	1971	1981
I(100,000 and above)	1 (1.43)	1 (1.32)	2 (2.56)	2 (2.42)	2 (2.36)	3 (2.00)	6 (7.41)	8 (8.69)	11 (11.58)
II(50,000-99,999)	2 (2.86)	1 (1.32)	3 (3.85)	1 (1.20)	4 (4.70)	6 (4.00)	7 (8.64)	8 (9.78)	11 (11.58)
III(20,000-49,999)	6 (8.57)	6 (7.89)	7 (8.97)	10 (12.05)	9 (10.59)	13 (8.66)	15 (18.52)	20 (21.74)	26 (27.37)
IV(10,000-19,999)	15 (21.43)	11 (14.47)	7 (8.97)	15 (18.07)	18 (21.18)	22 (14.67)	25 (30.86)	28 (30.44)	31 (32.63)
V(5,000-9,999)	31 (44.29)	26 (34.21)	26 (33.33)	28 (33.73)	30 (35.29)	90 (60.00)	22 (27.16)	19 (20.66)	12 (12.63)
VI(Less than 5,000)	15 (21.43)	31 (40.79)	33 (42.32)	27 (32.53)	22 (25.88)	16 (10.67)	6 (7.41)	8 (8.69)	4 (4.22)
All Classes	70 (100.00)	76 (10.00)	78 (100.00)	83 (100.00)	85 (100.00)	150 (100.00)	81 (100.00)	92 (100.00)	95 (100.00)

Figures in bracket indicate percentage of the number of towns to the total number of towns.

various classes in the region and their share in total number of towns, projects certain interesting facts :

i) The towns belonging to the highest size class (Class-I towns) have maintained a steady progress in its number. The number of towns in this class sharply increased from 1 in 1901 to 11 in 1981. It shows 1000 percent growth in their number. Their share in the total number of towns reached 11.58 per cent in 1981 which was only 1.43 per cent in 1901.

ii) During the last eight decades there has been ten-fold increase in the number of Class-I towns or cities, five-fold in Class II, more than four-fold in Class III and nearly two-fold in Class IV towns. But the number of Class V and Class VI towns have been reduced by 2.58 times and 3.75 times respectively during the same period.

iii) the significant increase in large class (Class I) and medium Class (Class I and II) towns and considerable decrease in small size class (Class IV, V and VI) towns is noticeable. The number of medium size class towns increased from 8 in 1901 to 37 in 1981 or from 11.43 per cent to 38.95 per cent share of total towns in respective years. While the number of small class towns declined from 61 in 1901 to 47 in 1981 or from 87.14 per cent to 49.47 per cent share of total towns in respective years.

iv) In the last three census years (1961, 1971 and 1981) the small size class towns took a lead in the total number against the number of large class and medium class towns. However, the share of large class and medium class towns increased

significantly but small size-class towns have shown decreasing trend of their share in the total number of towns.

v) According to the census of 1981, of the 95 towns, in the region, 11 are Class I, 11 Class II and 26 Class III towns. The remaining 47 towns have less 20,000 population each and hence are classified as small towns.

This trend of urban centres, definitely, indicates the instability of the small towns and the stability of the larger and medium class towns. It is also true that only smaller towns lost or gained their urban status from time to time due to the definitional changes by the census.

### 3.15 DISTRIBUTION OF URBAN POPULATION BY SIZE CLASS :-

It is quite interesting to note the changes in distribution of urban population according to size class of towns during different decades. Therefore, it will be worthwhile to analyse the distribution of population by size class of towns in order to identify the trend of urbanization.

Table 3.13 provides proportion of urban population by size class of towns during the period 1901-81.

An examination of the proportion of population living in each class of towns reveals that there is a secular tendency towards the reduction in the share of small towns (Table 3.13). It is quite apparent from Table 3.12 that there has been progressive rise in the number of class I towns since 1901. These cities share 63.45 per cent of total urban population in 1981 which was 17.07 per cent in 1901. They experienced

TABLE 3.13

PER CENT SHARE OF URBAN POPULATION IN DIFFERENT CLASS SIZE  
TOWNS IN THE STUDY REGION, 1901-81.

Year	Percentage of urban population to total population	Number of Towns	Size-Class of town						All Classes
			I	II	III	IV	V	VI	
1901	14.26	70	153320 (17.07)	129661 (14.43)	164669 (18.33)	199073 (22.16)	204078 (22.72)	47528 (5.29)	898329 (100.00)
1911	12.84	76	158856 (18.92)	61345 (7.31)	186053 (22.16)	156808 (18.67)	178152 (21.22)	98362 (11.74)	839676 (100.00)
1921	16.51	78	318124 (31.59)	97958 (9.73)	205354 (20.39)	96928 (8.63)	191686 (19.03)	107018 (10.63)	1007068 (100.00)
1931	16.79	83	342732 (28.20)	66728 (5.49)	329826 (27.13)	191737 (15.77)	203486 (16.74)	81027 (6.67)	1215536 (100.00)
1941	18.70	85	470174 (30.22)	252919 (16.26)	297443 (19.12)	249577 (16.04)	221762 (14.26)	63280 (4.10)	1555655 (100.00)
1951	26.31	150	902340 (33.15)	419115 (15.40)	415939 (15.26)	308571 (11.34)	618763 (22.73)	56963 (2.10)	2721674 (100.00)
1961	22.53	81	1503333 (51.59)	451777 (15.50)	449481 (15.43)	346702 (11.90)	145146 (4.98)	17443 (0.60)	2913882 (100.00)
1971	24.62	92	2251957 (56.16)	630031 (15.71)	560331 (13.97)	395545 (9.87)	143992 (3.59)	27691 (0.69)	4009547 (100.00)
1981	27.89	95	3534401 (63.45)	743121 (13.34)	734138 (13.18)	447011 (8.03)	96642 (1.74)	14749 (0.26)	5570065 (100.00)

Figures in bracket show per cent share of urban population .



continuous increase in their relative position in respect to their number and per cent share of their population. However, the concentration of such high per cent share of urban population in a small number of urban centres of class I cities is clear evidence of dominance of the big cities in the process of urbanization (Fig.3.15(B)).

The most striking feature observed in distribution of urban population by different size classes in the region that all classes of towns except Class I towns experienced continuous decrease in per cent share of their population since 1961. It is significant to point out that the share of small class (Class IV, V and VI) towns has tremendously reduced from 50.17 per cent in 1901 to 10.03 per cent in 1981. This type of tendency no doubt reflects the imbalance of distribution of urban population by size classes.

The percent share of medium class (Class II and III) towns has slightly decreased from 32.76 per cent in 1901 to 26.52 per cent in 1981.

Some generalizations may be formed from the analysis of per cent share of population in different size class towns :

- i) the dominance of Class I towns or cities is established in the study region as it is in Indian urban scene.
- ii) Percentage share of population of Class II and III towns has also considerably gone down.
- iii) Towns of lower classes (Class IV, V and VI) though have a high number, but the share of their population is very low.

In the of the region as a whole about 63 per cent of

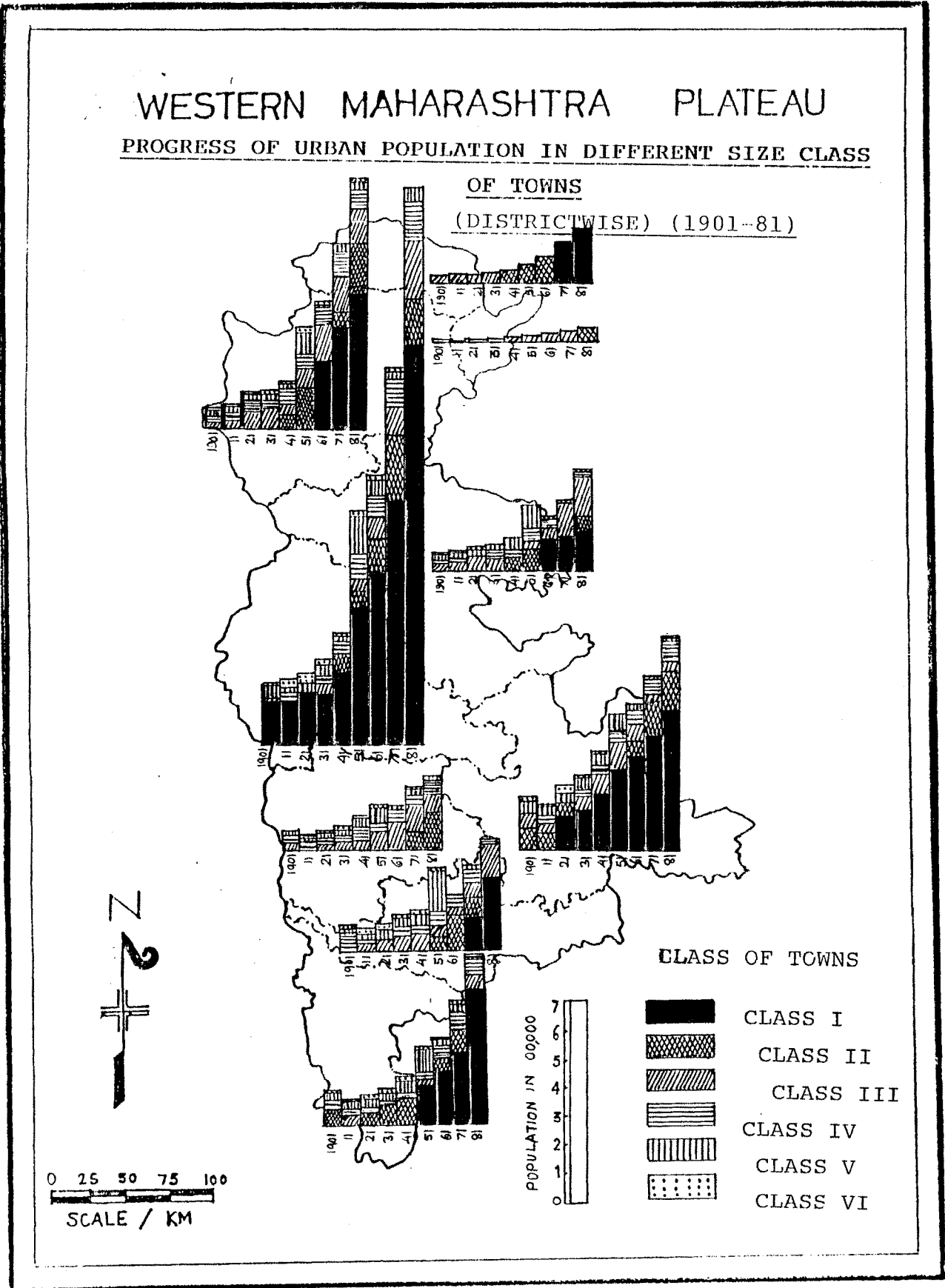


FIG. 3.16

total urban population lives in Class I towns or cities. Here, an attempt has been made to show growth and spatial distribution of urban population by size class of towns during 1901-81 (Fig.3.16). A study of distribution of urban population in different size classes of the towns reveals the greater concentration of urban population in Class I towns. The more urbanised a district, the greater proportion of urban population living in larger towns. The majority of population prefer to live in large towns. This tendency has become more distinct in the last three decades.

### **3.16 MEAN SIZE OF URBAN CENTRES :-**

The study of mean size of urban centres in various size classes during the period 1901-81 indicates that the general trend of average size of towns shows continuous growth in the mean size all towns (Fig.3.17).

Individual class order analysis shows that Class I towns have increased their mean size considerably upto 1951. In 1961 there is a decline in mean size of class I towns; and after 1961, it gradually increased.

In respect of Class II towns, alternative ups and downs in the trend of mean size are observed since 1911. A sharp decrease in mean size of this class towns noticed in 1921.

A moderate fluctuation in the mean size of urban centres is found in Class III towns. They have gained higher mean size during 1941. Since 1921 the mean size continued to increase steadily till the year 1941. From 1941 onwards the mean size of class III towns has fallen abruptly to 28016 in 1971.

# WESTERN MAHARASHTRA PLATEAU

## MEANSIZE OF TOWNS IN DIFFERENT SIZE CLASSES 1901-81

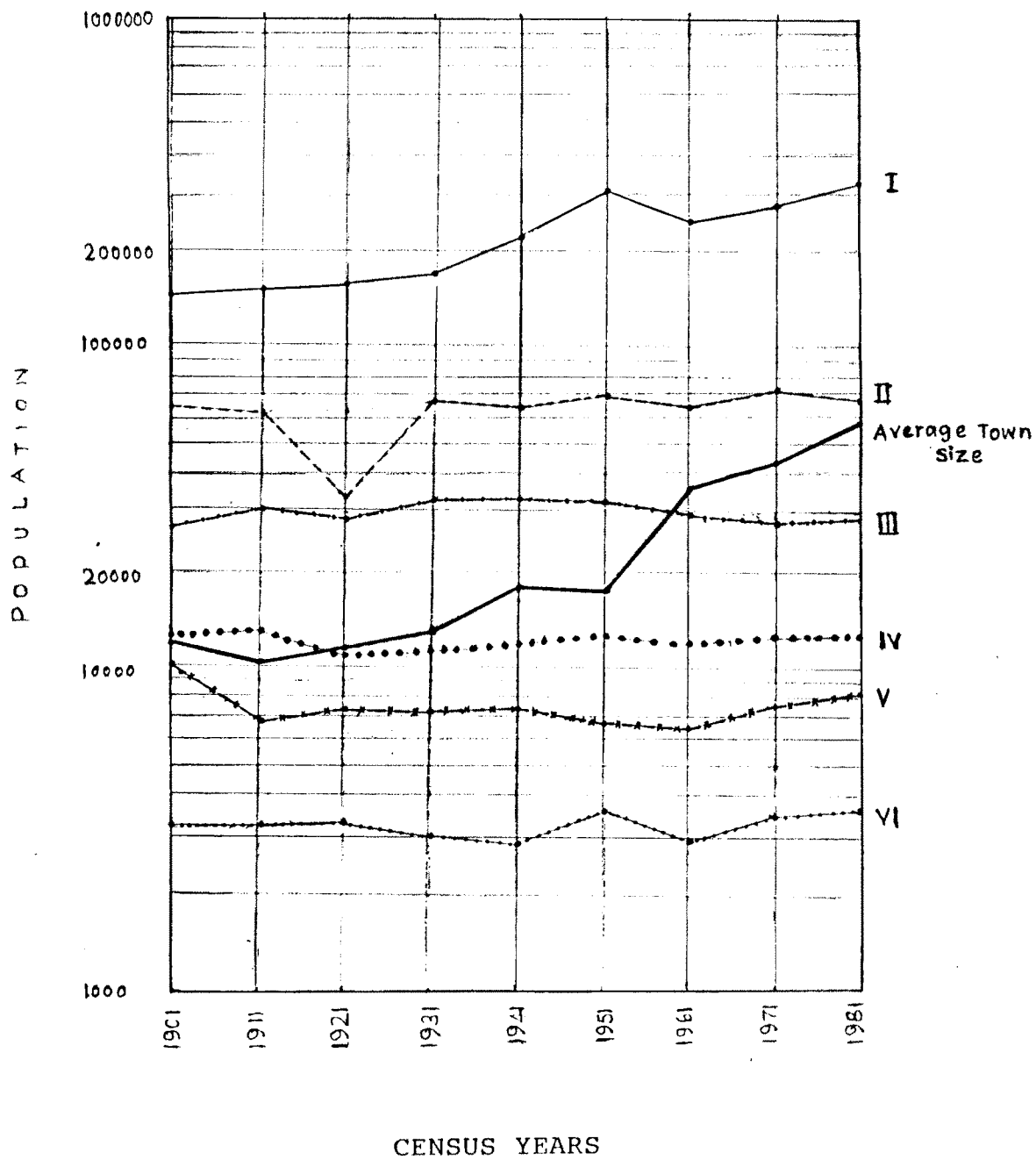


FIG. 3.17

In respect of small towns (Class IV, V and VI), the Class IV towns have a very high fluctuations in the mean size since 1941. They indicate stagnancy in the mean size during 1901-31. The mean size of class V towns remains the same with little variation. The lowest class of towns also shows little fluctuation in their mean size.

### 3.17 RANK ORDER FLUCTUATION OF URBAN CENTRES :-

The process of urbanization can be viewed through different angles. The physical growth of individual towns and cities and fluctuations in their population size are the important aspects of the urbanization process. Any change in population size of urban centre is directly related to its infrastructure and growth and urban centres. The general infrastructure and the competitive growth of urban centres is largely responsible for the fluctuation in the ranks of the urban centres (Mulik, 1989). In this regard, an attempt has been made to generalize the trend that has been produced by changes in the rank of urban centres.

The fluctuation in the rank and the maximum variation in the rank of towns is shown in Fig.3.18. The illustration clearly shows that three urban centres, namely, Pune, Solapur and Kolhapur maintained their first, second and third ranks respectively throughout the period. In addition to this, the towns like Dhule, Miraj and Baramati have maintained their ranks during eighty years of period. There may be fluctuations in their ranks in the transitional period, but in the final year i.e. 1981, they have secured their original ranks.

# WESTERN MAHARASHTRA PLATEAU

## RANK FLUCTUATION OF URBAN CENTRES

1901 - 81

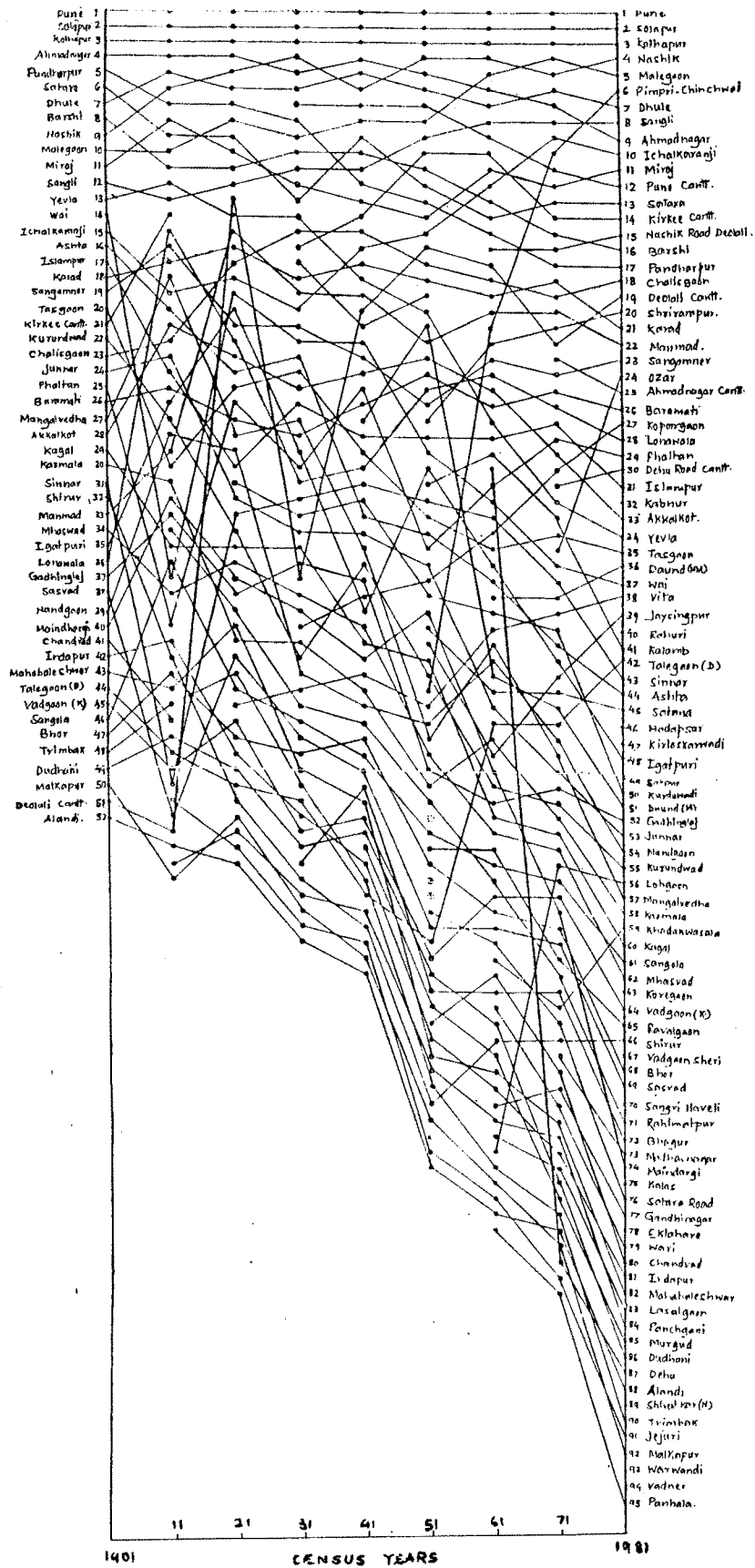


FIG. 3.18

Ahmadnagar, the 4th ranking town, could maintain its order in the rank upto 1921; in the year 1931 it was ranking 5th in the rank order and replaced by Nashik. In the year 1981, the order of this 4th ranking town has fallen to the 9th rank, at the same time, Nashik which could gain the 4th in 1931 was shifted to the 4th rank in 1981. The present 5th ranking city Malegaon was on the 10th step of ranking in 1901. It secured 9th rank in 1931 and continued to maintain its present position.

A very high upgrading in the rank order is observed in the case of Pimpri-Chinchwad; it was ranking with 44th in the year 1951, but in the next census year it was shifted to the 21st order, immediately in the next census year it was ranking 10th in order. In the year 1981, it was placed in the 6th order of rank.

A very high degrading in the rank order is appeared in the case of Dehu; it was ranking 30th in the year 1961; but in the next census year it was sharply dropped to the 80th order. In the year 1981, it remained on the 87th order of rank.

Small towns in the study region indicate a high fluctuation in their rank with a declining trend in the order of rank. For instance, town like Trimbak which was ranking 48th in order in 1901 is placed in the 90th order in 1981. Nearly 30 towns in this category show a declining trend in the order of rank in the year 1981 from their rank of initial period of rank study of towns.

Some of the towns which have emerged on the urban

landscape in the later period have secured a very high rank in a short span of time. For example, Shrirampur classified as town in 1951 was ranking 27th in order, secured the 20th order in the rank in 1981. The town Ozar which was ranking 35th in 1971 suddenly achieved 24th rank in 1981. The new towns emerged in 1981 hold relatively higher order of rank. Kabnur (32th rank), Rahuri(40th rank) Hadapsar (46th rank), Kirloskarwadi (47th rank) and Sastpur (49th rank) are some of them.

The analysis of variation range of ranking indicates that 14 towns have experienced a positive variation in rank ranging between 1 to 9 times. Higher positive fluctuation in the rank order is experienced by four towns. They are Mahmad, Ozar, Kopargaon and Lohgaon. Their fluctuation ranges between 10 to 18 times. There are two towns namely Pimpri-Chinchwad and Deolali cantonment show a positive variation in rank order over 30 times. Out of the 95 towns in the study region, 20 towns experienced positive variation in their ranks.

There are 56 towns which show a negative variation in their rank orders. Thirteen towns indicate a negative fluctuation ranging between 1 to 9 times. Sixteen towns show a negative fluctuation between 10 to 19 times. Nearly twenty-three towns indicate a negative fluctuation between 20 to 39 times. Four towns in the region, like Dehu, Trimbak, Jejuri and Malkapur have very high negative variation which exceed more than 40 times.



### 3.18 THE PHENOMENON OF NEW TOWNS :-

A striking feature of the last decade urbanization is related to the emergence of new towns. New towns represent not only an advancement of the urbanization process but also its diffusion to new areas. These places are expected to normally fill the gaps in space (Gopal Krishan, 1988). Their emergence brings additional area under urban influence.

A new town is one which did not have the status of an urban settlement at the previous census. The emergence of a new town is the product of one of the following situations.

- i) A village promotes into an urban centre either by way of acquiring the statutory civic status or by satisfying the requisite demographic criteria.
- ii) A town, which got declassified during a previous census, gets reclassified.
- iii) A segment of an existing town is carved out as a separate town.
- iv) Some existing towns are merged to form a new, bigger one.
- v) A new town is built for administration, industry, education or some other function.

A detailed analysis of the thirteen new towns in 1981 showed that 9 (69.23 per cent) got their status and name from the already existing villages, three (23.08 per cent) were reclassification cases, and one (7.69 per cent) were the products of separation from existing towns. Nearly thirteen places acquired the status of new towns in the 1981 census.

TABLE 3.14

DISTRIBUTION OF NEW TOWNS IN  
WESTERN MAHARASHTRA PLATEAU, 1981.

District	New town	Size-Class	Area in sq.km	Population
1. Nashik	1.Satpur	IV	12.26	19952
	2.Ekklahare	IV	9.15	10318
	3.Vadner	VI	10.82	3651
2. Ahmadnagar	1.Rahuri	III	47.46	23721
	2.Warwandi.	VI	12.41	3713
3. Pune	1.Hadapsar	III	19.59	20563
	2.Sangvi Haveli	IV	3.73	11969
	3.Vadgaon Sheri	IV	5.68	13050
	4.Kalas	IV	3.80	11058
	5.Shivatkar(Nira)	V	5.56	7054
4. Satara	1.Koregaon	IV	23.37	14594
5. Sangli	1.Kirloskarwadi	III	N.A.	20512
6. Kolhapur	1.Kabnur	III	10.27	30275
Western Maharashtra Plateau	13	--	164.10	190,430
Maharashtra State	31	--	213.82	353,050

Source : Census of India, 1981.

N.A. - Not Available.

These towns cover an area of 164.10 sq.km. and have a population of 190430 persons (Table 3.14). Most of them are small with an average population of around 14648 and an area of 13.67 sq.km. Their aggregate population accounts for roughly 3.42 per cent of the region's urban population, but their contribution to urban growth during 1971-81 is pronounced. About one-eighth of the urban population increase during 1971-81 is accounted by the new towns.

The locational pattern of new towns shows that the occurrence of new towns in the region in 1981 is on the peripheral zones of big and rapidly growing areas is indicative of decentralization of the urbanization process.

#### S U M M A R Y :-

Urbanization is a complex phenomenon. In the demographic sense, urbanization is the proportion of urban population to the total population of a region. Natural increase in urban population, reclassification and net in-migration constitute components of urban growth and the factors and forces of the dynamics of urbanization.

The urban population of Western Maharashtra has increased by more than six times during the eight decades. The pace of urbanization after independence has been rather faster in the region. The decade 1971-81 marked the highest urban growth higher percentage of urban population to total population as well as the number of towns. The region shows steady progress of urbanization. The percentage of urban population to total population has increased from 14.26 per

cent in 1901 to 27.89 per cent in 1981. But still, the region has a slow growth trend of urbanization in comparison to the State as a whole.

The spatial patterns of urban growth at the level of district and tahsil show considerable regional variations in urban growth. The region experienced a wide range in the proportion of urban population to total population over the eighty years, of period. The rates of urbanization during 1901-81, highlighted the changing patterns of urbanization at both district and tahsil levels in the study region.

In the present century the region has <sup>experienced</sup> ~~seen~~ a number of changes in number of urban settlements as well as a considerable variations in the number of towns of various size classes. The study of distribution of urban population in different size classes of towns in the region reveals that high per cent share of urban population is found in small number of class I towns ; while the per cent share of smaller class towns has tremendously reduced. The general trend of average size of towns shows continuous growth in the mean size of all towns.

The change in the population size of urban centres manifests the rank order fluctuation of towns in the region. Nearly thirteen new towns have emerged on the urban scene of the region.

@@@@@@

R E F E R E N C E S

1. Alam, S.M.and (1974): Urbanization in Developing Countries, Pokshishevsky, V.V. (ed) Osmania University, Hyderabad, pp.20-35.
2. Bose, Ashish. (1973) India's Urbanization 1901-2001, Tata McGraw Hill, New Delhi, pp.3-9.
3. Cherunilam, F. (1984): Urbanization in Developing Countries, Himalaya Publishing House, Bombay, pp.20-28.
4. Davis, K. (1962): "Urbanization in India: Past and Future," in Turner, R. (Ed.); India's Urban Future, Oxford University, Press Bombay, p.1.
5. Dikshit, K.R. (1986): Maharashtra in Maps, Maharashtra State for Literature and Culture, Bombay, pp.141-151.
6. Drakakis-Smith, (1987): The Third World City, Mathuen, London, p.3.
7. Gopal Krishan and Others (1988): State of India's Urbanization, National Institute of Urban Affairs, New Delhi, p.39.
8. Haggett, P. (1983): Geography, A Modern Synthesis, Harper and Row, New York, p.350.
9. Hauser, P.M. (Ed.) (1965): "Handbook for Social Research in Urban Areas," published by UNESCO, vide An Approach to Urban Studies in India (Ed. Burman, D.K.), p.239.

10. Kundu, A. (1983): "Theories of City Size and Indian Urban Structure, " Economic and Political Weekly, pp.1361-1368.
11. Lynch, O.M. (1963): "Some Aspects of Rural Urban Continuum in India," cited from Anthropology on the March, (ed.) by Balaratnam, Madras, Vide "An Approach to Urban Studies in India," p.239.
12. Malshe, P.T. (1986): "Analysis of the Changes and Trends in the Urban <sup>system of</sup> Maharashtra Year 1971-81" IIG. Vol.8, No.2, pp.139-150.
13. Mandal, R.B. and (1982): Urbanization and Regional Development, Peters, G.L. (Ed.) Concept Publishing Company, New Delhi, p.50.
14. Misra, R.P. (1978): Million Cities of India, Vikas Publishing House Pvt.Ltd., New Delhi, p.16
15. Mulik, A.D. (1978): "Trends of Urbanization in Maharashtra in Twentieth Century," Journal of Shivaji University (Science), Vol.18, pp.123-129.
16. ————— (1989): Dynamics of Urbanisation - A Geographical Perspective, Published Ph.D.Thesis, Himalaya Publishing House, Bombay, pp.18-35.
17. Nath, V. (1986): "Urbanization in India-Review and Prospects," Journal of Economic and Political Weekly, Vol.No.8.

