

**EMERGING PATTERNS OF URBANIZATION IN ORISSA:  
AN EMPIRICAL ANALYSIS, 1961-91**

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I HEREBY AFFIRM THAT THE RESEARCH FOR THIS DISSERTATION TITLED *EMERGING PATTERNS OF URBANIZATION IN ORISSA: AN EMPIRICAL ANALYSIS, 1961-91* SUBMITTED TO JAWAHARLAL NEHRU UNIVERSITY FOR THE AWARD OF THE DEGREE OF MASTER OF PHILOSOPHY WAS CARRIED OUT ENTIRELY BY ME.

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**Dedicated  
To My  
Family Members**

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# **CHAPTER-I**

## **Introduction**

**Urbanization** assumes considerable importance in the process of economic development. Economic development usually involves a gradual reallocation of labour force from the traditional agricultural sector to the growing modern-urban industrial and tertiary sectors. The inter-linkages among the aspects such as the sequential sectoral development of the economy, growing concentration of population in the areas where secondary and tertiary activities are located and development process leading to the disappearance of rural urban differences form the analytical linkages between urbanization and economic development.

An understanding of the urbanization process would be of immense importance to devise ways and means to accelerate the process of economic growth and social change. Again, a prerequisite for understanding the urbanization process is to have a clear idea about the interrelationship between urbanization and the socio-economic variables. Keeping this in view, a great deal of attention is paid to the study of patterns of urbanization. Thus, an attempt is made in the present study to examine the patterns of urbanization in the state of Orissa.

The role of internal migration in the process of urbanization and economic development is widely recognised. Therefore, an effort is made to bring out a discussion on patterns of migration and urbanization in the state. The most important finding of this analysis is the dominant role of internal in-migration in the urban process in Orissa.

Urbanization brings about major changes in the occupational structure of an economy. The restructuring of occupations comes out due to the shift of workers from rural agricultural to urban non-agricultural occupations. This provides an immediate motivation to see the interrelationship between urbanization and occupational structure. Hence, our study will also be looking into this issue. In the light of the discussion on urban growth and changes in occupational patterns, an attempt has also been made to examine the functions which towns in Orissa performed during the last few decades.

## **Section-1**

### **1.1.1. Defining The Urbanization Process**

There can hardly be a single definition of urbanization which is acceptable to all. In the demographers' view the level/extent/degree of urbanization of a country or region usually denotes the proportion of population enumerated in urban areas at a given point of time. Sociologists take it as a causal factor leading to modernisation or as a process of diffusion of certain modernising traits. Similarly, economists think it as a product of increasing specialisation and advancing technology which results in a change in economic functions from the primary to tertiary activities. Geographers study the urban patterns with the help of mapping, interpreting and projecting the distribution of population, employment, social and economic characteristics, tariff movements and physical facilities.

Lampard gives a broad but conceptually meaningful definition. To him, "Urbanization is a way of ordering a population to attain a certain level of subsistence and scarcity in a given environment." Defining broadly, V L S Prakash Rao says, "Urbanization is a process which relates to concentration of people engaged in non-agricultural occupations and concentration

of non-agricultural land uses in a specialized area, a 'place' as a consequence of Population, occupational and land use shifts. " According to one of the Census of India monographs "Urbanization is a socio-economic outcome of the process of economic development and industrial growth. It represents the spatial dimension of the process of economic development where the factors of production, manufacturing units and localities become increasingly specialized [Census of India (1984)]." All the above views, however, boil down to the core meaning of urbanization, that is, it is a process through which a predominantly rural population gets urbanized.

### **1.1.2. Conceptualisation**

At least three basic concepts (Town, Urban Agglomeration and Standard Urban Area) need to be clearly understood before the process of urbanization is analysed.

(a) **Town** The concept of "Town" is defined by the Census of India in two ways. First, all municipalities, cantonments, Notified Area Councils (NACs) and other places enjoying recognized local administration are considered as towns. Second, places, other than the above, are said to be towns if they satisfy certain qualifications such as a population of not less than 5000, density of population not less than 400 per square kilometer, engagement of at least 75 percent of the male workers in non-agricultural activities and possession of a few pronounced urban characteristics.

(b) **Urban Agglomeration (UA)** This is a new concept adopted by the Census of India in 1971. The concept of "Urban Agglomeration" is defined as areas like railway colonies, university campus/ college or training institute areas which come up around the core city or

statutory towns like municipality, corporation, cantonment or NACs. These areas are normally outside the statutory limit of the city but sometimes fall within the revenue boundary of the place by which the town itself is known. Strictly speaking they can neither be treated as rural areas nor can they be called as independent urban units as they fail to fulfil the minimum criteria of a town. Therefore, these areas deserve to be considered as an integrated urban area of the main town.

(c) **Standard Urban Area (SUA)** For the sake of obtaining comparable data for a definite area of urbanization continuously at least for three decades, the Census of India introduced the concept of standard urban area in the 1971 census which continued till the 1991 census.

The criteria for a place to be called as SUA are as follows:

- i) It should have a core town of a minimum population size of 50,000.
- ii) The contiguous made up of other urban areas as well as rural administrative units should have close mutual socio-economic link with the core town.
- iii) The probabilities are that this entire area will get fully urbanized in a period of two/three decades.

The areas included in SUAs also have some other characteristics such as, (a) there should be predominant land use in those areas, (b) they should interact with urban centres intensively (as reflected in commutation for the purpose of work and secondary educational facilities, extension of city bus services, sale of commodities such as milk, diary products, vegetables and purchase of food grains, cloths etc. by the consumer directly), (c) there should be an anticipated urban growth as a result of future location of industry, market, transport and communication, administrative and servicing facilities and (d) these areas should be endowed with big villages with a considerable proportion of working forces

engaged in non-agricultural industrial categories. However, the distinction between an UA and a SUA is that whereas SUA is characterised by a core town of a minimum population size of 50,000, UA does not have such a constraint.

## **Section-2**

### **1.2.1. Approaches to the study of Urbanization**

A review of the existing literature suggests that the process of urbanization is multidimensional in character. Therefore, we need multidimensional approaches to study the factors underlying it. Taking 'Towns' as the basic entity and analyzing their growth patterns is considered to be one approach for studying urbanization. However, this approach is criticised on the ground that it seldom takes into account the rural-urban interaction and its impact on the process of urbanization.

Different approaches can be noticed in the perspective which stresses the rural urban interaction and its impact on urban process. One such approach believes in the replication of the experience of the developed countries to analyze the process of urbanization in developing countries. A great proponent of this approach is Leonard Reinsman who argued that the underdeveloped countries today are experiencing more or less the same process of industrial urban development as it was in the west with, of course, great separation in time and space. But Devis and Golden (1954) and Hoselitz are critical about this view. They see that the present day developing countries, having low percentage of work force in industry than the developed countries at comparable level of development, are seemed to be over-urbanized. Hence, it is mischievous to study the process of urbanization in the developing countries on the basis of the urban experience of the western countries. Abanti

Kundu (1983) also goes against such an approach. The process of urbanization of the western world during the eighteenth and nineteenth centuries, as she views, was facilitated by freer trade policies, freer opportunities for international movements of population and lesser political and economic barriers than in the world today. With such fundamental contrasts existing between the economic and political institutions of the developed west and the developing third world, it is not rational to equate the experience of urbanization of the two worlds. Keeping this in view, researchers looked into the other ways of understanding the urbanization process and its relationship with economic development in the third world nations.

One among the other approach of studying the urbanization process of the under developed countries is to emphasize the Demographic Socio-economic and Institutional Specificities. Demographic Specificities include natural growth rate of total population, rural-urban migration, age structure of the migrants etc. which cause high urban growth and urbanization. Persons like Kingsley Devis (1977), Samuel H. Preston (1979), Todaro (1979) are the main advocates of demographic specificities. Kingsley Devis argued that since the natural growth rate of total population in developing countries is high, urban areas, being a part of the whole country, also witness a high growth rate of population. Thus, according to him, it is the natural growth rate of total population which is the basic reason for urbanization in developing countries. But Rogers and Williamson and Ledent seem not to be fully agreed with Devis. Their argument is that the difference in the natural growth rate of population in rural and urban areas is very negligible. The high urban growth in the developing countries, therefore, can hardly be assessed by natural growth rate of total population. According to them, it is the increasing rural-urban migration which acts as the principal reason for high urbanization in developing countries. But Todaro believed that

the natural growth rate of population in urban areas depends on the age structure of the migrants which, in turn, determines the level and growth of urbanization. According to him, migrants in the productive age group have the potentiality of influencing the natural growth rate and hence urban growth more than the migrants in the unproductive age-group. Thus, in this approach the demographic factors are considered as the basic determinants of urbanization. However, there could be others like the socio-economic factors which play a crucial role in the process of urbanization in the under developed countries.

The school that considers socio-economic specificities as the main determinants of urbanization process in the developing countries includes McGee T.G (1971), Moonis Raza and Atiya Habeeb (1976), Amitab Kundu (1980 and 1983), K. Nagraj (1985), R. Rukmani (1993), Mills, Edwin S. & Backer, Charles M. (1986) etc. According to them the urbanization process is an immediate outcome of industrialisation, agricultural transformation and modernisation. McGee opines that an understanding of the economic growth process is central to the analysis of the process of urbanization in the developing countries. R. Rukmani also argues in the same way.

Mill and Becker (1986) viewed that urbanization accompanies development because economic development entails a massive shift of labour and other inputs from sectors that are predominantly rural (Agriculture) to the sectors that are predominantly urban (Industry). This shift of labour force from agriculture to industry is caused due to rise in demand and fall in cost in industry relative to agriculture. According to them, demand for industrial goods increases due to rise in people's income. With the rise in their incomes they (people) spend proportionately more on industrial goods than on agricultural goods. The effect of this demand shifts is to raise returns to labour and other inputs in industry and other



services relative to those in agriculture. This induces workers and other inputs to shift from agriculture to industry and service sectors. On the supply side also, due to technical progress which takes place faster in industry than in agriculture, the cost and prices of industrial goods fall relative to those of agricultural products. Capital accumulation and scale economies reduce industrial prices relative to agricultural prices and attract more labour force to the industry and service sector. And, thus, the process of urbanization is helped. Apart from the demographic and socio-economic, there are institutional factors like the impact of colonialism and the policies of the government which are also of immense importance as far as the origin and growth of urbanization is concerned in the under developed economies.

The third category of specificities of studying urbanization process in developing countries takes into account the institutional factors which are stressed by Amitab Kundu(1980), Moonis Raza and Atiya Habeeb (1976), K.N Dubey (1986) etc. In the institutional factors included are the impact of colonialism and the developmental paths followed by the nationalist governments in the post-independence period. As per the above authors' view the seeds of urbanization in the developing countries were sown by the colonial rule and the nationalist governments. The colonialist policies and later the policies of the nationalist governments put tremendous impact on the agricultural and industrial sectors, infrastructural development and development of growth centres. This, in turn, created favourable atmosphere for urban development. Amitab Kundu termed these institutional factors as "Urban Accretion" which he defines as the distorted growth of urban centres in relation to their own economic base on the one hand and to the regional economy on the other. According to K.N Dubey (1988), colonialism brought about urbanization in the developing

countries but created heavy regional disparities which have also been exacerbated in the post-independence period of development.

Thus, the multi-dimensional character of urbanization attracted varying approaches for studying the factors underlying it. In each approach, in isolation, it is rather difficult to take care of all the urban aspects and analyze the process in all its dimensions. For instance, if the approach which takes the demographic aspects into account is followed, other important factors like socio-economic and institutional factors are kept aside. The similar problem is also faced while considering the approaches capturing either the socio-economic or institutional factors only. On the other hand, taking all the approaches together for studying urbanization is also a very difficult task. However, the usefulness of such approaches depends mostly on the historical, socio-economic and institutional background of the geographical unit whose urbanization process is under analysis. With this brief review of the literature on urbanization in general, we move a step forward to understand the process of urbanization in the state of Orissa.

### **1.2.2. Urbanization in Orissa: A Review**

The phenomenon of "Urbanization" in Orissa has remained the least researched subject. In the Indian context, there have been descriptive and analytical studies on the trends and patterns, sources and factors of the process of urbanization. However, in Orissa, systematic studies on this aspect are rather rare, if not totally absent. This subject was analysed by a few scholars like Kishore C. Samal, L N P Mohanty, Makhan Jha and A K Nanda. Kishore C. Samal (1990) dealt mainly with migration in his case study on the district of Sambalpur, a Class-I town in the western part of Orissa. The author found that the decision of the

people to migrate from rural to urban areas does not depend on the expected urban-rural real income differentials. It, rather, depends on a positive current urban rural income differential provided by the employment and earning opportunities of the urban informal sector. So the author doubts the "Graduation Hypothesis" which assigns to informal sector the role of vestibule for rural migrants to enter into the formal sector. Of course, he agrees that there is mobility within the informal sector, mostly from wage-worker to self employment status. Thus, the author, in his study, seems to have followed the socio-economic approach to explain the process of urbanization via migration.

Mohanty (1987), in his study, focused on the problems and prospectus in the planning and development of Bhubaneswar. The shift of capital from Cuttack to Bhubaneswar is the prime mover which led to the urban development in the city. Further, the growth of public and private offices, small/medium scale industries are primarily due to the establishment of capital in Bhubaneswar. This led to an increase in migration of population from the rural hinterlands to the city. This heavy migration of population unaccompanied by development of urban amenities created lots of problem in the city. Moreover, unlike in the country where urbanization is determined by the push factors, the process of urbanization in Bhubaneswar has been caused more by the pull factors as marked by the author. And this can be compared with the urbanization experience of some western countries. Mohanty's (1989) further study based on Cuttack stressed on the role of political factors as an obstacle on the path of urban development. According to his finding, political suppression has become one of the major reasons for hindering the process of urbanization.

Makhan Jha (1978) emphasised the cultural and institutional factors in the slow but a gradual process of urbanization of Puri, the great traditional and religious town of Orissa.

Cultural factors like increasing role of secular agencies such as market, government offices etc. and the decreasing role of the priests have made the city go through this slow transition. Similarly, the institutional factors like expansion of education also helped, to a large extent, the process of urbanization of the city.

The point to be noted here is that not much work was carried out on urbanization in Orissa. Only some town and district wise case studies addressing to some specific aspects of urbanization (as discussed above) are available. They, in fact, hardly seem to be sufficient to understand the process of urbanization in a big state like Orissa. Hence, a systematic study on the patterns, sources of urbanization and the factors leading to the process in the state as a whole are yet to be witnessed. This is, therefore, a scope open for carrying out an in depth study of urbanization in Orissa.

### **1.2.3. Urbanization: A Comparative Analysis**

India is usually thought of as a country where both the level and pace of urbanization are low. It is only towards the second half of the nineteenth century that the country stepped into the urban scene with the appearance of a few industrial centres like Bombay with its cotton textile factories and the port and industrial concentration of Calcutta serving a hinterland containing the country's main reserves of jute, coal and iron. Right from those periods till date, India has been passing through different phases of urbanization though the speed is rather slow as compared with that of the developed and even other third world countries. In fact, one of the interesting features of Indian urbanization has been the existence of wide disparities in the level of urbanization across the regions, within regions;

across states and within states; across districts. However, Table-1.1 gives a broad picture of urbanization disparities across the major states of India.

States like Maharashtra, Tamilnadu and Gujarat are highly urbanized as compared to Bihar, Orissa, Tripura and Himachal Pradesh. According to the 1991 Census, Orissa ranks 13th position among the Indian states in terms of level of urbanization. Maharashtra ranks first, Gujarat second and Tamilnadu third. The level of urbanization, defined as the proportion of urban to total population, was 13.43 per cent in Orissa in 1991. It was lagging behind Maharashtra (38.73 per cent), Gujarat (34.40 per cent), TamilNadu (34.20 per cent) etc. The all India average, at the same time, was 25.72 per cent.

Table-1.1: Proportion of Urban to Total Population in States, 1961-91.

Rank	Major States	1991	1981	1971	1961	Change (1961-91)
1	Maharashtra	38.73	35.03	31.17	28.22	10.51
2	Gujarat	34.40	31.10	28.08	25.77	8.63
3	Tamil Nadu	34.20	32.95	30.26	26.69	7.51
4	Karnataka	30.91	28.89	24.31	22.33	8.58
5	Punjab	29.72	27.68	23.73	23.06	6.68
6	West Bengal	27.89	26.47	24.75	24.45	3.44
7	Andhra Pradesh	26.84	23.82	19.31	17.44	9.40
8	Kerala	26.44	18.74	16.24	15.11	11.33
9	Haryana	24.79	21.88	17.66	17.23	7.56
10	Madhya Pradesh	23.21	20.29	16.29	14.29	8.92
11	Rajasthan	22.88	21.94	17.63	16.28	6.60
12	Uttar Pradesh	19.89	17.95	14.02	12.85	7.04
13	Orissa	13.43	11.79	8.41	6.32	7.11
14	Bihar	13.17	12.47	10.00	8.11	5.06
	India	25.72	23.7	20.21	18.24	7.47

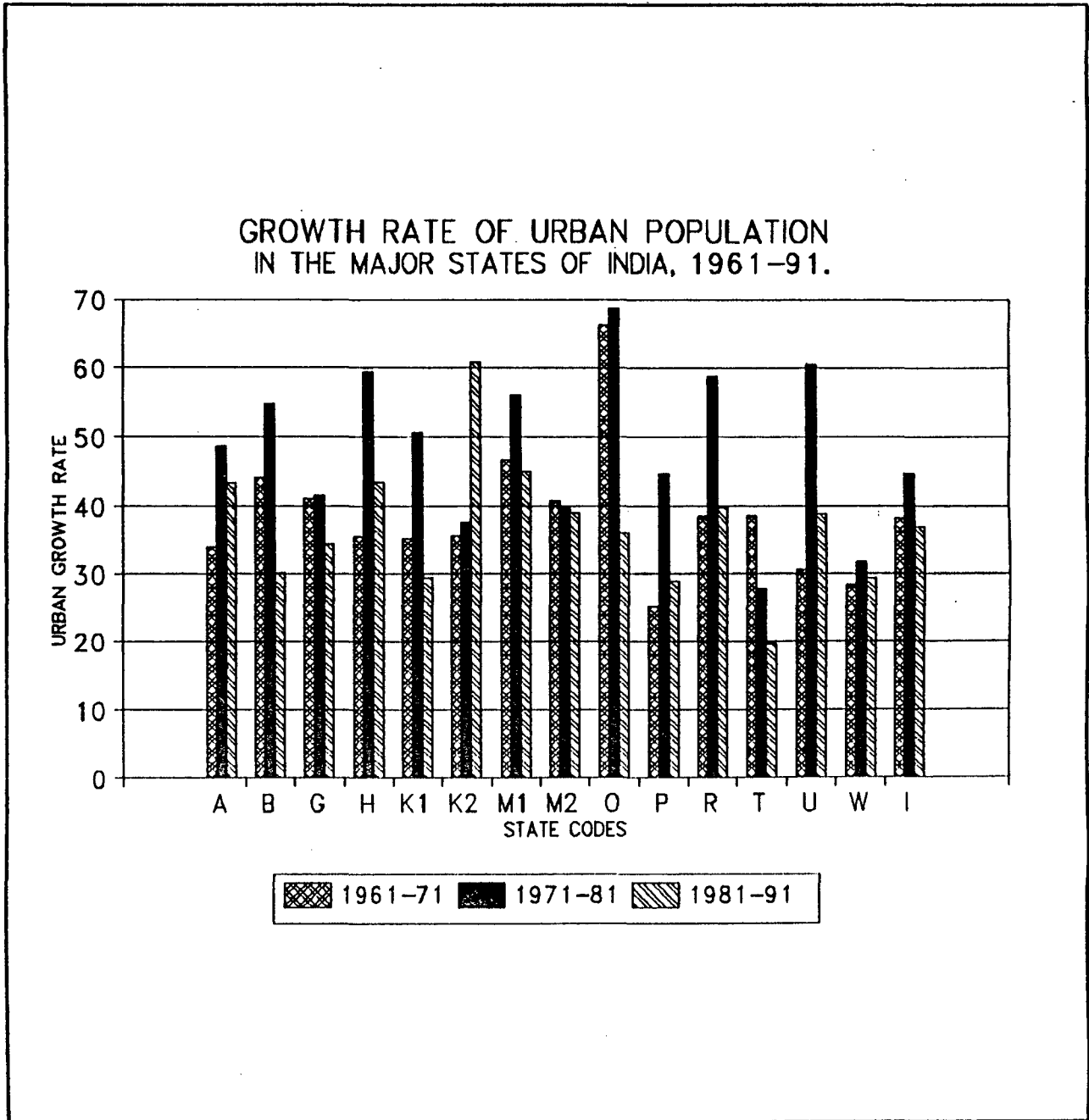
Note: Ranked according to 1991 Census.

Source: Census of India, 1981 and 1991

However, it is interesting to see the change in the proportion of urban population to total population between 1961 and 1991. In comparison, Orissa is very close to the highly urbanized states like Kerala, Maharashtra, Andhra Pradesh and Gujarat. The change is 7.11 percentage points in Orissa, and 11.33, 10.51, 9.4, 8.63 percentage points in Kerala, Maharashtra, Andhra Pradesh and Gujarat respectively. Orissa even appears to be far better off than states like West Bengal with regard to the difference in level of urbanization between 1961 and 1991. West Bengal shows only a difference of 3.44 percentage points while in Orissa it is 7.11 percentage points. The state (Orissa) also shows a higher level of urbanization differential than the states like Punjab and Uttar Pradesh which experience higher levels of urbanization for individual census years.

Urban growth rates in the major states of India from 1961 to 1991 (Figure 1.1) reveal a strange fact. A state which showed the highest growth rate of its urban population during the sixties and the seventies was none other than Orissa. Her urban growth remained far above the all India average. Even the states with high degree of urbanization were lagging far behind Orissa in terms of urban growth rate during these decades. The decadal urban growth rates of Orissa were 66.30 and 68.54 percentages during 1961-71 and 1971-81 respectively while the respective all India averages were 38.22 and 44.54 percentages only. However, the growth rate drastically came down during the eighties. It was slightly below the all India average then. However, during the eighties, urban decadal growth rate of Orissa was more than that of Gujarat, Tamilnadu, Karnatak, and Punjab which ranked second, third, fourth and fifth respectively so far as degree of urbanization is concerned then.

Figure 1.1



[Note: The state codes shown in the graph stand for the following states respectively and 'I' stands for India:]

A: Andhra Pradesh; B: Bihar; G: Gujarat; H: Haryana; K1: Karnataka; K2: Kerala; M1: Madhya Pradesh; M2: Maharashtra; O: Orissa; P: Punjab; R: Rajasthan; T: Tamilnadu; U: Uttar Pradesh; W: West Bengal; I: India.

Thus, it is seen from the above that the status of urbanization of Orissa is such that it has been maintaining its thirteenth place since long. As regards the decadal growth rate of urban population, the state ranks very high compared to the highly urbanized states.

## **Section-3**

### **1.3.1. Objectives**

The study has the following broad objectives.

- i) To have a state, regional and district level analyses on the patterns of urbanization and examine the components of urban growth in Orissa.
- ii) To analyze the role of migration in the process and patterns of urbanization in the state.
- iii) To see the urban process from the perspective of occupational structure and functional classification of towns in the state.

### **1.3.2. Methodology**

For observing the patterns of urbanization in Orissa, two sets of indicators will be used. They are: a) **Static Indicators** which compare the patterns at a point of time and b) **Dynamic Indicators** which explain patterns over a period of time.

The first set of indicators includes the followings-

- a) **Degree of urbanization:** It is defined as the percentage ratio of urban population to total population which is calculated through the formula,



$$DU = U/P \times 100$$

Where, DU stands for degree of urbanization

U, for urban population and

P, for total population

Higher the value of this indicator, higher the level of urbanization and vice-versa.

**b) Efficiency of urbanization:** It is defined as the ratio of total population of 20,000 plus towns to total population. This indicates how efficient the process of urbanization is. If the value of the indicator is high, urbanization is said to be high and vice versa.

**c) Sufficiency of urban centres:** This is a crude indicator showing the number of towns per lakh population. It is used to examine the extent of spread of urbanization.

**d) Concentration of urban population:** As an indicator of urbanization, it tries to find out whether the population of the state is concentrated only in a few cities or spread over all size classes of towns.

**e) Rural population per town:** This measures and compares the spread of urbanization across the regions or districts. Thus, this indicator is measured for some definite geographical units, say a district.

**f) Town Density:** This indicator is defined as the number of towns per thousand square kilometers. This is in use to measure the spread of urban centres.

The second set of indicators comprises of the followings-

**a) Urban growth rate:** This indicator depicts the growth rate of urban population over a period of time. In the present study, it is basically used for examining the decadal percentage variations of urban population.

**b) Urban-rural growth differential:** This is defined as the difference between the growth rate of urban and rural population which is directly related with the rate of urbanization. This also represents the migration of people from rural to urban areas.

**c) The growth rate of six-size classes of towns:** This indicator tries to find out whether growth rate of cities and towns differ according to their sizes. Growth rate of the six size classes of towns is calculated through two methods. In method-1, it is calculated for those set of towns of a particular class which are common in all the census periods (i.e, from 1961 to 1991). In method-2 we calculate the growth rate of population of the towns of each class common in every two census periods i.e, it is calculated for towns belonging to a particular class which are common between 1961 and 1971 with their 1961 population as base, between 1971 and 1981 with their 1971 population as base and between 1981 and 1991 with their 1981 population as base.

**d) Urban growth:** This indicator has three components such as intensive component (I), extensive component (E) and declassification component (D). Intensive component consists of natural increase of population in urban areas and net migration into urban areas. Extensive component consists of extension of the existing boundaries of the urban units and

emergence of new towns (i.e, reclassification). Declassification component incorporates only declassification of the urban areas. Then,

$$\text{Urban Growth} = \text{Intensive component} + \text{Extensive component} + \text{Declassification component.}$$

### **1.3.3. Data Base**

The study will be based entirely on the secondary data. The main data sources are the decennial Census Reports of India 1961-1991. Apart from this, various issues of the Statistical Abstracts of Orissa from 1961 to 1991 are also used.

### **1.3.4. Chapterisation Scheme**

The second chapter deals with the patterns of urbanization in Orissa since 1961. Chapter Three attempts to study migration as a source of urbanization in the state. The fourth chapter studies urbanization from the perspective of occupational structure and functional classification of towns and the last chapter draws together the conclusion of the study.

# **CHAPTER-II**

## **Patterns of Urbanization in Orissa**

### **Introduction**

A study of urban process and its relationship with the socio-economic life of a specific geographical unit should begin with a close look at the patterns of urbanization that it experiences. Once the patterns are diagnosed it becomes easier to tackle questions relating to the sources of and factors leading to the process. Hence, what is attempted in this chapter is to highlight the broad patterns that the urban process of the state of Orissa has been witnessing. The patterns will be observed at the state, regional and district levels. Although our study is limited to the period between 1961 and 1991, in order to have a historical background, an attempt is also made to examine the patterns from the beginning of the 20th century, albeit with state level analysis.

### **Section-1**

#### **Patterns at the State Level**

##### **2.1.1. Level of Urbanization**

Urbanization in Orissa has been a slow process; it picked up a momentum during fifties and sixties. The rise in urban population has been accompanied by a rise in the number of towns over time. So has been the case of degree of urbanization and town density. The number of towns had increased from 14 in 1901 to 119 in 1991. By 1991, as many as 42.34 lakhs of the total population of Orissa became urban as against only 2.54 lakhs in 1901.

This means that the urban population of the state had increased more than sixteen times that of 1901.

Table-2.1: Indicators of Urbanization in Orissa, 1901-91.

Census Years	No. of Towns	Total Population	Urban Population	Degree of Urbanization	Town Density	Rural Pop./ Town	No. of Towns/ Lakh Pop.
1901	14	103.03	2.54	2.47	0.223	0.14	0.13
1911	18	113.78	2.75	2.41	0.166	0.16	0.15
1921	20	114.40	2.81	2.46	0.184	0.18	0.17
1931	21	124.91	3.17	2.53	0.194	0.17	0.16
1941	29	137.67	4.12	2.99	0.195	0.22	0.21
1951	39	146.45	5.94	4.05	0.250	0.28	0.26
1961	62	175.49	11.10	6.30	0.398	0.38	0.35
1971	81	219.45	18.45	8.40	0.520	0.40	0.37
1981	108	263.70	31.10	11.70	0.694	0.46	0.41
1991	119	316.59	42.34	13.37	1.278	0.43	0.37

Note: Total Population, Urban Population and Rural Population per Town are in lakhs.

Source: Census of India, 1961: General Population Tables, Part II-A, Orissa.  
 Census of India, 1971: General Population Tables, Part II-A, Orissa.  
 Census of India, 1981: General Population Tables, Part II-A, Orissa  
 Census of India, 1991: Final Population Totals, Paper-1 of 1992, Vol.II, India.

The degree of urbanization gives a more visible picture of the level of urbanization overtime. As is seen from Table-2.1, degree of urbanization shows a continuous rise during all the census periods other than 1901. Percentage share of urban population to total population was 2.47 during 1901 which declined to 2.41 during 1911 and thereafter went on increasing and reached a level of 13.37 percent during 1991. The rising trend of all the indicators such as the number of towns, number of urban population and degree of urbanization shows that the level of urbanization of Orissa has been increasing since the break of the century. Considering only the towns with population 20,000 (Table-2.3) and above<sup>1</sup> it is found that

<sup>1</sup> Towns with population 20,000 and above are considered only to over come the problem of declassification.

degree of urbanization (i.e. proportion of 20,000+ towns' population to total population) has been rising continuously since 1921 although it was showing a continuous decline till then.

## 2.1.2. Spread of Urbanization

A continuous increase in the spread of urbanization, measured in terms of rising town density and number of towns per lakh population, has also been taking place in the state all the time. Town density is found to have gone up all through the period. There were only 0.223 towns per thousand square kilometres during 1901. Their number increased to 1.278 per square kilometres in 1991. An increase in the number of towns per lakh population from 0.13 lakhs in 1901 to 0.37 lakhs in 1991 shows that Orissa has been experiencing a slow but steady spread of its urban process throughout. But surprisingly the spread is stopped in 1931 and again in 1991. Rural population per town, however, has always been in the opposite direction. It has been showing an increasing trend exhibiting that the extension of services of the urban areas to the rural mass has been declining since the beginning of the century. This implies that the rate of growth of rural population in the state has been far higher than the rate of growth of towns throughout the period considered.

## 2.1.3. Rate of Urban Growth

The pace of urban growth started shooting up from 1921 and reached a peak during fifties and then it declined. The least urban growth rate is seen during 1911-21. On the basis of urban-rural growth differential (URGD) the whole period can be divided into three phases viz., from 1901 to 1931; 1931 to 1961 and 1961 to 1991.

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Table-2.2: Urban Growth Rate, Rural Growth Rate and Urban-Rural Growth Differential in Orissa, 1901-91.

Years	UGR	RGR	URGD
1901-11	08.26	10.50	-2.24
1911-21	02.18	02.04	0.14
1921-31	12.81	11.92	0.89
1931-41	29.96	09.70	20.26
1941-51	44.17	05.21	38.96
1951-61	86.86	16.93	69.93
1961-71	66.30	22.26	44.04
1971-81	68.50	15.72	52.78
1981-91	36.33	03.25	33.08

Note: UGR, RGR and URGD represent Urban Growth Rate, Rural Growth Rate and Urban Rural Growth Differential respectively.

Source: Same as Table-2.1

Table-2.3: Indicators of Urbanization in Orissa, 1901-91.

Years	Towns (20,000+)	Popula- tion (in lakh)	Eff.of Urban- ization	Urban Growth
1901	4	1.46	1.41	0.00
1911	4	1.44	1.26	-1.36
1921	3	1.22	1.06	15.27
1931	4	1.60	1.28	31.14
1941	4	1.79	1.30	11.87
1951	6	3.03	2.06	69.27
1961	12	6.00	3.41	98.01
1971	26	12.86	5.86	14.33
1981	40	23.58	8.94	83.35
1991	43	32.37	10.54	41.51

Source: Same as Table-2.1

**The first phase:** During the first phase, URGD increased from -2.24 to 0.89 per cent. In this phase the first decade was endowed with high degree of urbanization as well as urban growth rate. But at the same time rural growth rate increased at a faster rate than the urban growth rate causing a negative URGD. Thus, it is clear that the high urban growth might have been caused due to heavy natural increase of total population. This argument is also substantiated by the historical facts that Orissa witnessed a recorded increase in her population by 10.4 per cent between 1901 and 1921. The second decade (1911-21) was a

period of disasters of epidemics and war and of high mortality and low birth rate which is feared to have caused a sudden fall in the level and rate of urban growth. But still URGD is positive. This might have been partly due to migration of population from rural to urban areas for livelihood caused by bad harvests consequent upon heavy flood of 1917 and a dreadful drought in 1918. The last decade of the phase (i.e. 1921-31) showed a sudden rise both in urban and rural population and a positive but minimal URGD. This slightly higher urban growth is expected to have been due to the beginning of industrialisation in the state from this decade when two railway lines were opened; one joining to the Talcher coal fields with the main railway line connecting Calcutta-Madras and the other, Raipur-Vijaynagaram railway line. In addition, two iron mines were opened in Mayurbhanj district along with development of manganese and lime stone queries in Sundargarh district.

**The second phase:** During the second phase, from 1931 to 1961, URGD shows a rise as a result of higher urban growth compared to rural growth. A series of episodic socio-economic events were also behind such an interesting urban scene during this phase.

A part of the urban growth in the first decade of the phase could be attributed to the addition of Ganjam and Koraput districts on 1st April 1936 when they got detached from the Madras Presidency and Orissa started enjoying the status of a separate province. Some places like Nawapara sub-division and Mahadebpalli police station which were hitherto in the Central Provinces were also added to Orissa raising the size of the state's total as well as urban population. As the rural growth rate was rather small and URGD very high, rural-urban migration was expected to have taken place caused by cyclone and floods to crops in two important districts like Puri and Ganjam in October 1940. Low rural growth consequent upon high mortality could also have had a role for high URGD as during this



decade there were epidemics of cholera, small pox, malaria, typhoid, diarrhoea and dysentery.

The second decade (1941-51) of the second phase was a period of unfavourable weather, natural conditions, vital occurrences and deteriorated material conditions of the people due to war and political unrest of the country. This lowered the rate of growth of total population of the state during this decade as compared to the previous decades. However, it is astonishing that the urban growth rate as well as the URGD were very high then (44.17 percent and 38.96 per cent respectively). This means that natural increase had had a comparatively less important role than migration for gearing up urban growth during this period. It might be, to some extent, due to rural urban migration since rural growth rate was as low as 5.21 per cent.

The last decade of the second phase (i.e. 1951-61) is remarkable in the urban scene of Orissa when both urban growth as well as URGD reached their climax with growth rate of 86.86 per cent and 69.93 per cent respectively. Such a high urban growth might be an outcome of the development programs launched by the central government for economic reconstruction during this decade. Construction of the Hirakud Multipurpose Dam, the Machkund Hydro-electric Project, introduction of National Extension Services and Community Development Schemes during the first-five year plan (1951-56) and establishment of the Rourkela Steel Plant in the central sector, an Aluminum factory at Angul, Paper Mills at Brajaraj Nagar and Choudwar and a few other industries in the private sector during the Second Five-Year Plan (1956-61) are some of the important factors which would have attracted a large number of rural labour force with their increased employment potential; this would have led to such high urban growth.

**The third phase:** Under the third phase (1961 to 1991), URGD went up from 44.04 per cent in 1961-71 to 52.78 per cent in 1971-81 both as a consequence of rise in urban growth rate and fall in rural growth rate. However, during 1981-91 there have been substantial shrinking in the growth of both urban as well as rural population and thus resulting in a low URGD. Such slowing down in the pace of urban growth would be largely due to lower pace of industrialisation compared to the growth of population after seventies. Urban growth in the towns with population 20,000 (Table-2.3) and above started picking up sharply from 1951 and reached the highest rate of 114.33 percent in 1971 and then came down drastically to a rate as low as 41.51 per cent in 1991. This also supports our earlier argument that urban growth during the second phase was being caused by large scale industrialisation and the mild pace after seventies due to its slowing down.

What accounted for the drastic decline in the rural growth rate (03.25 per cent) during the eighties? The reasons are many. Crucial among them are the outbreak of deadly diseases like Malaria, Dysentery, Diarrhoea and respiratory diseases causing premature death to a wide range of rural people in the state during this decade. In 1985, the registered deaths in the rural areas of Orissa were 1.36 lakhs which increased upto 1.64 lakhs in 1988 (Statistical Abstract, 1991, Orissa). Child mortality rate was also high during this time due to poor nourishment and lack of medical facilities. Deaths due to poverty and hunger in the tribal dominated drought prone districts like Koraput, Kalahandi, Phulbani and Balangir also added to the low rural growth rate during this decade. The widespread flood disaster in 1982 is another reason which gave a serious threat to the rural natural increase by bringing end to a large number of village lives in one hand and promoting distress out migration from rural families of the state (whose lands got washed out by flood) on the other.

Decline in both UGR and RGR during 1981-91 could also be partly attributed to the achievements of the Family Welfare Programs (FWPs) launched in the state. During this period, there was a substantial increase in the number of sterilisation done, number of Intra Uterine Device (I.U.D) and number of Conventional Contraceptive (C.C) users even though mass literacy was not so high. For instance, between 1984-85 and 1988-89, the total number of sterilisation done increased from 2.36 lakhs to 2.90 lakhs, number of I.U.D increased from 0.7 lakhs to 1.46 lakhs and number of C.C users increased from 1.26 lakhs to 2.68 lakhs (Statistical Abstract, 1991, Orissa).

#### **2.1.4. Urban concentration**

Given the fact that both the degree of urbanization and the number of towns have been increasing, it is of great interest to examine the concentration of population in the urban units over the periods. This can be tested through the following three methods. First, to divide the towns into three categories viz. Large (Towns having population of one lakh and above), Medium (Towns having population range 20,000 and 99,999) and Small (Towns with population below 20,000) and examine their shares in the total population and also by observing the primacy rate. Second, by observing the concentration of population in Urban Agglomerations and Isolated Towns. Third, by observing the concentration in six-size classes of towns.

Following the first method (Table-2.4), it is seen that, in percentage terms, the shares of large towns was increasing dramatically both in number and population (their number increased from 7 per cent to 14 per cent and population from 20 to 48 per cent between 1901 and 1991 respectively). In case of medium towns, although the number increased very

marginally (i.e. from 21 in 1901 to 22 in 1991 in percentage terms), yet their share in total urban population has drastically come down from 37 per cent to 16 percent. Small towns have suffered from a decline from both the sides but the decline is sharper in the size of population compared to the number of towns. From the rate of primacy it is observable that the share of the largest town in the total urban population of Orissa has come down from 20 per cent in 1901 to 10 per cent in 1991. It is in 1931 when the largest town witnessed the highest concentration of urban population. [Cuttack has been the single largest town of Orissa throughout].

Table-2.4: Indicators of Urbanization in Orissa, 1901-91.

Census Years	Largest Towns		Medium Towns		Small Towns		Total		Primacy	
	No.	Pop.	No.	Pop.	No.	Pop.	No.	Pop.	*	#
1901	7	20	21	37	71	42	100	100	20	104.1
1911	6	19	17	33	78	47	100	100	19	132.4
1921	5	18	10	25	85	82	100	100	18	131.8
1931	5	21	14	30	81	58	100	100	21	172.9
1941	3	18	10	25	86	65	100	100	18	170.6
1951	5	28	13	23	82	56	100	100	17	164.4
1961	6	34	13	20	81	46	100	100	14	177.0
1971	7	38	25	32	68	30	100	100	12	133.4
1981	13	51	24	24	63	24	100	100	11	101.5
1991	14	48	22	16	64	17	100	100	10	107.0

Note: \* Ratio of largest town's population to total urban population.  
# Ratio of largest town's population to the second largest town's population.  
Source: Same as Table-2.1.

On the other hand, rate of primacy defined as the ratio of the largest town's population to the second largest town's population follows an unsteady path owing to changes in the nature of the second largest towns overtime. For instance, when Puri, the religious town, was the second largest town of Orissa, primacy between the largest and the second largest town was 104.1 percent in 1901; it suddenly went up to 132.36 per cent in 1911 and in 1921 it came down marginally. The period 1931 to 1951 during which Berhampur (basically a

commercial centre then) was the second largest town, primacy rate was quite high although it was falling. Interestingly, in the year 1961 when Rourkela (the industrial town of Orissa) appeared to be the second largest town, primacy rate was the highest of all the census periods considered i.e., 176.96 percent. But it declined so rapidly that in 1981 the primacy rate became the lowest of all the census periods with 101.49 percentage.

Table-2.5: Concentration of Population in UAs and Isolated Towns in Orissa.

Urban Units	No. and Population	Years		
		1971	1981	1991
Urban Agglomerations	No. of Towns	8 (9.88)	8 (7.41)	9 (7.56)
	Population (in lakhs)	6.01 (32.58)	9.66 (31.05)	13.30 (31.42)
Isolated Towns	No. of Towns	73 (90.12)	100 (92.59)	110 (92.44)
	Population (in lakhs)	12.44 (67.42)	21.45 (68.95)	29.05 (68.58)

Note: Figures in parentheses show percentages to total.

Source: Same as Table-2.1

In other words, during this period, both the largest and the second largest towns maintained more harmony so far as urban concentration is concerned. Primacy was satisfactorily low during the 1991 census when Bhubaneswar, the capital city of Orissa became the immediate follower of the biggest city Cuttack. Now to look at the concentration of population in urban agglomerations of the state. It is observed from Table-2.5 that the percentage share of both the number of towns and population in case of urban agglomerations have been suffering from a deterioration while in the case of isolated towns it is the other way round. Of course, the changes are seen to be very marginal. In 1971, urban agglomerations were 9.88 per cent of the total number of towns which could absorb 32.58 per cent of the total

urban population. But during 1991 their share in number as well as population came down to 7.56 and 31.42 percentages respectively.

On the contrary, the isolated towns, which accounted for 90.12 per cent of the total towns and a population of 67.42 per cent of the total population of the state, increased their share marginally up to 92.44 per cent (in number) and 68.58 per cent (in population) during 1991. Concentration of towns and population has been considerably larger in case of class-I towns (Table-2.6) right from 1961 onwards. Between 1961 and 1971 the class-I towns showed the highest performance both in percentage shares in their number and population. All other size classes of towns have faced a loss of population although in percentage share of numbers for class-II, III and IV registered a marginal increase during 1991 as compared to their position in 1961. In 1961 the number of class-I towns was only 2 per cent which had absorbed 13 per cent of the urban population of the state. In nineties their number increased to 6 per cent and population, by 44 per cent.

Table-2.6: Concentration of Towns and Population in Six-size Classes in Orissa, 1901-91.

Cens. Years	No. of Towns							Population						
	I	II	III	IV	V	VI	All	I	II	III	IV	V	VI	All
1901	0	7	21	36	29	7	100	0	20	37	30	10	2	100
1911	0	6	17	28	33	17	100	0	19	33	28	14	5	100
1921	0	5	10	30	45	10	100	0	18	25	33	20	28	100
1931	0	5	14	29	48	5	100	0	21	30	26	21	10	100
1941	0	3	10	28	55	3	100	0	18	25	27	28	9	100
1951	3	3	13	21	59	3	100	25	15	33	26	28	9	100
1961	2	5	13	35	40	5	100	13	21	20	28	17	1	100
1971	5	2	25	28	37	2	100	30	8	32	17	13	0	100
1981	6	7	24	37	23	3	100	36	16	24	17	6	0	100
1991	6	8	22	43	18	3	100	44	15	20	17	4	0	100

Note: Classification of Six-size Classes of Towns are made as follows: Class-I 1,00,000 and above; Class-II 50,000 to 99,999; Class-III 20,000 to 49,999; Class-IV 10,000 to 19,999; Class-V 5,000 to 9,999; Class-VI up to 4,999.

Source: Same as Table-2.1

The class-VI towns represented 5 per cent of the total number of towns with only 1 per cent of urban population and the situation became worse in 1991 when their number came down to 3 per cent and population share even less than one per cent. This means that, overtime, the larger towns have been growing at a faster rate than the smaller ones.

To examine if the larger towns are growing at a much larger rate than the smaller ones we take a look at the growth rate of towns belonging to different size classes. Table-2.7 shows the growth rate of population of the towns according to their size classes. Under method-1, growth rate has been calculated for those set of towns in each class which are common in all the census periods. Under method-2, the same has been calculated for those towns which are common in every two census periods.

Table-2.7: Growth Rate of Population according to Size Classes of Towns in Orissa, 1961-91.

Size Class	Method 1			Method 2		
	1961-71	1971-81	1981-91	1961-71	1971-81	1981-91
I	32.64	52.15	36.63	32.64	65.76	46.31
II	59.15	55.44	30.22	59.15	55.50	30.26
III	66.67	67.67	57.14	66.67	51.62	26.00
IV	42.93	56.64	28.08	42.93	45.35	22.98
V	38.62	36.30	21.05	38.62	102.95	75.91
VI	51.75	22.64	12.70	51.75	22.07	66.19
Total	49.13	54.87	35.71	49.13	64.21	38.23

Note: In Method 1, Growth Rate is calculated for towns common in all the four census periods. In Method 2, Growth Rate is calculated for towns common in every two census periods.

Source: Same as Table-2.1

**Method-1:** It is observed from Table-2.7 that, during 1961-71, growth rate of population of class-III towns was the highest (i.e, 66.67 per cent) followed by class-II and VI towns. The least urban growth was found in the class-I towns (i.e, 32.64 per cent). During 1971-81 also class-III towns were at the top in this regard. In second and third places appeared class-IV

and-II towns respectively. Class-VI towns, which acquired third place in urban growth in 1961-71, are found to have the least urban growth during this period. All the size classes showed a comparatively less urban growth rate during 1981-91. Of all classes it is still the class-III and class-VI towns which had the highest and the least urban growth rates respectively during this period.

Looking at the trends of urban growth of each size class of towns it is discovered that, except the class-I no other size classes of towns have shown an increase overtime. In case of class-II, V and VI towns, growth rates have been showing a continuous decline. Medium towns like class-IV and III have shown an increase of their urban population up to the decade 1971-81 and thereafter declined. However, it is notable that pace of urban growth was the highest for class-I towns followed by class-IV towns. For instance, while class-I towns grew from 32.64 per cent to 52.15 per cent from 1961-71 to 1971-81, growth of class-IV towns was from 42.93 to 56.64 per cent during the same period.

To sum up, during sixties, both larger and smaller towns (i.e, class-I and class-V and VI) had a lower growth rate compared to medium towns (i.e, class-II, III and IV). But during seventies large and medium towns had a higher urban growth than the smaller towns and the same pattern also followed during eighties.

**Method-2:** Using the second method, it is found that during 1961-71, class-III towns had shown the highest growth rate and that of class-I towns, the least (same figures as obtained in method-1). During 1971-81, class-V towns have grown at the highest speed (i.e. 102.95 per cent) followed by large and medium towns. The least urban growth was witnessed by the class-VI towns during this time. To one's surprise, small towns (class-V and VI) became



dominant during 1981-91 in terms of urban growth. Class-V towns had the highest growth of 75.91 per cent while those of class-VI, with 66.19 per cent growth rate, came in second place. The immediate followers were the class-I towns during this period.

Trend of urban growth under method-2 shows that, it is the large and small towns (i.e, class-I and class-V & VI ) which have witnessed an increase in urban growth between sixties and eighties. During the sixties, medium and small towns had higher growth rates than the large towns. Growth rate of urban population was more in case of small and large towns during the seventies while in the eighties, dominance was shifted to the small towns.

### **2.1.5. Components of Urban Growth**

As we have already seen, in Orissa, the pace of urban growth has been increasing rapidly although the level of urbanization is very low. Now it is interesting to see the main sources or components which have been behind such a high growth rate of urban population. For this, we have gone for component analysis following the method explained in the methodology part of Chapter-1.

It is clear from Table-2.8 that urban growth of Orissa has been mainly contributed by natural increase in urban population and net migration to urban areas (i.e, intensive component) followed by reclassification of towns (i.e, extensive component). It is notable that percentage contribution of the intensive component to total urban growth has been increasing while that of extensive component (i.e. emergence and reemergence of towns) has been declining over the periods.

Percentage share of natural increase and net migration in the total urban growth of Orissa during 1961-71 was 71.6 per cent which went up to 78.8 per cent during 1971-81 and again up to 88.7 per cent during 1981-91. On the contrary the extensive component's contribution to total urban growth fell down from 31.2 to 21.7 per cent between 1961-71 and 1971-81 and further to 15.7 per cent during 1981-91.

Table-2.8: Components of Urban Growth in Orissa, 1961-91.

Years	Components			
	Ur	I	E	D
1961-71	66.3	47.5	20.7	1.9
1971-81	68.5	54.0	14.9	0.4
1981-91	36.3	32.2	5.7	1.6
	Percentages to Totals			
1961-71	100	71.6	31.2	2.8
1971-81	100	78.8	21.7	0.5
1981-91	100	88.7	15.7	4.4

Note: Ur, I, E, and D represent Urban Growth Rate, Intensive Component, Extensive Component and Declassification Component respectively.

Source: Same as Table-2.1.

The declassification component, which is a negative component of urban growth by definition, had also played an important role in sixties and seventies with 2.8 percentage share. Its magnitude drastically shrank down to as low as 0.5 per cent during seventies and again geared itself up to 4.4 per cent during eighties. We can sum up the above discussion in the following statements.

The process of urbanization was taking place in Orissa since the beginning of the century with a rise in the number of towns and rising urban population. The spread of urbanization was also increasing consequent upon a rise in town density and number of towns per lakh

population. Although the level of urbanization had been low its pace was increasing overtime. It reached the peak during the fifties (86.86 percent). During sixties and seventies urban growth was also high but it had slowed down during eighties.

Taking towns with population of 20,000 and above it is observed that both the degree and rate of urbanization were high during sixties and seventies. Both of them slowed down during eighties.

As far as urban concentration is concerned, the role of large towns was increasing especially from fifties onwards while the importance of small towns was declining with a fluctuating tendency in the case of medium town. Urban Agglomerations showed a deterioration both in percentage share of towns and population. But the case is just opposite in case of isolated towns. A major role in urbanization was played by the Class-I towns since the sixties as their percentage share in total urban population was rising fast right from 1961 onwards.

A lion's share in urban growth of Orissa was contributed by the intensive component ( i.e., natural increase in and net migration to urban areas) followed by the reclassification component. In percentage terms, the share of the intensive component in the total urban growth of the state ranges between 70 to 90 during 1961 and 1991.

## Section-2

### Patterns at the Regional Level

To study the patterns of urbanization at a disaggregated level we have divided the state of Orissa into two regions viz., Coastal and Inland regions based on their geographical location.

#### 2.2.1. Level of Urbanization

As observed from Table-2.9, there is a small difference between the two regions with regard to the level of urbanization. Proportion of people living in urban areas of the coastal region ranges from 7.2 to 14.1 per cent between 1961 and 1991.

Table-2.9: Indicators of Urbanization in the State (Region wise), 1961-91.

State/ Regions	Years	Total Popula.	Urban Popula.	Rural Popula.	Degree of Urbaniza.
Orissa	1961	175.49	11.10	164.39	6.3
	1971	219.45	18.45	200.99	8.4
	1981	253.70	31.10	232.60	12.3
	1991	316.60	42.35	274.25	13.4
Costal *	1961	81.57	5.90	76.24	7.2
	1971	102.94	7.95	93.98	7.7
	1981	118.43	14.74	103.69	12.4
	1991	150.74	21.19	129.54	14.1
Inland #	1961	93.92	5.20	88.15	5.5
	1971	116.51	10.50	107.01	9.0
	1981	135.27	16.36	128.91	12.1
	1991	165.86	21.16	144.71	12.8

Note: \* Coastal Region consists of four districts viz. Balasore, Cuttack, Puri and Ganjam. # Inland Region comprises the rest nine districts viz. Sambalpur, Sundargarh, Keonjhar, Mayurbhanj, Dhenkanal, Phulbani, Bolangir, Kalahandi and Koraput.

Source: Same as Table-2.1.

This, in case of inland region, is 5.5 to 12.8 per cent between the same periods. However, it is interesting to see that the ratio of urban to total population raised suddenly in 1971 (i.e. from 5.5 per cent in 1961 to 9 per cent in 1971) in the inland region. On the other hand, in coastal region, the same thing happened in 1981 when level of urbanization showed an increase of around 5 per cent more than the previous decade (i.e. 1971). It could mainly be due to increased number of towns as during 1971-81 12 more towns had emerged in the coastal region raising the magnitude of town density from 0.79 to 1.09 per cent between 1971 and 1981. Followed by this, rural population per town in the region also decreased from 2.93 lakhs in seventies to 1.83 lakhs in eighties.

## 2.2.2. Spread of Urbanization

Town density (i.e, towns per 1000 square kilometres) depicts a continuous rise in both the regions. However, the rise in town density has been higher in the coastal region than in the Inland region.

Table-2.10: Indicators of Urbanization in the State (Region wise).

State/ Regions	Years	No. of Towns	Town Density	Rural pop. per Town
Orissa	1961	62	0.39	0.44
	1971	81	0.52	0.57
	1981	108	0.69	0.77
	1991	119	0.74	0.84
Coastal	1961	27	0.67	0.19
	1971	32	0.79	0.23
	1981	44	1.09	0.31
	1991	50	1.24	0.35
Inland	1961	35	0.30	0.25
	1971	49	0.42	0.35
	1981	64	0.55	0.45
	1991	69	0.59	0.49

Source: Same as Table-2.1.

Rural population per town, an indicator inversely related to spread of urbanization, also shows an upward movement in both the regions all through the period. But it is higher in case of the Inland than the Coastal region. This suggests that, like the state as a whole, in both the regions also, the extent of services provided by the urban units to the rural areas has been declining. And the decline is greater in the Inland region relative to that of the Coastal region.

### 2.2.3. Rate of Urban Growth

In the coastal region, URGD reached the highest level (i.e, 75.08 per cent) during 1971-81 following the highest urban growth rate of 85.41 per cent and the least rural growth rate of 10.33 percent (Table-2.11). On the other hand, in the inland region, URGD is maximum during 1961-71 (i.e. 61.68 per cent). This also results from the highest urban growth of 83.08 per cent and a rural growth rate as low as 21.40 per cent.

Table-2.11: Urban Growth Rate, Rural Growth Rate and URGD in the State and Regions.

State/ Regions	UGR RGR URGD	1961-71	1971-81	1981-91
Orissa	UGR RGR URGD	66.30 22.26 44.04	68.54 15.72 52.78	36.33 03.25 33.08
Coastal	UGR RGR URGD	34.75 23.23 11.48	85.41 10.33 75.08	43.77 24.94 18.83
Inland	UGR RGR URGD	83.08 21.40 61.68	71.85 14.61 57.24	29.33 18.00 11.33

Source: Same as Table-2.1.

But like the coastal, rural growth rate of inland areas is also seen to be the least during 1971-81. From this it follows that, during this period, rural-urban migration in both the regions was more than that in the other decades. It is also noteworthy that URGD in inland region shows a declining tendency corresponding to a continuous decline in urban growth throughout. The decline became severe during eighties. But in the coastal region, the trend of urban growth is discontinuous and so also the URGD. Yet, unlike the inland, this region does not experience a deterioration in urban growth all the times. For instance, while in the inland areas urban growth rate slipped down from 83.08 per cent in 1961-71 to 29.33 per cent in 1981-91, in coastal areas it went up from 34.75 to 43.77 per cent.

#### **2.2.4. Urban Concentration in the Regions**

Concentration of population in UAs and Isolated Towns at the regional level gives us some important insights. As shown in Table-2.12, in the coastal region, population concentration has been continuously declining in UAs but increasing in Isolated Towns. The ratio of UAs' population to total urban population in the coastal areas was 34.46 per cent in 1971. It came down to 26.45 per cent in 1981 and further to 9.40 per cent in 1991. At the same time proportion of urban population living in Isolated Towns increased from 65.54 per cent in 1971 to 90.60 percent in 1991. Quite adverse is the case of inland region. Unlike the coastal, this region witnesses a continuous rise in the concentration of population in UAs and a continuous fall in the population living in Isolated Towns.

As observed from Table-2.12, proportion of UAs' population to total urban population in this region increased from 31.14 to 51.90 per cent during 1971 and 1991. Another specialty of this region is that it has been accommodating more and more urban population in UAs

with less and less number of UAs (in percentage terms). And obviously, isolated towns have been absorbing proportionately less population even though their number has been increasing over time. However, such a case is not found in the coastal region.

Table-2.12: Concentration of Population in UAs and Isolated Towns in the Regions of Orissa.

State/ Regions	Years	UAs		Isolated Towns	
		No. of Towns	Popu- lation	No. of Towns	Popu- lation
Orissa	1971	8 (9.88)	6.01 (32.58)	73 (90.12)	12.44 (67.42)
	1981	8 (7.41)	9.66 (31.05)	100 (92.59)	21.45 (68.95)
	1991	9 (7.56)	13.05 (31.42)	110 (92.44)	29.45 (68.58)
Coastal	1971	3 (9.37)	2.74 (34.46)	29 (90.63)	5.21 (65.54)
	1981	3 (6.82)	3.90 (26.45)	41 (93.18)	10.84 (73.55)
	1991	4 (8.00)	1.99 (9.40)	46 (92.00)	19.20 (90.60)
Inland	1971	5 (10.20)	3.27 (31.14)	44 (89.80)	7.23 (68.86)
	1981	5 (7.81)	5.76 (35.19)	59 (92.19)	10.61 (64.81)
	1991	5 (7.25)	11.06 (51.90)	64 (92.75)	10.25 (48.10)

Note: Figures in parentheses show percentages to respective totals.

Source: Same as Table-2.1

Hence, from the above, it can be concluded that the process of urbanization in coastal areas was supported mainly by the expansion of Isolated Towns since the seventies. On the contrary, urban agglomerations have been playing an increasingly important role in the urban process of the inland areas over time.



We get a clearer picture of urban patterns of both the regions when we turn to the mode of concentration of their urban population in the six-size classes of towns. We have seen earlier that both town density and degree of urbanization have been increasing in the coastal as well as in inland regions of Orissa. Given this fact, it is of great interest to find out the contribution of the size classes of towns to the observed urban growth of these two regions.

An important finding from Table-2.13 is that, it is the class-I town which have been playing the major role in the urban growth of the coastal region of Orissa. In 1961, share of class-I towns in this region was only 4 per cent of the total coastal towns. But more than one-fourth of urban dwellers of that area were in those towns. Since then, the class-I towns have been accumulating their share although the rate has been slow.

**Table-2.13: Concentration of Towns and Population in the regions of Orissa, 1961-91.**

State/ Regions	Years	No. of Towns							Population						
		I	II	III	IV	V	VI	All	I	II	III	IV	V	VI	All
Orissa	1961	1.6	4.8	12.9	35.5	40.3	4.8	100	13.2	20.7	20.2	28.0	17.1	0.8	100
	1971	4.9	2.5	24.7	28.4	37.0	2.5	100	30.0	8.0	31.7	17.1	12.7	0.4	100
	1981	5.6	7.4	24.1	37.0	23.1	2.8	100	35.6	15.9	24.5	17.4	6.3	0.4	100
	1991	5.9	8.4	21.8	42.9	18.5	2.5	100	44.4	14.6	19.7	17.0	3.9	0.3	100
Coastal	1961	4.0	8.0	16.0	28.0	44.0	0.0	100	25.1	23.6	0.2	16.3	14.4	0.0	100
	1971	9.7	3.2	19.4	25.8	41.9	0.0	100	48.1	8.2	0.2	11.7	11.0	0.0	100
	1981	9.1	4.5	22.7	31.8	29.5	2.3	100	52.8	8.6	0.2	12.6	7.2	0.3	100
	1991	9.6	3.8	19.2	46.2	19.2	1.9	100	60.8	6.0	0.1	15.2	3.5	0.1	100
Inland	1961	0.0	2.7	10.8	40.5	37.8	8.1	100	0.0	17.5	19.7	40.9	20.2	1.7	100
	1971	2.0	2.0	28.0	30.0	34.0	4.0	100	13.1	7.8	41.7	22.3	14.3	0.8	100
	1981	3.1	9.4	25.0	40.6	18.8	3.1	100	20.0	22.4	29.8	21.8	5.5	0.5	100
	1991	3.0	11.9	23.9	40.3	17.9	3.0	100	28.0	23.3	25.1	18.8	4.3	0.4	100

Source: Same as Table-2.1

During eighties these towns contributed more than sixty per cent of the urban population of the coastal region with only 9.6 per cent share in the total coastal towns. Role of small

towns in the urban scene of the coastal region has been continuously decreasing overtime. A sudden decline of class-II towns both in number and population occurred during the seventies.

While comparing the urban concentration of the inland region with that of the coastal it is apparent that the former shows a more even distribution of its urban population among the size classes of towns. There was no class-I town in the inland region in 1961 and hence all its urban population were scattered among other towns. Like the coastal, in this part of the state also, importance of small towns has been continuously declining since the 60's. But the upper three classes combined together have been taking the major share. In this regard this region is different from the coastal region where an extremely high concentration is found in class-I towns. From the above regional analysis of the urban patterns in Orissa, the following remarks can be made:

There is little difference between the coastal and the inland regions of the state with regard to degree of urbanization. But in absolute terms near about half of the urban population of Orissa is found in only the four coastal districts throughout. It is due to the fact that this region also shares almost half of the total population of the state all the time. A sudden rise in the ratio of urban population to total population is marked during the sixties in the coastal areas while the same happened in the inland region during the seventies. Town density shows a continuous rise in both the regions and that, too, always at a higher level in coastal region.

Both the urban growth as well as URGD were the highest in inland (1961-71) and coastal (1971-81) region. Since rural growth rate was also the lowest, a sort of rural-urban

migration is expected to have supported the urban growth during these periods in the two regions. There has been a continuous fall of urban growth in inland region since 1960s while the coastal region observes a discontinuous growth of urbanization overtime. A steady decline has been taking place in urban concentration of the UAs and a continuous rise in urban concentration of isolated towns in the coastal region throughout while the reverse happened in the inland region. Urban population is highly concentrated in the class-I towns in the coastal region. But in the inland region, it is more evenly distributed among all the size classes of towns during the whole period.

## **Section-3**

### **Patterns at the District Level**

To examine the urban process of Orissa at a more disaggregated level we will analyze the district wise patterns. This will give us a more visible picture of urban patterns prevalent within the state.

#### **2.3.1. Level of Urbanization**

From Table-2.14, it is observed that in Orissa, the degree of urbanization has been increasing in all the districts except Dhenkanal where it has fallen marginally in 1971. Of all the districts, Sundargarh continues to be the highest urbanized district throughout and Phulbani, the least. In the two coastal districts viz. Ganjam and Puri, level of urbanization has always been above the state average. Cuttack has been maintaining more or less the same level with the state as a whole while Balasore is seen to be the least urbanized district in the coastal belt of Orissa. Sundargarh, the most urbanized district with regard to degree

of urbanization, is in the inland region whose level of urbanization has been nearly three times that of the state average during all the census periods considered.

Table-2.14: Indicators of Urbanization in the Districts of Orissa, 1961-91.

State/ Districts	Total Population (in lakh)				Urban Population (in lakh)				Rural Population (in lakh)				Degree of Urbanization			
	1961	1971	1981	1991	1961	1971	1981	1991	1961	1971	1981	1991	1961	1971	1981	1991
Sambalpur	15.09	18.45	22.81	26.97	1.15	2.22	3.53	4.63	13.93	16.23	19.28	22.35	7.6	12.0	15.5	17.2
Sundargarh	7.59	10.31	13.38	15.74	1.36	2.40	4.09	5.25	6.23	7.91	9.29	10.49	17.9	23.2	30.5	33.4
Keonjhar	7.43	9.56	11.15	13.37	0.32	0.67	1.26	1.67	7.11	8.88	9.88	11.70	4.3	7.0	11.3	12.5
Mayurbhanj	12.04	14.34	15.82	18.85	0.28	0.40	0.91	1.16	11.76	13.94	14.91	17.68	2.3	2.7	5.7	6.2
Balasore	14.16	18.31	22.53	28.02	0.92	1.00	1.86	2.64	13.24	17.30	20.67	25.38	6.5	5.4	8.2	9.4
Cuttack	38.03	38.28	46.29	55.23	2.09	2.06	4.76	6.79	28.51	35.22	41.53	48.44	6.8	8.0	10.3	12.3
Dhenkanal	10.29	12.94	15.83	19.09	0.47	0.52	1.24	1.88	9.82	12.42	14.59	17.21	4.5	4.0	7.8	9.9
Phulbani	5.14	6.22	7.17	8.64	0.06	0.20	0.38	0.51	5.08	6.02	6.80	8.13	1.2	3.1	5.2	5.9
Bolangir	10.69	12.64	14.59	17.08	0.50	0.87	1.33	1.64	10.19	11.77	13.26	15.44	4.6	6.8	9.1	9.6
Kalahandi	10.10	11.64	13.39	16.00	0.29	0.57	0.81	1.04	9.81	11.07	12.59	14.96	2.8	4.8	6.0	6.5
Koraput	14.98	20.43	24.84	30.13	0.77	1.67	2.81	3.38	14.21	18.76	22.03	26.75	5.1	8.1	11.3	11.2
Ganjam	18.73	22.94	26.70	31.59	1.56	2.60	3.80	4.71	17.17	20.34	22.90	26.88	8.3	11.3	14.2	14.9
Puri	18.65	23.41	22.91	35.90	1.33	2.29	4.32	7.06	17.32	21.12	18.59	28.84	7.1	9.7	18.8	19.7
Orissa	175.49	219.45	253.70	316.60	11.10	18.45	31.10	42.35	164.39	200.99	232.6	274.25	6.3	8.4	11.7	13.4

Source: Same as Table-2.1.

Besides Sundargarh, in some other inland districts like Sambalpur, Koraput and Keonjhar, urbanization level is comparatively higher than the other inland districts. It is generally found that the ratio of urban population to total population in almost all the districts of Orissa has been increasing fast up to 1981 and thereafter it has slowed down.

### 2.3.2. Spread of Urbanization

Comparing the number of towns with the level of urbanization across the districts it is found that Ganjam, one of the coastal districts, has the largest number of towns all the time. Sundargarh, which has always been topping the list in terms of degree of urbanization, is seen to have had fewer towns compared to Ganjam, Sambalpur, Cuttack, Koraput etc. The

same is also reflected in the town density. It follows from the above that the district of Sundargarh has been witnessing a vertical expansion of urban population and districts like Ganjam, Koraput and Sambalpur- a horizontal expansion. Phulbani, the district with the least number of population living in urban areas also ranks at the bottom in terms of number of towns and town density. Koraput having the second largest number of towns, lags far behind the other districts in terms of town density. This is primarily because of its large area.<sup>2</sup> Except Balasore, in all other coastal districts, town density has been increasing although there was a fall in Ganjam during eighties.

Table-2.15: Indicators of Urbanization in the Districts of Orissa, 1961-91.

State/ Districts	No. of Towns				Town Density				Rural Population per Town			
	1961	1971	1981	1991	1961	1971	1981	1991	1961	1971	1981	1991
Sambalpur	7	11	10	9	0.011	0.626	0.571	0.514	0.05	0.08	0.07	0.06
Sundargarh	4	5	6	7	0.408	0.517	0.618	0.721	0.03	0.04	0.04	0.05
Deonjhar	2	4	6	7	0.240	0.485	0.723	0.843	0.01	0.03	0.04	0.05
Mayurbhan	2	2	4	4	0.192	0.192	0.384	0.384	0.01	0.01	0.03	0.03
Balasore	5	4	6	5	0.770	0.626	0.951	0.792	0.04	0.03	0.04	0.04
Cuttack	7	8	9	13	0.642	0.713	0.808	1.167	0.05	0.06	0.06	0.09
Dhenkanal	4	4	9	11	0.365	0.369	0.831	1.016	0.03	0.03	0.06	0.08
Phulbani	1	2	2	3	0.090	0.181	0.270	0.270	0.01	0.01	0.01	0.02
Bolangir	5	6	7	7	0.566	0.674	0.785	0.785	0.04	0.04	0.05	0.05
Kalahandi	3	5	5	5	0.229	0.422	0.425	0.425	0.02	0.04	0.04	0.04
Koraput	7	10	14	14	0.272	0.370	0.519	0.519	0.05	0.07	0.10	0.10
Ganjam	10	15	20	20	0.817	1.197	0.596	1.596	0.07	0.11	0.14	0.14
Puri	5	5	9	12	0.477	0.492	0.884	1.179	0.04	0.04	0.06	0.09
Orissa	62	81	108	119	0.389	0.520	0.694	0.764	0.44	0.57	0.77	0.84

Note: Rural Population are in lakhs.

Source: Same as Table-2.1

Among the inland districts, Dhenkanal could show the highest town density i.e., 1.016 towns per thousand square kilometres. In 1961 and 1971, Ganjam had the highest town density

<sup>2</sup>This district (Koraput) had the largest geographical boundary in the state during the period under study. It has been divided into four districts on October 2, 1992.

(i.e. 0.817 and 1.197 in 1961 and 1971 respectively). In 1981, Balasore topped the list with 0.951 followed by Puri with 0.884 towns per thousand square kilometres. Further, in 1991, Ganjam won the race with Puri, Cuttack and Dhenkanal running behind it respectively. In most districts the number of towns has been stagnant after 1981.

So far as rural population per town is concerned, no other district shows a trend as such except the district Keonjhar. However, by comparing the figures of 1961 with that of 1991 we can have a rough idea about what has happened to the spread of urbanization in each district overtime. Following this idea we find that, in all districts, rural population per town has increased. This means that comparatively a smaller number of rural people have been served by the urban centres of the districts in 1991 than in 1961.

However, while comparing between two different time periods, the result becomes a different one. A comparison between 1961 and 1971 shows the spread of urbanization to have been stagnated in the districts like Mayurbhanj, Dhenkanal, Phulbani, Bolangir and Puri. On the contrary, the rest of the districts have witnessed a decline in the magnitude of service extended by the urban areas to the rural mass in the same period. But no district could experience a rise as such. Between 1971 and 1981, only Sambalpur district witnessed a positive spread of urbanization as the rural population per town in this district decreased during this time. Districts like Sundargarh, Cuttack, Phulbani and Kalahandi remained unchanged in this regard whereas the other seven districts showed a negative change. Compared to 1981, in 1991 six districts out of thirteen, had come down with regard to spread of urbanization. Only one district, that is Sambalpur, had performed positively. The other six districts had faced with a stagnation in this regard.

Hence, one may conclude from the above that the magnitude of the spread of urbanization in terms of rural population per town has been on an uneven path throughout. Overall, in a majority of the districts it showed a decline.

### 2.3.3. Rate of Urban Growth

On the basis of urban growth rate, we can divide the districts into three categories. In category-1 we include the districts whose urban growth has increased between 1961-71 and 1981-91. Category-2 includes all the districts showing first a decrease then an increase and again a decrease in urban growth. In category-3 we include the districts having a continuous decline in their urban growth.

Table-2.16: Urban Growth Rate, Rural Growth Rate and Urban-Rural Growth Differential in the districts of Orissa, 1961-91.

State/ Districts	Urban Growth Rate			Rural Growth Rate			URGD		
	1961-71	1971-81	1981-91	1961-71	1971-81	1981-91	1961-71	1971-81	1981-91
Sambalpur	92.22	59.36	30.89	16.49	18.76	15.93	75.73	40.61	14.96
Sundargarh	76.55	70.78	28.26	27.01	17.38	12.93	49.54	53.40	15.33
Keonjhar	110.70	87.62	32.07	24.86	11.27	18.40	85.84	76.35	13.67
Mayurbhanj	40.57	126.62	28.40	18.60	6.96	18.57	21.98	119.66	9.83
Balasore	8.98	85.68	41.96	30.69	19.45	22.82	-21.71	66.23	19.14
Cuttack	46.51	55.75	42.57	23.51	17.91	16.64	23.01	37.84	25.93
Dhenkanal	10.03	138.77	52.15	26.51	17.47	17.93	-16.47	121.31	34.22
Phulbani	221.42	92.97	35.38	18.45	12.86	19.61	202.97	80.12	15.77
Bolangir	74.52	53.73	23.29	15.50	12.65	16.41	59.01	41.08	6.88
Kalahandi	97.92	42.42	29.04	12.87	13.67	18.89	85.06	28.75	10.15
Koraput	117.30	67.98	20.15	31.99	17.43	21.42	85.31	50.55	-1.27
Ganjam	66.74	46.38	23.69	18.48	12.56	17.42	48.26	33.82	6.27
Puri	71.77	88.56	63.40	21.92	-11.97	55.14	49.85	100.53	8.26
Orissa	66.30	68.54	36.16	22.26	15.73	17.91	44.04	52.82	18.25

Source: Same as Table-2.1.

As it is seen from Table-2.16, there is not a single district experiencing a continuous increase in its urban growth throughout the period. Only two districts viz., Balasore and Dhenkanal

are in the category-1. Both of them started with a very low growth rate of their urban population and registered a rapid rise during the seventies. But during the eighties both the districts suffered a decline. URGD also shows the same thing. Both the districts had a negative URGD during the sixties (i.e. -21.71 per cent for Balasore and -16.47 per cent for Dhenkanal), later picked up pace and then slowed down in the eighties.

Three districts namely Mayurbhanj, Cuttack and Puri come under the second category. All of them saw a high urban growth rate during 1971-81. During 1981-91 their urban growth rate declined and remained even below the rate of 1961-71. Of the three, Mayurbhanj is the odd-man-out in the sense that its urban growth became more than four fold during

Table-2.17: Concentration of Towns in Six-size Classes in the districts of Orissa, 1961-91.

State/ Districts	1961							1971							1981							1991						
	I	II	III	IV	V	VI	I-VI	I	II	III	IV	V	VI	I-VI	I	II	III	IV	V	VI	I-VI	I	II	III	IV	V	VI	I-VI
Sambalpur	0	0	1	4	2	0	7	0	1	3	2	5	0	11	1	2	3	3	1	0	10	1	3	1	4	0	0	9
Sundargarh	0	1	1	2	0	0	4	1	0	3	1	0	0	5	1	1	3	1	0	0	6	1	0	3	0	2	1	7
Keonjhar	0	0	0	2	0	0	2	0	0	1	2	1	0	4	0	0	4	0	1	1	6	0	0	4	1	1	1	7
Mayurbhanj	0	0	1	0	1	0	2	0	0	1	1	0	0	2	0	1	0	2	1	0	4	0	1	0	3	0	0	4
Balasore	0	0	2	2	1	0	5	0	0	2	0	2	0	4	0	2	1	2	1	0	6	1	1	2	2	1	0	5
Cuttack	1	0	0	3	3	0	7	1	0	2	2	3	0	8	1	0	6	2	0	0	9	1	0	6	2	3	1	13
Dhenkanal	0	0	0	2	2	0	4	0	0	0	3	1	0	4	0	0	1	5	2	1	9	0	0	3	4	4	0	11
Phulbani	0	0	0	0	1	0	1	0	0	0	1	1	0	2	0	0	0	1	1	0	2	0	0	1	1	1	0	3
Bolangir	0	0	0	1	4	0	5	0	0	1	3	2	0	6	0	1	1	4	1	0	7	0	1	1	4	1	0	7
Kalahandi	0	0	0	1	2	0	3	0	0	1	0	4	0	5	0	0	1	3	1	0	5	0	1	0	4	0	0	5
Koraput	0	0	1	3	2	1	7	0	0	4	2	3	1	10	0	1	3	6	4	0	14	0	2	3	6	3	0	14
Ganjam	0	1	1	0	6	2	10	1	0	1	5	7	1	15	0	0	1	0	9	1	20	1	0	1	14	4	0	20
Puri	0	1	1	2	1	0	5	1	1	1	1	1	0	5	1	0	2	2	3	0	9	2	1	1	6	2	0	12
Orissa	1	3	8	22	25	3	62	4	2	20	23	30	2	81	6	8	26	40	25	3	108	7	10	26	51	22	3	119

Source: Same as Table-2.1.

1971-81 compared to that of 1961-71. It was mainly due to the shift of Baripada town from class-III in 1971 to class-II status in 1981 and emergence of two new towns viz., Karanjia (class-IV) and Udala (class-V). This raised the urban population of the district from 0.40



lakhs to 0.91 lakhs between 1971 and 1981. In case of Cuttack and Puri, we do not find such a wide variation. URGD also follows the same tendency.

The rest of eight districts viz. Sambalpur, Sundargarh, Keonjhar, Phulbani, Bolangir, Kalahandi, Koraput and Ganjam (included in category-3), have faced a continuous decline in their urban growth throughout the period. They started from a high growth of their urban population in sixties but registered a low growth in eighties. Interestingly, Phulbani district showed the highest urban growth of 221.42 per cent during 1961-71 followed by Koraput and Keonjhar. The major reason for such high urban growth in these districts was the emergence of new towns. The highest urban growth shown by the district of Phulbani was due to the coming up of the district head-quatre town 'Phulbani' which led to more than three fold increase in its urban population in 1971 over that of 1961. The high growth rate of urban population in Koraput and Keonjhar districts was also brought about by increase in the number of towns. The number of towns increased from 7 to 10 in Koraput and from 2 to 4 in Keonjhar between 1961 and 1971. This resulted in their urban population of 1971 more than double that of 1961. A few large and medium scale industries in 1950s and 1960s under both public and private sector led to the emergence of such new urban centres in these districts. However, during the next decades of 1970s and 1980s, the spatial spread of new large and medium scale industries in the state was not given a momentum due to lack of initiatives on the part of both the public and the private sector. Consequently, such districts faced severe slackening in their urban growths after the sixties. Sundargarh, which leads all districts all the time in the degree of urbanization front, is also not an exception in this regard. From URGD also we get the same impression. Koraput is the only district in this category where rural growth rate outweighed that of urban during 1981-91 and thus resulted in a negative URGD of -1.27 per cent.

Thus, from the above, we found that some districts have acquired high urban growth in sixties and some in seventies. But the number of districts with high urban growth is more in 60's than in 70's. In fact, all the districts have realised slower growth rates in eighties as compared to the seventies.

### 2.3.4. Urban Concentration in the Districts

Keeping in mind the degree of urbanization, town density and urban growth performances of the districts we can now turn to their respective positions in urban concentration.

Table-2.18: Concentration of Population in the Six-size Classes of Towns in the Districts of Orissa, 1961-91.

State/ Districts	1961							1971						
	I	II	III	IV	V	VI	I-VI	I	II	III	IV	V	VI	I-VI
Sambalpur	0.0	0.0	33.7	52.9	13.4	0.0	100	0.0	33.6	35.8	13.8	16.8	0.0	100
Sundargarh	0.0	66.5	15.0	18.5	0.0	0.0	100	0.1	0.0	84.8	15.1	0.0	0.0	100
Keonjhar	0.0	0.0	0.0	100.0	0.0	0.0	100	0.0	0.0	36.1	54.5	9.4	0.0	100
Mayurbhanj	0.0	0.0	71.4	0.0	28.6	0.0	100	0.0	0.0	71.9	28.1	0.0	0.0	100
Balasore	0.0	0.0	64.4	25.3	10.2	0.0	100	0.0	0.0	86.6	0.0	13.4	0.0	100
Cuttack	70.1	0.0	0.0	20.7	9.2	0.0	100	0.2	0.0	44.3	30.5	24.9	0.0	100
Dhenkanal	0.0	0.0	0.0	62.6	37.4	0.0	100	0.0	0.0	0.0	82.5	17.5	0.0	100
Phulbani	0.0	0.0	0.0	0.0	100.0	0.0	100	0.0	0.0	0.0	54.6	45.4	0.0	100
Bolangir	0.0	0.0	0.0	37.6	62.4	0.0	100	0.0	0.0	41.2	42.0	16.7	0.0	100
Kalahandi	0.0	0.0	0.0	50.0	50.0	0.0	100	0.0	0.0	41.1	0.0	58.9	0.0	100
Koraput	0.0	0.0	32.9	45.6	18.0	3.6	100	0.0	0.0	65.1	15.8	16.2	2.9	100
Ganjam	0.0	49.4	14.6	0.0	31.6	4.4	100	45.3	0.0	10.4	22.1	20.8	1.4	100
Puri	0.0	45.6	28.6	21.4	4.4	0.0	100	46.0	31.7	13.0	6.9	2.3	0.0	100
Orissa	13.2	20.5	20.3	28.0	17.1	0.9	100	30.0	8.0	31.7	17.1	12.7	0.5	100

State/ Districts	1981							1991						
	I	II	III	IV	V	VI	I-VI	I	II	III	IV	V	VI	I-VI
Sambalpur	31.9	30.8	24.0	10.6	2.7	0.0	100	81.8	0.0	5.3	12.7	0.0	0.0	100
Sundargarh	52.4	23.5	21.2	3.0	0.0	0.0	100	76.0	0.0	19.7	0.0	3.4	0.9	100
Keonjhar	0.0	0.0	88.6	0.0	7.5	3.8	100	0.0	0.0	87.1	6.8	3.4	2.7	100
Mayurbhanj	0.0	58.5	0.0	33.6	7.9	0.0	100	0.0	59.6	0.0	40.4	0.0	0.0	100
Balasore	0.0	68.0	10.8	17.1	4.2	0.0	100	38.6	29.0	18.2	11.2	3.1	0.0	100
Cuttack	62.0	0.0	33.0	5.0	0.0	0.0	100	64.9	0.0	28.0	4.1	2.6	0.4	100
Dhenkanal	0.0	0.0	28.8	59.1	8.4	3.6	100	0.0	0.0	52.0	29.6	18.4	0.0	100
Phulbani	0.0	0.0	0.0	54.6	45.4	0.0	100	0.0	0.0	53.1	30.2	16.6	0.0	100
Bolangir	0.0	41.2	16.1	37.4	5.2	0.0	100	0.0	42.6	15.7	37.2	4.5	0.0	100
Kalahandi	0.0	0.0	47.0	40.7	12.3	0.0	100	0.0	49.1	0.0	50.9	0.0	0.0	100
Koraput	0.0	19.2	38.4	32.0	10.4	0.0	100	0.0	34.9	31.6	28.1	5.4	0.0	100
Ganjam	42.7	0.0	8.5	28.0	19.6	1.2	100	44.7	0.0	7.8	40.6	6.9	0.0	100
Puri	74.1	0.0	14.8	5.4	5.6	0.0	100	76.0	7.1	4.3	10.3	2.2	0.0	100
Orissa	19.7	19.7	30.4	21.7	7.9	0.6	100	44.4	14.7	19.7	17.0	3.9	0.3	100

Source: Same as Table 2.1.

**(a) Concentration in the districts having high urban growth during 1971-81:** It is found that high urban growth in the district of Balasore was mainly contributed by class-II and class-III towns. In 1971, there were three class-III towns out of four which were giving shelter to around 87 per cent of the total urban population of the district. By 1981, in this district, class-II towns were sharing 68 per cent of the urban population. On the other hand, class -IV towns were playing a more important role in the urban growth of Dhenkanal district. These towns had 82.5 per cent of the urban population of the district (Dhenkanal) during seventies and they were dominant even by 1981. Class-II, III and IV towns were playing the major rôle in the urban growth scene of Mayurbanj district during the seventies. Cuttack shows a somewhat different pattern in this regard. In 1971, this district witnessed a large portion of its urban people living in class-III towns ( i.e. 71.9 per cent ). But during 1981 dominance was shifted to class-I towns which shared 62 per cent of the urban population. This was followed by class-III towns where 33 per cent of urban population of the district were living. The same trend also continues up to 1991.

In Puri district, class-II towns were dominant in 1961 with a more or less equal participation of both class-III and IV towns. But during 1971 and 1981 class-I towns were mainly responsible for high urban growth. This was due to the coming up of Bhubaneswar as a class-I town in 1971.

**(b) Concentration in the districts having continuous decline in urban growth:** Considering Sambalpur first in this category, it is seen that dominance in the urban process of the district has been graduating towards the higher classes of towns. For example in 1961, class-IV towns were sharing around 53 per cent of the urban population followed by class-II towns. In 1971, class-III and class-II towns appeared to be major contributors to urban growth

while in 1981 class-I towns emerged with nearly 32 per cent of the district's urban population. In 1991 also a large part of the urban population was in class-I towns. This shows that, by the passage of time, smaller size classes of towns transfer to bigger size classes in Sambalpur district. In Sundargarh district also the same pattern is exhibited but with only difference that some new towns have emerged in this district during 80's. In the district of Keonjhar 100 per cent of the urban people were only in class-IV towns during 1961. Of course the process of graduation took place but at the same time also emergence of small towns played an important role in the urban process of this district. Districts like Phulbani, Bolangir, Kalahandi and Koraput are also showing more or less the same pattern for urban concentration overtime. However, in this regard, Ganjam is different. In 1961, Berhampur was the only class-II town having 49.4 per cent of the urban population of the district. This was promoted to be a class-I town in 1971. Since then there have been no class-II towns in the district. Moreover, urban population in these districts is seen to have been distributed among the lower classes of towns throughout. From the district level analysis the following points emerge.

The degree of urbanization had been on rise in almost all the districts overtime. It was increasing faster upto eighties and slowed down thereafter. Town density follows almost the same path. The magnitude of spread of urbanization was uneven throughout. But overall, a majority of the districts had shown a decline.

No district experienced a continuous urban growth all the time. In some districts it was high during sixties and a majority had it high during seventies. But in none of the districts urban growth rate was higher in the eighties than in the previous decades. Most of the districts where urban growth rate was high during 1971-81 had a considerably larger portion of their

urban population concentrated in the upper class towns (i.e. in class-I to class-III). On the other hand, districts with continuous decline in urban growth showed more people concentrated in medium and small towns.

The discussion on the patterns of urbanization in the state of Orissa can be summarised as follows. The process of urbanization was taking place in Orissa since the beginning of the century with increasing number of towns and urban population. The spread of urbanization had also been increasing being reflected by a rise in town density and number of towns per lakh population.

Although the level of urbanization had been low its pace was increasing overtime. It reached a pick during the fifties (86.86 percent). During sixties and seventies urban growth was also high but it had slowed down during eighties.

Taking towns with population of 20,000 and above it is seen that both the degree of urbanization and rate of urbanization were high during sixties and seventies. Both of them had slowed down during eighties.

As far as urban concentration is concerned, the role of large towns had been increasing especially from fifties onwards while the importance of small towns was declining with a fluctuating tendency in the case of medium towns. Urban Agglomerations had shown a deterioration both in percentage share of towns and population. But it was just opposite in the case of isolated towns. In the urban scene of Orissa, a major role was played by the Class-I towns since the sixties. Their percentage share in total urban population was increasing fast right from 1961 onwards.

A lion's share in the urban growth of Orissa was contributed by the intensive component (i.e., natural increase in and net migration to urban areas) followed by the reclassification component. In percentage terms, the share ranges between 70 to 90 during 1961 and 1991.

There was little difference between the Coastal and the Inland regions of the state with regard to degree of urbanization. But in absolute terms near about half of the urban population of Orissa are found only in the four coastal districts throughout. It is for the reason that the region also shared almost half of the total population of the state all the time. A sudden rise in the ratio of urban population to total population was marked during sixties in the coastal areas while the same happened in the inland region during seventies. Town density showed a continuous rise in both the regions and that, too, always at a higher level in coastal region.

Both the urban growth as well as URGD were high in inland region during 1961-71 and in coastal region, during 1971-81. Since rural growth rate was also small, a sort of rural-urban migration could have supported the urban growth during these periods in the two regions. There was a continuous fall of urban growth in inland region since 1960s while the coastal region experienced a discontinuous growth of urbanization overtime.

There was a continuous decline in the urban concentration of UAs and rise in urban concentration of isolated towns in the coastal region throughout while the reverse happened in the inland region. Urban population was highly concentrated in class-I towns in the coastal region. But in the inland region, it was more evenly distributed among all the size classes of towns during the whole period.

The degree of urbanization was increasing in almost all the districts overtime. It was increasing faster up to early eighties and slowed down thereafter. Town density followed almost the same path. The magnitude of spread of urbanization had been uneven throughout. But overall, a majority of the districts had shown a slackening.

Hardly any district experienced a continuous urban growth all the time. In some districts it was high during the sixties and a majority had it high during the seventies. But in none of the districts urban growth rate was higher in the eighties as compared to earlier decades. Most of the districts where urban growth rate was high during 1971-81 had a considerably larger portion of their urban population concentrated in the upper class towns (i.e, in class-I to class-III). On the other hand, districts with continuous decline in urban growth show more people getting concentrated in medium and small towns.

# **CHAPTER-III**

## **Migration and Urban Patterns:**

### **An Analysis**

#### **Introduction**

In the previous chapter we observed the major patterns of Urbanization at the state, regional and district levels of Orissa since the sixties. The main finding is that although, in the state, the level of urbanization has been low, the urban growth rate has been fast; urban growth showed an increase up to seventies and thereafter it had slowed down. More importantly, the Inland region had witnessed a continuous decline in urban growth whereas in the coastal area it was most discontinuous. Also, in some of the districts it was high during the sixties and seventies. None had experienced an increase in the eighties. However, the major sources of urban growth were natural increase and positive net migration to urban areas. The present chapter presents an analysis of the role of migration in determining the observed urban patterns.

#### **Section-1**

##### **3.1.1. Natural Increase or Net Migration?**

It has always been a debatable question as to which of the two sources viz., natural increase and net migration, contributes more towards urbanization. The answer entirely depends on how one defines "urbanization experience". If urban growth is understood in terms of the increase in the number of people living in urban settlements, obviously, the rate of natural



increase matters a great deal to the growth. But if Urbanization is meant a rise in the proportion of people living in urban settlements, the role of natural increase becomes secondary [Rogers and Williamson (1982)]. Here the importance of migration in explaining the process of Urbanization becomes quite visible. Even if urban growth is defined as the number of people living in urban settlements, natural increase is not a suitable measure to explain it due to a number of limitations. As Rogers (1982) argued on the basis of his empirical study, in the third world countries, fertility of urban women is lower than that of rural women. Furthermore, rural mortality exceeds urban mortality and there is no significant difference between the rate of natural increase in urban areas and that in rural areas. Hence, it is clear that Urbanization should not be explained by differentials in natural increases alone. On the contrary, all of the measured Urbanization in the third world must be accounted for by in-migration to the cities and towns. M P Todaro (1979) also strongly supports the fact that migration explains urban growth better than natural increase. Following his argument, sometimes the statistics of natural increase may be seen to be better than the net migration but one should admit that migration, in disguise, is a substantial contributor to urban natural growth. To quote him, "Urban in-migrants as a group are predominantly of child bearing ages and the urban natural rate should reflect that fact. The age composition alters the projections in favour of migration as a contributor to urban growth" [Todaro (1979)].

All these arguments inevitably suggest that attention should be devoted more to migration as a source of Urbanization than natural increase in the developing nations of the world. Since the urban growth of these nations is also significantly affected by a high natural growth of population it should also be taken note of. However, in this chapter, as mentioned earlier, we will concentrate on the role of migration in the observed patterns of

Urbanization in the state. To analyze the role of migration we decompose intensive component into natural increase (Ni) and net migration (Nmi). For this purpose we make use of the method explained below.

### **3.1.2. The Method**

While doing a Component analysis in chapter-2, we used the following formula for calculating urban growth:

$$U_r = I + E + (-D)$$

where  $U_r$  stands for Urban Growth Rate; I for Intensive Component; E for Extensive Component; and D for Declassification Component.

Since the Intensive Component (I) consists of natural increase and net migration, the decomposition method drawn from the above formula will be of the following form:

$$U_r = \{N_i + N_{mi} + E - D\}$$

where  $N_i$  stands for natural increase;  $N_{mi}$  for net-migration, E for Extensive component and D for Declassification of towns.

Thus, the above method decomposes urban growth into natural growth and net migration inclusive of extensive component and declassification component. In fact, the extensive component is a combination of two sub-components viz. reclassification of towns and extension of boundaries of the existing towns. Since data for extension of boundaries is difficult to get, the usual practice is to exclude it from the extensive component and consider only the effect of the emergence of new towns i.e, reclassification of towns (R). We, here, also follow the same path.

### 3.1.3. Obtaining Net Migration

In the decomposition formula, we know the values of all variables other than that of natural increase (Ni) and net migration (Nmi). Once the value of natural increase is known, net migration value can be obtained by deducting natural increase, extensive component and declassification component values from the total urban growth.

The usual definition of natural increase of population of a particular area is the number of births over deaths. Hence, natural increase in urban areas should also be obtained from the birth and death statistics known as vital statistics. But the quality of vital statistics is too poor and unreliable to depict the reality. Non-availability of district wise information is also another serious problem in this regard. On the other hand, as discussed earlier, there is not at all a significant difference between the rate of natural increase in urban areas and that in the rural areas of the developing countries. We may, assuming that the natural growth rate of rural, urban and hence total population are same, that the total population growth rate is its natural growth rate, take the growth rate of total population as a proxy for natural growth rate of urban population. Thus, the rate of urban natural increase is obtained from the following formula.

$$Ni = [(TP_1 - TP_0)/TP_0]100$$

where Ni = Natural increase in urban areas; TP<sub>1</sub> = Total population in the current census year; and TP<sub>0</sub> = Total population in the previous census year.

Now from the component equation net migration can be found out in the following way.

$$Ur = Ni + Nmi + (R - D)$$

or 
$$Nmi = Ur - Ni - (R - D)$$

or 
$$Nmi = Ur - Ni - R + D$$

### **3.1.4. Drawbacks of the Method**

Considering natural growth rate of total population as a proxy for natural growth in urban areas is based on the following two assumptions:

- (i) The inter-state migration does not play a significant role in the population growth of the state. Also at the district and regional levels, this method assumes that there is no inter-regional and inter-district migration. However, this problem can be overcome by taking the natural growth rate of state as the natural growth rate of urban population at the regional and district levels.
- (ii) There is no significant difference between the rural and urban areas in terms of natural growth rate.

The method we use for obtaining net migration is limited by the above two assumptions. However, in view of the quality of data obtainable from Vital Statistics and Sample Registration System, one may not find sufficient clue to reject this method in favour of any other method that uses data from the above mentioned organisations. Another limitation of this method is that it does not reflect international migration as a part of net migration which, obviously, leads to a little over estimation of net migration.

## **Section-2**

### **Migration and Urbanization in Orissa**

Here we aim at analyzing the role of migration in the prevalent Urbanization patterns at the state as well as regional levels. The subsequent section will take care of the district level analysis. It can be seen from Tables-3.1 and 3.2 that natural increase was the dominant

source of urban growth in the state during sixties and eighties whereas in seventies, net migration out numbered natural increase. During seventies, the state witnessed a 56.08 percentage share of the net migration component which is a fairly high contribution to the state's urban growth as against 22.76 percentage shared by natural increase. The absolute figures (given in Table-3.1) also display more or less the same fact. Such a significantly high net migration was mainly due to high net migration to urban areas of the Inland region under which comes Sundargarh, the most industrialised district of the state. For instance, whereas net migration in the Coastal areas was only 44.01 per cent, in the Inland areas it was more than sixty per cent during the same period. This suggests that the Inland region shared fairly a larger segment of the state's urban growth compared to the Coastal region in terms of net migration during the seventies. Another important observation is that, between the other two periods (i.e., sixties and eighties) when natural increase dominated over net migration, it was during the sixties that a very small difference between these two components is noticed unlike in the eighties when the difference had widened.

Table-3.1: Components of Urban Growth in the State and Regions, 1961-91.

State/ Regions	Years	Components				
		Ur	Nmi	Ni	E	D
Orissa	1961-71	66.30	22.46	25.04	20.70	1.90
	1971-81	68.54	38.44	15.60	14.90	0.40
	1981-91	36.33	7.44	24.79	5.70	1.60
Coastal	1961-71	34.75	3.28	26.19	8.06	2.78
	1971-81	85.41	37.59	15.04	17.74	0.00
	1981-91	43.77	11.35	27.28	7.36	2.18
Inland	1961-71	83.08	24.88	24.05	35.10	0.95
	1971-81	71.85	43.55	16.10	12.88	0.68
	1981-91	29.85	3.58	22.61	4.67	1.01

Source: Census of India, 1961: "General Population Tables", Part II-A, Orissa.  
 Census of India, 1971: "General Population Tables", Part II-A, Orissa.  
 Census of India, 1981: "General Population Tables", Part II-A, Orissa.  
 Census of India, 1991: "Final Population Totals", Paper-I of 1992, Vol.II, India.

The share of natural increase and net migration in the total urban growth during the sixties were 37.77 and 33.88 in percentage terms and hence the difference was only about 3.89 percentage points. However, in eighties, the difference came down to around 48 percentage points. This means that in the eighties, unlike in the previous two decades, natural increase played comparatively a more important role in the urban growth of Orissa. The dominance of natural increase over net migration was very small in the sixties and in the seventies it was shifted to net migration unprecedentedly.

Table-3.2: Percentage Share of Components in Total Urban Growth of the State and Regions, 1961-91.

State/ Regions	Years	Components				
		Ur	NMi	Ni	E	D
Orissa	1961-71	100	33.88	37.77	31.22	2.87
	1971-81	100	56.08	22.76	21.74	0.58
	1981-91	100	20.48	68.24	15.69	4.40
Coastal	1961-71	100	9.44	75.37	23.19	8.00
	1971-81	100	44.01	17.61	20.77	0.00
	1981-91	100	25.93	62.33	16.82	4.98
Inland	1961-71	100	29.94	28.95	42.25	1.14
	1971-81	100	60.61	22.41	17.93	0.95
	1981-91	100	11.98	75.76	15.64	3.38

Source: Same as Table-3.1.

From the regional level analysis, it is quite evident that the Inland region maintained more or less the same sequence as that of the state. Although the Coastal region failed to do so, net migration in this region increased sharply from 9.44 to 44.01 per cent, during 1961-71 to 1971-81. But the magnitude of net migration as a source of urban growth in the state slowed down during the eighties. From the above observations, could we infer that the increasing role of net migration in urban growth during seventies was due to development of the major sectors of the economy? If so, from among the three sectors-primary,

secondary and tertiary, which was the leading one? Do the decreasing role of net migration and increasing role of natural increase on urban growth of Orissa during the eighties suggest that economic development of the state slowed down during this time as compared to the earlier decades? Hence, after analyzing the role of net migration in the urban growth, one may find it interesting to look at the behaviour of in-migration, out-migration and their internal and external aspects.

Table-3.3: In-migration, Out-migration and Net-migration in the State and Regions of Orissa, 1961-81.

State/ Regions	Years	In-mig- ration	Out-mig- ration	Net-mig- ration
Orissa	1961-71	8.08	5.58	2.50
	1971-81	20.26	13.06	7.20
Coastal	1961-71	3.63	2.41	1.22
	1971-81	9.62	6.17	3.45
Inland	1961-71	4.89	3.79	1.10
	1971-81	12.81	9.00	3.80

Note: Numbers are in lakhs.

Source: Census of India, 1961: "Cultural and Migration Tables", Part II-C, Orissa.  
Census of India, 1971: "Migration Tables" Part II-D, Orissa.  
Census of India, 1981: "Migration Tables (D-Series Tables) Part-V, Orissa.

Table 3.3 shows that during sixties 8.08 lakh people had immigrated to the urban areas of Orissa whereas 5.58 lakh persons were out-migrants. Thus, the resultant net addition to the total number of urban habitats of the state was 2.5 lakhs. It seems, during the same census period, out-migration was relatively more in the Inland region than in the Coastal region. The Coastal region, which consists of only four out of thirteen undivided districts of the state, could see 1.22 lakh net migrants whereas the Inland, having the rest of the nine districts, could experience a net migration of 1.1 lakhs to its urban settlements during the same period. However, during the seventies, there was a significant increase in the

magnitude of in-migration for the state as well as in both the regions. So was the case of net migration. Out migration (from the urban areas) also went up very sharply. Since the gap (i.e., net migration) appeared to be nearly three fold over the previous decade, undoubtedly, the state had a relatively better quantum of in-migration over out-migration during this time. A part of such a high in-migration could be attributed to the Indo-Bangladesh war in the early 1970s. During this time Orissa witnessed a large influx of Bangladeshi refugees who moved to the different urban centres of the state and settled. Both the regions had, more or less, the same experience. Net migration, in the Coastal areas, went up from 1.22 to 3.45 lakhs and that in the Inland areas, from 1.1 to 3.8 lakhs between sixties and seventies. Having seen the resultant increase in net migration, could we assume that all the districts have played equal role in receiving in-migrants? If not, could it be due to inter-district development disparities?

As said above, in-migration to the urban areas of Orissa and its regions showed tremendous rise in the seventies. In view of this, the internal and external<sup>3</sup> aspects of in and out migration will give us some insights. Table-3.4 presents an analysis on the internal and external in-migration to the urban areas of the state and regions. It is evident from the table 3.4 that, in both the decades (i.e., 60s and 70s), it is the internal in-migration which was dominant over external in-migration for the state as well as for the regions. Internal in-migration (which, here, means only rural-urban migration) had always been around twice

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<sup>3</sup> Internal in-migration is defined as the movement of people from rural to urban areas within a particular geographical unit. Internal out-migration, on the other hand, is just the reverse movement, that is, movement from urban to rural areas.

External in-migration to urban areas of the geographical unit in question takes into account migration from outside that unit only and the reverse movement is considered as external out-migration.



the external in-migration for the state as a whole. For example, total number of in-migrants to the urban areas in the state during 1961-71 was 8.08 lakhs out of which 5.16 lakhs were from within the state itself. Only 2.92 lakhs were migrants from outside the state; especially from other states. During 1971-81 also, out of a total of 20.26 lakh in-migrants, 13.90 lakhs were internal and only 6.36 lakhs were external.

**Table-3.4: Internal and External In-migration to the Urban Areas of the State and Regions of Orissa, 1961-81.**

State/ Regions	Years	Total In-mig- ration	Internal In-mig- ration	External In-mig- ration
Orissa	1961-71	8.08	5.16 (64)	2.92 (36)
	1971-81	20.26	13.90 (69)	6.36 (31)
Coastal	1961-71	3.63	2.90 (80)	0.73 (20)
	1971-81	9.62	7.66 (80)	1.96 (20)
Inland	1961-71	4.89	3.09 (63)	1.80 (37)
	1971-81	12.81	8.90 (70)	3.91 (30)

Note: 1. Absolute numbers are in lakhs.  
2. Numbers in parentheses are percentages to total.

Source: Same as Table-3.3

The regions also show fairly high internal in-migration compared to external in-migration. It is clear from the above that internal in-migration (or more conveniently rural-urban migration) was the major component of the increased in-migration to urban areas of the state and the regions of Orissa during the seventies and, thereby, played the most important role in their urban growth and Urbanization then.

It is always true that, in an over populated agrarian economy, people are generally pushed to the urban sector for livelihood. Internal in-migration in such economies, therefore, is nothing but a rush of people with very less or even zero marginal productivity from the

agricultural sector to the job-expected modern sector. Current and/or expected income differential also contributes towards population movement from the rural to the urban or modern sector.

In the light of these arguments the foregoing observation is prone to the following questions. Was the high in-migration vis-a-vis urban growth during the seventies followed by some sort of sectoral diversification in the state economy? Did any pull factor act upon the high increase in internal in-migration to the urban settlements of the state? It is important to note that although, in absolute terms, external and internal in-migration in both the regions have shown high increase during the sixties and the seventies, their share to total in-migration had been stagnant in the case of the coastal region. In the case of the Inland region, during the seventies, the share of the external in-migration has come down while that of internal in-migration has gone up compared to the earlier census.

It is not only in-migration, but also out-migration that influences urban growth and Urbanization to a greater extent. As has been observed so far, out-migration has been increasing along with the rise in in-migration in the state as well as across its regions. In this context the dimensions of out-migration are worth observing. Table-3.5 provides some insights on the internal as well as external aspects of out-migration from the urban areas of the state and regions.

It is seen that external out-migration has been higher than internal out-migration in the state as well as in the regions throughout the period. The increase has been significant during the seventies as compared to the sixties. Such high out migration of urban people from Orissa to outside has been a major retarding factor against the urban process of the state

overtime. Why is such a large outflow of urbanites from Orissa? There could be two major reasons: first, it could be due lack of livelihood sources in the urban areas of the state and second, due to better wage and employment prospects outside the state.

**Table-3.5: Internal and External Out-migration from the Urban Areas in the State and Regions of Orissa, 1961-81.**

State/ Regions	Years	Total Out-mig- ration	Internal Out-mig- ration	External Out-mig- ration
Orissa	1961-71	5.58	1.14 (20)	4.44 (80)
	1971-81	13.06	1.95 (15)	11.11 (85)
Coastal	1961-71	2.41	0.37 (15)	2.04 (85)
	1971-81	6.17	0.59 (10)	5.58 (90)
Inland	1961-71	3.79	0.56 (15)	3.23 (85)
	1971-81	9.00	0.79 (9)	8.22 (91)

Note: Same as Table-3.4.

Source: Same as Table-3.3

As per Orissa's development experience, the former is a stronger factor determining external out migration of urban population. A beggar has hardly any choice. A person leaving his own place out of desperation seldom becomes choosy in employment in the place where he moves into. Hence, it is the push- not pull-factors which seem to be more important in causing external out-migration from the urban areas of Orissa- a poor state where even the so called urban part has not flourished much.

Thus, we find Urban Orissa in a situation where both in-migration and out-migration are high; high in-migration is largely supported by high internal in-migration and high out-migration is mainly due to external out-migration. For a better understanding of the reasons of internal in-migration as well as external out-migration, we rely on the empirical facts provided in the following chapter.

## Section-3

### 3.3.1. District Level Analysis

As seen earlier, net migration played the major role in the urban growth of the state and regions of Orissa during the seventies. Now to look at the district level position. Tables-3.6 and 3.7 represent the district wise urban growth components during the period 1961-71 to 1981-91.

As observed from the tables, almost all the districts depict the same pattern as that of the state in terms of net migration as a source of urban growth. That is, in case of a majority of districts Urbanization was mainly supported by net migration during the seventies. On the other hand, natural increase and extensive component played relatively more important roles in the urban growth of the districts during the sixties and the eighties. The district of Puri recorded the highest percentage share of net migration (64%) during 1961-71. Dhenkanal was at the bottom with -157 percentage share. The district of Balasore which was sixth in terms of degree of Urbanization experienced a negative net migration of -28 percentage during the same period. This is, however, contradictory to the usual belief that a high degree of Urbanization is more supported by high net migration. An attempt to arrange the districts in ascending order on the basis of their performance in the share of net migration in urban growth will reveal the following results. During the sixties the positions of the districts were: 1. Puri (64%), 2. Bolangir (58%), 3. Mayurbhanj (53%), 4. Sambalpur (49%), 5. Cuttack (34%), 6. Kalahandi and Ganjam (27% each), 7. Koraput (19%), 8. Phulbani (11%), 9. Sundargarh (8%) 10. Kalahandi (7%), 11. Balasore (-28%) and 12. Dhenkanal (-157%).

Table-3.6: Components of Urban Growth in the Districts of Orissa, 1961-91.

State/ Dists.	1961-71					1971-81					1981-91				
	Ur	Nmi	Ni	E	D	Ur	Nmi	Ni	E	D	Ur	Nmi	Ni	E	D
Sambal	92	45	22	25	0	59	39	24	0	3	31	6	18	7	0
Sundar	77	6	36	35	0	71	36	30	5	0	28	5	18	6	0
Keonjh	111	8	29	74	0	88	50	17	21	0	32	8	20	5	0
Mayurb	41	21	19	0	0	127	61	10	55	0	28	9	19	0	0
Balaso	9	-2	29	0	18	86	24	23	39	0	42	11	24	7	0
Cuttac	47	16	27	3	0	56	25	21	10	0	43	14	19	16	7
Dhenka	10	-16	26	0	0	139	53	22	63	0	52	25	21	15	8
Phulba	221	25	21	175	0	93	43	15	34	0	35	15	20	0	0
Bolang	75	43	18	13	0	54	26	15	13	0	23	6	17	0	0
Kalaha	98	26	15	57	0	42	27	15	0	0	29	10	20	0	0
Korapu	117	22	36	65	0	68	25	22	22	0	20	-1	21	2	2
Ganjam	67	18	22	26	0	46	14	16	16	0	24	5	18	0	0
Puri	72	46	26	0	0	89	73	-2	17	0	63	2	57	5	0
Orissa	66	22	25	21	2	69	38	16	15	0	36	7	25	6	2

Source: Same as Table-3.1.

Except two districts viz., Mayurbhanj and Bolangir, in all other districts, the share of net migration in their urban growth appeared to have increased during the seventies compared to the sixties. The order of the districts according to their performance with regard to net migration to urban areas during this period is: 1. Puri (83%), 2. Sambalpur (66%), 3. Kalahandi (65%), 4. Keonjhar (57%), 5. Sundargarh (51%), 6. Mayurbhanj and Bolangir (48% each), 7. Phulbani (47%), 8. Cuttack (44%), 9. Dhenkanal (38%), 10. Koraput (36%), 11. Ganjam (30%) and 12. Balasore (28%). During the eighties, the role of net migration in the urban process declined in all the districts leaving only the district of Dhenkanal. At the same time, the role of natural increase and extensive component (i.e., emergence of new towns) appeared to be more important in the urban growth scene of the districts. However, to arrange the districts in order of the position of net migration in their urban growth: 1. Dhenkanal (48%), 2. Phulbani (42%), 3. Cuttack (34%), 4. Mayurbhanj and Kalahandi (33% each), 5. Bolangir (27%), 6. Balasore (25%), 7. Keonjhar (24%), 8. Ganjam (23%), 9. Sambalpur and Sundargarh (18% each), 10. Puri (3%) and 11. Koraput (-4%).

Table-3.7: Percentage Share of the Components in Total Growth in the Districts of Orissa, 1961-91.

State/ Dists.	1961-71					1971-81					1981-91				
	Ur	Nmi	Ni	E	D	Ur	Nmi	Ni	E	D	Ur	Nmi	Ni	E	D
Sambal	100	49	24	27	0	100	66	40	0	5	100	18	59	23	0
Sundar	100	8	47	45	0	100	51	42	7	0	100	18	62	20	0
Keonjh	100	7	26	67	0	100	57	19	24	0	100	24	62	14	0
Mayurb	100	53	47	0	0	100	48	8	44	0	100	33	67	0	0
Balaso	100	-28	326	0	199	100	28	27	45	0	100	25	58	16	0
Cuttac	100	34	59	7	0	100	44	38	18	0	100	34	45	37	16
Dhenka	100	-157	257	0	0	100	38	16	46	0	100	48	39	28	16
Phulba	100	11	9	79	0	100	47	16	37	0	100	42	58	0	0
Bolang	100	58	24	17	0	100	48	29	24	0	100	27	73	0	0
Kalaha	100	27	16	58	0	100	65	35	0	0	100	33	67	0	0
Korapu	100	19	31	55	5	100	36	32	32	0	100	-4	106	10	11
Ganjam	100	27	34	39	0	100	30	35	34	0	100	23	77	0	0
Puri	100	64	36	0	0	100	83	-2	20	0	100	3	89	8	0
Orissa	100	34	38	31	3	100	56	23	22	1	100	20	69	16	4

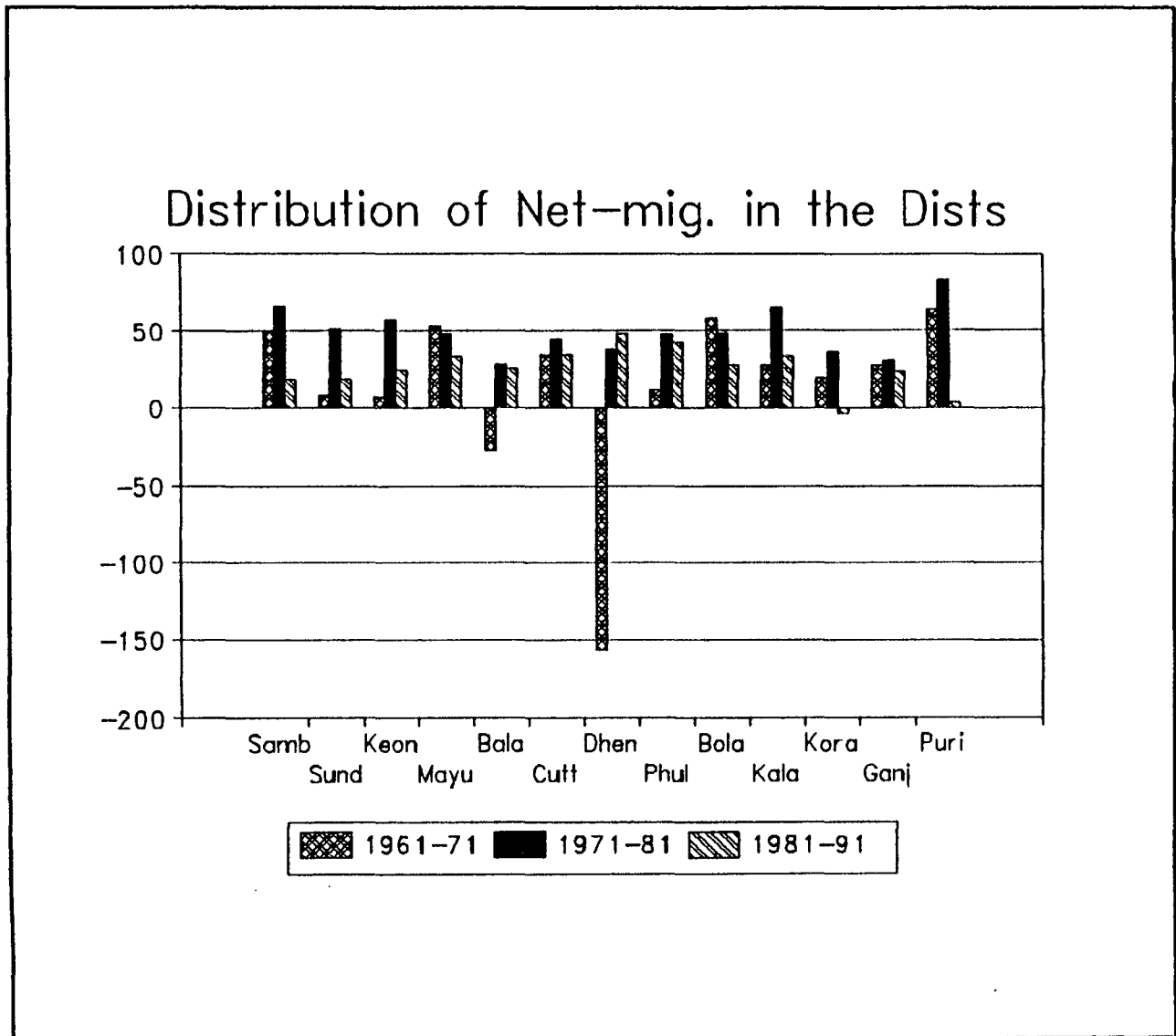
Source: Same as Table-3.1

While discussing the urban patterns in the second chapter, we had seen that urban growth of Orissa was low during sixties; during seventies it increased and then in eighties it showed a decline. Here also we find the ratio of net migration to urban growth of the state to follow the same pattern. Hence, one could argue that urban growth rate and the rate of net migration are positively related in the state and the relationship is more of a causal type; net migration being the cause and urban growth rate, the effect.

From Figure 3.1, it is clear that the variation of distribution of net migration among the districts was very high during 1961-71 as compared to the later two decades. The difference between the highest and the lowest net migration rates was 221 percentage points during the sixties. During the seventies, the difference came down to 128 percentage points. It further came down sharply to 52 percentage points during the eighties which, of course, is less than the rate at which it came down in the previous decade. The extent of the district net migration rates around the state average has also been demonstrating a continuous

improvement all through the period. Hence, one can say, from the above observations, that there has been a better distribution of net migration among the districts of Orissa over time. This, to some extent, reflects a steady reduction in the urban development disparities among the districts.

Figure 3.1



A comparable study of the three decades, in this context, would reveal the following facts:

- (a) During the 60's, the variation of distribution of the net migration among the districts was very high and that, too, at a situation of low state average.

- (b) The seventies witnessed a very low variation compared to the sixties along with a comparatively higher state average.
- (c) In case of the eighties, variation was still lower and the state average was also very low in comparison to the previous census periods.

Hence, it is quite obvious that, of all the three census decades in question, seventies was the best period for Orissa and her districts as far as Urbanization vis-a-vis net migration is concerned. Let us now move a step forward to see the district wise absolute statistics on in-migration, out-migration and net-migration.

### **3.3.2. In-migration, Out-migration and Net-migration**

Table 3.8 provides the absolute figures on in, out and net migration to the urban areas of the districts of Orissa. The most interesting point emerging from the information provided in the table is that districts having high in-migration also experience high out-migration both in sixties and seventies. Let us consider first the case of the sixties. During this period, Sundargarh and Cuttack, the districts being in ninth and fifth position with regard to net migration, were the first and second in terms of in-migration. As per out migration, these two were also in the first and second place respectively. As a consequence, the net addition of migration to the urban areas of these districts appeared to be very low. For instance, the districts of Sundargarh saw the highest influx of migrants to the extent of 1.54 lakhs. During the same period also, it witnessed the highest out migration to the extent of 14.6 lakhs. Thus the resultant net migration to its urban areas were only to the extent of 0.8 lakhs. The same also happened to Cuttack. During the 60's, 1.25 lakh persons in-migrated to the different towns of this district. But at the same time 0.91 lakh persons out migrated from



the towns of the same district. Consequently, the district came down from 2nd position in terms of in-migration to 5th position in terms of net migration during that period.

On the contrary, a district like Puri, which had lower in-migration than Sundargarh and Cuttack during the sixties, did also see lower out migration. As a result, it became the number one district as regards the contribution of net migration to the district's urban growth. Bolangir and Sambalpur are some more examples in this regard. Phulbani was the district having the least number of immigrants (10 thousands). However, so far as net migration is concerned, Dhenkanal was at the bottom having 0.19 lakh in-migrants and 0.27 lakh out-migrants and thus a net of 0.08 lakh migrants.

Table-3.8: In-migration, Out-migration and Net-migration in the Urban Areas in the Districts of Orissa, 1961-81. (figures in lakhs)

State/ Dists.	In-migration		Out-migration		Net-migration	
	1961-71	1971-81	1961-71	1971-81	1961-71	1971-81
Sambalpur	1.10	2.69	0.57	1.84	0.53	0.86
Sundargarh	1.54	3.88	1.46	3.02	0.08	0.86
Keonjhar	0.34	0.96	0.31	0.63	0.02	0.33
Mayurbhanj	0.20	0.63	0.14	0.38	0.06	0.25
Balasore	0.36	0.93	0.38	0.56	-0.02	0.36
Cuttack	1.25	3.14	0.91	2.29	0.34	0.85
Dhenkanal	0.19	0.76	0.27	0.39	-0.08	0.37
Phulbani	0.10	0.31	0.90	0.17	0.02	0.13
Bolangir	0.38	0.94	0.17	0.72	0.22	0.23
Kalahandi	0.24	0.58	0.17	0.27	0.07	0.30
Koraput	0.79	2.05	0.61	1.57	0.17	0.48
Ganjam	0.80	2.19	0.52	1.82	0.29	0.38
Puri	1.21	3.35	0.60	1.49	0.61	1.86
Orissa	8.08	20.26	5.58	13.06	2.50	7.20

Source: Same as Table-3.3.

second from bottom was Balasore which had 0.36 lakh in-migrants and 0.38 lakh out-migrants and the resultant net-migration was -0.02 lakhs. So, during the sixties, only two

districts such as Balasore (the district having the least urban growth) and Dhenkanal (the district having the second least urban growth rate) faced a situation of out migration over in migration to their urban areas.

During the seventies, all the districts of the state experienced a high level of in-migration as well as positive net migration. Even the districts which were very poor in attracting migrants to their towns in the sixties were able to perform better during the seventies. For instance, Balasore and Dhenkanal which were suffering from even a negative net migration of -0.02 lakhs and -0.08 lakhs respectively in the sixties could show 0.36 and 0.37 lakhs of net migration each in the seventies. However, to a large extent, the tendency of in-migration and out-migration that was found in the sixties seems to have continued in the seventies as well. That is, as in the earlier census, in the seventies also some districts like Sundargarh and Sambalpur were having high in-migration as well as high out-migration. Some districts were having high in-migration and a comparatively lower out-migration. In the case of some other districts both in-migration and out-migration were very close to each other but at a low level. However, despite all these diversities, that every district experienced a high in-migration over out-migration during the seventies is a fact.

Earlier, while studying the migration patterns at the regional level, we observed that a fairly good performance was made by both Coastal and Inland regions regarding net migration in the seventies compared to the sixties. We had also raised the question as to whether such increase was equally supported by all the districts coming under the regions. The answer has already been, more or less, clear from the foregoing discussion. To make it more clear we can now specify the districts in each region. The high increase in net migration of the coastal region in the seventies was mainly due to the district of Puri which could attract as

many as 3.35 lakh migrants to its urban areas both from within and outside the district boundary. Next in order was the district of Cuttack with 3.14 lakh in-migrants and a net gain of 0.85 lakh migrants to its urban places. Ganjam and Balasore, the other two coastal districts, were very poor in supporting the region in this regard.

In the Inland region, both Sundargarh and Sambalpur were the largest and second largest recipients of in-migrants respectively during 1971-81. In terms of net migration, they occupied the equal place. Phulbani is the least contributor with only 0.13 lakh net migrants. Other districts neither showed high increase in net migration nor did they display much variation in that. It is found that the districts attracting more migrants in the eighties were also the districts attracting more migrants in the previous two decades. Of course there was a little difference in the magnitude.

Hence, it is clear that in-migration to the urban areas of all the districts of Orissa increased dramatically during the seventies as compared to the sixties. Was the increased in-migration from within the statutory boundary of the districts or from outside? To put it in a different way, was the increase in migrants supported more by migration from the rural areas of the districts or was it from other districts or out of the state? Table 3.9, containing information on internal and external in-migration district wise, tries to answer this question.

As is seen from Table-3.9, in the sixties, internal in-migration was dominant over external in-migration in all the districts excepting for Sundargarh. Internal in-migration, here, reflects only the rural-urban migration stream.<sup>4</sup>

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<sup>4</sup> Here, we do not consider the shift of population from one urban unit to other as a part of urban internal in-migration. Hence, internal in-migration in a district means rural

Table-3.9: Internal and External In-migration to the Urban Areas of the Districts of Orissa, 1961-81.

State/ Districts	Total In-migration		Internal In-migration		External In-migration	
	1961-71	1971-81	1961-71	1971-81	1961-71	1971-81
Sambalpur	110	269	75 (68)	222 (83)	35 (32)	47 (17)
Sundargarh	154	388	75 (49)	199 (51)	79 (51)	189 (49)
Keonjhar	34	96	20 (58)	62 (64)	14 (42)	35 (36)
Mayurbhanj	20	63	15 (76)	50 (79)	5 (24)	13 (21)
Balasore	36	93	28 (78)	73 (79)	8 (22)	19 (21)
Cuttack	125	314	98 (79)	254 (81)	27 (21)	60 (19)
Dhenkanal	19	76	18 (93)	70 (91)	1 (7)	7 (9)
Phulbani	10	31	10 (97)	30 (97)	0 (3)	1 (3)
Bolangir	38	94	31 (82)	81 (86)	7 (18)	14 (14)
Kalahandi	24	58	19 (78)	47 (80)	5 (22)	11 (20)
Koraput	79	205	46 (58)	131 (64)	33 (42)	74 (36)
Ganjam	80	219	66 (83)	157 (72)	14 (17)	63 (28)
Puri	121	335	97 (80)	282 (84)	24 (20)	54 (16)
Orissa	808	2026	516 (64)	1390 (69)	292 (36)	636 (31)

Note: Figures in parentheses are percentages to total In-migration.

Source: Same as Table-3.3.

During 1961-71, Sundargarh, the district which experienced the largest number of in-migrants to its urban places was also the only district where internal in-migration (rural urban) was less than external in-migration. During 1971-81, the increase in in-migration in all the districts was mostly shared by internal in-migration. Taking the case of Orissa as a whole total in-migration during 1961-71 was 808 thousands out of which internal in-migration accounted for 516 thousands and only 292 thousands were from outside the state. During 1971-81, 1390 thousand in-migrants were internal and only 636 thousands external out of a total of 2026 urban in-migrants of the state. Remarkably, the district of Sundargarh showed a very small internal and external in-migration difference. This implies an insignificant role of rural urban migration in the urban process of this district even during

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to urban migration only.

the seventies. The largest number of in-migrants to the urban parts of the district were from the neighbouring districts of the state and outside the state.

The district wise pattern of out migration can be read from Table-3.10. Like in-migration, out migration too has gone up in the state as well as across the districts. During the seventies, urban out-migrants from the state appeared to be more than double of the sixties' figure.

All the districts demonstrate, more or less, the same pattern. Notably, external out-migration has been extremely higher than the internal out-migration. Only 114 thousand out of 558 thousand urban out migrants of the state were from within the state in the sixties.

Table-3.10: Internal and External Out-migration from the Urban Areas of the districts of Orissa, 1961-81.

State/ Districts	Total Out-migration		Internal Out-migration		External Out-migration	
	1961-71	1971-81	1961-71	1971-81	1961-71	1971-81
Sambalpur	57	184	7 (12)	12 (6)	50 (88)	172 (94)
Sundargarh	146	302	5 (3)	8 (3)	141 (97)	295 (97)
Keonjhar	31	63	5 (15)	7 (10)	27 (85)	57 (90)
Mayurbhanj	14	38	2 (13)	4 (11)	12 (87)	34 (89)
Balasore	38	56	3 (7)	6 (10)	36 (93)	51 (90)
Cuttack	91	229	16 (18)	21 (9)	75 (82)	208 (91)
Dhenkanal	27	39	12 (46)	15 (37)	14 (54)	25 (63)
Phulbani	9	17	1 (11)	2 (11)	8 (89)	15 (89)
Bolangir	17	72	7 (39)	6 (8)	10 (61)	66 (92)
Kalahandi	17	27	9 (55)	12 (43)	8 (45)	16 (57)
Koraput	61	157	8 (13)	14 (9)	53 (87)	143 (91)
Ganjam	52	182	12 (24)	24 (13)	39 (76)	158 (87)
Puri	60	149	6 (10)	9 (6)	54 (90)	141 (94)
Orissa	558	1306	114 (20)	195 (15)	444 (80)	1111 (85)

Note: Same as Table-3.4.

Source: Same as Table-3.3

During the same period, as many as 444 thousand urbanites out-migrated from the state. And the intensity went up vigorously during the seventies. The district wise figures also reveal a similar trend.

Now to sum up the above discussion, natural increase was the dominant source of urban growth in the state during the sixties and the eighties. In the seventies, net migration was more important than natural increase in urban growth.

The Inland region supported the state's urban growth more than the Coastal in terms of net migration during the seventies. During the other two periods (i.e., sixties and eighties) natural increase dominated over net migration. Also, it was during the sixties that a very small difference between natural increase and net migration was noticed unlike in the eighties when the difference was extremely large.

During the seventies, there was a steady increase in the magnitude of in-migration for the state as well as for both the regions. So was the case of net migration. Out migration (from the urban areas) also went up rather sharply. Internal in-migration was dominant over external in-migration for the state as well as for the regions both during the sixties and the seventies. External out-migration has been higher than internal out-migration in the state as well as in the regions throughout the study period. The increase has been significant during the seventies as compared to the sixties.

In the case of a majority of districts Urbanization was mainly supported by net migration during the seventies. On the other hand, natural increase and extensive component played relatively more important roles in the urban growth of the districts during the sixties and the

eighties. During the 60's, the distribution of net migration rate among the districts was highly scattered and that, too, at a situation of low state average. The seventies witnessed a very low disparity compared to the sixties along with a comparatively higher state average. In case of the eighties, variation was still lower and the state average was also very low in comparison to the previous census periods.

The districts having high in-migration also experienced high out-migration both in sixties and seventies. During the seventies, all the districts of the state experienced a fairly good time in terms of in-migration as well as net migration. Like in-migration, out migration has also gone up in the state as well as in all the districts. During the seventies, urban out-migrants from the state appeared to be more than double that of the sixties.

# **CHAPTER-IV**

## **Occupational Structure and Functional**

### **Classification of Towns:**

#### **Some Explanations for Urbanization**

### **Introduction**

Chapters-II and III have dealt mainly with the patterns and sources of urbanization and the role of migration in the observed urban patterns in the state of Orissa. This chapter tries to find out some explanations for the observed patterns. Taking in to account two major aspects such as occupational structure and functional classification of towns, an attempt has been made to see their relation with the level of urbanization in the state during the study period.

## **Section-I**

### **Occupational Structure and Urbanization**

#### **4.1.1. A Theoretical Perspective**

It is often suggested that with economic development, the occupational structure of an economy undergoes significant changes, for an increasing number of new jobs are created in the non-agricultural sector. Shift of population from the over populated low income agricultural sector to high income secondary and tertiary sectors immediately follows. Theory says that the reason behind such a change in occupational pattern is simple. As the



economy develops, income rises. Since the income-elasticity of demand for agricultural goods is less than unity, rise in the demand for food and other agricultural products does not correspond to rise in income. As a consequence, need for labour in agriculture is reduced which ultimately brings down the proportion of labour force operating in the sector. On the contrary, the reverse happens for the industrial and service sector, the reason being that income elasticity of demand for industrial goods and services is greater than unity.

However, such a hypothesis becomes less relevant in a low income under-developed economy where a large part of income is utilised in purchasing food and other agricultural products, leaving very little to be spent on non-agricultural goods and services. Further, modern capital goods and techniques needed by industries and services are very inadequate in such economies. For these reasons the secondary and tertiary sectors are unable to expand and, as such, can not provide large work-opportunities for the increasing labour force. Since the changes in the location of economic activity is one of the major processes of structural change, it is quite believable that urbanization process has a close link with change in occupational pattern of an economy. And it is, therefore, very often attempted to look into the relationship between the structure of work force and urbanization in such economies.

In the Indian context, inter-temporal comparison of work-force involves several difficulties because of the definitional and conceptual changes. However, given this fact, we may attempt to look at the behaviour of work-force distribution in the sectors as well as in the major industrial divisions with a view to provide some explanations for urban patterns in Orissa at the state and regional levels.

## 4.1.2. Total Occupational Structure

Table-4.1 demonstrates the percentage share of the sectors as well as industrial categories of workers to the total main workers in Orissa and her regions.

**Table-4.1: Share of the Industrial Categories of Workers to the Total Main Work force at the State and Regional levels, 1961-91.**

State/ Regions	Years	Total Pop. ( '000)	% MW to T.Pop.	III &												
				MW	I	II	IV	Va	Vb	VI	VII	VIII	IX	Pr	Se	Ter
Orissa	1961	17549	43.66	100	56.82	17.01	1.72	6.93	1.13	0.40	1.92	0.68	13.39	75.55	8.46	15.99
	1971	21945	31.22	100	49.16	28.28	2.90	3.63	2.30	0.55	3.31	1.45	8.42	80.35	6.48	13.18
	1981	26370	32.75	100	46.94	27.76	3.23	3.30	3.63	1.11	4.11	1.57	8.35	77.92	8.04	14.03
	1991	31660	32.78	100	44.31	28.68	2.84	3.13	3.51	0.87	5.38	1.74	9.55	75.83	7.51	16.66
Coastal	1961	8214	36.90	100	53.15	15.51	2.19	7.56	1.52	0.52	3.01	0.99	15.55	70.84	9.61	19.55
	1971	10293	28.88	100	47.38	27.95	2.54	3.37	2.24	0.60	4.47	1.72	9.73	77.88	6.21	15.91
	1981	11843	30.81	100	45.71	26.30	3.39	2.97	2.97	0.87	5.46	2.00	10.32	75.41	6.81	17.78
	1991	15074	29.20	100	42.20	25.78	3.01	2.62	3.75	1.02	7.29	2.37	11.95	70.99	7.39	21.61
Inland	1961	9335	49.50	100	59.35	17.82	1.42	6.53	0.87	0.32	1.21	0.47	12.09	78.59	7.72	13.78
	1971	11652	33.28	100	50.53	28.53	3.17	3.84	2.34	0.52	2.42	1.24	7.42	82.23	6.69	11.08
	1981	13898	35.71	100	48.07	28.96	3.12	3.56	3.64	1.29	3.14	1.27	6.94	80.16	8.49	11.35
	1991	16586	35.97	100	45.86	30.82	2.71	3.50	3.34	0.76	3.95	1.27	7.79	79.39	7.60	13.01

**Note:**

1. MW = Main Workers, I = Cultivators, II = Agricultural Labourers, III = Live Stock, Forestry, Hunting and Plantation, Orchards and Allied Activities, IV = Mining and Quarrying, Va = Household Industry, Vb = Other than Household Industry, VI = Construction, VII = Trade and Commerce, VIII = Transport, Storage and Communication, IX = Other Services.
2. Pr (Primary Sector) includes the industrial categories I to IV, Se (Secondary Sector) includes the industrial categories Va to VI and Ter (Tertiary Sector) includes the industrial categories VII to IX.

**Source:** Census of India (1961): General Economic Tables, Part II-B(ii), Orissa.  
Census of India (1971): General Economic Tables, Part II-B, Orissa.  
Census of India (1981): General Economic Tables, Part- III, B Series Tables, Orissa.  
Census of India (1991): General Economic Tables Manuscript, Office of the Director of Census Operations, Orissa, Bhubaneswar.

It is evident that, in Orissa, primary sector has been playing the dominant role in providing employment to the total main workers. Above 75 per cent of the total main workers of the state were found engaged in the primary activities since 1961 whereas the tertiary sector

comes second by absorbing 13 to 17 per cent and the secondary sector occupies the third position between 1961 and 1991. This sector has been providing employment to a comparatively less percentage of work force (only 6 to 8 per cent throughout). From the trend of the percentage share of the sectors in the total work force, it is seen that, since 1971, the share of the primary sector has been declining while that of the tertiary sector has been increasing continuously. The secondary sector showed a rising share from 6.48 per cent in 1971 to 8.4 per cent in 1981 but declined to 7.51 per cent in 1991. During the period 1961 to 1971, the reverse had happened. The share of the primary sector had increased while those of both secondary and tertiary sectors had declined. The declining share of the primary sector since 1971 has been due to a continuous reduction in the ratio of cultivators (category-I) to the total main workers. However, still it is the dominant category under this sector.

Under the secondary sector, workers at household industry (category Va) were dominant. However, with the passage of time, the importance of this industrial category has gone down. Workers in activities other than household industry have been increasing their proportion overtime leaving only 1991 when they showed a marginal decline of 0.12 percentage points compared to the last census. Employment in trade and commerce (category VI) and transport, storage and communication activities has been upward right from 1961. This has mainly led to an uninterrupted growth of the tertiary sector. In 1961, the tertiary sector registered even a higher growth than that of 1971 and 1981. The main reason for this was an unprecedented high proportion of workers in the other service<sup>5</sup>

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<sup>5</sup> "Other Services" include 1. Education and Research Services, 2. Medical and Health Services, 3. Religious and other Community Services, 4. Legal Services, 5. Business Services, 6. Recreation and Entertainment Services, 7. Personal Services (comprising domestic services, laundry, cleaning and dyeing, barbers and beauty shops and other personal services),

category during this time. More than 13 per cent of the total main workers employment was found under this category while the tertiary sector, as a whole, shared only around 16 per cent.

The coastal region shows quite a similar pattern with the state. In this region also there has been a gradual increase in the secondary and tertiary sectors in terms of proportion of employment since 1971. Since then, this region has also been witnessing a continuous decline in the primary sector employment. However, considering the over all situation, it is found that the share of primary and tertiary sector have grown while that of the secondary sector has declined both in the coastal region and the state as a whole.

Again, in the inland region, the same sequence has followed. Both secondary and tertiary sectors have shown gathering momentum accompanied by a decreasing role of the primary sector since 1971. It is rather surprising to compare the situation between 1961 and 1991. Interestingly, the primary sector has grown from 78.59 to 79.39 per cent between 1961 and 1991. In the secondary sector, the share has declined from 7.72 per cent to 7.60 per cent and that in the tertiary sector, from 13.78 per cent to 13.01 per cent between the same period. However, the changes are marginal.

Thus, in the state as a whole as well as in the regions whereas there was a gradual increase in employment in the secondary and tertiary sector, it showed a decline in the primary sector since 1971. However, in a longer time span, between 1961 and 1991, the shares of primary and tertiary have gone up and that of the secondary sector declined both for the coastal

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8. Sanitary Services (comprising garbage and sewage disposal including the operation of drainage system), 9. Services not elsewhere classified.

region and the state as a whole. In the Inland region, only the primary sector has shown an increase while other two sectors have come down.

How were the increasing shares of the secondary and tertiary employment since 1971 reflected on the urban work force structure? How was the structure of work force in the rural areas affected by such a behaviour of the total work participation in the state? What can be read from the work participation behaviour of the urban and rural areas in the face of an over all decrease of both the secondary and tertiary sectors employment and on the increase in the primary sector employment between 1961 and 1991? Was the increase in the agricultural labourers in the total occupation structure reflected only in the rural areas or was it found in the urban areas also? Such questions invite a desegregated look at the work force pattern in the urban as well as rural areas during the period under consideration.

### **4.1.3. Occupational Structure in the Urban Areas**

The scenario of urban occupational structure is presented in Table-4.2. A striking feature of the urban main workers in Orissa is declining trend in terms of percentage share to the total urban population of the state since 1961. Major reasons attributed to such decline could be the low level of development in the secondary and tertiary activities which are generally viewed as employment generating activities. As observed from the structure of urban main work force, the role of the secondary and the tertiary sectors has declined overtime.

In the urban areas of Orissa, the secondary sector employment as percentage to total urban main work force has come down from 25.08 in 1961 to 21.17 in 1991 and that of the tertiary

sector has slipped down from 62.31 per cent to 58.64 per cent during the same period. Quite interesting is the fact that the primary sector employment in urban Orissa has increased overtime. Such a scene in the urbanization process of the state is really a sharp contrast to the general experience of the developing countries where urban growth is mainly associated with an increasing share of the tertiary sector along with the declining role of the primary sector.

**Table-4.2: Share of the Industrial Categories of Workers to the Urban Main Work force in the State and Regions of Orissa, 1961-91.**

State/ Regions	Years	Total Pop. ( '000)	% MW to T.Pop.	III &												
				MW	I	II	IV	Va	Vb	VI	VII	VIII	IX	Pr	Se	Ter
Orissa	1961	1110	37.53	100	7.34	2.32	2.95	7.27	13.99	3.82	11.33	7.91	43.07	12.61	25.08	62.31
	1971	1845	30.44	100	7.73	6.76	5.11	4.14	13.74	2.47	18.30	8.02	33.73	19.61	20.35	60.04
	1981	3110	30.10	100	7.08	8.20	5.43	3.64	16.13	4.38	17.26	8.20	29.67	20.72	24.15	55.14
	1991	4235	28.93	100	6.44	8.15	5.61	2.60	14.83	3.74	20.00	8.28	30.36	20.20	21.17	58.64
Coastal	1961	590	34.46	100	7.27	2.43	2.31	8.37	11.35	2.58	13.09	8.09	44.51	12.01	22.30	65.69
	1971	895	29.51	100	6.17	7.40	3.65	4.55	11.02	2.70	21.10	10.07	33.31	17.22	18.27	64.48
	1981	1474	29.37	100	7.14	8.42	3.61	3.92	11.90	3.22	19.99	8.84	32.96	19.17	19.04	61.79
	1991	2119	28.79	100	6.30	7.72	3.84	2.82	10.64	3.67	22.50	9.00	33.50	17.87	17.13	65.00
Inland	1961	520	40.89	100	7.42	1.99	3.57	6.20	16.56	5.02	9.67	7.76	41.81	12.98	27.78	59.24
	1971	951	31.26	100	9.13	6.21	6.42	3.86	16.17	2.27	15.84	10.97	29.12	21.77	22.31	55.93
	1981	1636	30.82	100	7.02	8.00	6.98	3.39	19.93	5.36	14.88	7.64	26.80	22.00	28.68	49.32
	1991	2116	29.05	100	6.58	8.57	7.31	2.38	18.99	3.81	17.52	7.58	27.26	22.47	25.18	52.35

**Note:** Same as Table-4.1 .

**Source:** Same as Table-4.1.

The ratio of urban main workers employed in agricultural activities has been showing an upward trend. This is due to the fact that, in Orissa, a majority of towns coming up are overgrown villages with predominant rural characteristics present in them. Other economic activities like live stock, forestry, fishing, hunting and plantations, orchards and allied activities, mining and quarrying have also been taking care of an increasing proportion of

main workers in the urban areas of Orissa. All this combined together have led to an increasing share of the primary sector in the total urban main workers.

As mentioned earlier, both secondary and tertiary sectors have declined in terms of their percentage shares in the total urban workers. However, while looking at the sectoral shares of individual years, one can find the tertiary sector dominating over the secondary and primary sectors. This sector accounts for 55 to 62 per cent of the total main workers employed in urban areas of Orissa throughout. In the case of the secondary sector, it ranged merely 20 to 25 per cent all through the study period (1961-91).

Tertiary sector includes workers engaged in trade and commerce (industrial category VII), transport, storage and communication (industrial category VIII) and other services (industrial category IX). Information provided in Table-4.2 shows that there has been a satisfactory increase in the proportion of workers employed in trade and commerce in urban Orissa between 1961 and 1991. The increase has been from 11.33 per cent in 1961 to 20 per cent in 1991. Employment in transport, storage and communication has grown very marginally from 7.91 to 8.28 per cent between 1961 and 1991. In fact, absorption of the urban main workers under the industrial category IX (other services) has declined from 43 to 30 per cent. And this, undoubtedly, has led to the declining share of the tertiary sector as a whole.

The secondary sector, includes the industrial categories Va (workers at household industries), Vb (at other than household industries) and VI (workers engaged in construction activities). Both the household industry and construction are seen to have degraded overtime in providing employment to people in the urban areas of Orissa. The

proportion of workers engaged in household industries to total urban main work force has shown a decline of around 5 percentage points between 1961 and 1991. In construction also, the share has declined from 3.82 to 3.74 per cent between 1961 and 1991. Both of these categories combined together have resulted in an over all decline in the secondary sector even though the industrial category Vb has shown an improvement of a little more than one percentage point.

The picture obtained from the regions in this regard is not far different from that of the whole state. Main worker employment as a percentage of total urban population of both the regions have declined continuously since 1961. Regarding the structural role also, the regions present a pattern quite similar to that of the state. Increasing share of the primary sector coupled with declining role of the secondary and the tertiary sector has put a potential threat to the urban process and development of the regions. However, a comparison across the sectors for individual years reveals that the tertiary sector gets the lion's share. Its share ranges between 62 to 66 per cent of the urban main-workers employment in the Coastal region. Such a high share of the tertiary sector is supplemented by the high employment under the industrial categories like trade and commerce (category VII) and other services (category IX). Trade and Commerce has registered an increase from 13.09 per cent to 22.50 per cent during 1961 and 1991. Even though the "Other services category" commands over the other two categories of the tertiary sector, its contribution has decreased overtime and this has certainly affected the tertiary sector as a whole.

Both primary and secondary sectors are seen to have been close to each other as regards their performance in providing employment to the urban work force. More surprising is



that, while the importance of the primary sector has been increasing that of the secondary sector has been declining. Decline in the secondary sector employment is mainly brought about by the sharp contraction in the proportion of household industry workers which has come down from 8.37 per cent to as low as 2.82 per cent during 1961 and 1991. However, construction (industrial category VI) has been showing a continuous improvement overtime although the increase is not of much significance. Industrial category Vb is not seen to have affected the secondary sector considerably. In the primary sector of the urban coastal of Orissa, agricultural labourers have been playing the dominant role. They have increased their share from 2.43 per cent to 7.72 per cent between 1961 and 1991. Live stock, forestry, hunting and plantation, orchards and allied activities and mining & quarrying combined together have come up with a 1.53 percentage increase in 1991 over 1961. On the other hand, cultivators have witnessed a loss in their share.

The urban work force structure in the Inland region is more or less similar to that of the state and the Coastal region. However, the point of difference is that, unlike the state and the Coastal region, here (in Inland region) primary sector has been gathering momentum. Secondary sector employment in this region has always been above that of the Coastal and the state as a whole between 1961 and 1991. Furthermore, the share of tertiary sector in this region, like that of the state and the Coastal, has been sharing the largest proportion of the main-workers; but strikingly it has degraded overtime.

As a contrast to the urbanization experience of the developing economies where urban process goes hand in hand with increasing tertiary and secondary sector employment, Orissa's urban work force structure is characterised by a rising share of the primary sector and a decline in the tertiary and secondary sector. However, an inter sectoral comparison

over time shows that the tertiary sector has been claiming the dominant share of the total urban main workers of the state. On the other hand, shares of the secondary and the primary sectors have been very close to each other. In fact, the scenario of employment structure in urban areas of Orissa has more or less been replicated in the two regions also.

Under the primary sector, the industrial category II (i.e., agricultural labourers) has been gaining increasing importance overtime followed by the industrial category III and IV combined together.

Under the tertiary sector, the category Va (other than household industry) seems to have been dominating all the time but its change has not been much significant. Category Vb, coming under this sector, has really faced a drastic contraction. Even though more than half of the total tertiary sector employment has been shared by the industrial category IX (other services), its role has been coming down overtime. However, trade and commerce (industrial category VI) is the flourishing economic activity under this sector which has increased to a little less than double between 1961 and 1991.

#### **4.1.4. Occupational Structure in the Rural Areas**

Urban growth may be expected to contribute to diversification of occupation in the rural areas of the hinterland. This diversification may take place due to the spread effects of non-agricultural activities to the villages. Hence, it is also important, in the context of urban study, to observe and analyze the occupational structure in rural areas. Table-4.3 carries the information about the rural work force structure of Orissa and her regions.

As observed from Table-4.3, the primary sector has been highly dominating the occupational pattern in the rural areas of Orissa. In percentage terms, it has increased from 79.17 in 1961 to 83.28 in 1991 ranging between 80 to 85 per cent of the total rural work force. Only 15 to 20 percent are seen to have been engaged in other two sectors (secondary and tertiary). Among them, nearly 9 to 13 per cent have been in the tertiary sector and only 5 to 7 per cent in the secondary activities. Along with the increase in the primary sector, the importance of the secondary and the tertiary occupations has been shrinking in the rural areas of Orissa.

**Table-4.3: Share of the Industrial Categories of Workers to the Rural Main Work force in the State and Regions of Orissa, 1961-91.**

State/ Regions	Years	Total Pop. ( '000)	% MW to T.Pop.	III &												
				MW	I	II	IV	Va	Vb	VI	VII	VIII	IX	Pr	Se	Ter
Orissa	1961	16439	44.07	100	59.66	17.86	1.65	6.91	0.39	0.21	1.38	0.26	11.69	79.17	7.50	13.33
	1971	20099	31.59	100	52.37	29.92	2.68	3.55	1.26	0.38	1.96	0.85	6.10	84.96	5.19	8.91
	1981	23260	33.10	100	51.79	30.14	2.96	3.26	2.11	0.71	2.51	0.77	5.75	84.88	6.08	9.04
	1991	27425	33.37	100	49.38	31.43	2.46	3.20	2.00	0.49	3.42	0.86	6.76	83.28	5.68	11.04
Coastal	1961	7624	38.23	100	54.77	18.92	2.11	7.28	0.79	0.37	2.22	0.46	13.07	75.81	8.44	15.76
	1971	9398	29.82	100	49.71	29.12	2.44	3.28	1.90	0.46	3.51	1.26	8.19	81.27	5.64	12.95
	1981	10368	31.29	100	50.45	28.64	3.33	2.82	2.47	0.55	3.47	1.07	7.21	82.42	5.84	11.74
	1991	12955	29.26	100	47.98	28.69	2.86	2.59	2.64	0.60	4.84	1.31	8.48	79.54	5.83	14.63
Inland	1961	8815	42.79	100	59.47	17.94	1.28	7.64	0.13	0.11	0.94	0.14	12.35	78.68	7.89	13.43
	1971	10701	33.46	100	53.96	30.39	2.64	3.83	1.19	0.37	1.31	0.43	5.62	86.99	5.39	7.35
	1981	12262	36.39	100	52.66	31.31	2.68	3.58	1.84	0.83	1.79	0.55	4.76	86.65	6.25	7.10
	1991	14470	37.05	100	50.37	33.37	2.18	3.63	1.54	0.41	2.42	0.55	5.54	85.92	5.57	8.50

Note: Same as Table-4.1.

Source: Same as Table-4.1

This may be attributed to a slowing down of the spread effect of urbanization in the state overtime. The highest increase in the primary sector employment was seen in 1971 and that in the secondary and tertiary, in 1961. It is noteworthy that Cultivators, the dominant ones in the primary sector employment, have been losing in the total rural work force while that of the agricultural labourers have been gathering momentum since 1961.

Under secondary activities, household industry is seen to have been losing continuously in terms of employment while the other two categories have shown slight improvements. Trade and commerce activities, under the tertiary sector, have been providing employment to an increasing proportion of the rural mass. Transport, storage and communication have also increased in this regard although the performance is not substantial. There has been a drastic fall in the other services category (industrial category IX) under the tertiary sector between 1961 and 1991.

The two regions have more or less the similar experience with the state with regard to rural occupational structure. In both Coastal and Inland regions, workers were highly concentrated in the primary activities. In addition, the concentration has been in an upward trend whereas the reverse has happened to the other two sectors. About 76 to 82 per cent of the total rural main workers of the Coastal region have been in the primary sector. Twelve to sixteen per cent have been in the secondary and the rest, in the tertiary sector throughout the period.

In the Inland region, primary activities absorb 79 to 87 per cent of the rural work force while the remaining is shared between the secondary and the tertiary sector. Comparing the sectoral performance of both the regions it is observed that, in the Coastal region, comparatively a larger percentage of rural main workers are found in the tertiary sector while the secondary sector of the Inland region is in a slightly better position than the Coastal. More over, the primary sector engages a larger proportion of the rural workers in the Inland region as compared to the Coastal all through. Like the state as a whole, in both the regions, agricultural labourers under the primary sector have been continuously increasing their share. Economic activities namely other than household industry and

construction activities have been upward under the secondary sector. Under the tertiary sector, trade and commerce, transportation and storage and communication are seen to have gone up as regards percentage share of rural work force.

To sum up, rural Orissa has been characterised by an increase in the employment in primary sector and shrinking in the secondary and tertiary sectors. The increasing primary sector employment has been mainly due to the increasing share of the agricultural labourers in the total rural work force. Declining secondary sector employment has been reflected in the continuous fall of the employment creation in the household industries. A steady decline in the 'Other Services', on the other hand, has brought about a steady decline in the tertiary sector employment.

It is usually not astonishing to see that the rural part of an underdeveloped economy is highly dominated by primary activities. However, the growing tendency of such activities in the rural economy may sometimes reflect the growing weakness of the economy as a whole. In such a state of affairs, it may be assumed that the spread effect of urban growth in terms of occupational diversification is weak which, again, could be due to low level of urbanization.

As observed from the above analysis, primary sector employment has been growing even in the urban areas of Orissa. What has been the role of such a scenario in the urban process of the state? Does it mean that an increasing number of towns with primary activities have been coming up overtime? To know this, one has to look into the functional classification of towns.

## **Section-II**

### **Functional Classification of Towns:**

#### **An Explanation for Urbanization**

##### **4.2.1. A Broad View**

Table-4.4 gives a broad idea about the functional classification of towns for 1961, 1971 and 1991. A quick look at the table reveals that a large number of towns in Orissa were mono-functional during all the three census periods. In 1961, 48 out of 62; in 1971, 34 out of 81 and in 1991, 63 out of 119 towns in the state were mono-functional. It is noteworthy that among the mono-functional towns, a majority of them were by the small and medium towns (i.e., class V, IV and III towns). In 1961, out of 48 mono-functional towns, as many as 33 were small and medium. There were 11 bi-functional and 3 multi-functional towns during this census period. All the towns under class size I, II and III, were mono-functional. Of the 11 bi-functional towns 3 were in class IV, 7 in class V and only 1 in class VI. Likewise, out of 3 multi-functional towns, one was class IV and 2 were class V. Thus, during the sixties, all the bi-functional and multi-functional towns were small towns; there was not a single large or medium town in those categories. In 1971, there was a tremendous increase in the number of multi-functional towns. Such towns increased from 3 in 1961 to 28 in 1971 which is almost one-third of the total number of towns in this decade.

There were 19 bi-functional towns and 34 mono-functional towns. Unlike in 1961, during this period, there appeared some large and medium towns with bi-functional and multi-

functional characteristics. The number of such towns with bi-functional characteristics was four and with multi-functional characteristics was eleven.<sup>6</sup>

Table-4.4: Mono, Bi and Multi Functional Towns in the State of Orissa.

Size Classes	1961				1971				1991			
	Mo Fn.	Bi Fn.	Mu Fn.	Ttl.	Mo Fn.	Bi Fn.	Mu Fn.	Ttl	Mo Fn.	Bi Fn.	Mu Fn.	Ttl
Class I	1	0	0	1	2	2	0	4	2	3	2	4
Class II	3	0	0	3	1	0	1	2	3	3	4	10
Class III	9	0	0	9	8	2	10	20	10	6	10	26
Class IV	17	3	1	21	9	3	11	23	29	14	8	51
Class V	17	7	2	26	13	11	6	30	16	2	4	22
Class VI	1	1	0	2	1	1	0	2	3	0	0	3
Class I-V	48	11	3	62	34	19	28	81	63	28	28	119

Source: Census of India (1971): Town Directory, Part VI-A, Orissa Census of India (1991): Functional Classification of Urban Agglomeration/Towns of India 1991, Occasional Paper No.3 of 1994.

During 1991, mono-functional towns showed a large increase whereas the number of bi-functional towns were constant and multi-functional towns declined in number in comparison to 1971. However, large and medium towns with bi- and multi-functional characteristics still increased in number as compared to 1971.

The above observation makes it clear that mono-functional towns have been dominant among all the three functional categories all the time. In the mono-functional category, the largest representation has been by the medium and small towns. With the passage of time, more and more bi- and multi-functional towns have been coming up in the urban scene of Orissa. Another important observation that can be made from the above analysis is that,

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<sup>6</sup> It can be noted here that due to non availability of data on industrial workers for all the towns in 1981 it was not possible to make a functional classification of towns for this census.

overtime, large and medium towns have been increasing in number and the increasing number of such towns are found in the bi- and multi-functional groups.

What are the chief functions of such towns? What are the functions prominent in the bi- and multi-functional towns? These are some of the relevant issues to be looked into in the context of urbanization. For answering such questions, a more desegregated discussion on the functional classification of towns is attempted below.

#### **4.2.2. A Disaggregated Look**

A glance at Table-4.5 brings home the salient point that the majority of towns in 1961- numbering as many as 39 out of 48 mono-functional towns belonged to the services category. This accounts for more than half of the total number of towns during this census period. The types of workers included in this category are mainly those engaged in community, social and personal services. As against 39 under this mono-functional category, there were only four under primary activities group, four under industry and only one under transport.

As observed earlier, there were eleven towns under bi-functional category in 1961. Among them, four were in industry-cum-services, six in primary-cum-services and one, in services-cum-transport group. The number of towns belonging to the multi-functional category was only three. The functional groups like services-cum-primary activities-cum industry, services-cum-primary activities-cum-transport and services-cum-industry-cum-transport were sharing one each of these three towns.



In 1971, the extent of change in the functional classification of towns appears to be somewhat sweeping and significant (Table-4.6). Compared to 1961, more towns have assumed bi- and multi-functional characteristics. This, no doubt, goes to show that towns in 1971 have imbibed functionally more diverse traits. The number of towns under primary activities went up considerably from four in 1961 to seventeen in 1971 whereas those under services drastically came down from 39 to 12 during the same period. The numerical rise of towns under industry and transport is rather insignificant.

The number of towns under bi-functional category stepped up to 19 in 1971 which was seven more than that of the last census. Four out of them were in industry-cum-primary activities group, three in primary-cum-trade & commerce, two in services-cum-trade & commerce and one in services-cum-transport group. A striking feature of 1971 census is that while four towns belonged to services-cum-industry group in 1961, none of the towns represented this group in 1971.

There was a phenomenal rise in the multi-functional town in 1971. Towns under this category increased from three in 1961 to 28 in 1971. A majority of them-numbering 16, were coming under services-cum-primary activities-cum-trade & commerce. Four towns were confined to services, industry and trade & commerce activities. Services, trade and transport were dominant functions in three towns whereas two towns had services, industry and transport as their chief source of economic activity.

A total of 63 mono-functional towns in 1991 (Table-4.7) is quite a large number compared to 34 in 1971. A more than double increase in the number of primary towns under this mono-functional category between 1971 and 1991 is really a matter of concern. At the same

time, an increase in the industrial towns from four in 1971 to eleven in 1991 is also noteworthy. Strikingly, there has been a further reduction in the number of service towns from twelve to nine between 1971 and 1991. Absolutely no change in the number of towns with transport as their chief function is marked between these two census periods.

Under the bi-functional category, there were 28 towns in 1991 as against 19 in 1961. The largest number of such towns during this period were primary-cum-services towns numbering 12. One important landmark of this census is a significant increase in the number of services-cum-trade & commerce towns. These towns grew from two in 1971 to nine in 1991. Emergence of two industry-cum-services towns is also another important event in the urban process of the state during this time. Notably, the number of multi-functional towns has been stagnant at 28 between 1971 and 1991. Considering all the three Census periods (1961, 1971 and 1991), it is observed that a shift of the towns under the multi-functional category has taken place mainly to the group namely services-cum-primary activities-cum-industry from other groups except services-cum-primary activities-cum-trade & commerce.

An overall view of the picture of functional classification of towns makes it clear that the towns in Orissa mostly veer round the primary activities and the services group. Taking the mono-, bi- and multi-functional categories together, more than 50 out of 62 towns belonged to services, primary activities and other services in 1961. In 1971, the number of such towns increased to as many as 58 out of 81 and in 1991, they appeared to be more than 80 out of a total of 119 towns. Diversification of functions from mere services to bi- and multi-functional ones is considered as an indicator of progress. However, this does not hold good in the case of Orissa because the state has experienced a mounting rise in the number of

towns under primary activities (from 4 to 17 between 1961 to 1971 and from 17 to 42, between 1971 to 1991). On the other hand, between 1971 to 1991, the number of industrial towns showed a meager increase from 4 to 11. To get out of the old occupational patterns so as to ensure the predominance of functions such as industry, transport and trade & commerce seems to be the key aspect of urbanization in Orissa.

Since functional classification of towns is one of the important ways of explaining urbanization and development, it is always a felt need to observe and assess the role of the size classes of towns under the functional categories. For this purpose, a discussion on the cross classification of towns according to their functional categories and size classes is attempted below.

### **4.2.3. Cross-classification of Towns: A Discussion**

Information regarding the cross classification of towns according to their functional categories and size classes is also provided in Tables-4.5, 4.6 and 4.7 for the period 1961, 1971 and 1991 respectively.

It is evident from Table-4.5 that, in 1961, Cuttack, the only class-I town in Orissa was a service town. All the 3 class-II towns were under the mono-functional category. Of them, Rourkela in Sundargarh district, was industrial town. It owed its origin to the giant Steel Plant and the Fertilizer Plants located within the city. The other two class-II towns Bhubanewar and Puri were service towns. Bhubaneswar, the capital of the state, has a preponderance of persons belonging to the public and private services. Puri, on the other

hand, owes its service characteristics mainly to Lord Jagannath's Temple situated at the shore of the Bay of Bengal.

Table-4.5: Predominant Functional Characteristics of Cities and Towns in Orissa, 1961

Functional Characteristics of Towns	Class & Number of Cities and Towns						
	I	II	III	IV	V	VI	I-VI
<b>Mono Functional:</b>	1	3	9	17	17	1	48
Industry (In)	0	1	0	2	1	0	4
Primary (P)	0	0	0	2	2	0	4
Services (s)	1	2	9	12	14	1	39
Trade and Commerce (T&C)	0	0	0	0	0	0	0
Transport (Tr)	0	0	0	1	0	0	1
<b>Bi-Functional:</b>	0	0	0	3	7	1	11
In-P	0	0	0	0	0	0	0
In-S	0	0	0	2	2	0	4
In-T&C	0	0	0	0	0	0	0
In-Tr	0	0	0	0	0	0	0
P-S	0	0	0	1	4	1	6
P-T&C	0	0	0	0	0	0	0
P-Tr	0	0	0	0	0	0	0
S-T&C	0	0	0	0	0	0	0
S-Tr	0	0	0	0	1	0	1
Tr-T&C	0	0	0	0	0	0	0
<b>Multi Functional</b>	0	0	0	1	2	0	3
S-P-In	0	0	0	0	1	0	1
S-P-T&C	0	0	0	0	0	0	0
S-P-Tr	0	0	0	0	1	0	1
S-In-T&C	0	0	0	0	0	0	0
S-In-Tr	0	0	0	1	0	0	1
S-T-Tr	0	0	0	0	0	0	0
P-In-T&C	0	0	0	0	0	0	0
<b>Grand Total:</b>	1	3	9	21	26	2	62

Source: Same as Table-4.4

More interesting is the fact that all the class-III towns during this decade were also characterised by service functions. Thus, out of 13 large and medium towns in 1961, one

was industrial and the rest were service towns and all the towns were under mono-functional category. There were 21 class-IV towns during this period of which as many as 17 were mono-functional, 3 were bi-functional and 1 was multi-functional. Out of 17 mono-functional towns, 12 were service, 2 primary and 2 industrial towns. Only one was having transport as its predominant function. Among 3 class-IV towns under the bi-functional category, 2 were confined to industry-cum-services and 1 to primary activities-cum-services. The only class-IV town under the multi-functional category was service-cum-industry-cum-transport. Under class-V, the majority of towns numbering 17 out of 26, were in the mono-functional category for the largest number of which service was the chief economic activity. Further more, out of only two class-VI towns, one was service in character and the other, primary activities-cum-services.

The scenario of class wise classification of towns according to their predominant functional categories for 1971 could be understood from Table-4.6. Of the 4 class-I towns during this time, 2 were mono- and 2 were bi-functional and none of them were mono-functional as such. The mono-functional class-I towns were Rourkela and Bhubaneswar being characterised by industry and service functions respectively. In fact, these two towns shifted their status from class-II in 1961 to class-I in 1971. Cuttack, which was a mere service town under the class-I category jumped to the bi-functional category in 1971 with trade and commerce as the second important function apart from the services function that existed in 1961. Berhampur is another old town of Orissa which got the position of class-I town in 1971. It mainly derived its importance from being a trade and commercial centre and came under the category of services-cum-trade and commerce during this period.

Table-4.6: Predominant Functional Characteristics of Cities and Towns in Orissa, 1971.

Functional Characteristics of Towns	Class & Number of Cities and Towns						
	I	II	III	IV	V	VI	I-VI
<b>Mono Functional:</b>	2	1	8	9	13	1	34
Industry (In)	1	0	3	0	0	0	4
Primary (P)	0	0	2	4	10	1	17
Services (s)	1	1	3	5	2	0	12
Trade and Commerce (T&C)	0	0	0	0	0	0	0
Transport (Tr)	0	0	0	0	1	0	1
<b>Bi-Functional:</b>	2	0	2	3	11	1	19
In-P	0	0	1	0	3	0	4
In-S	0	0	0	0	0	0	0
In-T&C	0	0	0	0	0	0	0
In-Tr	0	0	0	0	0	0	0
P-S	0	0	0	3	6	0	9
P-T&C	0	0	0	0	2	1	3
P-Tr	0	0	0	0	0	0	0
S-T&C	2	0	0	0	0	0	2
S-Tr	0	0	1	0	0	0	1
Tr-T&C	0	0	0	0	0	0	0
<b>Multi Functional</b>	0	1	10	11	6	0	28
S-P-In	0	0	0	1	0	0	1
S-P-T&C	0	0	5	6	5	0	16
S-P-Tr	0	0	1	0	0	0	1
S-In-T&C	0	1	1	1	1	0	4
S-In-Tr	0	0	1	1	0	0	2
S-T-Tr	0	0	2	1	0	0	3
P-In-T&C	0	0	0	1	0	0	1
<b>Grand Total:</b>	4	2	20	23	30	2	81

Source: Same as Table-4.4

Of the two towns under the class-II viz. Puri and Sambalpur, the former belongs to the services category; this was an overgrown class-III town of 1961. As mentioned earlier, a considerable section of its population sustain on services to the temples and therefore, the town had hardly any importance from the point of view of other economic activities like trade and commerce, transport etc. The later (Sambalpur) was under the category of services-cum-industry-cum-trade. The Hirakud Dam had added to its importance during the

period of its construction. A number of large and medium industries cropped up in the neighborhood of this district had quarter's town. Although, as a fast growing town it had diverse functional traits, still it had got predominance over services, industry and trade & commerce activities.

Out of 20 class-III towns, 8 belonged to mono-functional, 2 to bi-functional and 10 to multi-functional categories. It is noteworthy that, out of the four industrial towns in the state as many as three viz., Brajaraj Nagar, Chowdwar and Rajgangpur were under this size class. Almost half of the multi-functional towns under this class belonged to the services-cum-primary activities-cum-trade & commerce group. This was a unique feature of the 1971 census in comparison to the 1961; there were no industrial towns under this category in 1961. The number of class-IV towns in total were 23 in 1971. Of them 9 were mono-, 3 were bi- and 11 were multi-functional in character. All the three towns were confined to services and trade & commerce under the mono-functional category. Under the bi-functional category all the three class-IV towns were in the primary-cum-services. Majority of such towns under the multi-functional category belonged to the services-cum-primary-cum-trade & commerce group. Under the size class-V, 13 mono-functional, 11 bi-functional and 6 multi-functional towns were seen in the urban scene of Orissa. Majority of them were in the primary activities group under the mono-functional category. More than half of the bi-functional class-V towns were in primary-cum-services group and under the multi-functional group, 5 out of 6, were in services-cum-primary-cum-trade & commerce functions.

There was absolutely no change in the number of class-VI towns during 1971 as compared to 1961. The only significant feature is the shift of one out of the two towns from primary-cum-services in 1961 to primary-cum-trade & commerce in 1971 under this size class.

Table-4.7: Predominant Functional Characteristics of Cities and Towns in Orissa, 1991.

Functional Characteristics of Towns	Class & Number of Cities and Towns						
	I	II	III	IV	V	VI	I-VI
<b>Mono Functional:</b>	2	3	10	29	16	3	63
Industry (In)	1	0	1	2	6	1	11
Primary (P)	0	1	6	25	8	2	42
Services (s)	1	1	3	2	2	0	9
Trade and Commerce (T&C)	0	0	0	0	0	0	0
Transport (Tr)	0	1	0	0	0	0	1
<b>Bi-Functional:</b>	3	3	6	14	2	0	28
In-P	0	1	0	2	0	0	3
In-S	0	0	1	1	0	0	2
In-T&C	0	0	0	0	0	0	0
In-Tr	0	0	0	0	0	0	0
P-S	0	0	3	8	1	0	12
P-T&C	0	0	0	2	0	0	2
P-Tr	0	0	0	0	0	0	0
S-T&C	3	2	2	1	1	0	9
S-Tr	0	0	0	0	0	0	0
Tr-T&C	0	0	0	0	0	0	0
<b>Multi Functional</b>	2	4	10	8	4	0	28
S-P-In	0	0	3	2	1	0	6
S-P-T&C	1	3	5	5	2	0	16
S-P-Tr	0	0	0	0	0	0	0
S-In-T&C	1	1	1	0	0	0	3
S-In-Tr	0	0	0	0	0	0	0
S-T-Tr	0	0	1	1	0	0	2
P-In-T&C	0	0	0	0	1	0	1
<b>Grand Total:</b>	7	10	26	51	22	3	119

Source: Same as Table-4.4.

Table-4.7 gives an idea about the cross classification of cities and towns according to their size classes based on their predominant functional categories in 1991. It is seen that three new class-I towns such as Puri, Balasore and Sambalpur emerged in 1991 with their predominant economic functions viz., services-cum-trade & commerce, services-cum-primary activities-cum-trade & commerce and services-cum-industry-cum-trade & commerce respectively. No change took place in the functional status of the other four class-I towns



present in 1971 such as Rourkela, Bhubaneswar, Cuttack and Berhampur between 1971 and 1991.

There was a significant rise in the number of class-II towns between 1971 and 1991. From two in 1971, their number increased to as many as ten in 1991. Three of them belonged to mono-, three to bi- and four to multi-functional category. Under the mono-functional category, one each of such class size of towns were in services, primary and trade & commerce group. Of the three class-II towns under bi-functional category, two were in services-cum-trade & commerce group while one was in the group of industry-cum-primary activities. Out of a total of four mono-functional towns of such class size, as many as three were in services-cum-primary activities-cum-trade & commerce category.

Looking at the class-III towns, it is found that there has been an increase in the mono- and bi-functional characteristics of such towns between 1971 and 1991. It is surprising that, in both the categories, majority of such towns have shifted from industry and other activities to primary and services. For example, in 1961, there were three industrial class-III towns; the number was reduced to one by 1991. Similarly, out of six bi-functional towns, three appeared to be in the primary activities-cum-services group.

In 1991, class-IV towns under the mono-functional category increased more than double the number existing in 1971. And a majority of them, numbering 25, were primary towns. The class-IV towns increased their number under the bi-functional category also. In fact, multi-functional towns under this size class showed a decline from 14 in 1971 to 8 in 1991.

There was a decline in the number of class-V towns between 1971 and 1991 and such decline was due to a sharp fall in bi- and multi-functional towns. However, it is interesting to see the coming up of six industrial towns under this size class. They were Panposh (CT), FCI Township (CT), Hatibandha (CT), NALCO (CT), Nuapatna and Damanjodi (CT). In addition, class-VI towns increased by one in 1991 as compared to 1971 and that was an industrial town namely Paradeep Phosphate (NAC).

It was seen earlier (in chapter II) that Orissa's urbanization has been mainly supported by class-I cities particularly from the sixties. The findings from the class wise functional classification of towns shows that the majority of newly emerging class-I towns were characterised by services and trade & commerce activities as their dominant function. In the context of urbanization and economic development, class-I towns with industrial activities are highly expected. Again, a diversification to multi-functions of such towns dominated by industry, transport and communication etc. is quite in line with the degree of urban as well as economic development. These appear to be lacking in Orissa and this could be a major reason why the state's level of urbanization has been so low overtime.

Graduation of towns from smaller size classes to bigger ones plays a key role in the urban process. Again, such graduation of towns associated with their shifting to multi-functional category headed by stronger economic activities such as industry is a key note to development. In the context of Orissa, only the former has been taking place. A majority number of towns which enter into the bigger size classes are found in the mono-functional category and that, too, mainly in the primary and services groups. This could be feared to have been posing a serious threat to the state's economic development if urbanization is considered as a cause of development.

The foregoing discussion can be summarised as follows.

There was a gradual increase in employment in the secondary and tertiary sector in the state as well as in the coastal region since 1971. The primary sector, on the other hand, showed a decline since 1971. However, in a longer time span, between 1961 and 1991, the shares of primary and tertiary have gone up and that of the secondary sector declined both for the coastal region and the state as a whole. In the Inland region, only the primary sector has shown an increase while other two sectors have come down.

Orissa's urban work force structure is characterised by a rising share of the primary sector and a decline in the tertiary and secondary sector. However, an inter sectoral comparison over time shows that the tertiary sector has been claiming the dominant share in the urban work force employment. The shares of the secondary and the primary sectors have been very close to each other in this regard. In fact, the scenario of employment structure in urban areas of Orissa has more or less been replicated in the two regions also.

Rural Orissa has been characterised by an increase in the employment in primary sector and shrinking in the secondary and tertiary sectors. The increasing primary sector employment has been mainly due to the increasing share of the agricultural labour in the total rural work force. Declining secondary sector employment has been reflected in the continuous fall of the employment creation in the household industries. A steady increase in the 'Other Services', on the other hand, has brought about a steady decline in tertiary sector employment.

Mono-functional towns have been dominant among all the three functional categories all the time in Orissa. The towns in the state mostly veer round the primary activities and the services group even today. Taking the mono-, bi- and multi-functional categories together, more than 50 out of 62 towns belonged to services, primary activities and other services in 1961. In 1971, the number of such towns increased to as many as 58 out of 81 and in 1991, they appeared to be more than 80 out of a total of 119 towns. A majority of newly emerging class-I towns were characterised by services and trade & commerce activities as their dominant function. Most of the towns which enter into the bigger size classes are found in the mono-functional category and that, too, mainly in the primary and services groups.

# **CHAPTER-V**

## **Summary and Conclusions**

Urbanization has a significant role to play in the process of economic development. Hence, a study of urbanization assumes considerable importance in the field of development economics. At the macro level, there have been many analytical and descriptive studies on the trends, patterns, sources and factors of urbanization. There are very few studies on urbanization in Orissa. The present study attempts to fill this gap.

The specific objectives of the study are

- (i) to analyze the patterns of urbanization and examine the components of urban growth in Orissa;
- (ii) to analyze the role of migration in the process of urbanization in the state; and
- (iii) to study the urban process from the perspective of occupational structure and functional classification of towns.

The patterns have been analyzed by examining the level and spread of urbanization, rate of urban growth and urban concentration. A component analysis has also been attempted with a view to identify the components of urban growth. An analysis of the pattern of urbanization showed that the level of urbanization in Orissa was rising with the rise in the number of towns and urban population. However, the level of urbanization in the state was rather low compared to other states of the country. Even though the level of urbanization was low, its pace was increasing overtime. Urban growth reached a peak during the fifties and maintained its pace during the sixties and seventies. This seems to have slowed down

during the eighties. Taking towns with population of 20,000 and above it is seen that both the degree and rate of urbanization were high during the sixties and seventies which slowed down during the eighties.

Increase in the spread of urbanization has also taken place in Orissa all through the study period. It is reflected in rising town density and number of towns per lakh population. However, the rising rural population per town has been a threat to the spread of urbanization in the state.

As far as urban concentration is concerned, the role of large towns was increasing especially from fifties onwards while the importance of small towns was declining; the medium towns showed a fluctuating tendency. In fact, urban concentration of Orissa is mainly due to the class-I and some other isolated towns. The role of urban agglomerations in the process of urbanization is rather insignificant overtime.

Regarding the components of urban growth, the study shows that the intensive component (i.e., natural increase and net migration) is the largest contributor to the urban growth of Orissa. This is followed by the reclassification component.

No significant difference is found between the Coastal and the Inland regions of Orissa with regard to the degree of urbanization. Both the regions are witnessing a continuous spread of urbanization in terms of increasing town density. Urban growth is on a consistent decline in the Inland region since the sixties while that of the Coastal region is discontinuous. Like the state as a whole, isolated towns are playing a more important role than the urban

agglomerations in the urban concentration of both the regions. Urban population is more evenly distributed in the Inland region than in the Coastal region.

The degree of urbanization shows a rising trend in almost all the districts overtime. It is increasing faster up to the early eighties and slowed down thereafter. A majority of the districts have a lesser degree of spread in urbanization. Hardly any district experienced a consistent urban growth all the time. In some districts it was high during the sixties where as many others experienced a high urban growth during the seventies. But in none of the districts urban growth rate was higher in the eighties as compared to the earlier decades. Most of the districts where urban growth rate was high during 1971-81 had a considerably larger portion of their urban population concentrated in the upper class towns (i.e. in class-I to class-III). On the other hand, districts with continuous decline in urban growth showed more people getting concentrated in medium and small towns.

As regards the role of migration, it is found that urbanization in Orissa during the sixties and seventies was supported more by internal rather than external in-migration. External out-migration (generally considered as a negative factor affecting urbanization) was higher than internal out-migration in the state throughout the study period. The two regions also had more or less similar experiences. Net migration played a more important role in the process of urbanization in the Inland region than in the Coastal region. During the other two periods viz., the sixties and the seventies, natural increase dominated over net migration. In most of the districts, net migration supported urbanization during the seventies while in the sixties and eighties, it had a marginal role compared with natural increase and reclassification of towns in the urban process of the districts. With the passage of time, the distribution of net migration among the districts was becoming more even. Another

important finding is that the districts having high in-migration also experienced high out-migration both during sixties and seventies.

With regard to the occupational structure and urbanization process in the state, it was found that with the slow but steady increase in the level of urbanization, employment in the secondary and tertiary sector increased gradually while that of the primary sector showed a decline since 1971. However, in a longer time span between 1961 and 1991, the shares of the primary sector went up and that of the secondary sector slowed down both for the coastal region and the state as a whole. In the Inland region, only the primary sector showed an increase while the other two sectors came down.

An inter-sectoral comparison of the occupational structure in the state shows that the tertiary sector had been claiming a dominant share in the total urban main work force overtime. The urbanization experience of most developing economies goes hand in hand with increasing tertiary and secondary sector employment. However, in Orissa, urban work force structure is characterised by a rising share of the primary sector and a decline in the tertiary and secondary sector employment.

Rural Orissa is characterised by an increase in the employment in primary sector and shrinking in the secondary and tertiary sectors. The increasing primary sector employment was mainly due to the increasing share of the agricultural labourers in the total rural work force. Declining secondary sector employment is mainly due to lack of employment creation in the household industries. A steady decline in the 'Other Services', on the other hand, brought about a steady decline in the tertiary sector employment in the rural areas of the state.



The peculiar employment structure in the urban areas of Orissa (i.e, increasing primary sector employment and declining secondary and tertiary sector employment as mentioned earlier) made us look into the nature of towns coming up in the state overtime. Hence, this led to an exercise on the functional classification of towns.

An over all view of the picture of functional classification of towns made it clear that the mono-functional towns were dominant among all the three functional categories in the urban scene of Orissa all the time. The towns in the state mostly veered round the primary activities and the services group. A class wise functional classification of towns showed that the majority of newly emerging class-I towns were characterised by services and trade & commerce activities as their dominant functions.

In the context of urbanization and economic development one expects the emergence of class-I towns with industrial activities. Again a diversification to multi-functions of such towns dominated by industry, transport and communication etc. is quite in line with the degree of urbanization and economic development. But unfortunately, these appeared to be lacking in Orissa and this could be a major reason why the state's level of urbanization has been so low overtime.

In brief, Orissa's level and spread of urbanization have been increasing along with increase in urban concentration even though the process is slow compared to the rest of the country. Net migration has been the most important component of urban growth in the state. The urban areas have been dominated by the primary sector employment and most of the towns in the state veered round primary and services activities.

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