MORPHOLOGY OF INDIA'S URBANIZATION

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I. INTRODUCTION

The population of India increased from 238 million in 1901 to 844 million in 1991. India is at present the second most populous country after China in the world. Population growth in India was slow during the first half of this century; however, growth accelerated during the second half, particularly after the 1960s. In its process of demographic transition, India entered into the stage of so-called population explosion with a relatively high birth rate and medium death rate since the 1960s.

India has been placed into a group of less developed regions by the United Nations. These less developed regions have been further divided into two subgroups: "least developed" countries and other less developed countries. India belongs to the latter subgroup, while Bangladesh, Bhutan, Nepal, and Maldives, four out of the seven South Asian countries, have been included in the former subgroup. A recent United Nations' publication on world urbanization prospects reveals that the urban share of the world has increased from 37 per cent in 1970 to 43 per cent in 1990 [22, p. 3]. Less developed regions have observed a relatively rapid increase in the proportion of urban population, from 25 per cent to 34 per cent during 1970–90, while increase in the urban share of more developed regions has been slow: 67 per cent to 73 per cent during the same period. Accordingly, urban population in less developed regions surpassed that of more developed regions by 1975 and increased their percentage of the world's urban population to 61 per cent by 1990.

The pace of urbanization in India has been slower even compared to the less developed regions. The level of urbanization has increased from 10.8 per cent in 1901 to 25.7 per cent in 1991. The main reason for this slow urbanization in India lies in the high pace of rural population growth. The growth rate of rural population in less developed regions was 2.2 per cent per annum during 1965–70 and 1.24 per

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cent during 1985–90, while the rates in India were 1.8 per cent during 1980–85 and 1.7 per cent during 1985–90 [22, pp. 11-12].

This paper is aimed at presenting the salient features of the morphology of India's urbanization paying due attention to interstate variations. We will find a lot of variations among the states in terms of their basic indices of urbanization. There are six sections in this paper. Section II deals with how to define an urban area. Section III presents a picture of the patterns of population transformation in India with due consideration to changes in the birth and death rates over time. Section IV examines the main features of the morphology of India's urbanization, discussing the level of urbanization, primacy patterns, interstate differences in urbanization, and the components of urban growth. Section V deals with the structure and pattern of migration in order to explain the background to India's slow urbanization.

II. DEFINITION OF URBAN AREA AND OTHER RELATED ISSUES

A. The Definition

The definition of urban area in India is much more strict than that of other developing countries. The *Census of India* defines urban according to several criteria. First, all statutory towns—i.e., all places with a municipal corporation, municipal board, cantonment board, notified area committee etc.—are defined as "urban." This criterion is based on the type of local government. Secondly, all other places which satisfy the following three criteria are regarded as urban: (a) a minimum population of 5,000, (b) at least 75 per cent of the male working population is engaged in nonagricultural and allied activities, and (c) a population density of at least 400 per square kilometers. Thirdly, some other places with distinct urban characteristics are also considered as urban, even though they do not satisfy the above criteria. This category includes major project colonies, areas of industrial development, railway colonies, important tourist centers, etc. A statutory town with a population of 100,000 and above is classified as a city. Also, a city with a population of a million or more is generally called a metropolis.

Besides town and city, the concept of urban agglomeration (UA) is also used in the *Census of India*. A UA is an integrated urban area, consisting of a town (city) and its adjoining areas. These adjoining areas are either statutory or non-statutory towns. The 1991 census counted 381 UAs, which included 1,302 towns out of the total 4,689 towns. The average number of towns per UA was 3.4 in 1991.

The 1991 census counted 2,996 statutory towns and 1,693 non-statutory towns (or census towns). About 85 per cent of the total urban population in 1991 resided in statutory towns, which are generally under the jurisdiction of urban development departments. The remaining 15 per cent were residing in non-statutory towns under the jurisdiction of departments of local government and/or *panchayats* (councils).

B. International Comparison

As compiled in a United Nations' publication on world urbanization, the definition of urban varies considerably across countries [22, pp. 38-69]. Despite this diversification, the definition of urban can be classified into three major types. The first type is based on the statutory status of communes, localities, nuclei, and clusters. This definition has been adopted by the South Asian countries of Bangladesh, Mauritius, Pakistan, and Sri Lanka. The second type of definition is based on the population size of communes, localities, nuclei, and clusters. However, the criterion for distinguishing urban from rural ranges from 1,000 to more than 10,000 persons. Less populous Latin American countries tend to adopt criteria between 1,500 and 2,000 persons for demarcation, while populous Asian countries tend to set their criteria at higher levels. In South Asia, Nepal is the only country adopting this type of definition with localities of 9,000 or more inhabitants looked upon as urban. The third type is a mixture of the previous two types. It combines the statutory status and the population size of communities. Density, ratio of nonagricultural workers, etc. are often added to the population size for defining urban in this group. India, Japan, Canada, and several other countries have adopted this type.

Since India's definition of urban is very strict, its level of urbanization tends to be understated when used in international comparison. For example, if India adopted the second type of definition only and counted clusters with say 2,000 and more people as urban, its urbanization level would jump to more than 50 per cent. Moreover, changes in definition may take place within a given country over time, forcing us to pay attention not only to international differences, but also adjust definitions domestically.

C. Other Related Issues

Apart from definition issues, we should point out that, first, most of the seasonal workers migrating from rural to urban areas during nonagricultural seasons are not counted as urban population in India, although they are actually a part of urban working force for several months of the year [13, pp. 13, 118]. Many of them are employed as contract workers in the infrastructure sector (construction etc.); however, the actual number of such workers is not known. Secondly, some of the rural inhabitants on the outskirts of urban areas also make up a part of the urban workforce. It is a well known fact that some of urban workers are forced to purchase housing in the adjoining rural areas due to the prohibitive price of urban housing and subsidized bus facilities. It is estimated that 4.3 per cent of urban workers were residing in rural areas during 1987–88 [23, p. 7]. Thus, there are a considerable number of people who are counted as rural population, although directly connected with urban industries and other urban facilities.

Statutory reclassification also influences the rate of urbanization. Between 1981 and 1991 there was a net addition of 735 towns, involving the declassification of 93 towns and the addition of 828. This reclassification resulted in an urban population increase of 9.8 million and accounted for 17 per cent of urban population growth during 1981–91, compared to 19 per cent during 1971–81. The two other factors in urban population growth, natural increase and rural-urban net migration will be discussed later.

III. PATTERNS OF POPULATION TRANSFORMATION

Patterns of demographic transition in India have characteristics which appear to be common to most of the world's developing countries. As shown in Table I, during the first decade of this century both the birth and death rates in India were very high, which resulted in a slow decadal population growth during 1901–11. During the second decade the population decreased slightly due to a high death rate caused by the spread of plague and influenza all over the country. Since 1921 the death rate has declined sharply and steadily, while the birth rate has not decreased much. The birth rate has been more than 40 per thousand up to 1961–71, with the exception of 39.90 per thousand during 1941–51. The gap between the birth rate and the death

TABLE I

Dynamics of Population Growth in India, 1901–91

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Period	Population a the Population (As on N	eriod	Growth	Rate (%)	Vital Ra	ites per 1,00	0 Persons
renod	Total (Million)	Urban (%)	Decadal	Annual (Expo- nential)	Birth Rate	Death Rate	Natural Growth Rate
1901-11	252.09	10.29	5.75	0.56	49.20	42.60	6.60
1911-21	251.32	11.18	-0.31	-0.03	48.10	48.60	-0.50
1921-31	278.98	11.99	11.00	1.04	46.40	36.30	10.10
1931–41	318.66	13.86	14.22	1.33	45.20	31.20	14.00
1941-51	361.09	17.29	13.31	1.25	39.90	27.40	12.50
1951-61	439.23	17.97	21.51	1.96	41.70	22.80	18.90
1961-71	548.16	19.91	24.80	2.20	41.20	19.00	
1971-81	683.33	23.34	24.66	2.22	37.20	15.00	22.20
1981-91	846.30	25.72	23.85	2.12	32.50	13.00	22.20 21.10

Sources: [9, p. 22] [6, p. 15].

Notes: 1. The 1981 total has been revised in the light of the 1991 census results.

- 2. The 1991 census figures include projected populations of Jammu and Kashmir.
- 3. Vital rates, except for 1981-91, have been calculated from the Census of India data via the reverse survival method.
- 4. Vital rates for 1981–91 have been calculated using sample registration system (SRS) data.

TABLE II
BIRTH AND DEATH RATES AND RATES OF NATURAL INCREASE ACCORDING TO
RURAL-URBAN RESIDENCE—INDIA, 1971–80 AND 1981–90

Years	Birth Rate	Death Rate	Rate of Natural Increase
1971–80			· · · · · · · · · · · · · · · · · · ·
Rural	35.8	15.8	20.0
Urban	28.5	9.2	19.3
1981–90		*************************	
Rural	33.9	12.6	21.3
Urban	27.0	7.7	19.3

Source: [23, p.22].

Note: We have also taken account the provisional SRS estimates for 1990.

rate became widest during 1961–71, resulting in the highest decadal population growth ever. A very high natural growth rate was recorded during the next two decades because the gap between the birth rate and the death rate did not narrow though both rates declined during that period. The birth rate declined to 37.20 per thousand during 1971–81 then further to 32.50 per thousand during 1981–91, while the decline in the death rate was more impressive: 15.00 per thousand during 1971–81 and 11.40 per thousand during 1981–91. Still, India can be characterized as a country with high birth rate and medium death rate.

Both the birth and death rates in urban areas have differed considerably from those of rural areas. Table II shows that both the birth and death rates appear to be lower in urban areas than in rural areas for both 1971–80 and 1981–90. The fall in the birth rate between the two periods has been relatively small—1.9 points in rural areas and 1.5 points in urban areas—while the decline in the death rate in rural areas reached 3.2 points against 1.5 points in urban areas. Mainly due to this sharp fall in the death rate in rural areas, the differences in the rate of natural increase between rural and urban areas have widened: from 0.7 points during 1971–80 to 2.0 points during 1981–90. This factor constituted one of the major reasons for India's slower urbanization during 1981–90.

IV. LEVELS OF URBANIZATION

A. Levels over Time

At the beginning of the century, the rate of urbanization in India was only 10.8 per cent, as shown in Table III. Since then, urban population increased, but its growth rate was very slow during the first quarter of the century. Since 1930 the

TABLE III
URBANIZATION TRENDS IN INDIA

				Urban	Decen-	Tempo of	Urbanizati	on (%/Year)
Census Year	No. of UAs / Towns	Total Population	Urban Population	Popula- tion as Percentage of Total Popula- tion	nial Growth	Annual Expo- nential Growth Rate	Annual Gain in Percen- tage of Urban Popula- tion	Annual Rate of Gain in Percentage of Urban Popula- tion
1901	1,827	238,396,327	25,851,873	10.84		_	_	
1911	1,815	252,093,390	25,941,633	10.29	0.35	0.03	-0.06	-0.51
1921	1,949	251,321,213	28,086,167	11.18	8.27	0.79	0.09	0.86
1931	2,072	278,977,238	33,455,989	11.99	19.12	1.75	0.08	0.72
1941	2,250	318,660,580	44,153,297	13.86	31.97	2.77	0.19	1.56
1951	2,843	361,088,090	62,443,709	17.29	41.42	3.47	0.34	2.47
1961	2,365	439,234,771	78,936,603	17.97	26.41	2.34	0.07	0.41
1971	2,590	548,159,652	109,113,977	19.91	38.23	3.21	0.19	1.08
1981	3,378	683,329,097	159,462,547	23.34	46.14	3.83	0.34	1.72
1991	3,768	846,302,688	217,611,012	25.72	36.19	3.09	0.24	1.02

Source: [5, p.15].

Notes: 1. Since the 1981 census was not conducted in Assam, the 1981 population figures for India include interpolated figures for Assam.

2. The 1991 census has not been held in Jammu and Kashmir. The 1991 population figures for India include projected figures for Jammu and Kashmir as projected by the Standing Committee of Experts on Population Projections (October 1989).

urban population has been growing by more than 3 per cent per annum, except during 1951–61. However, the rate of urbanization has not shown any sharp increases during this period. The present rate of urbanization, 25.7 per cent in 1991, is still lower than other developing countries. The urban population in India, which exceeded 217 million in 1991, is projected to reach 425 million in 2011 with the level of urbanization of 36.6 per cent [9, p. 23].

Table IV shows the number of towns by size class¹ for the census years between 1901 and 1991. The number of towns in all classes has doubled during this period. Particularly striking is the increase in the number of class I towns since 1951. Likewise, the number of class II and III towns has also increased steadily. class I, II, and

¹ There has been a lot of differences and fluctuations in the distribution of urban population by size class. It has been a tradition of the Indian census to classify towns into six categories on the basis of population. Class I towns are those with a population of 100,000 and more, while class II towns fall between 50,000 and 99,999, class III towns between 20,000 and 49,999, class IV towns between 10,000 and 19,999, class V towns between 5,000 and 9,999 and class VI towns have less than 5,000. Class I towns are generally referred to as cities.

 $\begin{tabular}{l} TABLE\ IV \\ Decadal\ Percentage\ Variation\ in\ Urban\ Population\ in\ Each\ Size\ Class—India, \\ 1901-11\ to\ 1981-91 \\ \end{tabular}$

Decade	All Classes	Class I	Class II	Class III	Class IV	Class V	Class VI
1901-11	-0.14	5.54	-7.07	4.71	-5.39	-4.23	7.48
1911–21	8.25	16.99	7.09	5.10	0.32	4.66	15.82
1921–31	19.08	25.11	33.50	25.66	17.22	9.30	-11.74
1931–41	32.09	61.83	29.50	28.57	15.78	16.18	-20.23
1941-51	41.49	65.19	23.34	36.00	22.21	21.73	39.21
1951-61	25.85	44.99	41.98	35.62	17.90	-33.33	-68.71
1961–71	37.91	53.51	34.06	30.34	18.22	-10.75	-20.71
1971-81	46.23	54.35	55.73	30.85	27.54	17.82	65.33
1981–91	36.09	46.87	28.14	25.30	10.72	-1.27	-21.70

Source: [5, p. 34].

III towns have distinct urban characteristics, while class IV, V, and VI towns generally lack urban facilities. The number of class V towns has been stagnant over time, reaching 1,124 in 1951, then declining sharply to 711 in 1961. The number of class VI towns has declined from 479 in 1901 to 185 in 1991. Here again, a sharp decline took place during 1951–61. The stagnation or decline in the number of the class V and VI towns can be attributed to upward mobility due to population growth as well as declassification into rural areas. For all size classes, changes in the number of towns were comparatively less before Independence. Urban structure as indicated by the number of towns by size class has drastically changed after Independence, particularly between 1951 and 1961.

Table V shows the dominance of class I, II, III towns in the percentage distribution of urban population. Class I towns have been recording the highest share throughout the census years concerned. Its share has increased drastically from 26.00 per cent in 1901 to 65.20 per cent in 1991. The population in class I towns exceeded 50 per cent of total urban population in 1961. On the other hand, the share held by class II towns has remained almost the same at around 11 per cent throughout the period in question except for 1951, while the share held by class III towns has also remained constant at around 16 per cent until 1971, and then declined to 13.2 per cent in 1991. The aggregate share of the class I, II, and III towns in the total urban population has remarkably jumped from 52.9 per cent in 1901 with 13.5 million people to 89.3 per cent in 1991 with 190.2 million people. On the contrary, the share of smaller towns has declined drastically. In 1901 the shares of class IV and V towns were 20.8 per cent and 20.1 per cent, which ranked second and third respectively. Thus, the share of smaller towns was 47.1 per cent, nearly half, with 12.1 million people at the beginning of the century. The decline of their shares was relatively slow until 1951, has accelerated since 1961, particularly in the case of

TABLE V

Distribution of Urban Population by Town Size Class—India, 1901–91

Census Year	All Classes	Class I	Class II	Class III	Class IV	Class V	Class VI
1901	100.00	26.00	11.29	15.64	20.83	20.14	6.10
1911	100.00	27.48	10.51	16.40	19.73	19.31	6.57
1921	100.00	29.70	10.39	15.92	18.29	18.67	7.03
1931	100.00	31.20	11.65	16.80	18.00	17.14	5.21
1941	100.00	38.23	11.42	16.35	15.78	15.08	3.14
1951	100.00	44.63	9.96	15.72	13.63	12.97	3.09
1961	100.00	51.42	11.23	16.94	12.77	6.87	0.77
1971	100.00	57.24	10.92	16.01	10.94	4.45	0.44
1981	100.00	60.42	11.63	14.33	9.54	3.58	0.50
1991	100.00	65.20	10.95	13.19	7.77	2.60	0.29

Source: [5, p. 32].

class V and VI towns. Nevertheless their total share has shrunk to 10.7 per cent with only 22.7 million people in 1991.

B. Primacy Patterns

Urban primacy appears to have a positive relationship to the rate of population growth, and a negative relationship to the level of development and the geographical size [16, p. 58], although actual primacy patterns are quite complicated. As examined earlier, definitions of urban area may also affect levels of urban primacy in international comparison.

There were twenty-three metropolises in India in 1991, as shown in Table VI. India had only five metropolises in 1951. The increase in the number of metropolises was slow till 1981, then, as many as eleven new cities were given metropolitan status during 1981–91. Metropolises with a population of eight million or more were termed "mega-cities" by the United Nations; however, the 1991 Indian census applied a criterion of five million or more for classification as a mega-city. According to the 1991 census, there were four mega-cities in India: Greater Bombay UA, Calcutta UA, Delhi UA, and Madras UA. Greater Bombay UA occupied the seat of primacy by overtaking Calcutta UA during 1981–91, mainly due to the addition of five urban areas. Urban population growth in Calcutta UA, a giant city at the time of Independence, has been the lowest among the four mega-cities during 1951–91. Delhi UA, the capital of India, has grown most rapidly among the four after Independence.

The shares of Greater Bombay UA, the primate city, in the total urban population and class I towns were 5.9 per cent and 9.1 per cent respectively in 1991. However, since its population exceeds that of Calcutta UA by only 15 per cent, urban primacy in India appears quite low compared to other developing countries.

TABLE VI

RANKED LISTING OF URBAN AGGLOMERATIONS/CITIES HAVING POPULATIONS OF MORE THAN
A MILLION IN 1991 (ARRANGED IN DESCENDING ORDER OF THEIR 1991 POPULATION)

4 Madras UA 1,542,333 1,944,502 3,169,930 4,289,347 5,421,98 5 Hyderabad UA 1,130,688 1,249,151 1,796,339 2,545,836 4,344,43 6 Bangalore UA 786,343 1,206,961 1,664,208 2,921,751 4,130,28 7 Ahmedabad UA 877,329 1,206,001 1,752,414 2,548,057 3,312,21 8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,93 13 Jaipur UA 304,380 410,376	Rank in 1991	Urban Agglomeration (1,000,000 + Pop		1951	1961	1971	1981	1991
2 Calcutta UA 4,669,559 5,983,669 7,420,300 9,194,018 11,021,91 3 Delhi UA 1,437,134 2,359,408 3,647,023 5,729,283 8,419,08 4 Madras UA 1,542,333 1,944,502 3,169,930 4,289,347 5,421,98 5 Hyderabad UA 1,130,688 1,249,151 1,796,339 2,545,836 4,344,43 6 Bangalore UA 786,343 1,206,961 1,664,208 2,921,751 4,130,28 7 Ahmedabad UA 877,329 1,206,001 1,752,414 2,548,057 3,312,21 8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,93		Greater Bombay	UA	2,966,902	4,152,056	5,970,575	8.243.405	12 596 243
3 Delhi UA 1,437,134 2,359,408 3,647,023 5,729,283 8,419,08 4 Madras UA 1,542,333 1,944,502 3,169,930 4,289,347 5,421,98 5 Hyderabad UA 1,130,688 1,249,151 1,796,339 2,545,836 4,344,43 6 Bangalore UA 786,343 1,206,961 1,664,208 2,921,751 4,130,28 7 Ahmedabad UA 877,329 1,206,001 1,752,414 2,548,057 3,312,21 8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,51		Calcutta	UA	4,669,559				
4 Madras UA 1,542,333 1,944,502 3,169,930 4,289,347 5,421,98 5 Hyderabad UA 1,130,688 1,249,151 1,796,339 2,545,836 4,344,43 6 Bangalore UA 786,343 1,206,961 1,664,208 2,921,751 4,130,28 7 Ahmedabad UA 877,329 1,206,001 1,752,414 2,548,057 3,312,21 8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,93 13 Jaipur UA 304,380 410,376		Delhi	UA	1,437,134	2,359,408			8,419,084
5 Hyderabad UA 1,130,688 1,249,151 1,796,339 2,545,836 4,344,43 6 Bangalore UA 786,343 1,206,961 1,664,208 2,921,751 4,130,28 7 Ahmedabad UA 877,329 1,206,001 1,752,414 2,548,057 3,312,21 8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,93 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,93 14 Kochi UA 177,134 292,167		Madras	UA	1,542,333	1,944,502			
6 Bangalore UA 786,343 1,206,961 1,664,208 2,921,751 4,130,28 7 Ahmedabad UA 877,329 1,206,001 1,752,414 2,548,057 3,312,221 8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,95 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,95 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp. a 153,795 244,032 401,176 607,052 1,042,74		Hyderabad	UA	1,130,688				
7 Ahmedabad UA 877,329 1,206,001 1,752,414 2,548,057 3,312,21 8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,95 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,95 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 </td <td></td> <td>Bangalore</td> <td>UA</td> <td>786,343</td> <td>1,206,961</td> <td></td> <td></td> <td></td>		Bangalore	UA	786,343	1,206,961			
8 Pune UA 608,634 790,798 1,135,034 1,686,109 2,493,98 9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,95 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,95 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203		Ahmedabad	UA	877,329	1,206,001			3,312,216
9 Kanpur UA 705,383 971,062 1,275,242 1,639,064 2,029,88 10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,95 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,32 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210		Pune	UA	608,634	790,798	. ,		
10 Lucknow UA 496,861 655,373 813,982 1,007,604 1,669,20 11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,95 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,32 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501		Kanpur	UA	705,383	971,062			2,029,889
11 Nagpur UA 485,264 690,302 930,459 1,302,066 1,664,00 12 Surat UA 237,394 317,519 493,001 913,806 1,518,95 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,32 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,72 18 Patna UA 326,163 414,811 551,210 918,903 1,099,62 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042			ŪΑ	496,861	655,373			1,669,204
12 Surat UA 237,394 317,519 493,001 913,806 1,518,95 13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,32 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467		Nagpur	UA	485,264			, ,	1,664,006
13 Jaipur UA 304,380 410,376 636,768 1,015,160 1,518,32 14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp.a 153,795 244,032 401,1		Surat	ŬΑ	237,394		,		1,518,950
14 Kochi UA 177,134 292,167 505,838 685,836 1,140,60 15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp. a 153,795 244,032 401,176 607,052 1,042,72		Jaipur	UA	304,380	410,376			
15 Vadodara UA 211,407 309,716 467,487 744,881 1,126,82 16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp. a 153,795 244,032 401,176 607,052 1,042,74		Kochi	ŬΑ	177,134				
16 Indore UA 310,959 394,941 560,936 829,327 1,109,05 17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,74 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp.a 153,795 244,032 401,176 607,052 1,042,72	15	Vadodara	UA	211,407	309,716	467,487	•	
17 Coimbatore UA 287,334 448,201 736,203 920,355 1,100,72 18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp.a 153,795 244,032 401,176 607,052 1,042,74		Indore	UA	310,959	394,941			1,109,056
18 Patna UA 326,163 414,811 551,210 918,903 1,099,64 19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp.a 153,795 244,032 401,176 607,052 1,042,74		Coimbatore	ŪΑ	287,334		,	•	1,100,746
19 Madurai UA 370,791 490,948 711,501 907,732 1,085,91 20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp. a 153,795 244,032 401,176 607,052 1,042,74		Patna	UA	326,163	414,811			, ,
20 Bhopal UA 102,333 222,948 384,859 671,018 1,062,77 21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp.a 153,795 244,032 401,176 607,052 1,042,74		Madurai	UA		490,948	•	,	1,085,914
21 Visakhapatnam UA 108,042 211,190 363,467 603,630 1,057,11 22 Ludhiana M. Corp.a 153,795 244,032 401,176 607,052 1,042,74			UA	102,333	222,948	•		1,062,771
22 Ludhiana M. Corp. a 153,795 244,032 401,176 607,052 1,042,74		Visakhapatnam	UA	108,042	211,190	•		
00 17		Ludhiana M. C	orp.a	153,795		•		1,042,740
25 Variation OA 309,799 505,952 635,175 797,162 1,030,86	23	Varanasi	ŨΑ	369,799	505,952	635,175	797,162	1,030,863

Source: [7, p. 316].

Note: Population for the years 1951 to 1981 is for the jurisdiction which prevailed in 1981 and has not been adjusted for the 1991 set up. In other words, 1991 population includes component attributable to inclusion of new areas in the urban agglomeration or expansion of jurisdiction of the 1981 census.

However, this finding will be misleading if we do not take into account the fact that the four mega-cities have been functioning as the most important regional centers in India. The aggregate shares of the four mega-cities in the total urban population and class I towns were 17.1 per cent and 26.8 per cent respectively.

It is necessary to examine urban primacy at the level of states in such a country as India, where fifteen out of twenty-five states have populations of ten million or more in 1991. According to Table VII, primacy patterns among the states may be summarized as follows. First, urban primacy is high in the hilly states, where urban population is concentrated in capital cities. Particularly, Meghalaya, Sikkim, Mizoram, and Tripura show high urban primacy of more than 50 per cent. Urban

^a Municipal Corporation is a type of local body distinguished from UA, with a population 300,000 or more, regulated by the Municipal Corporation Act.

TABLE VII
URBAN PRIMACY BY STATES AND UNION TERRITORIES, 1981

	of the	age Share of Largest Urb Fotal Urban l	an Center	latio	between the of the Large cond Large	gest and
	1961	1971	1981	1961	1971	1981
Indiaa	7.34	6.65	5.81	1.38 : 1	1.18:1	1.12:1
States						
Andhra Pradesh	19.90	21.38	20.39	5.32:1	4.94:1	4.22:
Arunachal Pradesh	n.a.	29.59	22.06	n.a.	1.06:1	1.13:
Bihar	9.32	8.72	10.54	1.11:1	1.08:1	1.35 :
Goa	10.62	29.16	23.92	2.31:1	1.22:1	1.11:
Gujarat	22.68	23.23	24.03	3.80:1	3.53:1	2.79 :
Haryana	8.07	7.04	11.70	1.20:1	1.22:1	1.98 :
Himachal Pradesh	23.89	22.89	21.66	3.27:1	2.60:1	3.40 :
Jammu and Kashmir	49.19	49.32	48.08	2.69:1	2.58:1	2.71 :
Karnataka	22.78	23.22	27.23	4.75:1	4.36:1	5.51 :
Kerala	9.39	12.67	14.37	1.21:1	1.07:1	1.26 :
Madhya Pradesh	8.54	8.27	7.85	1.08:1	1.05:1	1.09 :
Maharashtra	37.20	38.00	37.48	5.31:1	5.26:1	4.89 :
Manipur	100.00	70.93	41.71	n.a.	11.53:1	7.38 :
Meghalaya	87.16	83.41	72.39	11.51:1	7.93:1	4.95 :
Mizoram	100.00	84.06	61.15	n.a.	5.27:1	4.33 :
Nagaland	37.82	41.92	28.56	1.18:1	1.24:1	1.01 :
Orissa	13.19	11.15	10.53	1.62:1	1.19:1	1.01 :
Punjab	15.50	14.24	13.06	1.63:1	1.14:1	1.02 :
Rajasthan	12.51	14.01	14.08	1.77:1	2.00:1	2.00:
Sikkim	100.00	67.66	71.93	n.a.	6.91 : 1	9.09 :
Tamil Nadu	21.63	25.45	26.89	3.96:1	4.30:1	4.66 :
Tripura	58.28	61.75	58.60	4.15:1	5.95:1	6.35 :
Uttar Pradesh	10.24	10.29	8.24	1.48:1	1.57 : 1	1.63 :
West Bengal	67.17	64.11	63.64	33.92:1	29.14:1	25.05:
Union Territories			***************************************	*************	***************	
Andaman and						
Nicobar Islands	100.00	100.00	100.00	n.a.	n.a.	n.a
Chandigarh	100.00	100.00	100.00	n.a.	n.a.	n.a
Dadra & Nagar Haveli	n.a.	n.a.	100.00	n.a.	n.a.	n.a
Daman and Diu	68.97	75.59	72.37	2.22:1	2.79:1	2.62:
Delhi	100.00	100.00	99.33	n.a.	n.a.	451.50:
Lakshadweep	n.a.	n.a.	35.74	n.a.	n.a.	1.01:
Pondicherry	58.16	78.14	49.55	2.33:1	3.91:1	5.79:

Source: [16, p. 59]. Note: n.a. = Not applicable. ^a Excluding Assam.

primacy is also high in the states whose levels of industrialization and urbanization are relatively high. This is the case in West Bengal, Karnataka, Maharashtra, and Tamil Nadu. It is no coincidence that three out of the four mega-cities are located in

these states: Calcutta UA in West Bengal, Greater Bombay UA in Maharashtra, and Madras UA in Tamil Nadu. Urban primacy in West Bengal appears as high as 63 per cent, a pattern showing more polarization than other states due to less development of West Bengal's other metropolises and cities in the state. In contrast, urban primacy tends to be low among the larger, more populous states with less industrialization. Most of these states, such as Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan, are located in the Hindi belt with the exception of Orissa.

C. Interstate Differences in Level of Urbanization

The level of urbanization varies widely among states and union territories, as shown in Table VIII and Figure 1. The five populous states with high levels of urbanization in 1991 were Maharashtra, Gujarat, Tamil Nadu, Karnataka, and Punjab. Punjab, Maharashtra, and Gujarat are also advanced in their levels of per capita net domestic product, ranking first, third, and fourth respectively among the populous states. Union territories show high levels of urbanization, except for Dadra and Nagar Haveli. On the other hand, states with lower levels of urbanization are represented by Himachal Pradesh, Sikkim, Assam, and Arunachal Pradesh. Among the populous states Bihar, Orissa, Uttar Pradesh, Rajasthan, and Madhya Pradesh are less urbanized. These states are also poorer in terms of per capita net domestic product. Thus, the level of urbanization is positively related to the level of per capita net domestic product. A study of the 1981 census also reveals that the level of urbanization is positively related not only to the share of secondary sectors in income generation, but also to the share of urban population in the total urban population [16, pp. 8–9].

Now let us examine trends in urban and rural population growth rate by state. As shown in Table IX, the growth rate of urban population was highest during 1971–81, while the growth rate of rural population was highest during 1961–71. Accordingly, the urban-rural growth differential widened most during 1971–81, then, narrowed considerably during 1971–81.

There is an interesting relationship between the urban growth rate and the level of urbanization among major states. The highly urbanized states experience relatively less urban growth during 1971–81 and 1981–91 respectively, while the lowly urbanized states achieved relatively high urban growth rates during the same periods. For example, the three highly urbanized states of Maharashtra, Tamil Nadu, and Gujarat ranked respectively eleventh, fourteenth, and tenth in urban growth rate among the populous states during 1971–81, while the three lowly urbanized states of Orissa, Bihar, and Uttar Pradesh ranked first, sixth, and second respectively. Likewise, the three most urbanized states of Maharashtra, Gujarat, and Tamil Nadu showed relatively low urban growth rates ranking seventh, ninth, and fourteenth respectively among the populous states during 1981–91. The three least urbanized states of Bihar, Orissa, and Uttar Pradesh showed a similar pattern,

TABLE VIII
STATES AND UNION TERRITORIES ARRANGED IN DESCENDING ORDER OF THEIR LEVEL OF URBANIZATION

Rank in	State/Union Territory	Urban Populati Total Po	on as Per Cent of opulation	Rank in
1991		1991	1981	1981
1	Delhi	89.93	92.73	2
2	Chandigarh	89.69	93.63	1
3	Pondicherry	64.00	52.28	3
4	Lakshadweep	56.31	46.28	4
5	Daman and Diu	46.80	36.75	5
6	Mizoram	46.10	24.67	15
7	Goa	41.01	32.03	8
8	Maharashtra	38.69	35.03	6
9	Gujarat	34.49	31.10	9
10	Tamil Nadu	34.15	32.95	7
11	Karnataka	30.92	28.89	10
12	Punjab	29.55	27.68	11
13	Manipur	27.52	26.42	13
14	West Bengal	27.48	26.47	12
15	Andhra Pradesh	26.89	23.32	16
16	A. & N. Islands*	26.71	26.30	14
17	Kerala	26.39	18.74	21
	India	26.13	23.34	
18	Haryana	24.63	21.88	17
19	Jammu and Kashmir	23.83	21.05	18
20	Madhya Pradesh	23.18	20.29	20
21	Rajasthan	22.88	21.05	19
22	Uttar Pradesh	19.84	17.95	23
23	Meghalaya	18.60	18.07	22
24	Nagaland	17.21	15.52	25
25	Tripura	15.30	10.99	28
26	Orissa	13.38	11.79	27
27	Bihar	13.14	12.47	26
28	Arunachal Pradesh	12.80	6.56	32
29	Assam	11.08	9.88	29
30	Sikkim	9.10	16.15	24
31	Himachal Pradesh	8.69	7.61	30
32	Dadra and Nagar Haveli	8.47	6.67	31

Source: [5, p. 16] [7, p. 7].

ranking tenth, eighth, and sixth respectively during 1981–91 though the contrast was not so clear as had been observed for 1971–81. Thus, the speed of urbanization among the lowly urbanized states has been faster than that of the highly urbanized states during 1971–91.

However, this does not necessarily mean that the gap in the level of urbanization by state has been narrowing among the populous states. Since the level of urbaniza-

^a Andaman and Nicobar Islands.

Jammu and Kashmir Himachal 23.83 Pradesh 8.70 C Η A Arunachal Haryana Pradesh Punjab Chandgarh 12.21 Meghalaya 89.69 18.69 Sikkim Delhi 9.12 89.93 Rajasthan Uttar Pradesh Nagaland 22.88 17.28 19.89 Manipur BANGI 27.69 DESH Madhya Pradesh West Tripura Bengal 15.26 Mizoram 23.21 34.40 6.20 N D I MYANMAR Daman 46.86 and Diu (BURMA) Mehareshira 33.73 Nagar Haveli 8.47 BAY OF Andhra Pradesh ARABIAN BENGAL 26.84

Percentage of Urban Population

Above 60.00

35.01~60.00

25.01~35.00

 $15.01 \sim 25.00$ $10.01 \sim 15.00$

Below 10.01

National Average

25.72

to Total Population

The Level of Urbanization in India, 1991

Source: Based on [5, Map 2].

SEA

Goa 41.02

Karnataka 30.91

tion is influenced by the growth rate of rural population, let us examine trends in urban-rural growth differentials among the populous states during 1961-91. Those states with higher levels of urbanization than the national average numbered six in each census year from 1961 to 1981. Incidentally, the number of states with larger urban-rural growth differentials than the national average numbered two only among the higher urbanized states, while the remaining four have shown smaller

Pondicherry

64.05

SRI

ANKA

Tamil Nadu

34.20

TABLE IX ANNUAL EXPONENTIAL GROWTH RATE: URBAN, RURAL, AND THEIR DIFFERENCE

		A	verage A	nnual E	xponent opulatio	ial Grown	/th		-Rural G	
			Urban			Rural		· D	ifferentia	al
		1961– 71	1971– 81	1981– 91	1961– 71	1971– 81	1981– 91	1961– 71	1971– 81	1981– 91
India	l	3.21	3.83	3.09	1.96	1.78	1.80	1.25	2.05	1.29
State	······································	• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •				
1.	Andhra Pradesh	2.92	3.96	3.55	1.67	1.57	1.67	1.25	2.39	1.88
2.	Arunachal Pradesha		8.74	9.28	3.26	2.71	2.44		6.03	6.84
3.	Assam	5.01	3.27b	3.27b	2.82	2.00	1.98	2.19	1.27b	1.29
4.	Bihar	3.64	4.37	2.65	1.76	1.88	2.03	1.88	2.49	0.62
5.	Goa	8.24	4.66	3.96	1.59	1.47	0.06	6.65	3.19	3.90
6.	Gujarat	3.44	3.47	2.90	2.26	2.01	1.39	1.18	1.46	1.51
7.	Haryana	3.04	4.67	3.58	2.74	2.00	1.85	0.30	2.67	1.73
8.	Himachal Pradesh	3.05	2.98	3.11	2.00	2.06	1.65	1.05	0.92	1.46
9.	Karnataka	3.02	4.10	2.55	1.91	1.75	1.58	1.11	2.35	0.97
10.	Kerala	3.05	3.19	4.76	2.20	1.46	0.32	0.85	1.73	4.44
11.	Madhya Pradesh	3.83	4.45	3.71	2.39	1.76	2.00	1.44	2.69	1.71
12.	Maharashtra	3.42	3.36	3.27	2.01	1.62	1.68	1.41	1.74	1.59
13.	Manipur	7.37	9.76	2.98	2.68	1.16	2.34	4.69	8.60	0.64
14.	Meghalaya	2.25	4.95	2.74	2.82	2.36	2.77	-0.57	2.59	-0.03
15.	Mizoram	9.74	11.71	9.57	1.53	2.37	-0.07	8.21	9.34	9.64
16.	Nagaland	9.87	8.50	5.58	2.84	3.42	4.29	7.03	5.08	1.29
17.	Orissa	5.09	5.22	3.08	2.01	1.46	1.59	3.08	3.76	1.49
18.	Punjab	2.25	3.68	2.56	1.88	1.61	1.56	0.37	2.07	1.00
	Rajasthan	3.25	4.62	3.31	2.29	2.43	2.24	0.96	2.19	1.07
20.	Sikkim	10.55	9.54	-3.29	2.02	3.33	3.50	8.53	6.21	-6.79
21.	Tamil Nadu	3.27	2.47	1.76	1.51	1.22	1.20	1.76	1.25	0.56
22.	Tripura	4.55	3.29	6.19	2.94	2.71	2.41	1.61	0.58	3.78
23.	Uttar Pradesh	2.68	4.74	3.29	1.67	1.80	2.02	1.01	2.94	1.27
	West Bengal	2.50	2.76	2.54	2.34	1.85	2.07	0.16	0.91	0.47
	on Territories	• • • • • • • • • • • • • • • • • • • •	***********			•••••				
1.	A. & N. Islands ^c	6.22	6.38	4.10	5.86	4.48	3.84	0.36	1.00	0.26
2.		8.53	5.96	3.07	1.65	1.68	8.32	6.88	1.90 4.28	0.26
3.	Dadra and	0.55	5.70	5.07	1.05	1.00	0.32	0.88	4.28	-5.25
٠.	Nagar Havelid			5.28	2.45	3.38	2.69	<u></u>		2.50
4.	Daman and Diu	5.54	2.12	4.93	5.04	2.47	0.76	0.50	-0.35	2.59
5.	Delhi	4.36	4.58	3.79	3.36	0.77	7.35	1.00	-0.33 3.81	4.17
6.	Lakshadweep ^d			4.46	2.75	2.37	0.44	1.00	3.81	-3.56
	Pondicherry	8.01	4.66	4.92	-0.24	0.53	0.44	8.25		4.02
		0.01	7.00	7.72	-0.24	0.55	0.05	0.23	4.13	4.87

Source: [5, pp. 51-52].

^a In Arunachal Pradesh there was no urban area in 1961. ^b Interpolated using 1971 and 1991 census figures.

c Andaman and Nicobar Islands.

d In these Union Territories there was no urban area in 1961 and 1971.

and smaller urban-rural growth differentials for each decade from 1961 to 1991. In contrast, the number of states with larger urban-rural growth differentials than the national average has increased from four during 1961–71 to seven during 1971–81, but decreased to five during 1981–91 among the eight lowly urbanized states. Overall, the gap in urban-rural growth differentials among the populous states have been narrowing to some extent during 1971–81.

The geographical pattern of urbanization shows large regional imbalances. The overall trend during 1971–91 shows that urban clusters have been formed in districts in and around metropolises and big cities, such as Delhi, Bombay, Calcutta, Madras, and Ahmedabad, and in the industrial belts along the major transport routes. Advanced agrarian districts with agro-industries also tend to form urban centers. Historically, the core areas of urbanization have been shifting from the coasts to inland and from the eastern region to the northwestern and southern regions [20, pp. 129–34].

D. Components of Urban Growth

There are three components of urban growth: natural increase, net migration and reclassification. Reclassification can be caused by changes in the definition of urban area. Out of the three components, net migration in developing countries tends to be more important in urban population growth at earlier stages of development, when levels of urbanization are low with moderately high growth rate of urban and rural population. At an intermediate stage of urbanization, however, natural increase of urban population may play a more important role in urban growth. At later stages, when levels of urbanization are high with low rates of natural increase, net migration may become crucial again for urban growth. Trends in the components of urban growth in independent India show a pattern common to a developing country at an intermediate stage of urbanization.

Reclassification is related to changes in urban population through the addition and declassification of towns. Alterations in the territorial jurisdiction of towns is another factor of reclassification. Natural increase in urban population is caused by an excess of births over deaths among urban inhabitants. Net in-migration is the excess of in-migration from rural areas and foreign countries over out-migration to rural areas and foreign countries.

Table X shows components of urban growth by state during 1971–81. Out of the three components, natural growth contributed most to urban growth accounted for almost 60 per cent except during 1971–81. The share of intercensal migrants, one of the two divisions of natural increase, is very small compared to that of the initial urban population. Net rural-urban migration ranks second with a share of around 20 per cent during 1971–81, followed by net reclassification.

The study of National Institute of Urban Affairs [16, pp. 28–30] reveals that the percentage share of natural increase is positively related to the level of urbanization

(Million) 1961-71 1971-81a 1981-91b Component No. % No. % No. % 1. Absolute increase 30.2 100.0 49.9 100.0 57.7 100.0 Net reclassification of localities from rural to urban 4.7 15.6 9.5 19.9 9.8 17.0 3. Net rural-urban migration 6.3 20.9 9.8 19.6 12.5 21.7 4. Natural increase: (a) of initial urban population 18.8 62.2 24.5 46.1 33.5 58.0 (b) of intercensal migrants (net effect) 0.7 2.3 1.1 2.2 1.9 3.3 5. Residual (including errors and changes in boundaries) -0.3-1.05.0 10.0

Source: [25, p. 34].

among states during 1971-81. Such highly urbanized states as Tamil Nadu, Gujarat, and Maharashtra showed relatively large shares of natural increase, while the share of natural increase among lowly urbanized states, like Orissa, Uttar Pradesh, and Bihar appeared to be far below the national average. The share of net in-migration exceeded the share of natural growth in two states, Maharashtra and Karnataka, both highly urbanized states. Surprisingly, Kerala recorded minus net in-migration (i.e., net out-migration), which may be attributed mainly to the pervasion of rural-urban commuting and to out-migration to other states and abroad. Tamil Nadu in the south and Punjab and Haryana in the northwest are other states where rural-urban commuting pervades. As for reclassification, its percentage share among the highly urbanized states appears to have been very low, while the lowly urbanized states tended to show relatively high shares for reclassification, except in Andhra Pradesh. Again, Kerala, a state with a reclassification share as high as 82 per cent, attracts our attention. Reclassification was able to affect urban growth in Kerala mainly because the state is densely populated and the majority of the rural population lives in villages with populations of 10,000 or more. In the north, Uttar Pradesh, a very populous state, showed its high reclassification share.

a Excluding Assam.

b Including Assam as well as Jammu and Kashmir.

V. MIGRATION AND URBAN GROWTH

A. Structure of Migration to Urban

As already examined, net migration from rural to urban areas contributed nearly 40 per cent as one component of urban growth during 1981–91. Further analysis on migration will be attempted here to trace its structure with special attention to variations according to state, sex, types, and reasons. Since migration tables of the 1991 census are yet out, the analysis will be confined to previous census data, particularly that of the 1981 census.

Since 1872, the Indian censuses have included a question on birth place (BP) of each individual to trace lifetime migrants. Since 1961, the censuses have adopted questions to trace BP as rural or urban, and the duration of residence at the place of enumeration. The 1971 census included a question on the place of last (normal) residence (PLR) to overcome the problem of identifying return migrants, though it could not identify persons who had moved more than once during the intercensal period. Furthermore, the 1981 census added a question on the reason for migration from the last place of residence [24, pp. 239–40].

There are four migration directions, rural-rural (RR), rural-urban (RU), urban-rural (UR), and urban-urban (UU), and two major migration types, intrastate and interstate. Intrastate migration is divided further into intradistrict and interdistrict migration.

The census counted 167 million persons in 1971 and 204 million persons in 1981 as migrants (BP criterion). Thus, the number of migrants increased by 37 million during 1971–81. The percentage of migrants in the total population has been relatively constant: 30.4 per cent in 1971 and 31.0 per cent in 1981; however, the number increased by 22 per cent during 1971–81. The 1971 census reported that 83.2 per cent of the total migrants had been born within the state of enumeration, 11.2 per cent in other states of India, and 5.5 per cent in other countries, while the corresponding figures for 1981 were 84.4, 11.8, and 3.9 per cent respectively. The migrants born in India showed an increase not only in size, but also in their percentage of total migrants during 1971–81. In contrast, migrants born in other countries decreased from 7.3 million to 6.2 million during the same period. This is mainly attributed to the attrition of in-migrants from Pakistan to India at the time of partition in 1947.

As Table XI shows, pattern of migration differ considerably according to sex (PLR criterion). RR migration has been dominant among females, with as high a share as around 74 per cent, while the corresponding share among males has been around 46 per cent. The share of RR migration ranked first for each sex and for both 1971 and 1981. The second difference according to sex is that males dominated females in the number of both RU and UU migrations. Male migrants have been

 $TABLE\ XI \\ DISTRIBUTION OF MIGRANTS IN INDIA ACCORDING TO SEX, DIRECTION, Type, 1971, 1981$

					(%)
		RR	RU	UR	UU
(1) Males				-	
Intrastate					
Intradistrict	1971	33.9	8.6	3.3	3.0
	1981	31.3	10.7	3.4	3.6
Interdistrict	1971	8.7	7.3	2.2	6.6
	1981	10.1	10.8	2.4	7.7
Interstate	1971	4.2	6.1	1.4	5.7
	1981	4.2	8.6	1.2	6.0
Total	1971	46.8	22.0	6.9	15.3
	1981	45.6	30.1	7.0	17.3
(2) Females					
Intrastate					
Intradistrict	1971	59.1	5.1	2.9	1.7
	1981	56.0	5.8	3.0	2.1
Interdistrict	1971	11.7	3.1	1.5	3.3
	1981	13.8	4.3	1.9	4.0
Interstate	1971	3.3	1.7	0.6	2.3
	1981	3.4	2.4	0.7	2.5
Total	1971	74.2	9.9	5.0	7.3
	1981	73.2	12.5	5.6	8.6

Source: Hiroshi Satō, "Minami Ajia no toshika no tokushitsu," in [14, p. 114].

more urban-oriented than female migrants. All these results are closely associated with the difference in the reasons for migration among the sexes, a topic that will be examined later. UR migrants made up the smallest populations of migrants for both sexes. Another difference between the sexes is a type of migration. Intradistrict migration is dominant among females, while types of migration among males are more diversified

Several important changes took place in the patterns of migration during 1971–81. The first and most dynamic change can be observed in the percentage increase of RU migrants for both sexes during the period. A further breakdown of RU migrants shows that these percentage increases were more among intrastate migrants than among interstate migrants. This trend is obviously associated with the development of the new towns and cities emerging in various parts of India. Secondly, there has been a visible increase in the percentage of interdistrict migrants irrespective of sex, direction, and type. Thirdly, the percentage of intradistrict migration among RR migrants has been declining although the overall share of RR migrants has remained stable.

There is sharp contrast in the direction of urbanward migrants among states. Table XII presents percentages of urbanward migrants according to state and the duration of residence in 1981 (PLR criterion). Out of the total 60.9 million urbanward migrants, RU migrants totaled 33.5 million, or 55.0 per cent, UU migrants 24.0 million, or 39.4 per cent, and the remaining 3.5 million, or 5.6 per cent were from foreign countries. Uttar Pradesh, Bihar, and Rajastan, the first three states in terms of the number of urbanward migrants, accounting for 10.51 per cent, represented a large segment in forming the national average.

The differences among the states in their shares of urbanward migrants, i.e., RU and UU migrants are large. Surprisingly, RU migrants outnumbered UU migrants in only nine states out of the twenty-five, although the percentage of RU migrants among the total urbanward migrants averaged 55.0 per cent nationally. In addition, out of these nine states, those with more than the national average in percentage of RU migrants numbered merely five: Bihar, Himachal Pradesh, Orissa, Rajasthan, and Uttar Pradesh. The levels of urbanization of these states were below the national average of 23.70 per cent, while there were sixteen states where UU migrants outnumbered rural-urban migrants, though the percentage was only 39.4 per cent in national average. The share of UU migrants was particularly high for most of the hilly states. Also, the dominance of UU migrants was common in relatively highly urbanized and highly industrialized states, such as Maharashtra, Punjab, Karnataka, and West Bengal. The sole exception was Gujarat. Thus, the share of UU migrants had a positive relationship to the level of urbanization and industrialization among the larger, populous states.

Some features of recent urbanward migration trends can be discovered by analyzing migrants who relocated during 1971-81. Among the 34.1 million urbanward migrants during this period, RU migrants accounted for 17.4 million, or 50.9 per cent, UU migrants 13.4 million, or 39.3 per cent, and the remaining 3.3 million or 9.7 per cent were from foreign countries. The number of total urbanward migrants during this period made up slightly more than half (56.0 per cent) of the total urbanward migrants of any duration. The corresponding percentages exceeded the national average in all the hilly states but Himachal Pradesh. Another interesting feature is that the urbanward migrant percentages stood far below the national average in several urbanized states, such as Goa, Gujarat, and Punjab, where patterns had been set in motion long ago. As for the percentages shared by the two streams of urbanward migration, the data for migrants who moved during 1971-81 reveals that (1) differences between RU and UU migrant figures narrowed due to the declines in the former type, and (2) the latter outnumbered the former in as many as nineteen states. However, there has been no change in the dominance of RU migrants among the larger, populous states in the Hindi belt. As a result, the percentage of RU migrants did not change drastically as far as the national average was concerned. The percentage share of urbanward migrants from other countries

Urban Migrants (Rural-Urban and Urban-Urban) Classified by Duration of Residence, 1981 TABLE XII

			Any Duration		Durati	Duration of Residence Less Than 10 Years (1971–81 Migrants)	Than 10 Years
	Total Migrants	rants	Rural-Urban	Urban-Urban	Total	Rural-Urban	Urban-Urban
	No.	%	Migrants	Migrants	Migrants	Migrants	Migrants
India	60,911,969		33,485,090 (55.0)	23,974,064 (39.4)	34,134,878	17,381,226 (50.9)	13,431,195 (39.3)
States							
Andhra Pradesh	757,014	1.24	388,331 (51.3)	366,392 (48.4)	356,903	172,164 (48.2)	183,704 (24.3)
Arunachal Pradesh	3,287	0.01	$\overline{}$	_	2,755		
Assam	126,383	0.21	_	76,848 (60.8)	76,801	24,861 (32.4)	
Bihar	1,433,776	2.35	960,173 (67.0)	437,953 (30.6)	696,528		
Goa	96,539	0.16	_	61,529 (66.8)	28,689		
Gujarat	830,992	1.36	_		316,943		
Haryana	650,813	1.07	_		322,945		
Himachal Pradesh	278,456	0.46	-		122,182		
Jammu and Kashmir	66,138	0.11			40,130	_	
Karnataka	873,429	1.43			431,197	_	
Kerala	758,314	1.24		395,286 (52.1)	411,350	_	
Madhya Pradesh	629,663	1.03	288,276 (45.8)	336,164 (53.4)	344,015	_	178,727 (28.4)
Maharashtra	856,494	1.41			459,083		
Manipur	12,208	0.05			7,732		
Meghalaya	11,765	0.02			7,998		
Mizoram	4,745	0.01	2,485 (52.4)		3,188		
Nagaland	6,321	0.01			4,997		
Orissa	274,594	0.45			133,013		50,542 (18.4)
Punjab	751,604	1.23	254,301 (33.8)	490,083 (65.2)	315,369	_	
Rajasthan	921,996	1.51	520,617 (56.5)	393,779 (42.7)	426,525	_	
Sikkim	4,711	0.01	1,569 (33.3)	2,589 (55.0)	3,023	_	
Tamil Nadu	826,560	1.36	306,815 (37.1)	514,453 (62.2)	423,098	_	
Tripura	15,512	0.03	6,096 (39.3)	8,453 (54.5)	7,585	2,983 (39.3)	
Uttar Pradesh	3,472,048	5.70	2,141,627 (61.7)	1,293,253 (37.3)	1,879,159	_	688,305 (19.8)

TABLE XII (Continued)

ss Than 10 Years rants)	Urban-Urban	Migrants) 216,547 (39.1)			1,915	46,761		743	202,816	83	25,612
Duration of Residence Less Than 10 Years (1971–81 Migrants)	Rural-Urban	Migrants	71,041 (24.6)			904	3,922		424	13,804	123	5,565
Duration	Total	Migrants	288,656			2,943	51,001		1,167	218,101	206	25,584
	Urban-Urban	Migrants	403,331 (72.9)			2,823	55,492		1,408	321,549	162	47,713
Any Duration	Rural-Urban	Migrants	148,199 (36.8)			1,431	5,836		755	24,032	183	13,582
	rants	%	0.91									
	Total Migrants	No.	553,287 0.91			4,403	61,745		2,184	348,284	345	55,693
			West Bengal	Union Territories	Andaman and	Nicobar Islands	Chandigarh	Dadra and	Nagar Haveli	Delhi	Lakshadweep	Pondicherry

Source: [16, p. 37].

Notes: 1. Figures in parentheses are row percentages.

2. Among the urban migrants classified by place of last residence, 3,172,917 in 1981 and 2,459,195 in 1971 had moved from a foreign country. Due to rounding up during estimation, totals many not tally exactly. Includes Union Territory of Daman and Diu.

showed a sharp increase. Bangladesh and Nepal were two major countries in sending migrants to Indian towns and cities during 1971–81.

B. Reasons

Table XIII presents percentages of migrants according to sex, direction, type, and reason (PLR criterion). In the 1981 census, the reasons for migration have been divided into five categories: employment, education, family moved, marriage, and other. The employment category includes search for employment, transfer in service or for business contracts. The family moved category is migration of dependents accompanying other income-earning household members. The "other" category includes migration caused by retirement or discharge, family separation, political change and for health reasons, religious grounds, better security and social amenities, etc. [24, p. 256]. Migrants who moved to set up their own shop or to start a business have been excluded from the employment category and are included in "other" category. Thus, the "other" category accommodates some migrants in pursuit of economic activities. Also, the census compiles reasons at the time of the last migration and does not guarantee continuity at the time of enumeration. Our major findings are as follows.

First, there is clear contrast between the sexes in terms of reason. Marriage is the dominant reason for migration among females followed by family moved, other,

TABLE XIII

PERCENTAGE OF MIGRANTS ACCORDING TO SEX, DIRECTION, TYPE, AND REASON
(ON THE BASIS OF PLR CRITERION), 1981 CENSUS

(%)

	Migration Direction						
	RR	RU	UR	UU	All		
(1) Males							
Intradistrict							
Employment	15.9	35.4	21.8	31.1	21.8		
Education	4.7	11.5	3.3	4.7	6.0		
Family moved	33.5	27.6	32.1	35.8	32.4		
Marriage	6.3	1.8	2.7	1.4	4.6		
Other	39.6	23.7	40.1	27.0	35.2		
All	100.0	100.0	100.0	100.0	100.0		
Absolute No. (million)	19.1	6.3	2.2	2.7	30.3		
Interdistrict		5.5	2.2	2.1	30.3		
Employment	25.7	50.4	28.9	40.2	37.9		
Education	4.0	8.2	4.2	6.0	5.9		
Family moved	35.1	22.5	31.6	31.9	29.9		
Marriage	4.2	1.0	2.1	0.9	29.9		
Other	31.0	17.9	33.2	21.0	24.2		
All	100.0	100.0	100.0	100.0	100.0		
Absolute No. (million)	5.5	5.6	1.5	5.0	17.7		

TABLE XIII (Continued)

(%)Migration Direction RR RU UR UU All Interstate **Employment** 37.8 61.4 33.2 48.9 50.5 Education 2.1 4.0 2.9 4.8 3.8 Family moved 31.1 18.0 28.7 26.8 24.3 Marriage 2.8 0.6 1.4 0.8 1.0 Other 26.0 16.0 33.8 18.7 20.3 All 100.0 100.0 100.0 100.0 100.0 Absolute No. (million) 2.2 4.4 8.0 3.7 11.3 (2) Females Intradistrict **Employment** 0.9 3.5 2.6 3.8 1.3 Education 0.4 2.8 0.9 2.0 0.7 Family moved 7.6 24.6 18.2 32.7 10.5 Marriage 82.8 57.1 61.8 45.5 78.2 Other 8.3 12.0 16.5 16.0 9.3 All 100.0 100.0 100.0 100.0 100.0 Absolute No. (million) 80.6 8.5 4.2 3.5 96.9 Interdistrict **Employment** 1.7 4.6 3.6 4.5 2.9 Education 0.5 2.6 1.3 2.4 1.2 Family moved 10.5 31.3 22.6 35.2 19.4 Marriage 79.6 49.3 58.2 44.1 66.4 Other 7.7 12.2 14.3 13.8 10.1 All 100.0 100.0 100.0 100.0 100.0 Absolute No. (million) 19.0 5.6 2.6 5.9 33.1 Interstate Employment 3.7 5.6 4.8 5.0 4.7 Education 0.5 2.0 1.6 2.4 1.5 Family moved 15.5 37.3 27.9 37.9 28.4 Marriage 71.5 42.0 50.4 41.2 53.6 Other 8.8 13.1 15.3 13.5 11.8 All 100.0 100.0 100.0 100.0 100.0

Absolute No. (million)

Source: [24, p. 257].

employment, and education in that order. Among males, employment, other, and family moved are the three most important reasons for migration, followed by education and marriage. Though none of the three is compatible with the dominance of marriage among females, we may consider employment as the representative reason among males for migrating in comparison with females.

3.0

1.0

3.6

12.3

4.7

Secondly, there are differences in reasons between urbanward and ruralward migrants of both sexes, while there is much similarity within the two groups for

both sexes. Urbanward migrants among males are distinct from ruralward migrants in the dominance of employment with a relatively high percentage of education and a low share of other and marriage. There is not much difference in the percentage of family moved. Thus, urbanward migration among males can be labeled clearly as employment-oriented. The characteristics of female urbanward migrants, in comparison with their ruralward counterparts, are characterized by relatively high percentages of family moved, employment, and education figures and low percentages of marriage figures, though it occupies the highest percentage the five reasons. As a result, the difference between marriage and family moved appears smaller among urbanward migrants. Accordingly, these two reasons constitute the major ones among urbanward migrants, while marriage dominates the reasons why ruralward people migrate. As for employment and education, we do not find much differences in their percentages among urbanward and ruralward migrants, partly because their amounts are very small among female migrants.

Thirdly, there is clear differences in reasons according to type of migration for both sexes. Overall, employment is a major reason for migration among males; however, its percentage ranges from 21.8 per cent among intradistrict migrants, to 37.9 per cent among interdistrict migrants, to 50.6 per cent among interstate migrants. In contrast, the percentage of the other reasons besides employment are at their highest among intradistrict migrants and lowest among interstate migrants, though the range of variation varies according to reasons. The range is relatively small with regard to education and family moved and relatively large regarding marriage and "other." Interestingly, the percentage of family moved does not vary much according to type. Besides employment, other and family moved are two equally important reasons for intradistrict migration. In contrast to males, migration among females is dominated by marriage irrespective of the type of migration. In reverse of the case of males, the aggregate percentage share of other reasons than marriage is highest among interstate migrants and lowest among intradistrict migrants. In particular, the percentage share of family moved, the second important reason, attracts our attention. Its percentages among intradistrict and interstate migrants are much lower than the corresponding figures for male migrants. However, its percentage among interstate migrants goes as high as 28.4 per cent, which exceeds the corresponding figure for male migrants. Also, though the share of employment and education is very small for female migrants, we should not overlook their importance, particularly among interstate migrants.

C. Rural Population Growth and Slow Urbanization

We will examine here the two factors which have contributed to limiting the size of urbanward migration, despite the high growth rate of rural population. These are the impact of rural development programmes, and changes in the levels and structure of employment in rural areas.

Though India, unlike in China, has taken no direct measures to restrict urbanward migration, the central and state governments in India have obviously played a very important role in discouraging urbanward migration through their various development and social welfare programmes for the rural population. These rural development programmes, initiated in the early 1970s, have been empowered in a campaign since the mid-1970s to eradicate poverty in the form of twenty point programmes. At present, this strategy for rural development is characterized by (1) self-employment programmes, such as the Integrated Rural Development Programme (IRDP, since 1978/79), (2) wage employment programmes, such as Jawahar Rojgar Yojana (JRY, since 1989), which was introduced in the place of National Rural Employment Programme (NREP, since 1980) and Rural Landless Employment Guarantee Programme (RLEGP, since 1983), (3) backward area programmes, and (4) training programmes.

The Integrated Rural Development Programme (IRDP), one of the largest poverty alleviation programmes in the world today, received its physical and financial support of Rs 17.7 billion for 16.6 million beneficiaries during the Sixth Five-Year Plan (1980/81–1984/85), and received Rs 30.0 billion for 18.2 million beneficiaries during the Seventh Five-Year Plan (1985/86–1989/90) [11, p.436]. Also during 1985/86–1988/89 NREP and RLEGP generated 1,310 million and 1,026 million man-days of employment respectively with an allocation of Rs 25.8 billion and Rs 21.1 billion [12, p.71]. These rural development programmes, though criticized by many economists on the grounds of inefficiency regarding planning, administration, and implementation, worked, without doubt, as a driving force to mitigate rural poverty and urbanward migration among the lower classes, particularly during the 1980s.

Changes in levels of employment and occupational structure in rural India have also affected the size of urbanward migration. Similar to other South Asian countries, the average land-holding has been declining in India as a result of growing population pressure on agricultural land, particularly after the 1970s, when net area sown has reached its maximum level. The decline in average land-holding acted as one of the major push factors in urbanward migration. However, this push seems to have been weakened more than expected partly due to: (a) the emerging new employment opportunities offered by the green and white revolutions,² (b) the development of nonagricultural sector in rural areas, and (c) extensive intrarural, seasonal, and long-duration migration.

² The socioeconomic effect caused by the Operation Flood Project is often referred to as the white revolution. The project, begun by the National Dairy Development Board in 1970, aimed at setting up milk producer cooperatives to assure uniform pricing for producers and procure a sufficient supply of milk for urban centers. The number of such cooperatives increased from 35,000 in 1984/85 to 64,000 in 1991/92. Accordingly, milk production also increased from 41.5 million tons to 57.5 million tons during the same period. See [10, pp. 6–7].

TABLE XIV

Broad Sectoral Distribution of the Work Force in India According to Sex and Rural-Urban Residence, 1961 to 1983

					(%
	1961	1972–73	1977–78	1983	1987–88
(1) Rural areas					
Male workers					
Primary sector	83.7	83.3	80.6	77.8	74.6
Secondary sector	7.8	7.8	8.8	10.0	12.1
Tertiary sector	8.5	8.8	10.6	12.2	13.3
Female Workers				. = . =	15.5
Primary sector	89.7	89.8	88.1	87.8	84.4
Secondary sector	7.2	5.9	6.8	7.4	10.0
Tertiary sector	3.1	4.3	5.1	4.8	5.2
(2) Urban areas			• • • • • • • • • • • • • • • • • • • •		
Male Workers					
Primary sector	10.2	10.8	10.6	10.4	9.2
Secondary sector	39.9	33.0	33.8	34.4	34.2
Tertiary sector	55.9	56.3	55.6	55.3	56.6
Female Workers				00.5	50.0
Primary sector	28.6	33.0	31.9	31.2	29.5
Secondary sector	33.0	29.3	32.4	30.9	31.8
Tertiary sector	38.4	37.6	35.6	37.9	38.7
(3) All areas		***************************************			*****************
Male Workers					
Primary sector	71.0	68.9	64.0	61.4	57.9
Secondary sector	12.4	12.8	14.2	15.8	17.7
Tertiary sector	16.6	18.3	21.8	22.8	24.4
Female Workers				5	27,7
Primary sector	85.8	84.5	81.7	80.9	77.2
Secondary sector	8.9	8.1	9.7	10.2	13.0
Tertiary sector	5.3	7.4	8.6	8.9	9.2

Source: [23, p. 26].

Note: Not recorded cases have been distributed pro-rata.

As Table XIV shows, there has been a steady change in the sectoral distribution of rural workers after 1972/73. The rural scene changed considerably due to the green revolution since the late 1960s and the white revolution since the 1980s. In addition, new employment opportunities have been created in the secondary and tertiary sectors of rural areas. We should also recall that rural development programmes have acquired momentum since the late 1970s. Interestingly, the changes in the sectoral distribution of rural male workers has been sharper than those of female workers. Though the primary sector is still predominant among both sexes, the percentage share of secondary and tertiary sectors among rural male workers increased by 4.3 point and 4.8 point respectively between 1961 and 1987/88, while the corresponding increase for rural female workers came to only 2.8

point and 2.1 point. Surprisingly, changes in the sectoral distribution of urban workers appear to be slight for both sexes during the same period.

We may safely assume that the number of workers who migrated for employment has a positive relationship to demand for labor. As shown in Table XIII, total male migrants looking for employment came to 19 million in 1981, of which RU migrants accounted for 7.8 million, RR migrants for 5.3 million, UU migrants for 4.7 million, and UR migrants for 1.2 million. Thus, ruralward migrants made up an important share with slightly more than one third of the total migrants looking for employment. Also, RR migrants account for large share among all migrants from rural areas. Among female migrants looking for employment, ruralward migrants outnumber urbanward migrants, though the absolute figures are much smaller than those of male migrants. There were 2.9 million female migrants looking for employment in 1981, of which RR migrants accounted for 1.2 million, RU migrants for 0.8 million, UU migrants for 0.6 million, and UR migrants for 0.3 million. Thus, RR migrants were dominant in this respect. Also, we should pay attention to the fact that the number of ruralward migrants for "other" reasons is much larger than that of urbanward migrants for both sexes, since the reason classified as "other" includes migrants in pursuit of economic activities.

Taking all these facts into consideration, we may conclude that rural population growth in recent years has been supported to a considerable extent by the various rural development programmes and the development of the agricultural, livestock, manufacturing, and service sectors in rural India, which have generated considerable job opportunities for the rural folk. In many developing countries, where employment opportunities in rural areas have been small, urbanward migration has taken place on a massive scale, resulting in sharp increases in the level of urbanization. In contrast, India's urbanization has been slow, partly due to increasing employment opportunities in rural areas helping to support a large segment of its growing rural population.

VI. CONCLUSIONS

The major findings in this study may be summarized as follows.

- (1) The definition of urban area in India is relatively strict in comparison to other developing countries. India takes both the statutory status and the population size of communities to define them as urban. India, as one of the most populous countries in the world with high density, sets minimum population size for urban regions higher than that of any other developing country. Also, India considers population density and share of nonagricultural workers in its definition of urban area. As a result, India's level of urbanization could very well be understated in comparison with other countries if not adjusted for definition.
 - (2) A turning point in India's demographic transition arrived at in the 1960s

characterized by the maximum gap between the birth and death rates. This gap (i.e., the natural growth rate) has remained wide in the successive years because declines in both the birth and death rates keep offsetting each other. In the meantime, the death rate in rural areas declined more rapidly than in urban areas during 1981–90, and could be a major reason for the slow urbanization in the 1980s.

- (3) Though the process of urbanization is slow, there is a drastic change in the distribution of urban population by size class. Nowadays the majority of India's urban population resides in communities with distinct urban facilities.
- (4) Urban primacy is not observed naturally in India. However, at the state level there is high urban primacy in both the hilly states and the more urbanized and industrialized states.
- (5) The urban growth rate in the highly urbanized states was relatively slow during 1971–91. In addition, the gap in urban-rural growth differentials among the major states narrowed to some extent during the same period.
- (6) Among the three components of urban growth, natural increase contributed most to urban growth in India during 1961–91. At the state level, share of natural increase was positively related to the level of urbanization among states. It has been widely observed that natural increase plays more a important role as the component of urban growth at an intermediate stage of urbanization. This is the case of India.
- (7) The pattern of migration varies considerably according to sex and state. Female migration is predominantly RR by direction and intrastate by type, while male migration is more urban-oriented with a relatively higher percentage of interstate migration. The share of UU migrants has a positive relationship with the level of urbanization and industrialization of the state.
- (8) There is a considerable gender gap in the reason for migrating. Marriage is the dominant reason among females, while there is no such dominating reason among male migrants; however, employment can be regarded as a representative reason among them. Urbanward migration differs a lot from ruralward migration with respect to reason. Among urbanward migrants relocating for employment appears to be high for males, while moving to marry tends to decrease for urbanward females.
- (9) In recent years urban population growth in India cannot be termed as small; however, it still remains as one of the least urbanized countries due mainly to its high growth rate of rural population. In contrast to most other developing countries, India's urbanization has been slow, partly due to increasing employment opportunities for rural folk generated by rural development programmes and the development of agriculture and the nonagricultural sector in rural India, but also to extensive intrarural seasonal and long duration migration.

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