

Chapter-I
Introduction

CHAPTER – I

INTRODUCTION

I.1. CONCEPTUAL FRAMEWORK

The term 'urban' is usually applied to a spatial or aerial unit having certain specific characteristics which differentiate it from a rural unit. It refers to towns or cities having marked secondary and tertiary functions along with a municipality or notified area committee. It concerns with the geography of town, their situations, patterns, layout, housing and hierarchical organization of population concentration and service areas. Urban habitat on the other hand includes the habitat of urban people, their mode of life, relationship with the neighboring areas which have an impact on the urban environment and the resident of the area. The ecological elements like trade, transport, industries, cultural institutions and physical conditions of the urban centres are guiding force for deciding the pattern of urban habitat.

While the growth of population in urban area is known as 'Urbanization'; in other words, the shift of population from village to city or town and the process of transformation of villages into city or town is called 'Urbanization'. (G.Trewartha) According to Thompson urbanization is characterized by movement of people from small communities concerned solely with agriculture to other larger communities whose activities are primarily centered in government, trade, manufacture and allied interests. Hauser and Duncan characterize urbanization as a change in the pattern of population distribution and growth in number and size of urban places with increasing concentration of population of such places. The transformation of rural service centres in both time and space, due to concentration of commercial, transportation and professional services give rise to the development of urban centres. Urbanization usually brings with it regional prosperity as the provision of infrastructural facilities. It stimulates the development of local available resources, increasing regional income and the level of employment. Urbanization provides, new economic opportunities through providing employment in new industries including the provision of several other infrastructural facilities e.g. electricity, irrigation, provision of higher education, transport and communication lines and the better opportunity of employment in urban areas. Besides, these urban areas also provide the facility of new political features of urban state and national level marketing of produce, diversification of occupations, commercialization of agriculture and change in consumption pattern. The process of urbanization includes the change economy which may be from forest to agriculture, agriculture to manufacturing oriented production centres and centres of exchange of goods. According to G.Trewartha, "The level of urbanization is defined as the proportion of urban population to total population residing in urban places." The urban growth is influenced by physical, socio-economic, political, demographic, cultural and technological factors. From the economic point of view, the

higher the level of urbanization, the higher is the stage of economic development which has been typified by a higher level of industrialization and development of modern sectors of commerce, transport and services. Economic development is further typified by a shift in the structure of work force from agriculture to non-agricultural activities which in turn, means a shift in population from rural to urban areas, either by rural urban migration or the development of rural areas themselves into industrial and commercial areas.

By definition, the Indian Census (2001 similar to 1991) treats those areas as urban which are either statutory town. i.e. all places with a Municipal Corporation, Municipal Board, Cantonment Board, Town Committee or notified area or which have got a i) minimum population of 5,000 persons coupled with ii) three-fourth (75%) of its male work force being engaged in non-agricultural economic activities and iii) a density of at least 400 persons / km². That is, even those areas which are classified as rural administratively would be treated as urban in census if they fulfill above three criteria such urban areas are called 'Census Town'. Besides, the concept of Urban Agglomeration (U.A) adopted for – large railway colonies, university campus, port areas, military camps etc. which very often sprang up outside the statutory limit of city or town but adjoining it may not be themselves qualify continuous spread with the adjoining town. It would only be realistic to treat them as urban and are termed as Out Growth (O.G) and may cover a whole village or part of village. Two or more town may also be contiguous to each other such towns together with their Out Growth (O.G) are treated as one urban unit and called Urban Agglomeration (U.A).

The level of urbanization differs very sharply from state to state. Higher is the percentage of urban population to total population, greater is the level of urbanization and vice-versa. Similarly urbanization becomes a part and parcel of economic development.

Urbanization is a global phenomenon and it holds a special significance in context of developing countries, as the latter have been experiencing rapid urban growth. Planned response to the process urbanization has been a relatively recent phenomenon. Urban development programme attempts to address the various manifestation of the process of urban growth in organized manner. The state of West Bengal is no exception to witnessing the phenomenon of urban growth and various manifestations thereof.

The state of West Bengal had been experiencing the process of urbanization at a relatively rapid rate since a long time. In the year 2001, the urban population in West Bengal has shown an increasing trend rising from 24.45% in 1961 to 27.39% in 1991 and 28.03% in 2001. The rate of growth of urban population during the last few decades has been smaller than national average but West Bengal occupies a prominent position in the urbanization scheme of India (Rank – 15). In respect of population to total, the place of West Bengal has been above the national average implying that it is one of the highly urbanized states of India. Since urbanization started in West Bengal in early years during colonial period, there was lack of planned response to the relatively rapid rate of urban growth in earlier days. The Government of West Bengal need for a dispersed process of urban growth across the state and accordingly adopted a strategy of decentralized urban

development since late 1970's. Nevertheless, it is in the state of West Bengal that first organized planning effort to tackle the variants manifestation of urban and metropolitan growth had taken place.

The forces of urbanization over the years have demonstrated in West Bengal two distinct patterns: on the one side, the individual development. This process was greatly supported by trading activity and other functions that a large metropolis performs for its vast hinter lands. On the other side, the growth of agriculture economy in rural Bengal during the past two decades has created efforts for urban growth starting at the block level and spreading over to the small and medium towns. During the past two decades, there have been remarkable achievements in the rural areas through development of agriculture and the landforms. These measures have increased the agricultural productivity in this state to a very significant extent. As a result of the economic momentum generated out to rural development along with agro-based industries, the demand for urban services has increased. This has triggered off a rapid urban growth process in an around the towns of all size. The State Government has recognized the need for instituting a decentralized structure of urban development with one of the strategy of developing the small and medium towns of the state so that they can play appropriate rôle in discharging urban functions. Necessary to support their agricultural hinterland, every urban centre does perform several functions for a size of population threshold. Such centres need the hierarchically arranged along with inter-linkages. The functions of size class cities or towns are to be identified and the capacity of these cities and towns has to be augmented by removing the weakness of infrastructures needed for stimulating growth.

I.2. THE STUDY AREA

The district of Koch Bihar which once formed a part of ancient kingdom of Kamrupa, Khens, Koch has great historical traditions. Even after the independence of India, Koch Bihar still remained a feudatory native state in political relation with the government of India under Hindu King – the Maharaja of Koch Bihar. In January, 1950, Koch Bihar merged with the state of West Bengal is presently the farthest north-eastern border district of West Bengal lies between $25^{\circ}57'04''$ and $26^{\circ}32'20''$ north latitude and between $88^{\circ}47'40''$ and $89^{\circ}54'35''$ east longitude adjacent to Assam and Bangladesh.

The purview of the present study is to assess urban habitat and levels of development — A case study of Koch Bihar district. The district is pre-eminently an agricultural district and agriculture forms principal occupation of this district. Most of the people of this district are engaged in agricultural pursuits for earning livelihood for their families. The total urban population of this district in 2001 is 2, 25,506 which are unevenly distributed in different towns. The percentage of urban population to total population has shown in increasing trend ranging from 7.80% in 1991 to 9.03% in 2001. In terms of the percentage of urban population to total population, Koch Bihar district occupies 15th position in West Bengal. There are ten (10) towns (2001 census)

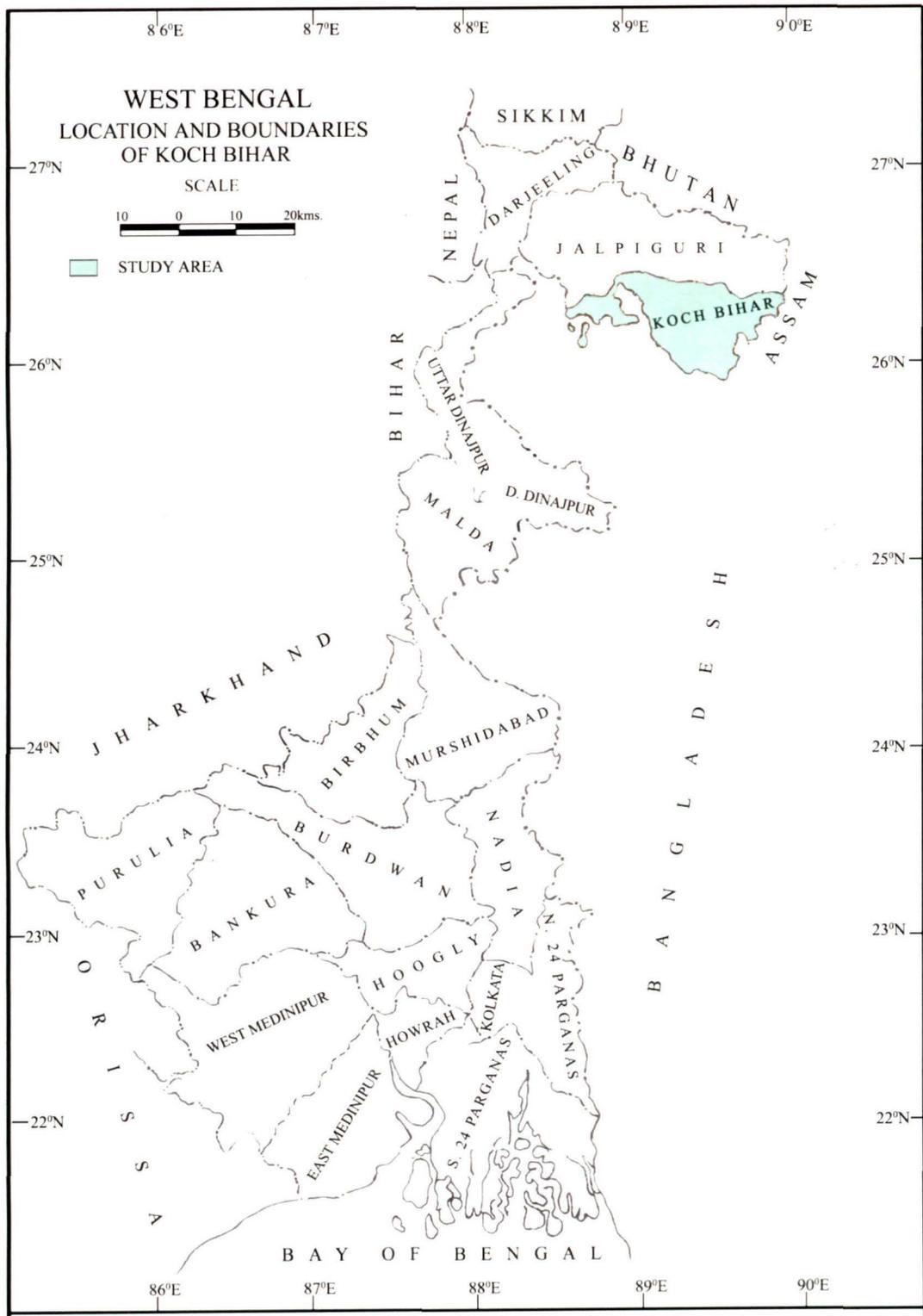


Fig. No. I.1

of this district viz. Cooch Behar Municipality (Class-II), Dinhata Municipality (Class-III), Mathabhanga Municipality (Class-III), Tufanganj Municipality (Class-IV), Haldibari Municipality (Class-IV) Mekhliganj Municipality (Class-IV), Khagrabari Census Town (Class-IV), , Guriahati Census Town (Class-IV), Kharimala Khagrabari Census Town (Class-V) and Bhangri Pratham Khanda Census Town (Class-VI) These towns of this district are the centres of trade and commerce as well as service centres of their hinter lands. They have enough scope to development activities. Besides, these towns have the potentialities to develop not only as a nodal growth centre for the agriculture based products and small scale industries but also as a tourist centres. In Cooch Behar Municipality, the district headquarters, once upon a time as a State Capital, the Maharaja of Koch Bihar engaged foreign experts to prepare a plan for this town. The existing grid iron pattern road network with well conceived vistas, palace, buildings, corroborates this fact. Thus in past, as a state capital and now as a district headquarter, the town has been catering to a large number of settlements in terms of facilities and services not only to the surrounding settlements, but also the semi-urban settlement of the district. Surrounding by a large number of hinterland, this district headquarters has to cater to the needs of urban amenities and industrialization to a vast population. Accept Cooch Behar , all towns are unplanned where the primary activity still dominates in the urban environment leading to haphazard growth offering by the migrants came from Bangladesh due to communal disturbances and the influx of rural people to urban areas.

Rapid growth rate of population, lack of urban amenities, lack of land use management, housing problem, unemployment, influx of rural population, inadequate transport or infrastructural facilities, waste and sewage disposal, lack of water supply, .power shortage, absence of parking places for vehicles, traffic lights and regulations, price control and quality control for perishable goods, lack of fixed price markets, storage facilities, inadequate postal services, savings problems, lack of wholesale market, haphazard growth of the markets, narrowness of the roads, inadequate drainage facilities, lack of health facilities, juvenile delinquencies, low per capita income, deprived of central share , lower the availability of funds, low level of industrialization, lack of proper plan, environmental hazards like floods, soil erosion, depletion of forests are some serious problems of the different urban centers of Koch Bihar districts.

I.3. HYPOTHESIS

In my present study I have find out the answer of the following hypothesis:

- 1) There is a positive correlation between density of population and development of the towns.
- 2) The higher the growth of population the higher will be the level of development of the towns.
- 3) The larger the size of the town, the higher will be the level of social and economic development.

- 4) The higher the administrative status of the town, the higher will be the level of development.

I.4. OBJECTIVES OF THE STUDY

In my present study, an attempt had been made to study in depth of ten(10) small and medium towns of North Bengal under Koch Bihar district. Here I have shown the demographic pattern of those urban centres of this district and their existing position, their level of development, problems and implementations. So the objective of this work was to reveal the trend of urban habitats and levels of development of different towns of Koch Bihar district in North Bengal since 1951 to 2001 and their decadal variation.

In the six municipal and four census towns of this district viz. Cooch Behar (District Headquarter), , Dinhata, Mathabhanga, Tufanganj, Haldibari ,Mekhliganj, and Khagrabari, Guriahati, Kharimala Khagrabari and Bhangri Pratham Khanda ,very few empirical studies have been done. But so far no work has been done on urban habitats and levels of development — A case study of Koch Bihar district. Therefore I shall try to find out the following objectives from the said six municipalities and four census towns or urban centres.

- 1) To analyze the demographic indicators of all the towns of Koch Bihar district.
- 2) To evaluate the levels of socio-economic development.
- 3) To analyze the resident's perception of development.
- 4) To classify towns on the basis of level of development.
- 5) To suggest suitable measure for the development of towns having low level of developments.

I.5. METHODOLOGY

In order to carry out the study, all six municipal and four census towns of Koch Bihar are selected purposively. The present work is primarily analytical in nature. Therefore, it is based on two types of data — primary and secondary.

➤ *Primary Data:* The primary data is collected from unpublished official record and peoples perceptions gathered from field survey from six municipal and four census towns of this district by stratified interview method.

Sample Survey — A sample is that part of the universe which we select for the purpose of investigation. A sample should exhibit the characterize of the universe, it should be a 'microcos' a word which literally means 'small universe sampling is simply the process of learning about the population on the basis of a sample drawn from it. Thus in the sampling technique instead of every unit of the universe only a part of the universe

is studied and the conclusions are drawn on that basis for the entire universe. So the selected respondents constitute what is technically called a 'Sample' and the selection process is called 'sampling technique'. The survey so conducted is known as 'Sample Survey'.

Sample Size — This study includes ten (10) towns of this district viz. Cooch Behar, Dinhata, Mathabhanga, Tufanganj, Haldibari, Mekhliganj Khagrabari, Guriahati, Kharimala Khagrabari and Bhangri Pratham Khanda . Then 5% beneficiaries of the total households of different towns including councilors and elected members, officials and the general peoples are selected randomly for detail investigation.

Interviews — The author employed the interview technique for collection of data. Open interviews had been arranged with the different categories of respondents for collecting information and peoples' perception. Generally the author tried to make prior appointments with the respondents for setting up interviews and found no difficulty in setting up interviews with the officials, councilors and elected members and the general people in the time originally schedule for interview.

Before getting down to the schedule a number of queries had to be answered as to the author's profession, address, intension in conducting survey, the some ones for finance etc. Most of the respondents welcomed the subject of the study and replied the questions in the schedules frankly and in a friendly atmosphere. In course of these interviews, the respondents also gave some relevant and useful information in addition to questions in the schedule.

➤ *Secondary Data* : On the other hand, the secondary data are collected form books, journals, official records, annual reports, the census reports, district census hand books, key of statistics of Koch Bihar district, district level planning report of Koch Bihar, IDSMT(Integrated Development of Small and Medium Towns) Project reports of six municipal towns.

Statistical Tools Employed — In order to analyse and interpret the data obtained from the census annual report of this district and data collected by interviewing, different statistical tools and techniques are used in this study. The statistical techniques are as follows.

Mean — The most popular and widely used measure for representing the entire data one is mean value, what call an 'average' and what the statisticians call the arithmetic mean – the mean value is obtain by adding together all the observations and by dividing this total by the number of observations. The arithmetic mean, often simply referred to as mean, is the total of the values of a set of observations divided by their total number of observations. It is calculated by applying the formula.

$$\bar{X} = \frac{\sum X}{N}$$

Where \bar{X} = Arithmetic mean; $\sum X$ = Value of observations and N = Number of observations.

Weighted Mean — When all observations do not have the same importance we compute weighted arithmetic mean. It is the most important tool for studying a number of economic problems. It is also used to calculate in the construction of index numbers

$$\bar{X}_w = \frac{\sum WX}{\sum W}$$

Where \bar{X}_w = weighted arithmetic mean; W = the weights assigned to variable X and WX = multiply weights by X .

Standard Deviation — It is by far the most important and widely used measures for the study of dispersion. It satisfies most of the properties of a good measure of dispersion. Standard deviation is also known as the root mean square deviation. The square of the standard deviation called the variance. It is conventionally symbolized by σ . The formulas for standard deviation for ungrouped and grouped data by direct and short cut methods are given below.

$$\sigma = \sqrt{\frac{\sum (X - A)^2}{n} - \left\{ \frac{\sum (X - A)}{n} \right\}^2}$$

Where σ = standard deviation; A = mid value of class interval; X = the individual value; n = number of observation

Standard Score — This is the most important statistical technique to standardize all types of data on a common scale.

$$Z_{ij} = \frac{X_1 - \bar{X}}{\sigma}$$

Where Z_{ij} = Standard score of the observation; σ = standard deviation of X ; X_1 = original value of the observation; \bar{X} = Mean value for all the values of X

Composite Standard Score — The results of the Standard score obtained from different indicators are aggregated by Composite Standard Score for obtaining the disparities.

$$CSS = \frac{Z_{ij}}{N}$$

Where CSS = Z score of an indicator j in district i ; N = Number of indicators.

Correlation — To evaluate the inter-relationship between variables under the study correlation co-efficient has been used. The formula used to calculate the correlation co-efficient of any two variables: -

$$r = \frac{\sum (X - \bar{X})(Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 \sum (Y - \bar{Y})^2}} = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Where r = correlation; \bar{X} = mean of X series; \bar{Y} = mean of Y series; $X - \bar{X}$ = deviation from mean x ; $Y - \bar{Y}$ = deviation from mean y .

Cartographic Presentation — The calculated data were plotted by suitable cartographic methods such as histogram, line graphs, bar graphs, pie chart, etc.

1.6. REVIEW OF LITERATURE

In the light of preceding analysis of the present study, it would be useful to recount briefly the review of literature in the field of urbanization and urban development. There is plethora of literature on urbanization and urban development published in India and abroad. So I bound to concentrate on some of the earlier publications. Tripathi R.S. (1996) in an article discuss that highly urbanized areas have high state of socio-economic development. Urbanization provides new social and economic institutions to the people and opens new horizon of development. Munsu K.S. (1972) in an article discussed that the characteristics of West Bengal's urban growth are marked by the development of a single primate city of a gigantic proportions totally correlated to any system of nodes hierarchically arranged. Mukhopadhaya Shayamal (1977) in an article discussed about the picture of local urban government of North Bengal. Shortage of fund, lack of multiple sources of income coupled with real administration and inadequate government development growth and other social and economic conditions together have tight to hands of local urban government in rendering services to the residents. Sarkar Ashis (1989) in an article discussed, since the beginning of this century the urban domain of West Bengal is rapidly expanding. A major part of its urban growth is often attributed to the "selective migration" to the larger towns having the greatest attractive force. Jana M.M. (1993) in his article concluded that the towns of North Bengal are developed on the basis of services or trade and commerce. Ghosh A.K. (1994) in his article, discussed that the urban ecology study should include a positive factorial study of the available open space for recreational areas, parks, gardens and wet lands in both man made and natural in urban and semi-urban region. Bhattacharya Bimalendu (1972) in an article discussed, in North Bengal the administrative status and the size of individual town have determined the respective hierarchical order where towns in administrative status are generally large in size and also higher in the graded order. Sarkar Ashis (1987) in an article expressed, the urban rank size rule embracing the most important geographically significant assumption that there is some sort of order or logic underlying the size relationships and spatial distribution of urban centres. Majumder Paramita (1998) in an article discussed the

trend of urbanization and urban growth of Haryana where she stated that urbanization as complex process and the epitomic of a society advancing towards industrial and technological enrichment. Sing S.C (1999) in an article highly discussed the morphology of a service centre reflects the function and the planning at each place of its development. Lahiri Shikha (1984) in an article presents a quantitative analysis on the levels of urbanization where she measured the level of urbanization of Burdwan district qualitatively with the help of aggregate urbanization scores of different police station and established correlation of four urban attributes. Banerjee Basabi (1989) in an article discussed, the regional disparity is typical feature of most of the Third world countries and in India also. Zones of development exist with the areas of subsistence economy. To promote the backward regions, the growth centre policy has become the strategic approach to tackle the problem in development level as well as against planners. Dey Jaysree (1989) in an article highly studied that in order to comprehend the process of urbanization it is necessary to understand the rural-urban phenomenon, the trend of migration and the existing level of urbanization. Basu Tridib Kumar (1975) in an article discussed on functional classification of urban settlements of Singbhum district cartographically. Jana M.M. (1975) in an article also discussed the decennial growth and functional characteristics of urban areas of Midnapur district. Munsi Sunil Kumar (1993) in an article presents an enquiry into the historical roots of Indian urbanization of nearly 200 years of colonial rules. Nandi Purabi (1993) in an article on Birbhum district studied that big cities may be more efficient in a short terms perspective but need not be so in the context of long run development. The development of small and medium towns can ensure the spatial dispersion of growth processes which is necessary for long run development in a vast rural economy. Jana M.M. (1991) in an article presents strategies and planning for development urban areas of Sikkim where he discussed, with the rapid urbanization a number of problems that have been tackled, have multiplied. So strategies and planning for urban development is essential now-a-days. Bagchi K.K. and Sarkar Satyen (2003) also worked on the strategy for development of comparative backwardness of North Bengal. Tiwari Ramkumar (1990) in an article discussed; internal demographic structure of any town is the basic concern of study for urban geographers as well as population geographers to formulate a rational strategy for future planning of the town. Tripathi R.M.(1996) in an article discussed on urbanization and urban hierarchy in Uttar Pradesh to analyse the spatial trends of urbanization on various aspects of the process in the state. Tripathi Raj Manai (1996) in his article and attempt has been made to identify the existing pattern of distribution and relative strength of scheduled caste population along with demographic, social and economic characteristics. Bhaduri Shukla(1995) in her article and attempt has been made to asses the mass transport services in Calcutta with the emphasis on performances and perspective of state buses and their routes growth as well as composition of buses in routes. Sing Biri and Chand Ramesh (1998) in an article an attempt has been made to discuss spatial pattern of urbanization in Himachal Pradesh (1981 – 1991). Tiwari Ram Kumar (1998) in an article discussed regional pattern of urbanization in Jharkhand, India on the basis of five selected indicators, decadal urban growth, percentage of urban population, population per urban centre, relative distance

between urban centres and percentage of population of above 20,000 urban centres to total population. Kothari Sadhma and Kohli Anju (1999) in article discussed urbanization have great bearing on socio-economic development and population growth. Das (Roy) Sharmistha and Betal R. Himangshu (2005) in a paper deal the role of educational institution on literacy in Hoogly, West Bengal on the basis of multiple regression models. Adhikary Sunit (2005) in his article has made an attempt to discuss the emerging travel and transportation issues in contemporary urban area. Tyagi Nutan (2005) in an article discussed that there is a continuous pressure on existing urban areas due to rapid and uncontrolled migration of rural population towards cities for various reasons. Jana M.M. (2005) in an article discussed due to slow urbanization, the quality of life in India is very low compared to some developing countries of the world. Other factors for determining the quality of life in India are poverty, literacy, high fertility and mortality, low female literacy, large number of unemployed youths, unstable income, poor infrastructural facilities and lack of awareness for environment. Sharma R. Babli (2005) in an article has made an attempt to determine the hierarchical pattern of service centres in the urban field of Kashganj in Uttar Pradesh. Lokhande T.N. and Power C.T. (2005) in an article discussed importance of market centres in the socio-economic development of a region. Bhattacharya Jayanti (2005) in an article made an attempt to study the present socio-economic conditions, problems and prospect of development in Purulia district for the purpose of suggesting a suitable development strategy for the overall development of the study area. Dorababu K. Krishna and Tataji U (2004) in article clearly discussed the growth and decay of towns in Andhra Pradesh. Naseer Yasmeen (2004) in an article an attempt has been made to discuss the levels of development in western plains of Uttar Pradesh. Chatterjee Shishir (2004) in his article "Urbanization in Kolkata: A Study on impact of migration" discussed migration is a complex phenomenon and it is very difficult to analyse the process of migration. Koushik S. (2003) in his article discussed trend of urbanization in India. Mazumder Rajarshi (2003) in an article, "Infra-structural facilities in India: district level availability index", discussed the role of infrastructure in fostering economic growth and enhancing public welfare is more pronounced in developing economics like India. Douglas Pocock and Roy Hudson (1998) in a book, "Images of the urban environment" have made an attempt to discuss the nature of environmental perception and the image. Harold Carter (1999) in his book, "The study of urban geography" discussed about the images of the city, the citizens view, landuse and general problems,

There are some of the research works available on urban development in North Bengal. Mukhopadhyay Shayamal (1977), in his research work "Urban Development in North Bengal, its process character and future trends" had made a study of central functional activities and the actual institutional scenario of the urban centres of North Bengal. Choudhury Namita (1988), in her work of "Urbanization in North Bengal in the post independence period" explained the social, economic and demographic aspects of urbanization in North Bengal. Sarkar Dilip (1990), in his thesis, "small and medium town development in West Bengal : a case study of selected towns of North Bengal" analyzed the historical background, growth pattern, the functional character, financial position and

future prospects of urbanization in some towns of North Bengal. Roy Ranjit (1985), in his research work, "Economic Change in Siliguri and Problem of its Urban Development" made a study of urban growth, urban development and related problems of Siliguri situated in the foot hill of the Himalayas. Bandopadhyaya Utathya (1996) in his thesis, "Urban Development and Urban Government in the district of West Dinajpur and Malda" made a study of demographic and socio-economic profile of some selected towns of two districts elaborately.

However, the review of literature of urban development suggests that no serious and exclusive work on urban habitats and their levels of development in the district of Koch Bihar has been done by any scholar. The prime importance put to the habitats and the levels of development of six municipal towns of Koch Bihar district warrants, such a serious study and the present work humbly claims to remove the gap in this field.

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