CHAPTER - III

({}) URBANISATION AND DEVELOPMENT ({})

3.1 INTRODUCTION :

The future of regions and subregions vary greatly.
Some are relatively prosperous, others are not. The levels
of development in the region is often related to the presence
of or absence of large cities, reflecting the opportunities,
they offer for growth and employment. The study of economic
development and urban growth provide us the clearcut picture
of the area. It has been suggested that urban development in
any area has close association with the levels of development.

There are several theories of development which are put
forward by economist and geographers. According Thompson's idea
of growth using basic non-basic concept, he pointed out series
of stages in the development and urbanisation. The first stage
is of export specilization. A second stage is of export complex.
Third stage is of economic maturation and the fifth stage is of
technical competence. Basically, these stages are related to
the growth of cities, but one can use them for the study of the
entire process of urbanisation.

The resource potential and the economical base of a
region plays vital role in the growth of urbanisation. Consi-
dering this aspect, an attempt has been made in this chapter,
to study the levels of development and the relation with the
growth of urbanisation.

It is assumed that urbanisation is a process which is

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related to various factors, in which metropolitian city
structure of the area industrial development, agro-develop-
ment and socio-economic character of the landscape are the
important factors. These factors vary from place to place.
There are several other factors such as resources, technolo-
gical development, transport network, market organisation
and communication infrastructure, which also have great
bearing on the growth of urbanisation and economic development
of area.

While studying the levels of development, various
elements of development are taken into consideration. In
the present study, we have tried to find out the levels of
development of all the districts of Maharashtra, and their
relation with the degree of urbanisation. The levels of
development have been calculated for three decades. The
details of parametres selected and the methodology used has
been given in detail as follows.

METHODOLOGY :

To study the levels of development following important
parametres have been selected.

1) Percentage of urban population to total population

2) Decadal growth rate of population

3) Percentage of workers to total population

4) Percentage of literacy

5) Percentage of area sown more than once to net sown area.

6) Percentage of net area irrigated to net area sown.

7) Number of tractors per 100 hectare area of net sown area.

8) Average road length per 100 sq.km. of geographical area.

9) Motor vehicles per one lakh of population.

10) Average number of telephones per one lakh of population.

11) Average number of beds in public and public aided medical institution per one lakh of population.

12) Average number of co-operative banks per one lakh of population.

13) Number of establishments per one lakh of population.

14) Average number of factory workers per one lakh of population.

With the help of these parameters, the levels of development have been calculated for 1971, 1981 and 1991 decades. The following formula is used for calculating the levels of development.

The co-efficient of development of a district in terms of single variable is calculated by the following equation.

$$CDi = \frac{Pi}{PI} \times 100 \qquad \dots \ I$$

Where, CDi = is the co-efficient of development for variable 'i'.

PI = is the percentage of variable 'i' in the areal unit.

PI = is the mean percentage of variable 'i' in the study region.

Table 3.1 : Levels of development in districts of

Maharashtra.

Sr. No.	Name of the District	1971	1981	1991
1	Thane	92.20	110.13	115.35
2	Raigarh	65.25	66.21	71.00
3	Ratnagiri	47.94	57.03	60.50
4	Nashik	83.19	97.48	106.15
5	Dhule	69.38	77.13	79.89
6	Jalgaon	84.57	97.77	98.42
7	Ahmednagar	89.92	92.54	102.05
8	Pune	132.17	139.58	146.95
9	Satara	109.25	93.64	99.00
10	Sangli	95.23	97.67	100.50
11	Solapur	83.08	85.08	87.57
12	Kolhapur	135.48	141.22	139.56
13	Aurangabad	77.99	89.79	115.66
14	Parbhani	56.86	66.25	74.24
15	Bid	70.87	59.21	62.28
16	Nanded	62.85	66.00	69.35
17	Osmanabad	60.71	67.86	73.68
18	Buldhana	63.57	82.68	88.52
19	Akola	65.82	67.24	69.00
20	Amravati	69.52	75.53	76.75
21	Yeotmal	55.70	57.62	54.34
22	Wardha	64.56	71.83	72.00
23	Nagpur	95.90	101.98	104.05
24	Bhandara	96.30	98.60	97.60
25	Chandrapur	60.59	66.44	73.78

$$CID = \frac{CDi_1 + CDi_2 + CDi_3 \cdots CDin}{N}$$

Where, CID = is composite index of development

N = is number of variables

(Deshmukh - 1984).

Levels of developments of all districts (excluding Gr.Bombay) of Maharashtra have been calculated and given in Table 3.1.

The degree of urbanisation has been priviously calculated in Chapter II and Table 2.5 gives the details of degree of urbanisation. The calculated levels of development and degree of urbanisation is depicted in Fig.3.1.

3.2 REGIONAL ANALYSIS :

The regional analysis of levels of development reveals that in 1971 there were three districts namely Pune, Satara and Kolhapur, where higher level of development is observed. In 1981 there are four districts - Thane, Pune, Nagpur, and Kolhapur which indicate high development. In 1991, eight districts of Maharashtra namely Thane, Nashik, Ahmednagar, Pune, Sangli, Kolhapur, Aurangabad and Nagpur indicate high level of development (Table 3.1).

The temporal changes in the moderate level of development indicate that in 1971, Thane, Nashik, Jalgaon, Ahmednagar, Satara, Sangli, Solapur and Bhandara show moderate level of development.

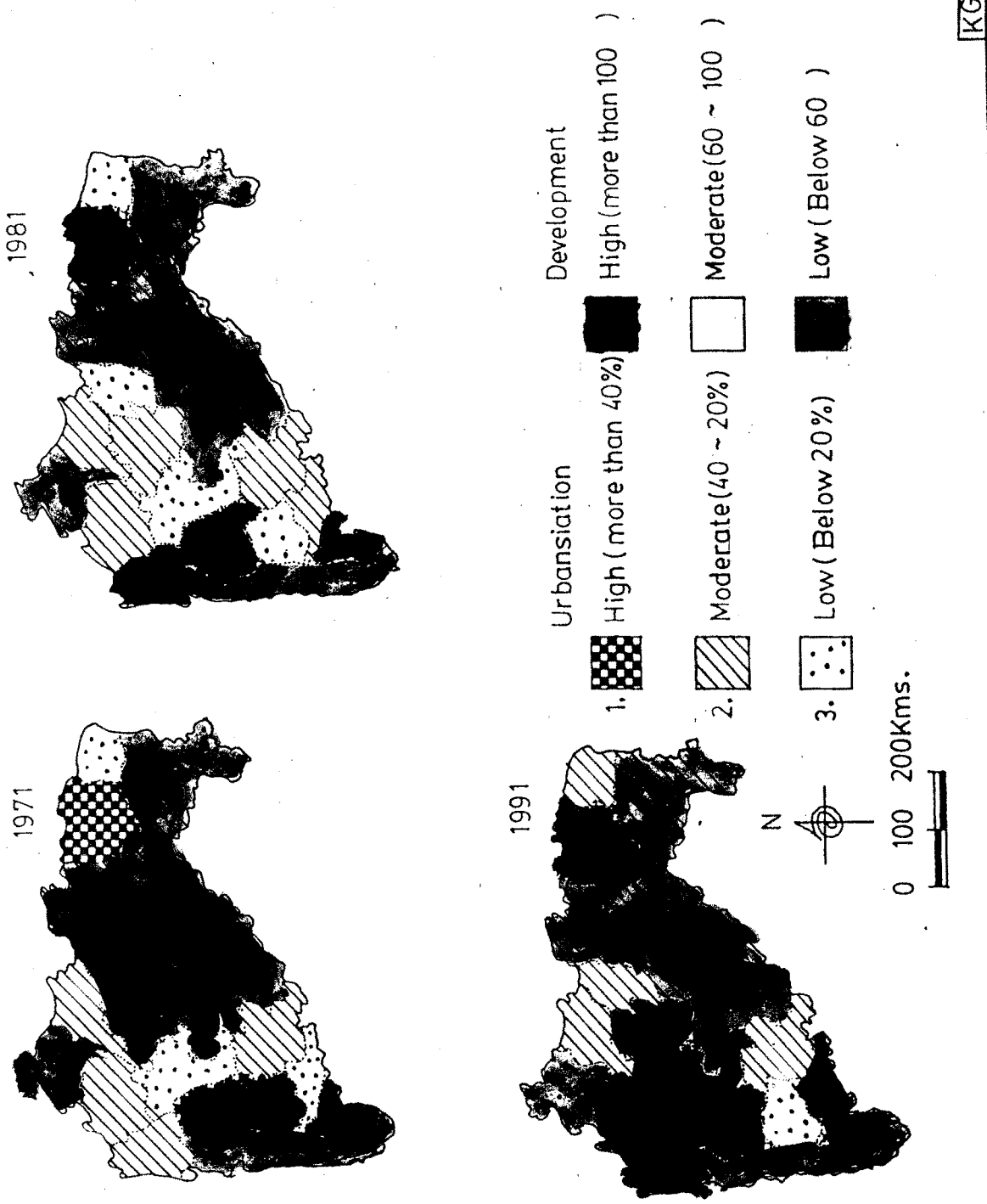DEGREE OF URBANISATION AND LEVELS OF DEVELOPMENT
IN MAHARASHTRA
1971 TO 1991

1981

1971

1991

Urbansiation

1. High (more than 40%)

2. Moderate (40 ~ 20%)

3. Low (Below 20%)

Development

High (more than 100)

Moderate (60 ~ 100)

Low (Below 60)

N

0 100 200 Kms.

Fig. 3.1

KG

In 1981, following 9 district show moderate level of development. They include Nashik, Jalgaon, Ahmednagar, Satara, Sangli, Solapur, Aurangabad, Buldhana and Bhandara, but in 1991, there are only 5 districts namely Jalgaon, Satara, Solapur, Buldhana and Bhandara which indicate moderate level of development.

More number of districts are included in low level of development. In 1971, there are 13 districts - Ratnagiri, Raigarh, Amravati, Akola, Buldhana, Osmanabad, Bid, Nanded, Yeotmal, Aurangabad, Parbhani, Wardha and Chandrapur are included in low level of development. In 1981, the number of districts, which show low level of development, is 12. They include - Raigarh, Ratnagiri, Dhule, Parbhani, Bid, Nanded, Osmanabad, Yeotmal, Akola, Amravati, Wardha and Chandrapur and in 1991, the following 12 districts show low level of development. They are - Raigarh, Ratnagiri, Dhule, Bid, Nanded, Osmanabad, Yeotmal, Akola, Amravati, Wardha, Parbhani and Chandrapur.

3.3 DEGREE OF URBANISATION :

The degree of urbanisation has been studied at three levels - high (above 40), moderate (20 to 40) and low (below 20).

In 1971, high degree of urbanisation was observed at Pune and Nagpur districts while in 1981 and 1991, high degree of urbanisation was found at Pune, Nagpur and Thane districts (Table 3.2).

Table 3.2 : Levels of development and percentage of urban population.

Sr. No.	Name of the District	Year	Percentage of urban population	Level of develop- ment
1	2	3	4	5
1	Thane	1971	36.20	92.20
		1981	44.34	110.13
		1991	64.74	115.35
2	Raigarh	1971	12.10	65.25
		1981	14.10	66.21
		1991	17.84	71.03
3	Ratnagiri	1971	08.40	47.94
		1981	08.73	57.03
		1991	08.87	60.50
4	Nashik	1971	28.60	83.19
		1981	31.00	97.48
		1991	35.52	106.15
5	Dhule	1971	17.30	69.38
		1981	19.52	77.13
		1991	20.53	79.89
6	Jalgaon	1971	23.70	84.57
		1981	25.14	97.77
		1991	27.42	98.42
7	Ahmednagar	1971	11.10	89.92
		1981	12.90	92.54
		1991	15.84	102.05

Table 3.2 conti..

1	2	3	4	5
8	Pune	1971	41.80	132.17
		1981	47.33	139.58
		1991	50.76	146.95
9	Satara	1971	13.20	109.25
		1981	13.04	93.64
		1991	12.91	99.00
10	Sangli	1971	18.60	95.23
		1981	21.52	97.67
		1991	22.84	100.50
11	Solapur	1971	27.40	83.08
		1981	29.65	85.08
		1991	29.81	87.57
12	Kolhapur	1971	21.50	135.48
		1981	25.32	141.22
		1991	26.40	139.56
13	Aurangabad	1971	16.70	77.99
		1981	24.79	89.79
		1991	32.78	115.66
14	Parbhani	1971	16.10	56.86
		1981	18.74	66.25
		1991	22.50	74.24
15	Bid	1971	11.60	70.24
		1981	15.46	59.21
		1991	17.96	62.28
16	Nanded	1971	16.30	62.85
		1981	18.74	66.00
		1991	21.71	69.35

Table 3.2 conti..

1	2	3	4	5
17	Osmanabad	1971	12.50	60.71
		1981	15.39	67.86
		1991	20.42	73.68
18	Buldhana	1971	17.50	63.57
		1981	18.49	82.68
		1991	20.63	88.52
19	Akola	1971	23.50	65.82
		1981	24.84	67.24
		1991	28.68	69.00
20	Amravati	1971	27.60	69.52
		1981	29.25	75.53
		1991	33.01	76.75
21	Yeotmal	1971	15.90	55.70
		1981	15.09	57.62
		1991	17.21	54.34
22	Wardha	1971	24.50	64.56
		1981	24.98	71.83
		1991	26.61	72.00
23	Nagpur	1971	54.30	95.90
		1981	56.75	101.93
		1991	61.84	104.05
24	Bhandara	1971	11.40	96.30
		1981	13.10	98.60
		1991	13.15	97.60
25	Chandrapur	1971	10.20	60.59
		1981	12.73	66.44
		1991	18.40	73.78

Moderate degree of urbanisation in 1971 was observed in 8 districts of Maharashtra. They include - Thane, Nashik, Jalgaon, Solapur, Kolhapur, Akola, Amravati and Wardha. In 1981 following 9 districts show moderate degree of urbanisation. They are Nashik, Jalgaon, Sangli, Solapur, Kolhapur, Aurangabad, Akola, Amravati and Wardha, but in 1991 there are 14 districts which indicate moderate degree of urbanisation, means 2 districts are added in this category. They are Dhule and Chandrapur.

The low degree of urbanisation is a common characteristic of most of the districts of Maharashtra, where agrarian economy is dominant. In 1971, there were 15 districts having low degree of urbanisation, but in 1981, the number has reduced to 13 and in 1991, it is reduced to 8 districts only (Table 3.2).

3.4 URBANISATION AND DEVELOPMENT :

The geographers concerned with differences between places, have always been interested in economic development. The interest of geographers in economic development is much more recent. The best way to find out the economic development of any region is by studying the per capita income of the people. Under developed countries are predominantly agricultural and thus they remain mainly rural in character, but in such countries the rate of urbanisation is often high (Grigg, 1970). Economic development is not uniformly distributed. It varies from place to place. Some areas have more economic

activities than the other. When we try to find out the
relationship between urbanisation and economic development,
we find that these two aspects have shown close relationship.
The example of Western Europe can clearly prove that the
economic development has a great bearing on the urbanisation
of the area. In 1801, England and Walse had between 1/3rd
of it's population living in towns. By 1851, the ratio was
50 percent, by 1910; it was 78 percent and afterwards, it
has not changed much. This process of growth of urban
population continuous till the economic development becomes
well advanced. The first decline of rural population in
England and Walse in 1861, in Beljium it was in 1910 and in
Sweedan it was in 1920.

In any country economic development in early state is
closely associated with more increase in total population, but
urban population grows more rapidly than rural population and
further it is believed that migration is the important factor
responsible for rapid urban growth (Smith W.,1953).

Considering the above observations, we have tried to
find out the relationship between the growth of urbanisation
and economic development in Maharashtra. As mentioned earlier,
by considering the 14 indicators of development, the economic
development of all the 25 districts have been calculated for
3 decades (1961-1971, 1971-1981, 1981-1991). This economic
development has been related with the growth of urbanisation

for the same period. The correlation coefficient for level
of economic development and degree of urbanisation has been
calculated by Karl Pearsons method and the results have been
obtained for all 25 districts of Maharashtra.

The analysis of the results clearly indicates that in
Maharashtra, the levels of economic development and degree of
urbanisation shows high positive relationship. In the year
1971, the degree of urbanisation is 31.17 percent which shows
2.95 percent increase from the year 1961. During this decade,
it is observed that the level of development of 3 districts -
Pune, Satara and Kolhapur is high and moderate level of develop-
ment is observed for Thane, Nashik, Jalgaon, Ahmednagar, Sangli,
Solapur, Nagpur, Bhandara, these are the districts where percen-
tage of urban population also shows considerable increase. The
calculated 'r' value for relationship between level of develop-
ment and level of urbanisation for the year 1971 is 0.44. In
the successive decade (1971-1981), the economic development in
nearly 14 districts of Maharashtra indicates considerable
increase and urbanisation also shows an increase by 3.86 percent.
The correlation value for these two variables for the year 1981
is (0.75) highly positive. In the recent decade (1981-91) the
rate of urbanisation has increased by 3.72 percent and there are
nine districts which show high economic development and 5 districts
which show moderate economic development. It means in the entire
Maharashtra there are 14 districts where the degree of urbanisation

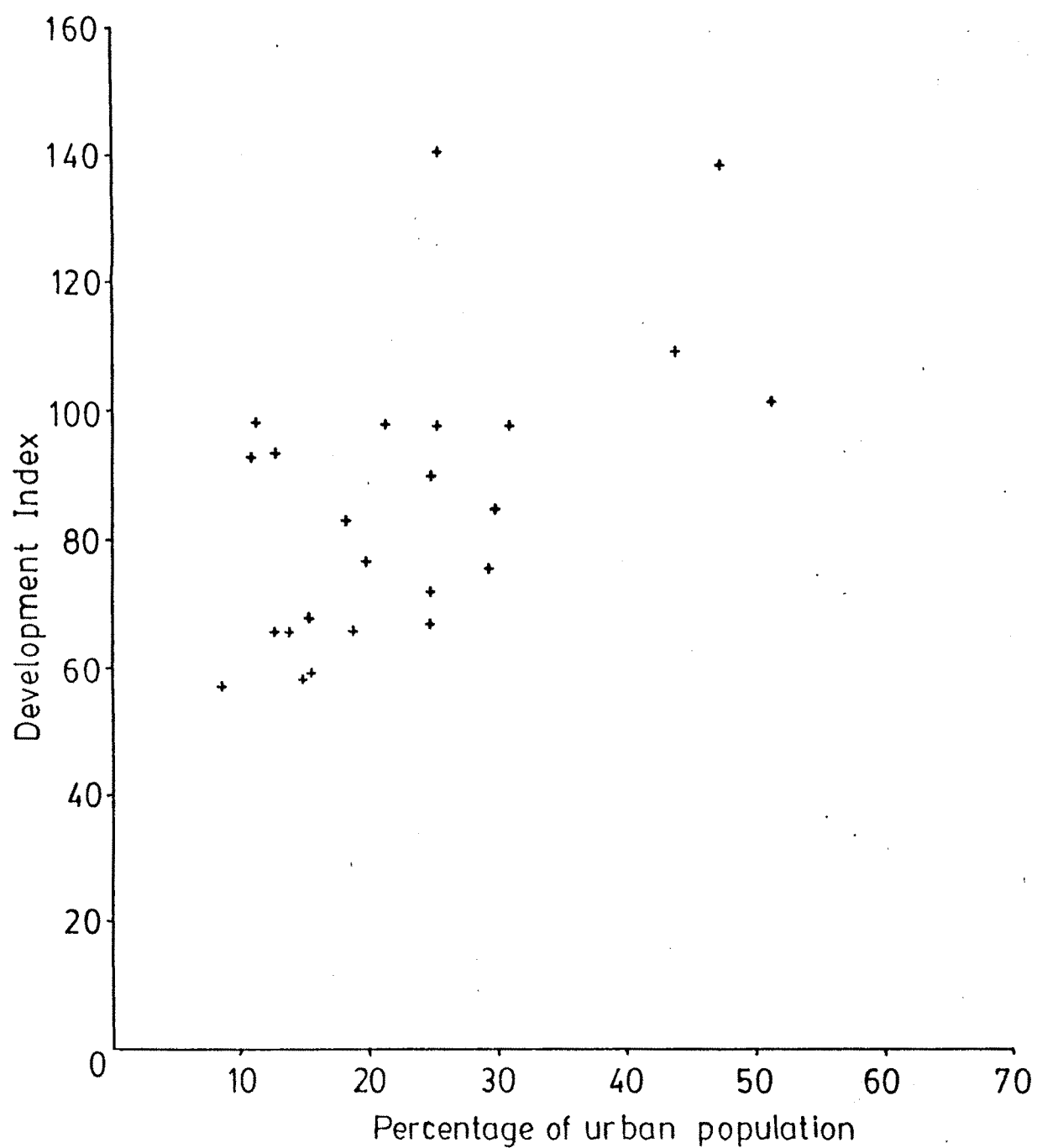DEVELOPMENT INDEX AND PERCENTAGE OF URBAN POPULATION IN DISTRICTS OF MAHARASHTRA 1971
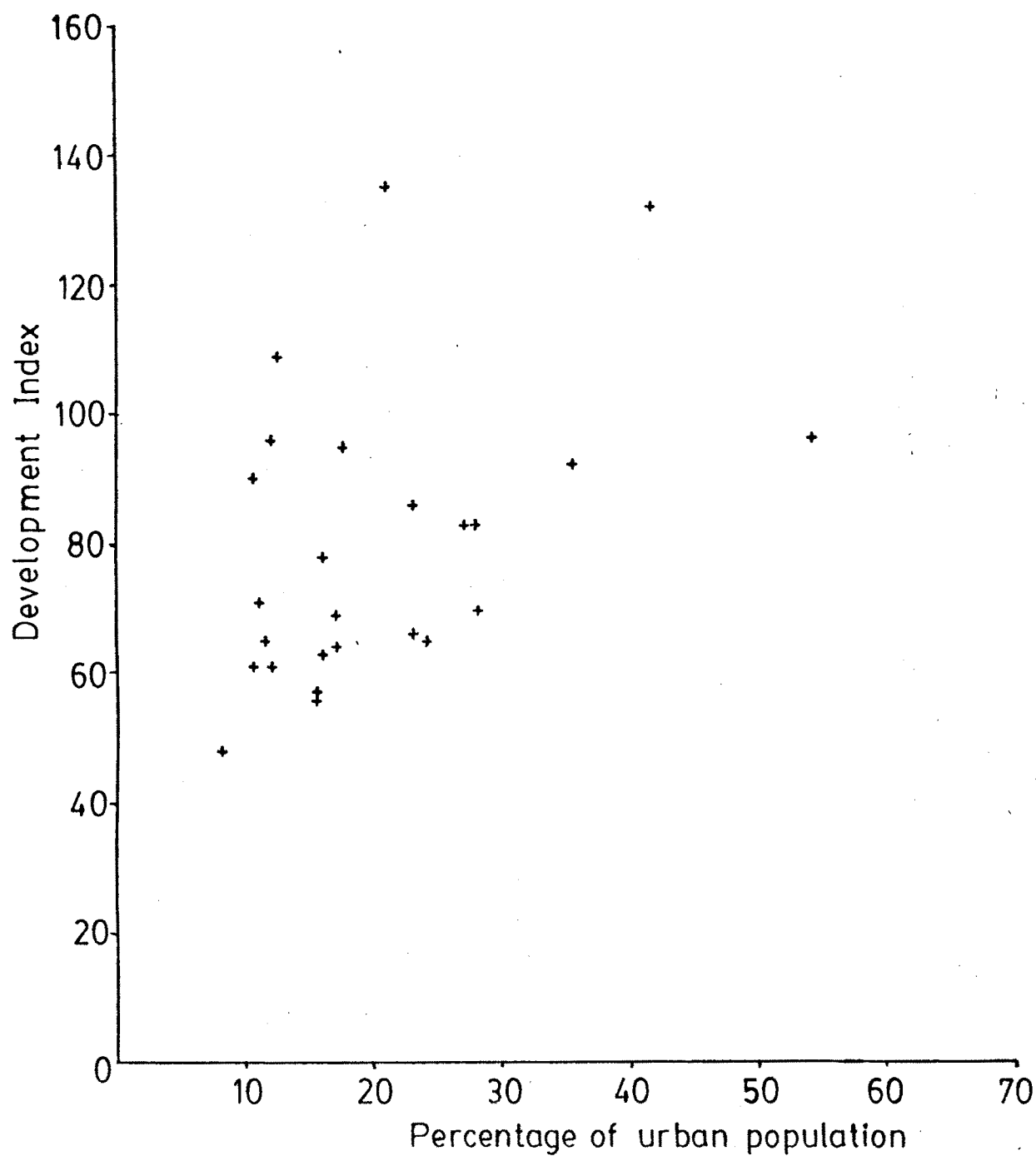
Fig. 3.2 A

DEVLOPMENT INDEX AND PERCENTAGE OF URBAN POPULATION
IN DISTRICTS OF MAHARASHTRA
1981

Fig.3.2 B

DEVELOPMENT INDEX AND PERCENTAGE OF URBAN POPULATION
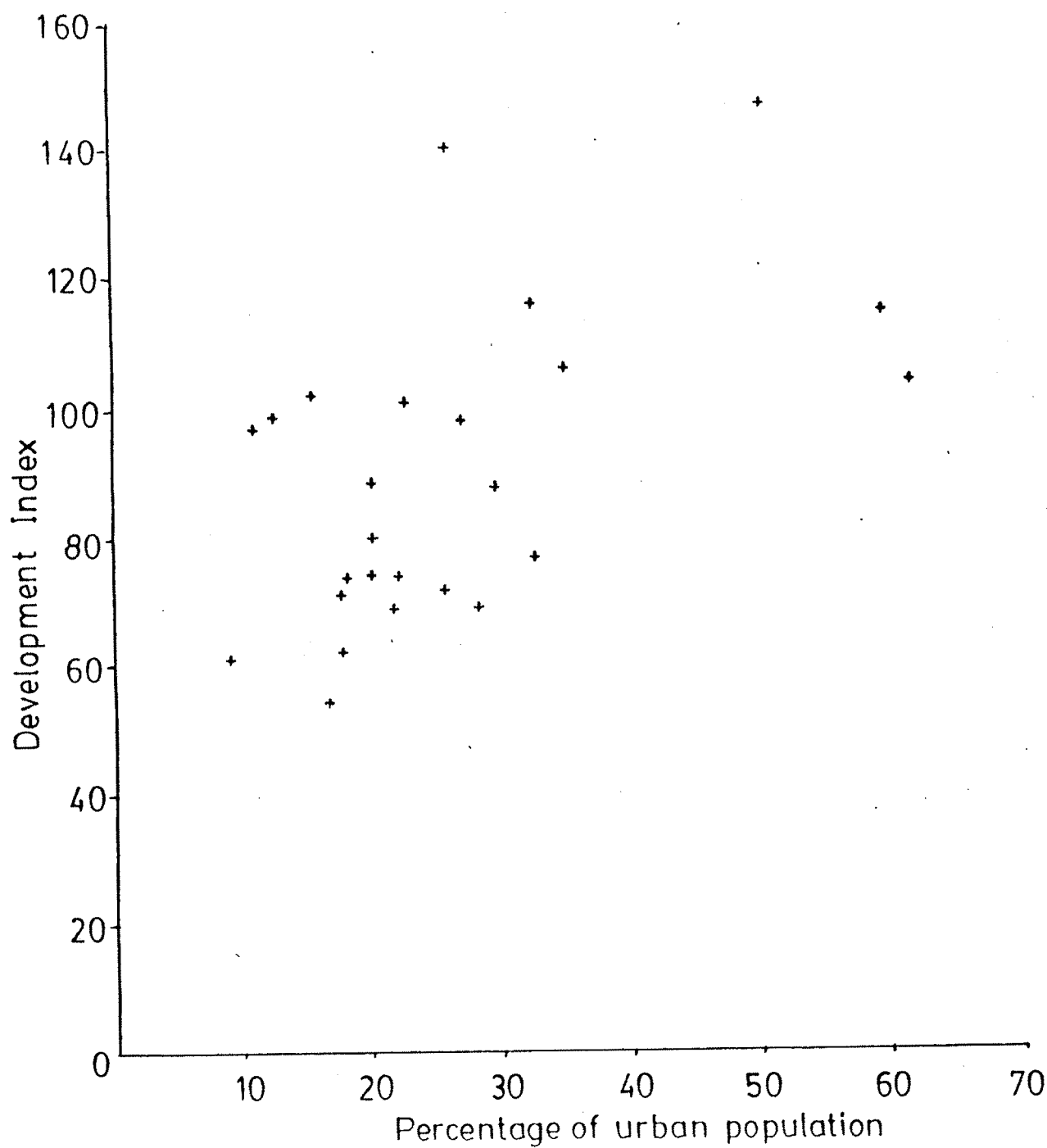IN DISTRICTS OF MAHARASHTRA
1991

Fig.3.2 C

and the level of development is high. The Fig.3.1 clearly indicates the relationship between the level of development and the degree of urbanisation in various districts of Maharashtra. The scatter graph indicates the correlation between the levels of development and degree of urbanisation in all districts of Maharashtra (Fig.3.2-A,B,C).

3.5 CONCLUSION :

Concluding the salient features of development and urbanisation, one may say that the economic development takes place in stages. Resource potentials and economic base are the important factors which encourage the growth of urbanisation. The levels of development can be calculated by several methods and with the help of various indicators, but the method used here is more easy to calculate and gives better reasons. The regional analysis of the development and urbanisation has been studied separately where it is observed that in 1971, 13 districts indicate high to moderate level of economic development, but during the same year, there are only 3 districts, where high to moderate level of urbanisation is observed. In 1981, 14 districts show high to moderate level of economic development, but only four districts show high degree of urbanisation. Surprisingly in 1991, there are 14 districts where high level of economic development is observed but there are five districts which show high to moderate level

of urbanisation. It means some of the districts having
agricultural base may show high level of economic develop-
ment but the rate of urban growth is very poor. The five
districts of Maharashtra namely Thane, Pune, Nagpur, Nashik
and Aurangabad are industrially developed districts of
Maharashtra. Remaining all districts are more dominated
by agrarian economy.

The close observation of relation between the level
of development and the level of urbanisation indicates high
positive correlation.

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