CHAPTER-III

POST INDEPENDENCE TRENDS OF URBANIZATION

- Dynamics of urbanization

- Growth of population

- Relative growth of urban population

- Gains and Losses of urban population

- Stages of urbanization

- Changes in number and size of towns

- Classwise distribution of urban population and meansize of each class.

- Rank fluctuation of urban centres

- Spatial analysis of urban growth

- Growth of urban centres and status of towns.

In this eighth decade of 20th century one is constantly
remainded that every thing affects every thing else. We live
in a closed system of interdependencies. (Loewenstein 1971)
In the present chapter attempt has been made to bring out the
salient character of the post-independence trendes of
urbanization and the pattern of urban system in south Maharash-
tra. Keeping this objective in mind an analysis of spatial
and temporal trends of urbanization have been studied. Towns
being the focal points of economic,cultural and administrative
activities of society, play an important part in social and
economic development. Urban growth is considered to be an
important indicator of the development of the country and its
regions. However it will not be out of place to define the
concept of urbanization.

Various authors have given the specific definitions of
urbanization in which Hauser (1965), Lynch (1963), Stamp
(1961), Reddy (1970) and Alam (1974) are very important.
The concept of urbanization implies changes in the nature of
peoples activities in the ratio between the population engaged
in agricultural activities and the rest of the population.
Urbanization can be represented as a process leading to a
spatial connections of activities in relatively few areas. In
the present study the growth of urban settlements and urban
population is studied with reference to their regional setting.
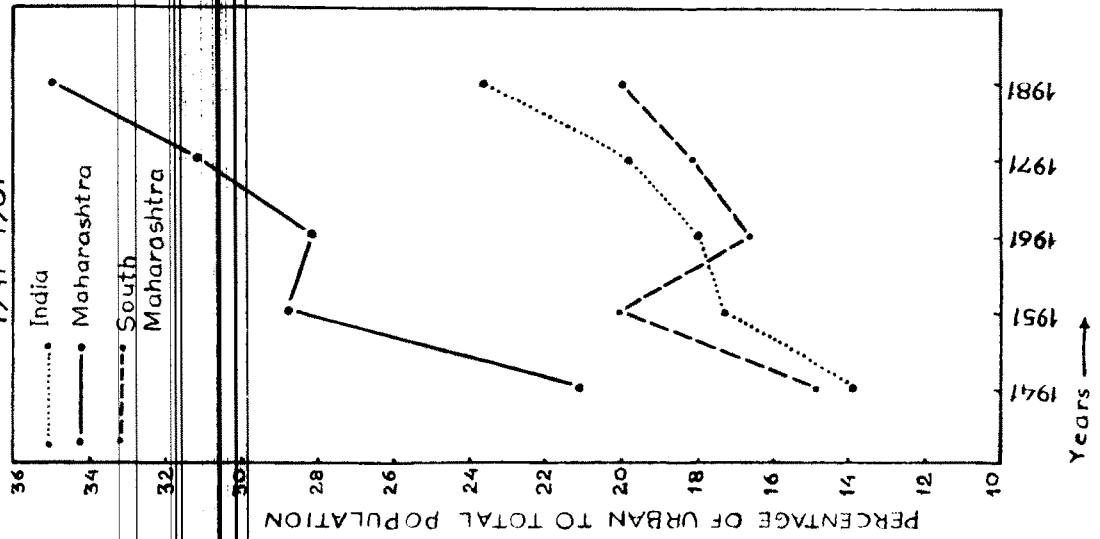
DYNAMICS OF URBANISATION :

The process of urbanization takes place when the proportion of urban population is increasing. Some times urbanization also increses due to reclassification of rural settlements. But real change in urban growth is due to migration of rural population to urban areas. In the present study the growth of urban population since independence is considered.
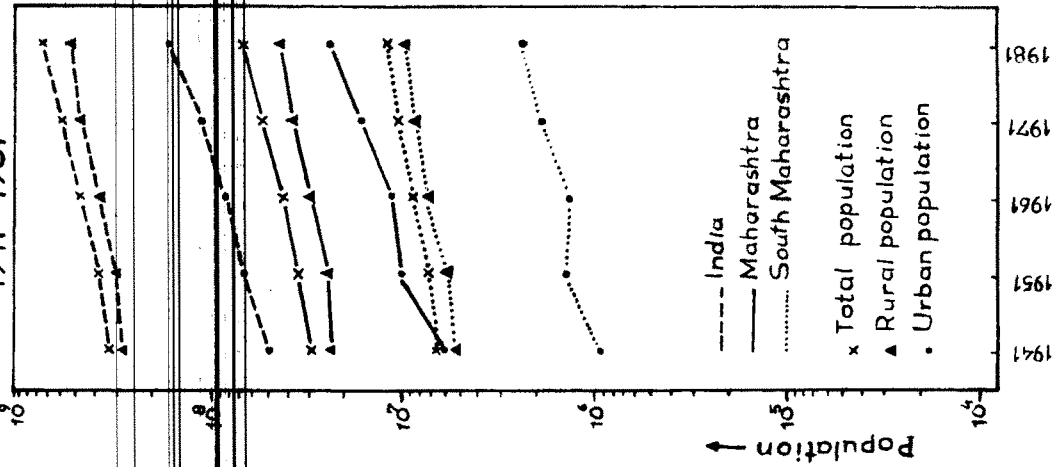
GROWTH OF POPULATION:

The comparative analysis of the growth of rural, urban and total population of the study area with Maharashtra and India indicates that the total population of India and Maharashtra began to increase at a very high rates since, independence. While the population of the study area indicates that the rural and total population is constantly increasing but the urban population indicates decrease during the census year of 1961. From 1961 onwards it shows considerable growth. The urban population of the study area indicates the growth rate of 54.63% during the decade 1941-1951. This high growth rate is the result of change in the definition of towns . According to 1961 census several towns were declassified and the growth rate indicates - 0.42 % during 1951-61 decade. The Fig No.3.1 gives a comparative picture of the total rural and urban population of study area Maharashtra State and India. The table No.3.1 gives the

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SHIFT OF URBAN POPULATION AT NATIONAL AND STATE LEVEL 1941-81

National level
State level

FIG-3·3

GROWTH OF POPULATION 1941-1981

India
Maharashtra
South Maharashtra

× Total population
▲ Rural population
• Urban population

← Population

FIG-3·1

TRENDS OF URBANISATION 1941-1981

India
Maharashtra
South Maharashtra

PERCENTAGE OF URBAN TO TOTAL POPULATION

Years →
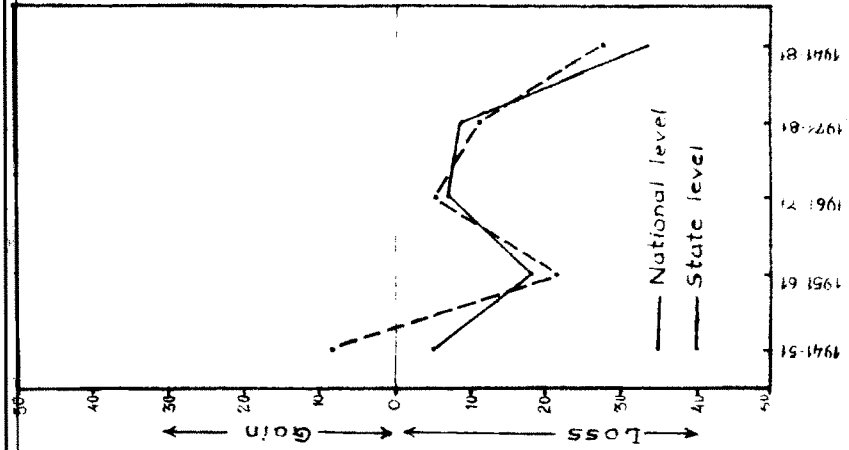
FIG-3·4

details of decadal growth rate.

Table No.3.1.

Decadal rate of change in population 1941-81.

Decade		1941-51	1951-61	1961-71	1971-81	1941-81
Study Area	Total	+ 14.67	+ 20.00	+ 20.33	+ 15.94	91.97
	Rural	+ 7.66	+ 25.15	+ 18.18	+ 13.32	79.83
	Urban	+ 54.63	- 0.42	+ 31.04	+ 27.72	157.71
Maharashtra State	Total	+ 19.27	+ 23.60	+ 27.45	+ 24.40	133.72
	Rural	+ 12.86	+ 24.51	+ 22.22	+ 17.43	92.50
	Urban	+ 62.42	+ 21.32	+ 40.75	+ 39.82	287.75
India	Total	+ 13.31	+ 21.64	+ 24.75	+ 20.10	106.53
	Rural	+ 8.79	+ 20.64	+ 21.80	+ 14.38	82.85
	Urban	+ 41.43	+ 26.41	+ 38.20	+ 43.17	253.74

As compared to Maharashtra the region has lower growth rate of urban population since independence. The comparative

analysis of growth rate of total, rural and urban population
of all the three areas is dipicted in Fig.3.2'a,b and c '

RELATIVE GROWTH OF URBAN POPULATION :

The trend of growth compared at national and state level
can give the clear cut idea about the apparent increase in
urbanization in the study area. To study the regional pattern
of urban growth at national and state level, the technique of
' shift analysis ' has been used. In the present study Fuch's
method (1962) of calculating relative gains and losses has
been used.

Methodology : - The modified mathematical equation of
shift method is ...

$$GP = Yp - Hp \qquad (I)$$

$$Hp = Xp \times \frac{Y}{X} \qquad (II)$$

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 the country/state in
the initial year.

Y = Urban population of the country/state in
the final year.

Hp = an abstract value representing the value of
urban growth in the study region that would
exist if the region had grown at national
or state level.

The difference between actual value Yp and Hp can be
converted in to percent gain or loss by the following equation :

POPULATION GROWTH RATES IN
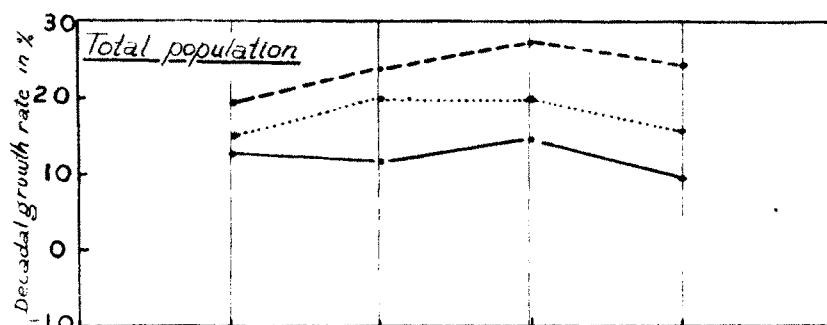
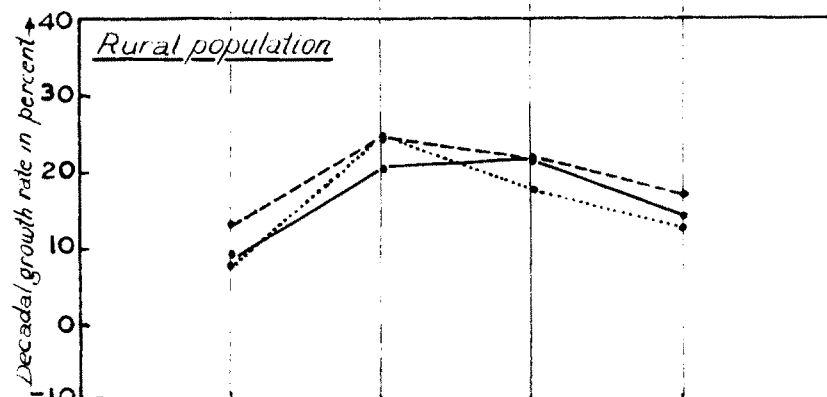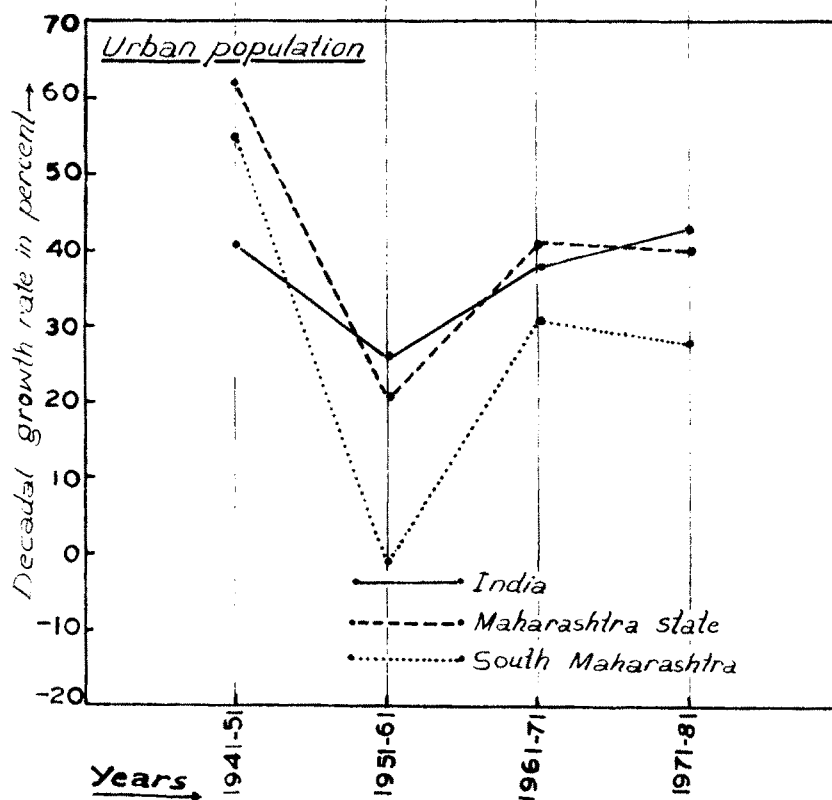# SOUTH MAHARASHTRA, MAHARASHTRA STATE AND INDIA

FIG-3·2
a

FIG-3·2
b

FIG-3·2
c

$$\frac{(Yp - Hp)}{Yp \text{ or } Hp} \times 100 \ldots \ldots \ldots (III)$$

The larger of the two terms (Yp or Hp) in the numerator is always used in denominator. When Yp is denominator then there is a gain.and When Hp is denominator then there is a loss.
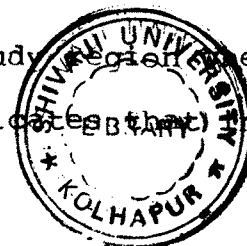
GAINS AND LOSSES OF URBAN POPULATION :

With the application of above method gains and losses of urban population in the study area from 1941 to 1981 have been calculated at national and state level. The details of decade wise gains and losses and net gain or loss in urban pupulation is given in Table No.3.2 and the trends of gains and losses have been dipicted in Fig. No.3.3

Table 3.2

Decadewise percent shift of urban population of the study region at State and National level.

Decade	1941-51		1951-61		1961-71		1971-81		1941-81	
	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss
State Level	—	4.79	—	17.92	—	6.89	—	8.65	—	33.53
National Level ->%>	8.54	—	—	21.23	—	5.18	—	10.79	—	27.14

The growth of urban population in the study region when compered with the state and national level indicates that the

decade 1941-51 there is a gain of 8.54 % at national level but on the state level the region shows a loss of 4.79 % . The next decade (1951-61) indicates heavy loss of 17.92 % and 21.23 % at the state and national levels respectively. During the decade 1961-71 also the study region shows a loss of 6.89 % and 5.18 % respectively. In the decade 1971-81 again it indicates a loss of 8.65 % and 10.79 % respectively. The analysis of the net shift also indicates a loss at both the levels.

STAGES OF URBANIZATION :

The analysis of the data of the percentage of urban population to total population brings out the growth or decline of urban population during the various census periods. It also helps in the study of stages of urban growth. A comparision of the regional urban population percentage with the national and state level percentage of urban population gives us an idea about the stages of urban growth. The percentage of urban population to total population for India during 1941 was 13.86 % and for the state it was 21.11 % . During the same period the percentage of urban population in the study area was 14.92 % . In 1951 the percentage of urban population in the study region was 20.12 % which was 8.63 less than the state's percentage and 2.78 more than that of India. In the next decade (1961) the percentage of urban population of the study area was nearer to national percentage and it was comparatively less than the state of Maharashtra (Table No.3.3) In the year 1971 the same trend is continued. But in 1981 the regional percentage of urban population is less by 3.70 on national level and 15.00 less than that of states percentage.

Table No.3.3.

Stages of urbanization

Decadewise share of urban population as percent to the total population.

Decade -->	1941	1951	1961	1971	1981
South Maharashtra (Study region)->	14.92	20.12	16.70	18.18	20.03
Maharashtra State .... ->	21.11	28.75	28.22	31.17	35.03
India .....>	13.86	17.30	17.98	19.87	23.73

In the study area in 1941 , 14.92 population was urban. The rate of increase seems to be very low. In the year 1981 percentage of urban population has increased to only 20.03.While in respect of state, during the same period percentage of urban population has increased from 21.11 to 35.03 percent. When national growth of urbanization is compared with the study region it is observed that the region is,comparatively growing at the national level. (Fig.No.3.4)

Looking in to the trends of growth of urbanization it is observed that the development of economy and industrialization has accelerated the growth of urban population after 1961. This growth has two aspects i) Rapid growth of older cities and

impact of " Pull " factor and 2) Emergence of new towns.

CHANGES IN NUMBER AND SIZE OF TOWNS :

The study of size classes of towns gives us clear cut idea about the degree of imbalance and the pattern of population distribution in different size class of towns.

Since independence the study of urban centres of different classes of towns indicates that during a Span of 40 years (From 1941 to 1981) the total number of towns has increased from 40 to 53 (Table No.3.4)

In 1941 out of the 40 towns, one town, Solapur , was classified as class I town. The another town Kolhapur was classified as Class II town. There were five towns each in the Class III and class VI category. Thirteen towns were classified as class IV towns, while V classV includes fifteen towns of the study area.

Table No.3.4

Classwise distribution of towns in south Maharashtra

Size class of town	1941		1951		1961		1971		1981	
	no.of Towns	% of Town	No.of no.	% of town no.	no.of towns	% of town no.	no.of towns	% of town no.	no of town	% of town no.
1	2	3	4	5	6	7	8	9	10	11
I	1.	2.50	2.	4.65	2.	4.00	3.	5.26	5	9.43
II	1	2.50	1	2.33	4	8.00	5	8.77	4	7.55
III	5	12.50	7	16.28	6	12.00	8	14.40	12	22.64

Size class of town	1941 no.of Towns	% of Town no.	1951 No.of towns	% of town no.	1961 no.of towns	% of town no.	1971 no.of towns	% of town no.	1981 no.of town	% of town no.
1	2	3	4	5	6	7	8	9	10	11
IV	13	32.50	12	27.91	19	38.00	18	31.58	19	35.84
V	15	37.50	17	39.53	16	32.00	16	28.70	7	13.21
VI	5	12.50	4.	9.30	3.	6.00	7 .	12.28	6	11.32
TOTAL	40	100.00	43.	100.00	50	100.00	57	100.00	53	100.00

In 1951 the number of towns has increased to 43. As a matter of fact according to 1951 consus 87 settlements were classified as towns. But here we have taken only those settlements which have continued to exist as urban places after the change in the definition of town in 1961. Out of these 43 towns two towns are classified as class I (Solapur and Kolhapur) one town, Sangli, is classified as class II, Seven towns are classified as class III. Class IV included twelve towns and class V includes highest percentage (39.53 %) of towns, where seventeen towns are included,Class VI has only four towns.

In 1961 seven more towns were added making a total of fifty towns in the study area. The classwise distribution shows that from class I to class VI there were 2,4,6,19,16 and 3 towns respectively.

In 1971 the total town number has increased to fiftyseven. Three towns, Sangli,Kolhapur and Solapur are classified as

class I towns. Five towns are classified as class II towns.
Class III includes eight towns. Largest share of towns is
found in fourth and fifth class,where eighteen and sixteen towns
are found accordingly. Only seven towns are classified as
class VI towns.

In 1981 the number of towns has decreased to fifty three.
Eight towns namely, Shirgaon,Nate,Radi,Bhade,Sadashivgad, Patan,
Gokal T.Helwak and Humbarli are declassified according to 1981
census. While four new towns, Koregaon, Kirloskarwadi, Kabnur
and Kanakawali have been included. The percent share of
class I towns which was 5.26 % in 1971 has increased to 9.43 %.
Five towns, Kolhapur, Solapur,Sangli, Miraj and Ichalkaranji
are classified as class I towns. Four towns are included in
class II category and twelve in class III category. Large
number of towns (35.84 %) are included in the IV Class, where
the number of towns is nineteen .

Looking in to class wise distribution of towns it is
observed that more towns are included in the higher classes of
towns and the number of towns in the small size is declining.

CLASSWISE DISTRIBUTION OF URBAN POPULATION AND MEAN SIZE OF
EACH CLASS:

Attempt has been made here to study the percentage of
urban population in towns of each class and mean size of each
class town. In 1941, though the number of class I town was only
one its percent share of urban population was 27 %. Class IV
towns were having a share of 23 % of urban population followed

by class III towns, where, percent share of urban population
was 21.77 % . Class V towns have 14.16 % share while class II
and VI towns have 11.7 % and 2.36 % share respectively.
(Table No.3.5) .

Table 3.5

Percent share of urban population in different classes
of towns in South Maharashtra - 1941.81.

Size class of town	1941	1951	1961	1971	1981
I (>-1,00,000)	26.95	40.40	39.45	44.45	55.97
II (50,000-99,999)	11.79	4.91	17.18	20.00	12.39
III(20,000-49,999)	21.77	23.81	15.11	12.88	15.34
IV(10,000-19,999)	22.97	15.46	19.28	14.72	12.52
V (5,000-9,999)	14.16	12.92	8.21	6.66	2.60
VI (5,000 -- >)	2,36	1,50	0.77	1,29	*1,18
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%

In 1951 the towns in class I and II category have a
highest share (45.3 %) of urban population. Next two classes
have a share of 40.4 % of urban population while the lower two
classes have only 14 % share of urban population (Fig.3.5).

In 1961 the higher class of towns (I & II) covered
56.63 % urban population of the area while the group of class -
III & IV towns have a share of 34.4 % and lower class of towns
has a very little share (8.98 %) of urban population.

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POPULATION LOAD UNDER   CLASS WISE GROWTH OF URBAN   MEAN SIZE OF URBAN CENTRES

DIFFERENT CLASSES OF TOWNS   POPULATION OF TOWNS 1941-81   IN EACH CLASS DURING 1941-81
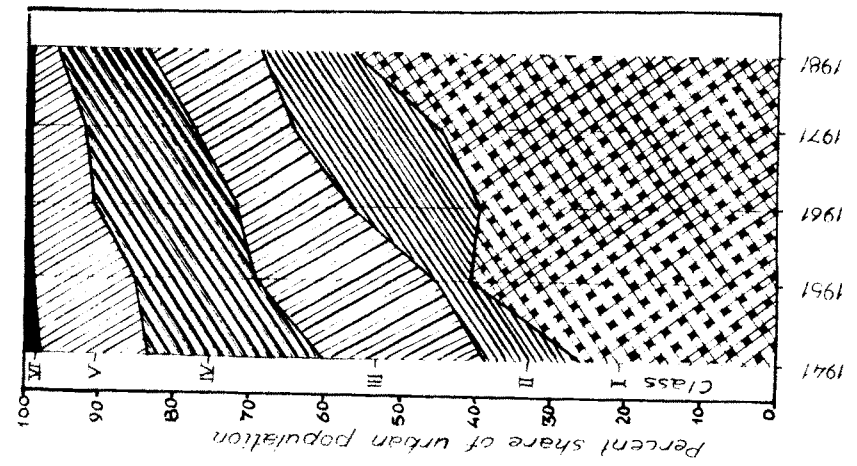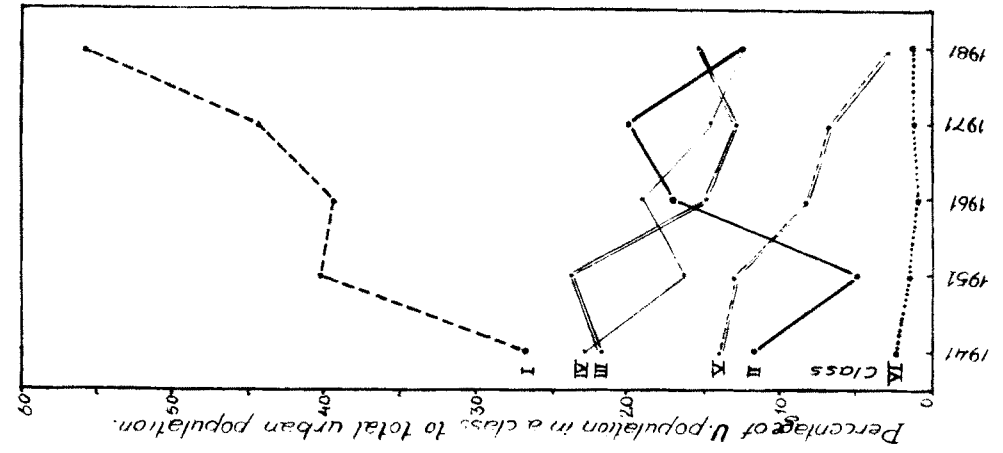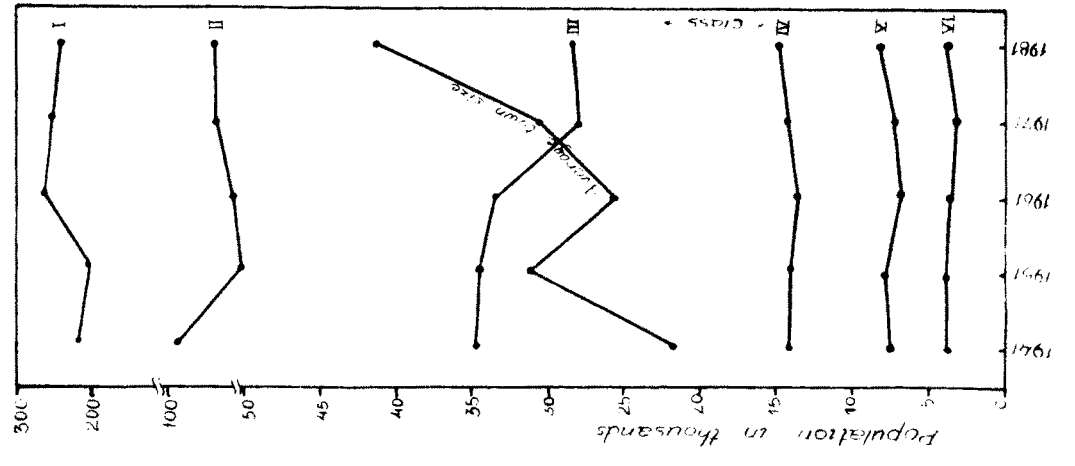
1941-81

FIG-3·7

FIG-3.6

FIG-3.5

In 1971, 64.45 % urban population of the area is found in the higher class of towns. The middle group of towns has a share of 27.5 % and lower class group covers only 7.96 % of urban population.

In the year 1981 higher class of towns has a share of 68.36 % urban population. The middle class group includes 27.86 % and the lower class group covers only 3.78 % share of urban population. Fig.No.3.6 indicates the changes in the class-wise share of urban population in the study area.

A comparative analysis clearly indicates that, the higher group of towns is sharing very high percentage of urban population since independence and the trend shows a constant increase. The medium class towns shows a declining trend in the share of urban population. Lower class of towns shows a sharp fall in the percentage share of urban population when compared with the previous years.

The analysis of mean size of towns in each class, indicates that there is very little change in the mean size of class I and class VI towns. While class II and III towns indicate high fluctuations in their mean size. The towns of class IV and V also indicate very little change in their mean size. The average mean size of all towns indicates constant increase since 1941 (Fig No.3.7) and (Table No.3.6).

Table No. 3.6
Mean population size of each class during verious decades.

Size Class	1941	1951	1961	1971	1981
I	2,12,620	2,06,961	2,62,513	2,57,516	2,48,502
II	93,032	50,287	57,140	69,525	68,771
III	34,662	34,476	33,516	27,989	28,375
IV	13,945	14,054	13,504	14,215	14,628
V	7,449	7,785	6,825	7,231	8,240
VI	3,719	3,840	3,425	3,196	3,736
Average size all towns	21,535	30,976	26,527	30,484	41,109

RANK FLUCTUATION OF URBAN CENTRES:

The growth of urbanization is closly associated with the physical growth of individual cities and towns. The population size of city changes due to various geographical factors. In the present study changes in the population ranks of urban centres has been studied. The fluctuations of ranks of towns is shown in Fig.No.3.8 and their sum, net and maximum rank variation is given in table No.3.7. From Fig.3.8 it is clearly evident that three towns, Solapur, Kolhapur and Sangli, the first, second and third ranking towns of the area, have maintained their ranks since independence. Chiplun and Madhavnagar indicate no net variation in their ranks.

Very high net fluctuation in ranks is found in the towns, Vita, Jaysingpur, Malvan, Vengurla, Maindargi, Rajapur and

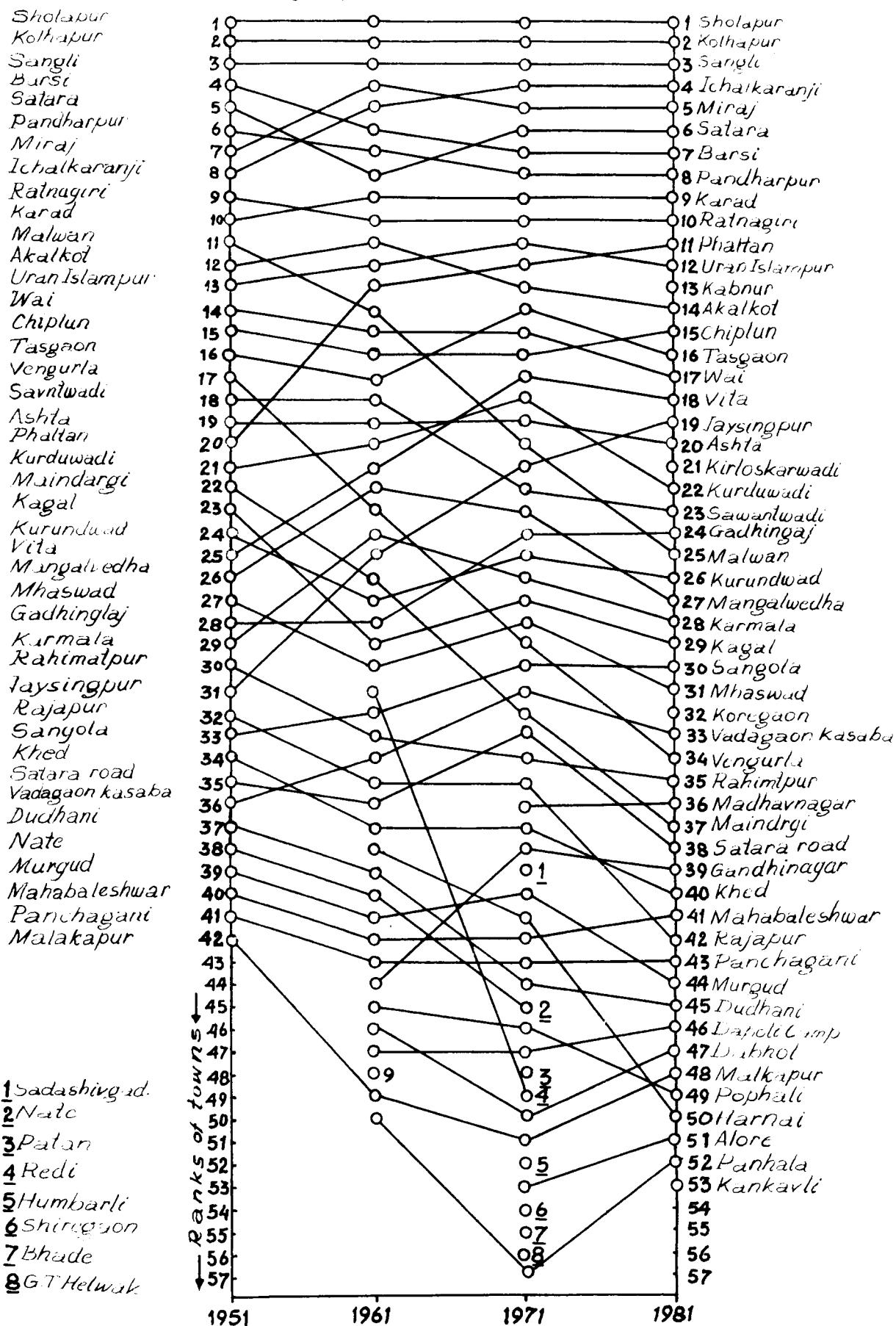SOUTH MAHARASHTRA
RANK FLUCTUATION OF URBAN CENTRES 1951-81

FIG-3·8

Table No.3.7

Rank Fluctuation of Urban centres in South Maharashtra.

1951-81

Sr. No.	Name of the urban centres	Net variation of Rank	Sum of the variation in Rank	Maximum variation	Present rank
1	2	3	4	5	6
1	Solapur	0	0	0	1
2	Kolhapur	0	0	0	2
3	Sangli	0	0	0	3
4	Ichalkaranji	4	4	4	4
5	Miraj	2	4	3	5
6	Satara	-1	5	3	6
7	Barsi	-3	3	3	7
8	Pandharpur	-2	2	2	8
9	Karad	1	1	1	9
10	Ratnagiri	-1	1	1	10
11	Phaltan	2	9	9	11
12	Urun-Islampur	1	3	2	12
13	Akalkot	-2	4	3	14
14	Chiplun	0	2	1	15
15	Tasgaon	2	6	4	16
16	Wai	-3	3	3	17
17	Vita	7	9	8	18
18	Jaysingpur	12	12	12	19
19	Ashta	-1	1	1	20
20	Kurduwadi	-1	7	4	22

1	2	3	4	5	6
21	Sawantwadi	-5	5	5	23
22	Gadhinglaj	4	4	4	24
23	Malwan	-14	14	14	25
24	Kurundwad	-2	6	3	26
25	Mangalvedha	-1	9	5	27
26	Karamala	1	9	5	28
27	Kagal	-6	10	6	29
28	Sangola	3	3	3	30
29	Mhaswad	-4	8	4	31
30	VadagaonKasaba	3	7	5	33○
31	Vengurla	-15	15	15	34
32	Rahimatpur	-5	5	5	35
33	Madhavnagar	0	0	0	36
34	Maindargi	-15	15	15	37
35	Satara Road	-3	9	5	38
36	Gandhinagar	5	7	6	39
37	Khed	-6	6	6	40
38	Mahabaleshwar	-1	3	2	41
39	Rajapur	-10	10	10	42
40	Panchagani	-2	2	2	43
41	Murgud	-5	7	5	44
42	Dudhani	-8	8	8	45
43	Dapoli Camp	1	1	1	46
44	Dabhol	-1	7	4	47
45	Malakapur	-6	12	9	48

1	2	3	4	5	6
46	Pophali	-4	4	4	49
47	Harnai	-12	12	12	50
48	Alore	-1	1	1	51
49	Panhala	-3	11	7	52
50	Kabnur	-	-	-	13
51	Kirloskarwadi	-	-	-	21
52	Koregaon	-	-	-	32
53	Kanakawli	-	-	-	53

Note : The "Net Variation " of rank shows the difference between the rank of an urban centre from 1951 to 1981.

The ' Sum of Variation ' of rank shows the sum of all the fluctuations of the rank of an urban centre from 1951 to 1981.

"Maximum Variation " shows the difference between highest and the lowest rank of an urban centre during any period between 1951 to 1981.

Dudhani. Of these towns first two towns have positive high fluctuation, while, remaining five towns indicate high negative fluctuation. Out of these towns, three towns are from Konkan area.

The modarate net negative fluctuation in the ranks of towns is observed for Malakapur, Khed, Murgud, Rahimatpur, Mhaswad, Kagal and Sawantwadi towns. Only three towns, Gandhinagar, Gadhinglaj and Ichalkaranji indicate, modarate positive fluctuation. Remaining all towns show low net fluctuation in their ranks i.e. one to three positive or negative. More number of towns indicate low negative fluctuation.

SPATIAL ANALYSIS OF URBAN GROWTH :

The spatial analysis of urban growth is studied in respect of taluka-wise growth and growth of individual towns. In the study area only 35 talukas have urban population. Remaining 22 talukas are rural. The decadal growth of urban population for all 35 talukas has been plotted in Fig.3.9.

The analysis of talukawise growth of urban population since independence divides the urban talukas into four classes or groups. Two talukas ,Tasgaon and Hatkanagle, indicate very high growth rate (above 200 %). Tasgaon taluka indicates high growth because new town, Kirloskarwadi,has developed recently, while, in Hatkanangle taluka high growth is observed only because of high agglomaration of population at Ichalkaranji town. Moderate growth of urban population (100 % to 200 %) is observed in following eleven talukas. They include Chiplun,Satara,

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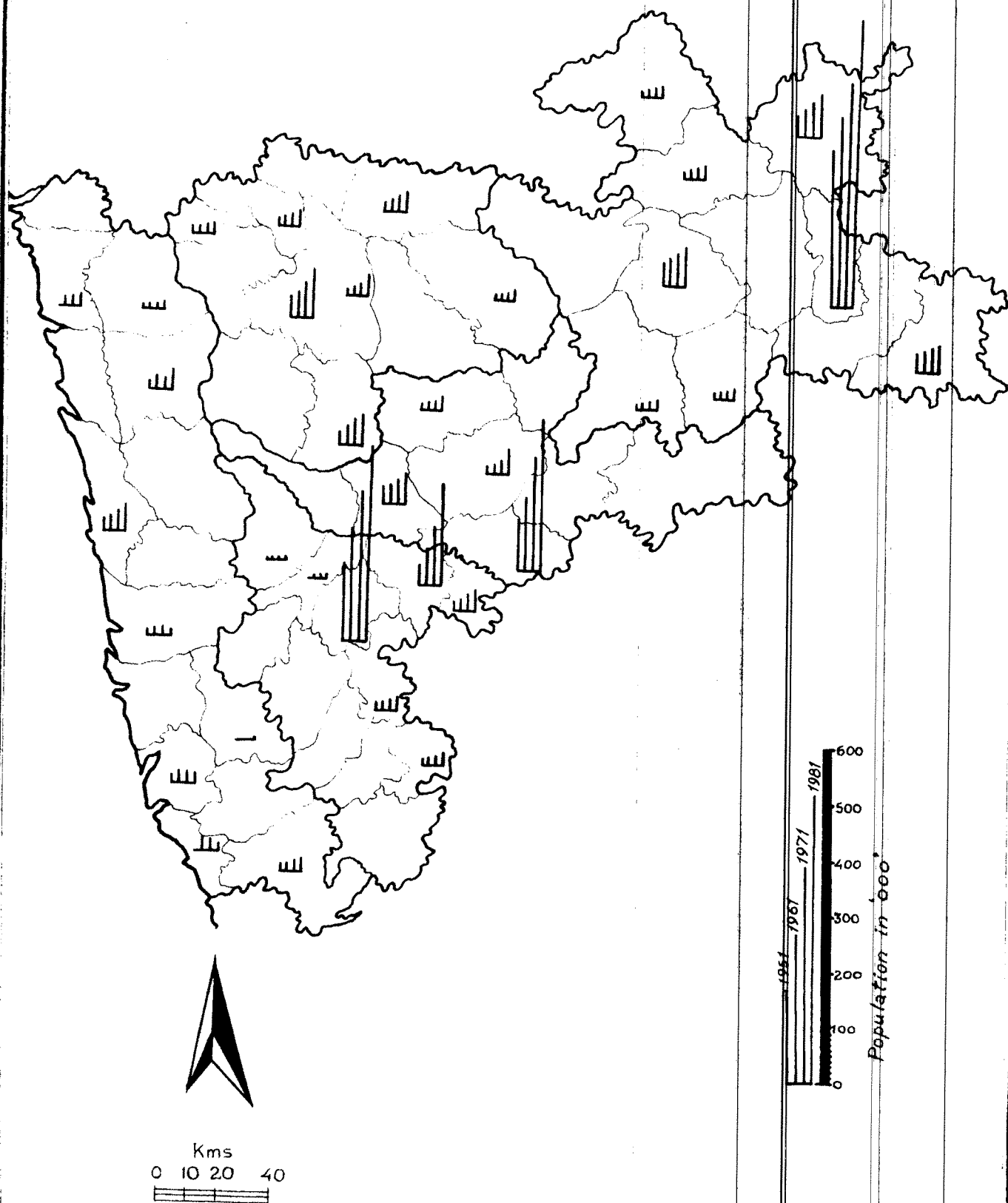## TALUKAWISE GROWTH OF URBAN POPULATION 1951—80

Kms
0 10 20   40

FIG - 3·9

Koregaon, Phaltan, Karad, Karmala, Miraj,Khanapur, Karvir, Shirol and Gadhinglaj talukas of the area. Most of the towns in these talukas are old established towns and these towns are growing at a modarate rate. Low growth of urbanization is found in 18 talukas namely, Ratnagiri, Khed,Sawantwadi,Dapoli, Wai, Man, Mahabaleshwar, North Solapur, Barsi, Akalkot, Mangalwedha, Pandharpur,Sangola, Madha, Walawa, Kagal, Panhala and Shahuwadi. From the analysis it is pointed out that,most of the talukas of Solapur district and talukas from Konkan districts have low growth of urbanization. From Konkan districts Rajapur,Vengurla and Malwan talukas indicate decline in their urban population since independence.

Talukawise analysis of urban growth clearly indicates that, excepting Chiplun all talukas of Konkan districts indicate either low growth rate or decline. Excepting Karmala all talukas of Solapur district show low growth of urban population. Modarate and high growth rate is observed in most of the talukas of upper Krishna basin.

GROWTH OF URBAN CENTRES AND STATUS OF TOWNS :

The rate of growth of urban population is a perfect indicator of the trend of growth of different towns influnced by various geographical and socio-economic factors. The annual rate of growth of each town has been calculated by the following formula :-

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

Where :————

r = the rate of change.

P_1 = the population size of a town in the initial period of time

P_2 = the population size of that town at a later period of time.

t = the number of years or decades.

(Gibbs : Urban Research Methods)

In the table No.3.8 the annual rate of change or growth of urban population of each town between the various census decades and the over all annual rate of change since independence is given. The fig No.3.10 shows the actual urban population of each town during various census years. The analysis of the growth of individual towns divides them in to five classes. The towns have been classified into different groups by plotting them on scattered graph according to their annual growth rate (Fig.3.11) and dividing them in to five groups. The first group classified as ' high ' growth includes one town, Ichalkaranji, where the annual growth rate is above 4 % . The second group includes towns having higher growth rate between 2.5 % to 4% . It includes Sangli,Miraj, Vita,Kolhapur, Vadagaon Kasaba,Jaysingpur and Phaltan towns of the study area. Most of these towns have developed as administrative head-quarters

Table No.3.8

Annual growth rate of towns in South Maharashtra

Sr. No.	Name of town	ANNUAL GROWTH RATE DURING			
		1951-61	1961-71	1971-81	1951-81
1	2	3	4	5	6
1	Ratnagiri	1.38	1.88	2.24	1.79
2	Harnai	-	1.36	-4.49	-1.56
3	Dabhol	-	0.18	1.63	0.91
4	Dapoli Camp	-	2.29	2.16	2.24
5	Khed	1.22	1.84	1.46	1.50
6	Chiplun	0.91	1.07	2.59	1.76
7	Pophali	-	1.65	-2.78	-0.57
8	Alore	-	-	-0.24	-0.24
9	Rajapur	0.30	0.86	-0.15	0.34
10	Nate	1.03	0.49	-	0.76
11.	Sawantwadi	1.86	1.10	1.01	1.29
12	Vengurla	-0.53	-0.21	0.47	-0.09
13	Redi	-	-5.39	-	-5.39
14	Malwan	-0.56	-0.14	-0.15	-0.28
15	Satara	1.70	3.08	2.29	2.27
16	Wai	1.02	1.65	1.58	1.40
17	Rahimatpur	1.28	1.20	1.21	1.22
18	Satararoad	1.90	2.80	0.50	1.70
19	Phaltan	4.41	3.40	2.34	3.15
20	Mhaswad	1.29	1.96	1.52	1.56

1	2	3	4	5	6
21	Karad	2.71	2.25	2.49	2.38
22	Mahabaleshwar	1.92	1.93	2.13	1.94
23	Panchagani	2.31	1.78	2.22	2.07
24	Sangli	3.80	4.37	2.78	3.36
25	Miraj	2.80	3.71	3.04	2.98
26	Madhavnagar	-	-	2.26	2.26
27	Tasgaon	2.53	2.58	1.92	2.26
28	Vita	3.61	3.32	2.50	2.95
29	Urun-Islampur	2.55	2.64	1.94	2.29
30	Ashta	1.51	2.14	1.79	1.77
31	Solapur	1.97	1.65	2.47	1.98
32	Barsi	1.85	2.13	1.54	1.80
33	Akalkot	1.61	2.18	0.69	1.47
34	Maindargi	0.78	-0.22	0.32	0.30
35	Dudhani	0.51	0.46	2.10	1.02
36	Mangalvedha	3.49	1.38	1.04	1.42
37	Pandharpur	1.14	1.66	1.81	1.51
38	Sangola	2.16	1.57	2.81	2.11
39	Karamala	3.13	2.22	1.74	2.28
40	Kurduwadi	2.45	2.55	0.91	1.92
41	Kolhapur	3.12	3.21	2.71	2.84
42	Gandhinagar	-	3.83	2.40	3.11
43	Panhala	-	1.30	1.35	1.33

1	2	3	4	5	6
44	Ichalkaranji	6.01	5.28	4.18	4.40
45	Vadagaon Kasaba	3.33	2.34	2.76	2.67
46	Jaysingpur	3.09	4.41	3.34	3.32
47	Kurundwad	1.12	0.29	1.56	1.82
48	Kagal	0.06	2.52	2.07	1.70
49	Murgud	0.73	2.10	1.40	1.39
50	Gadhinglaj	2.22	3.14	2.33	2.46
51	Malakapur	1.85	1.32	0.67	1.27

SOUTH MAHARASHTRA

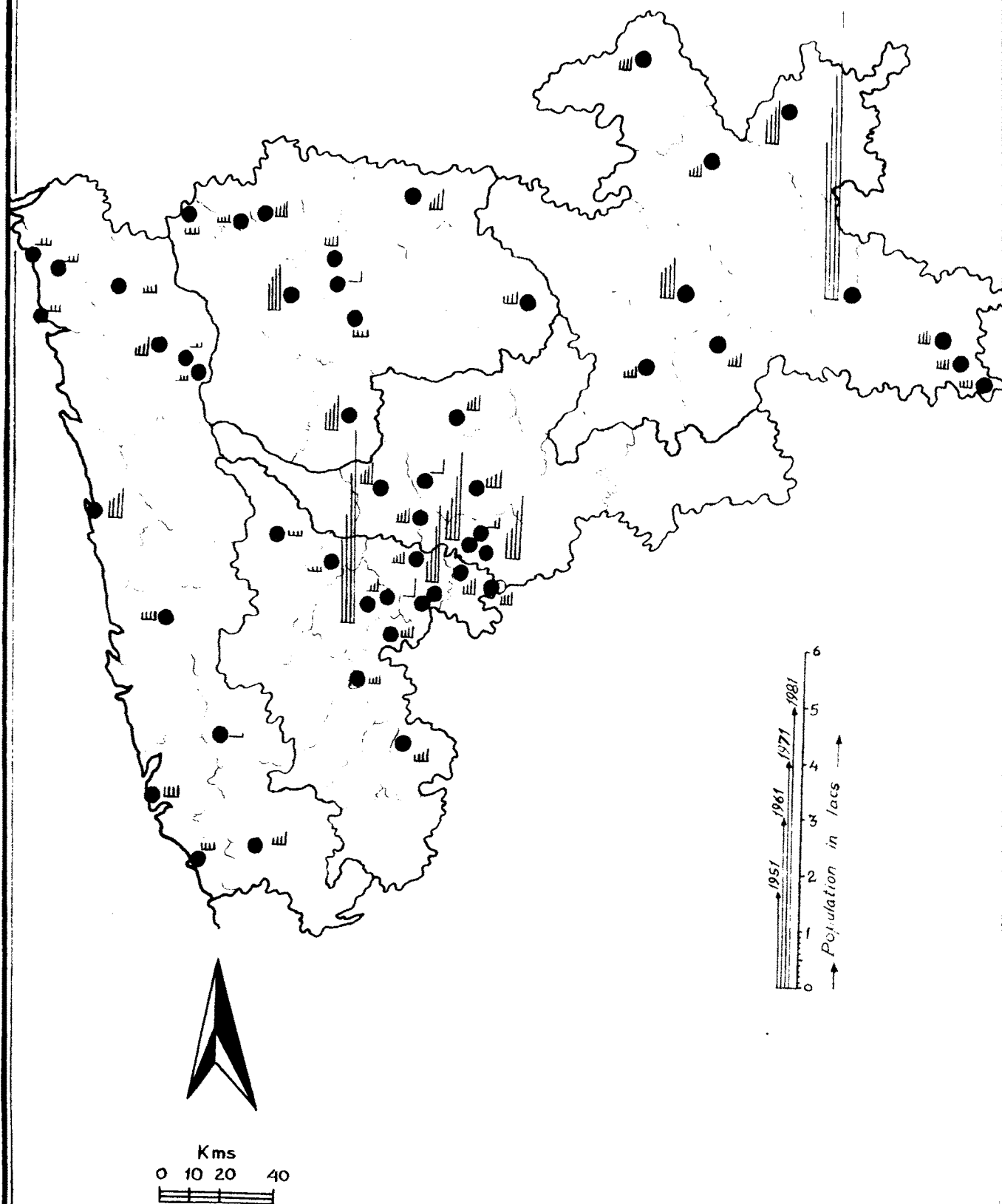POPULATION GROWTH OF URBAN CENTRES 1951-81

Kms
0 10 20   40

FIG-3·10

and located in the rich agricultural regions of the area. The third group, where, modarate growth rate is found (1.00 % to 2.5 %) includes Tasgaon, Islampur,Ashta,Solapur,Barsi,Akkalkot, Dudhani, Mangalwedha ,Pandharpur,Sangola, Karmala, Kurduwadi, Gandhinagar, Panhala,Kurundwad,Kagal,Murgud,Gadhinglaj, Malakapur,Khed,Chiplun, Sawantwadi,Satara, Wai, Rahimatpur, Satara Road, Mhaswad,Karad,Mahabaleshwar and Panchagani. Most of the towns in this group are small size towns. Only one town, Solapur which is first ranking town of the area, is included in this group. In the fourth group very low rate of growth is found (0 to 1.00 %) . It includes Maindargi and Rajapur towns. Vengurla and Malwan these two towns of the area indicate negative rate of change.

Looking in to the rate of growth and groupping of towns shown in the scattered graph towns are classified into five groups indicating their status. Towns included in the first group are very fast growing towns. The second group includes fast growing towns. Third group includes modarately growing towns. The fourth group is of stagnant towns and the towns having negative rate of change are classified as declining towns. Fig.No.3.11 shows the status of towns.

The process of urbanization is influnced by various factors in which the development of economy,industry and transportation plays important role. Other two factors which affect the process of urbanization are rural-urban migration and

SOUTH MAHARASHTRA
STATUS OF TOWNS

Legend

- ◗ Declining Town
- ⬟ Stagnant Town
- ● Growing Town (Modarately)
- ✦ Fast Growing Town
- ✸ Very Fast Growing Town

→ Annual growth rate of towns →

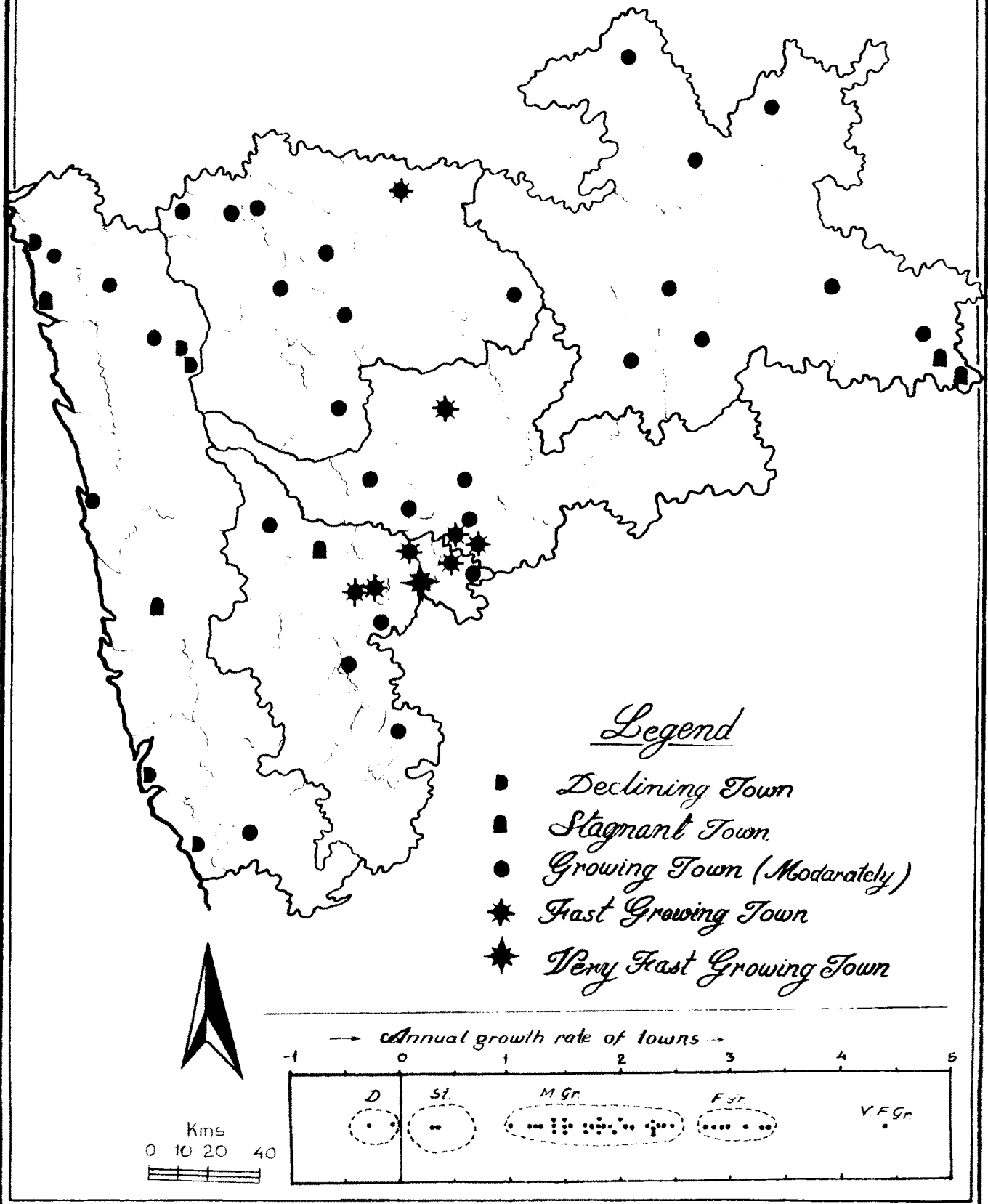| -1	0	1	2	3	4	5

Kms
0 10 20 40

FIG – 3·11

emergence of new towns. The study region, where, the process of urbanization indicates the trends of developing country have been influncied by various geographical and socio-economic fac - -tors. Since independence the process of urbanization has become faster and higher degree of urbanization is found in the plain and fertile area of upper Krishna valley. The upper Bhima basin is less urbanized. The western hilly part of Sangli,Satara and Kolhapur districts also indicate low degree of urbanization. In the Konkan region few towns are growing faster but many towns are declining because of the poor infrastructure. Most of the rapidly growing towns are located in the lower part of upper Krishna valley and the analysis of the trend of growth of urbanization indicates that the rich infrastructure of upper Krishna valley and northern talukas of Konkan area will certainly stimulate the growth of old towns and encourage the development of new towns in the area. The central dry plateau and western hilly region these two areas will develop small towns, where administrative and service functions will be dominant.

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