INTRODUCTION

Statement of the Problem

Despite a long history of urbanisation going back to nearly five millennia, India entered the twentieth century with a low degree of urbanisation. Its 25.8 million urban population in 1901 made only 10.8 per cent of the total population. By comparison, more than two-thirds of the population of the United Kingdom, nearly one-half of that of Germany and more than one-third of that of the United States were urban at that time.

India, like other developing countries, went through a process of massive urbanisation during the present century. Its urban population grew to 109 million in 1971. This number was double the total population of the United Kingdom, equal to that of Japan and about a half of that of the United States. It was the fourth largest urban population for any country in the world. Still India occupied a low position in terms of degree of urbanisation; the 109 million constituted only 19.9 per cent of the country's total population. The corresponding figures for the United Kingdom, Japan and the United States were 78.9, 88.1 and 68.9 per cent respectively.


The process of urbanisation in India, as in many other developing countries, was strongly stamped by its colonial history for the last about two centuries. A polarised urban system, in which a few primate cities took away a large proportion of urban population, evolved. In 1971, more than a half of India's urban population was living in its 148 cities and nearly one-fourth in the nine 'million' cities. The apex of Indian urbanisation remained dominated by the port cities of Calcutta and Bombay, both of which were the product of colonial era. On the other hand, hardly one-sixth of India's urban population in 1971 lived in small towns. These towns, numerically two-thirds of the total, were little more than large market villages, with some very local administrative functions added. The contrast between explosion of cities and stagnation of small towns was sharp, and India presented a peculiar situation of over-urbanisation at low level of economic development.


4 Urban places with a population of at least one hundred thousand each.

5 Urban places with a population of less than twenty thousand each.


7 N.V. Sovani: Urbanization and Urban India, Asia Publishing House, Bombay, 1966, p. 82.
Urbanisation and industrial development, so stably married in the western world, were often divorced in India\textsuperscript{8}. The former moved at a faster pace than the latter resulting in a direct shift from agriculture to service, as in other developing countries too\textsuperscript{9}. Tertiary sector expanded more than the secondary, a factor contributing to the prevailing unemployment in urban India. As per 1971 census, 54.9 per cent of urban workers in the country were in the tertiary, 31.3 per cent in the secondary, and 13.8 per cent in the primary activities.

Another salient feature of the recent urbanisation in India was the enhanced role of the accelerating natural increase rate in growth of urban population. The 1971 census data revealed that 60.8 per cent of the urban population was born at the place of enumeration as compared with 55.2 per cent in 1961. Among the migrants to urban places, 55.8 per cent were involved in rural-urban migration, 32.8 per cent in urban-urban migration and most of the remaining had migrated from the erstwhile Pakistan at the time of Independence\textsuperscript{10}.


\textsuperscript{9} T.G. McGee : The Urbanisation Process in the Third World, G. Bell and Sons Ltd., London, 1971, p. 16.

\textsuperscript{10} Calculated from Census of India, 1971, Birth Place Migration in India, Special Monograph No. 1, Section III, Appendix B, pp. 5-9.
The above statements present only a bird's eye view of Indian urbanisation. The picture through time and space is much more varied. A detailed spatial analysis of Indian urbanisation in temporal dimension is called for. The present work purports to do that. Its main objectives are to:

i) trace the evolution of spatial picture of Indian urbanisation through history;

ii) describe and interpret the regional variations in urbanisation process during the various decades spanning over the 1901-1971 period;

iii) examine in a spatial perspective the relationship between the size and growth rate of towns;

iv) regionalise India on the basis of the levels of urbanisation in 1971 and trends in urbanisation during 1901-1971;

v) make a comparison of the nature of urbanisation that evolved under colonial setting before 1947 with the one that emerged during the post-colonial period following Independence;

vi) compare the urbanisation experience of India with that of other developing countries; and

vii) test a number of hypotheses on urban growth.

Previous Investigations

Urbanisation has been a popular field of research among Indian scholars. Bose's bibliography on Indian urbanisation

and its allied aspects listed as many as 1529 entries. More than half of them belonged to the fields of urban economics, urban sociology and urban demography, one-fifth to urban geography, and one-sixth to town planning. The entries under the urban history section were only a few to count.

Economists' interest in urban studies was a post-war development. The Gokhale Institute at Poona was the pioneer. Its scholars conducted exhaustive surveys of several towns and cities, such as Poona, Sholapur and Kolhapur. The Indian Economic Association adopted urbanisation as a special theme of its discussions in 1956 and later published a number of papers dealing with the patterns and process of urbanisation.

Urban sociologists and demographers also made a notable contribution to the study of Indian urbanisation. Geddes' contributions to urban studies were rich in both theory and practice. Bose's doctoral dissertation and his other


13 A. Bose: *op. cit.*, pp. 28-29.


publications were also outstanding. Ghurye\textsuperscript{16} presented a sociological analysis of Indian cities. Zachariah\textsuperscript{17} made a study of rural-urban migration as a special aspect of internal migration in India. Most of these studies made liberal use of census data. Research works based on primary data were in a small number.

The few studies from the pen of historians may also be noted. Piggott\textsuperscript{18} gave a detailed description of cities in ancient India. A similar contribution was made by Puri\textsuperscript{19}. Naqvi\textsuperscript{20} conducted an inquiry into urban centres and industries in Upper India during the Mughal period of Indian history.

Diagnosis of urban problems was basic to any town planning. Town planners rightly devoted their attention to an understanding of the problems relating to housing, slums and sanitation in Indian cities\textsuperscript{21}. Besides, the town planning


\textsuperscript{17} See K.C. Zachariah: \textit{Historical Study of Internal Migration in Indian Sub-Continent, 1901-1931}, Demographic Training and Research Centre, Bombay, 1965; and \textit{Internal Migration in India, 1941-1951}, Demographic Training and Research Centre, Bombay, 1960.

\textsuperscript{18} S. Piggot: \textit{Some Ancient Cities of India}, Oxford University Press, Bombay, 1945.


\textsuperscript{20} H.K. Naqvi: \textit{Urban Centres and Industries in Upper India}, Asia Publishing House, Bombay, 1968.

bodies at the national and state levels conducted diagnostic surveys for more than three hundred towns for which master plans have been prepared. Geographers' interest in the study of Indian urbanisation was rather a late affair. A geographic analysis of urbanisation in India based on the 1961 census data was accomplished by Lall and Thirtha. Mookerjee examined the urbanisation pattern of India in terms of distribution of population in various size categories of towns. Munshi reviewed the nature of Indian urbanisation and linked it with the past colonial setting of the country. Lall investigated the functional attributes of Indian cities as in 1951, and Ahmed conducted a similar study of the cities in 1961 by multivariate analysis of their population characteristics.

26 A. Lall: Some Characteristics of Indian Cities over 100,000 Inhabitants in 1951 with Special Reference to their Occupational Structure and Functional Specialization, Indiana University, Indiana, 1965 (unpublished Ph.D. thesis).
Chandna described and interpreted growth of Indian cities during 1901-1971. The spatial pattern of population distribution in Indian cities was examined by Brush. Krishan and Gupta regionalized India on the basis of the population potential of cities, and Datta determined the urban zones of India by taking the criteria of density of urban population and accessibility to urban places with a population of at least 50,000.

In addition to the above mentioned studies at national level, some attempts were made at meso and micro levels. Study of urbanisation by individual states was quite popular.

Gosal discussed the process of urbanisation in Punjab during 1881-1961. In a series of three articles, Jauhari traced the trends in urbanisation in the Ganga-Yamuna divide from the earliest times to the post-partition period. Dikshit presented a detailed account of urbanisation in Maharashtra through history. A comprehensive study of towns in Mysore state came from the pen of Rao.

Among the studies at micro-level, the one by Alam on Hyderabad metropolitan region deserves the first mention. He established the relevance of such studies to planning. Mukerji and others highlighted the positive impact of Delhi

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on urbanisation in its peripheral region. Reddy made a study of urbanisation trends in the Godavari-Krishna delta.

The above review was a testimony to inadequacy of geographic research on urbanisation in India as a whole. The works accomplished so far confined their scope either to urbanisation in a specific census year at the national level or to urbanisation for a given period in an individual state or to a select aspect of urbanisation. Seldom an effort was made to study temporal-spatial trends in urbanisation and to regionalise India on the basis of levels of and trends in urbanisation. There was hardly any attempt to test statistically the various hypotheses stated in the context of Indian urbanisation. The present work would try to fill these lacuna.

Study Period

The study period (1901-1971) of the present work begins with the dawn of the current century and terminates at the last census count. Only for this period, published data adjusted to the existing administrative boundaries of the country were available. The period was punctuated by events like World Wars I and II and Independence to India in 1947. It would be of special interest to see the impact of these events on Indian urbanisation. In particular, a comparison of urbanisation trends before and after Independence would lay bare the role of differing political economies on the nature of urbanisation.

Research Methodology

The present work was based primarily on mapping and statistical analysis of the census data for all the decennial census counts beginning with 1901. The census data were used for individual towns/urban agglomerations as well as for individual districts. There were 2636 towns/urban agglomerations and 356 districts in India in 1971 (Map 1).

A serious difficulty in any study of urbanisation in India arises from the changes in the definition of a town from time to time. According to the 1901 census, towns included (a) every municipality, (b) all civil lines not included within the municipal limits, (c) every cantonment and (d) every other collection of houses inhabited by not less than 5,000 persons that the census superintendent may decide to treat as a town for census purposes. At the 1911 census, the capitals of the princely states in India, irrespective of being urban or not, were adopted as towns. The census operations up to 1951 continued with the same definition of a town. After Independence, the former princely states were mostly merged to form larger unions and their erstwhile capitals were not treated as towns in 1951 if they did not possess the requisite urban characteristics.

The 1961 census adopted a strict definition and a little was left to the discretion of the superintendent of census operations. According to the code of this census, all

municipalities, cantonments, notified areas and other places enjoying recognised local administration were considered as towns. For other places to qualify as town, the following tests were uniformly applied: (a) a population of not less than 5,000; (b) density of not less than 1,000 persons per sq. mile (or 400 persons per sq. km.); (c) at least three-fourths of the male workers in pursuits outside agriculture; and (d) possession of a few pronounced urban characteristics and amenities. The 1971 census retained the same definition of a town.

The 1971 census, however, introduced a slight change in presentation of data. The earlier concept of 'town group' in practice since 1951 was replaced by the idea of 'urban agglomeration.' A town group was a cluster of towns adjoining each other closely so as to form a single inhabited urban locality. By comparison, urban agglomeration comprised of a core city or statutory town and its functionally integrated areas like railway colony, university campus, port area and military camp that may not necessarily lie within the statutory limits of the core city or town. Two outgrowing towns merging with each other would also be called as urban agglomeration in place of town group as at the 1951 and 1961 censuses. The concept of urban agglomeration was certainly more comprehensive than that of town group.

43 ibid., p. 52.
44 Census of India, 1971, General Population Tables, Series 1, Part II-A(i), p. 3.
Thus, one has to overcome two simultaneous problems in the treatment of data on Indian urbanisation. The first related to changing definition of a town from time to time and the second pertained to presentation of data by individual towns till 1941 census, by towns and town groups for the 1951 and 1961 censuses and for towns and urban agglomerations for the last 1971 census. A practical device to solve these problems would be to treat only those places as towns/urban agglomerations at the pre-1971 censuses that were recorded so in 1971. This would amount to tracing back the population of each and every town/urban agglomeration in 1971. Although this method cannot be said to be flawless yet it reduces the vagaries arising out of changes in definition of towns and the method of presenting their data.

Fortunately, Table A-IV in the Census of India: General Population Tables, Series 1 - India Part II-A(1) provided the requisite data by towns/urban agglomerations in respect of their population in 1971 as also for all the preceding decades beginning with 1901. In 1971 there were 339 urban agglomerations and 2297 towns making a total of 2636 urban units.

The decadewise growth rate of towns/urban agglomerations was mapped by a suitable cartographic technique. The population of a town at a given census year was depicted by a graduated circle and its growth rate during the preceding decade was indicated by an appropriate shade category. All
the towns in one urban agglomeration were considered as one unit for mapping purposes to overcome the problem of overlapping. Imagine the situation if the growth rates of 74 towns in Calcutta urban agglomeration were to be shown separately when these towns together occupied hardly an area of half a sq. centimetre on the scale of the map.

It was also thought profitable to make use of the available data on urban population by districts for all the decades. These data could be obtained from the General Population Tables, Part II-A of various states and union territories. The percentage of urban population in the total at each census year and the percentage growth of urban population during each decade were calculated and mapped.

The number of categories as well as their intervals for showing decadewise growth rate of individual towns/urban agglomerations and of individual districts was still another problem to be taken care of. It was deemed proper to maintain the same number of categories and the same intervals on all the maps pertaining to a particular aspect of urbanisation. For example, the decadewise growth rates of towns/urban agglomerations were mapped by uniform categorization. Similarly, percentage of urban population in the total was represented by the same categories for all the census years. The number of categories was kept mostly around six since the human eye can discern this number of shades.
conveniently. For the selection of appropriate interval values, a number of frequency graphs and histograms were drawn to locate critical breaks in the distribution of data. Also the average values were taken into account while defining the precise limits of various categories.

In addition to the maps showing patterns of and trends in urbanisation, several other maps were prepared to facilitate interpretation. These included the railway maps for various decades and maps showing sites of irrigation, mining and industrial projects. A series of maps was prepared to depict the distributional pattern of towns during the ancient, medieval and early modern periods of Indian history.

Apart from mapping, all relevant data were given statistical treatment. The purpose was to test a number of hypotheses on urban growth. The discussions in the various chapters were based largely on the mapping and statistical analysis of data.

Organisation of material

Keeping in view the objectives of the study, the material in the present work was organised into four sections.

The first section, consisting of Chapter I, traced the evolution of the spatial pattern of urbanisation in India till the close of the nineteenth century. It was intended

merely as a background to the main theme of the work. The discussion was based on the available published literature on this aspect.

The second section, comprising of Chapters II to IX, was devoted to description and interpretation of regional variations in urbanisation in 1901 and decadewise growth of urban population during 1901-1971. The discussion in these chapters depended primarily on a series of maps prepared with the help of published data for 2636 towns/urban agglomerations and 356 districts.

The third section, corresponding with Chapter X, was an attempt at regionalisation of India on the basis of level of urbanisation in 1971 and trends in urbanisation during 1901-1971.

The fourth section, covering Chapter XI, presented the results of statistical testing of the various hypotheses on urban growth.

The closing pages of the text provided a summary of conclusions arrived at in different chapters. A select bibliography was placed at the end.