

## **ABSTRACT**

### **A GEOGRAPHICAL STUDY ON URBANIZATION AND ASSOCIATED PROBLEMS IN NORTH BENGAL**

#### **Introduction**

North Bengal comprising the six districts of West Bengal viz. Darjeeling, Jalpaiguri, Koch Bihar, Uttar Dinajpur, Dakshin Dinajpur and Maldah has an important strategic location. On one hand it acts as the main connection between the north east India and the rest of India. Infact the 20 km wide Siliguri corridor connects the north east India with the main land. On the other hand the six districts of North Bengal share international border with Bangladesh, Nepal and Bhutan. Not only is studying the pattern of urbanization in North Bengal important from an international point of view because North Bengal itself has a variety of physical and social conditions which ultimately affects the trajectory of urbanization in this region. North Bengal as a whole till 2011 had a very lack lusture history of urban development. There were very few urban centres in this region before independence and this situation continued till 2011. The total number of urban centres in North Bengal in 1991 was 45, which increased to 48 in 2001 and further increased to 131 in 2011. Therefore during 2001 – 2011 North Bengal witnessed an unprecedented growth of urban centres and rapid urbanization which brought along it all kinds of problems associated with rapid urbanization in any backward region.

#### **Objectives**

1. To trace the origin of urban centres in North Bengal.
2. To analyze the recent trend of urbanization and growth of urban centres in North Bengal.
3. To analyze the socio-economic condition of urban centres in North Bengal.
4. To analyze the level of infrastructure development among the urban centres in North Bengal.
5. To analyze the problems associated with the process of urbanization in North Bengal.

## **Hypothesis**

1. The tempo of urbanization will increase with the passage of time for all the districts of North Bengal.
2. Most of the districts in North Bengal is in an urbanizing mode i.e.  $RGUP > RGTP > RGRP$ .
3. Class I cities will dominate other size-classes of urban centres in terms of their population share and growth rate.
4. Higher the population size of an urban centre, lower will be their annual exponential growth rate.
5. The sex-ratio will deteriorate with an increase in the size of urban centres.
6. The level of infrastructural development will be higher for the larger urban centres compared to smaller urban centres and also for the statutory towns compared to census towns.
7. The problems associated with urban development are more for the larger urban centres.

## **Database and Methodology**

The source of data for this study will be both secondary and primary in nature. Majority of the data related to population size, urban growth, infrastructure development and housing condition will be collected from various Census of India publications. The data related to water quality, noise pollution, air quality and traffic density will be collected by primary survey for randomly selected 67 urban centres of North Bengal. The analysis will mainly be done taking into consideration the three census year of 1991, 2001 and 2011 for secondary data. However, wherever required the temporal span may be increased if the situation demands accordingly. In this study a systematic analysis involving both qualitative and quantitative techniques will be used to find out the dynamics of urban development in North Bengal and to get an idea about the growth of urban centres in this region. The spatial and temporal variation of various aspects of urban development will be shown with the help of GIS maps prepared under Arc GIS platform and tables where ever required.

## **Major Findings**

Historically there were few urban centres in North Bengal. The urbanization process started to develop systematically in this region only after the coming of the British. There was a lot of variation in the level of urbanization among the six districts of North Bengal during the study period. The level of urbanization in North Bengal as a whole was quite low compared to West Bengal and India. Urban population and urban centres in this region was mainly concentrated in the districts of Darjeeling and Jalpaiguri. Most of the districts of North Bengal were in an urbanizing mode during the study period. The rank-size relationship among the urban centres of North Bengal shows a lot of variation from the expected one. The growth rate of statutory towns has been very nominal while the census towns grew very rapidly during the study period in North Bengal. However, majority of urban population continue to live in statutory towns during the study period. Although the class I towns were fewer in number but majority of urban population lived in class I towns in North Bengal. There was no relationship between the population size of any urban centre and their exponential growth rate of population during the study period.

The concentration of scheduled caste and scheduled tribe population across urban centres of North Bengal are quite high. Many urban centres have more than 50% of their total population from these two categories in North Bengal. The literacy rate, sex-ratio and percentage of main, marginal and non workers vary across urban centres of North Bengal.

The level of infrastructure development in most of the urban centres of North Bengal was very poor during the study period. Most of the census towns have low to very low level of infrastructure development. The level of infrastructure development in statutory towns was comparatively better. Most of the urban centres in the district of Darjeeling have better infrastructure facilities while majority of urban centres in the district of Maldah have very poor infrastructure facilities. There was no relationship between the population size of any urban centre and their level of infrastructure development.

The problems associated with rapid urbanization were very much visible across the urban centres of North Bengal. Slum proliferation was taking place during the study period in a number of urban centres. The housing condition like availability of safe drinking water facility,

electricity facility, latrine facility, bathroom facility, drainage facility and separate kitchen was not available to a large section of urban households in North Bengal. Most of these facilities were better available in larger urban centres compared to smaller urban centres. The problems related to drinking water quality, noise pollution, air quality and traffic volume was very much rampant across urban centres of North Bengal. Larger urban centres face more problems compared to smaller urban centres.

### **Conclusion**

The urbanization process in North Bengal was not uniform; some districts witnessed rapid development while others were lagging behind. Since urban centres have their own physical setting and resource base so the solutions for sustainable urban development in North Bengal should be formulated in a planned manner taking inputs from local bodies and common people rather than being doctored by some outside agency. In spite of all the shortcomings, North Bengal has a very bright future of urbanization and the condition is just perfect to achieve rapid economic development fuelled by planned urban development in this region.