

## CHAPTER 7

### CONCLUSION

This has been an in depth study about the process of urbanization unfolding in North Bengal in recent years. In this study the history of urbanization in North Bengal was analyzed. The analysis shows urban development in North Bengal was not a continuous process and this region had very few urban centres before the coming of the British. Before the coming of the British urban development in North Bengal was associated with the rise of political power and so it was disrupted easily with the fall of political power. The southern part of North Bengal presently consisting of the districts of Uttar Dinajpur, Dakshin Dinajpur and Maldah was ruled by a succession of Hindu and Muslim rulers. In this region the oldest urban centre was Bangarh (near Gangarampur) which was a prosperous town with good planning, architecture and craftsmanship. Another ancient urban centre found in this region was Gour, which attened great splendor during the reign of Pala Kings. It was a very important urban centre both during the Muslim and Hindu rulers and was regularly visited by the Arabs, Abyssinians, Afghans, Portuguese and Chinese for trading. Another important urban centre of this region was Pandua and was the capital of Bengal during the rule Shamsuddin Ilyas Shah. Other urban centre of importance in North Bengal was Kamtapur and Cooch Behar. Kamtapur was the centre of administration in the first half of the 13<sup>th</sup> century. The 10<sup>th</sup> Koch King Rupnarayan shifted his capital to Guriahati which is the present town Cooch Behar. During the reign of Koch Bihar Maharajas this town was developed in a planned manner and the Town Committee of Cooch Behar was constituted in 1885 and the municipality was formed in 1944. The Darjeeling Himalayas was sparsely populated and politically very unstable and there was no urban centre till the coming of the British. The British developed a number of urban centres in North Bengal to serve their own interest in trade and to escape from the heat of the plains. The important urban centres developed by the British were English Bazar, Darjeeling, Jalpaiguri, Kurseong, Mathabhanga, Dinhata, Haldibari, Kalimpong, Siliguri, Hili, Tufanganj and Mekhliganj respectively. However, at the time of independence the urban centres were very few in number in North Bengal and this situation continued upto 2001. Infact from 2011 onwards the urbanization process in North Bengal is in an accelerating mode with a huge increase in the number of urban centres. The total number of urban centres in North Bengal was 45 in 1991, 48 in 2001 and 131 in 2011 respectively.

The recent trends of urbanization in North Bengal show a lot of subtle variation among its districts with respect to various angles of analyzing the process of urbanization. The important point to keep here in mind was that the urbanization process has taken off only recently in North Bengal. This was clearly manifested by the difference in the level of urbanization in North Bengal and India. The level of urbanization across the six districts of North Bengal was uniform. The district of Darjeeling due to its heavy patronage received during the British period was in an advantageous position after independence and the urbanization process in the district kept its momentum and is the most urbanized district of North Bengal. Jalpaiguri district was the second best in this region with respect to the level of urbanization. However, the districts of Koch Bihar, Uttar Dinajpur and Dakshin Dinajpur continued with their very low level of urbanization. The district of Maldah witnessed unprecedented urban growth during 2001 – 2011 and its level of urbanization nearly doubled in 2011 compared to 2001. Therefore the recent spurt in the urbanization process in North Bengal was fuelled by urban growth in the districts of Darjeeling, Jalpaiguri and Maldah respectively. This was clearly evident by examining their annual exponential growth rate urban population, annual exponential growth rate of urban – rural ratio of population and Urban – Rural Growth Differential (URGD). All these measures were 3 to 4 times higher in the districts of Darjeeling, Jalpaiguri and Maldah compared to Koch Bihar, Uttar Dinajpur and Dakshin Dinajpur, ultimately making the urbanization process in North Bengal in recent years spatially skewed.

A very important statistical tool available to urban geographers to study the overall urban system of a region is rank-size relationship among the urban centres. The rank-size relationship among the urban centres of North Bengal points to a lack of conformity with the theoretical one. There was a lot of variation in the population size of any urban centre and their corresponding rank in the rank-size relationship. The urban centres occupying the middle ranks have more actual population than their estimated one while the urban centres occupying the lower ranks have less actual population than their estimated population. Therefore from policy implication sincere efforts are required for planned redistribution of population between these two groups of urban centres otherwise the smaller urban centres will gradually decline while the medium sized urban centres will be over populated with respect to their resource and infrastructural base. Another important finding which requires proper attention is that urban population was more concentrated in fewer urban centres in less urbanized districts compared to more urbanized

districts where urban population was more dispersed among their urban centres. This requires immediate policy intervention by developing more urban centres in less urbanized districts so that the population pressure from the district headquarter in these districts can be neutralized. In this regard it must be mentioned that, since urbanization in developing country like India is very much fuelled by rural push factors which is even stronger in backward regions like North Bengal so the government should try to establish or encourage new enterprises from private entrepreneurs with ample employment opportunities in smaller urban centres which will then become effective counter magnets to the stream of migrants from rural areas towards the district headquarters or class I towns in search of employment and livelihood. In this regard resource from central government schemes like Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) with the objective of improving the infrastructural facilities, enhanced public-private partnership and planned development for small and medium towns can be mobilized for improving the small and medium sized urban centres of North Bengal.

One interesting aspect of urban growth in North Bengal has been the different trajectories of growth for statutory towns and census towns. The stupendous increase in the number of urban centres witnessed across North Bengal was mainly fuelled by the growth of census towns. Infact the number of statutory towns increased from 20 in 1991 to 23 in 2011 while during the same period the number of census towns increased from 25 to 108. Therefore the percentage of statutory towns out of total urban centres of North Bengal showed rapid decline during the study period. However, majority of urban population stays in statutory towns making them overburdened in providing various amenities and infrastructure facilities to their residents. The problem with census towns were even more critical, because they have to function under the Gram Panchayets and work with limited financial resource for their citizens. During 2001-2011, the decadal growth rate of population in census towns of North Bengal was more than 15 times that of the corresponding figure for statutory towns. The problem become more accurate for census towns with large population base like Uttar Bagdogra (25044), Binnaguri (58840), Dabgram (119040), Jaygoan (42254), Kharia (61661), Mainaguri (30490), Khagrabari (23122) and Guriahati (21064). Therefore, there should be adequate statutory policy instrument to convert any census town to statutory town once they reach a particular size in terms of population. If not converted into statutory towns these urban centres may well degenerate into substandard habitats without any potential to develop in future.

A very insightful analysis about the urban system of a region can be done by studying the size-class characteristics of urban centres. A careful look at the size-class distribution of urban centres and urban population across North Bengal points to an imbalance in its urban structure. The class I town although had a negligible share in total urban centres, but they dominate in terms of their share of urban population. This trend was visible across the country because the class I towns are mostly statutory towns with better infrastructural and financial capabilities to satisfy the urban needs and aspirations. Moreover, the perception of better employment opportunities and living condition in class I towns among the rural masses make them more attractive for prospective migrants from rural areas. This ultimately leads to urban diseconomies setting in class I towns and rural poverty being converted to urban poverty because the migrant from rural areas entering labour market of class I towns failing to get absorbed in formal sector are forced to enter the urban informal sector with very little wage and job security ultimately leading to proliferation of slums and poverty in urban areas. To break the vicious cycle it is very important to develop the intermediate urban centres and surrounding rural areas so that push factors in migration process from rural areas become less important. In this regard the schemes like PURA (Provision of Urban Amenities in Rural Areas) can help in balancing the trajectories of development in urban and rural areas by narrowing the gap in availability of basic urban type services in rural areas.

The population balance sheet showing the disaggregated growth of urban population in various components across size-class categories for North Bengal shows that growth differentials by size-class did not correspond to those by place and they were also not related in a simple way.

North Bengal with a diversified social and cultural base also shows a lot of variety in its urban social and economic characteristics. North Bengal has a huge scheduled caste population especially in the districts of Koch Bihar, Jalpaiguri, Maldah and Dakshin Dinajpur. Moreover, there is ample number of persons belonging to scheduled tribe category in the districts of Darjeeling and Jalpaiguri. This huge concentration of people from scheduled caste and scheduled tribe category was reflected in the social mosaic of urban centres of North Bengal. Around 85% of total urban centres of North Bengal in 1991 and 2001 and around 68% of total urban centres of North Bengal in 2011 recorded a share of scheduled caste population higher than the average for urban India in respective years. Around 31%, 33% and 40% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively recorded a percentage of scheduled tribe population

higher than that of average for urban India in respective years. Therefore, with this huge concentration of people from backward section in urban centres of North Bengal, efforts must be undertaken to provide them with proper education and skill development so that they can prosper in future. For this purpose special schemes for upliftment of scheduled caste and scheduled tribe population like construction of hostels, scholarship for basic as well as higher education and establishment of vocational training institutes should be undertaken in urban centres of North Bengal based on a cluster approach so that benefits can accrue to wider section of people from backward section.

Nearly 50%, 31% and 64% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively recorded a total literacy rate below the national average for urban India in respective years. Nearly 49%, 41% and 60% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively recorded a female literacy rate below the national average for urban India in respective years. While nearly 44%, 38% and 41% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively recorded a male-female disparity in literacy rate higher than the national average for urban India in respective years. Moreover, the total literacy rate, female literacy rate and male literacy rate in statutory towns were much higher compared to census towns in North Bengal. The disparity in literacy rate between male and female counterparts was also less in statutory towns compared to census towns in North Bengal. Therefore there is a lot of scope for improving the educational status of people living in urban centres of North Bengal. Since the literacy rate in census towns are less therefore efforts must be undertaken to establish new educational institutes with proper infrastructure in census towns of North Bengal.

The sex-ratio in about 69%, 85% and 84% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively reported better than the average for urban India in respective years. Whereas, about 86%, 94% and 76% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively reported child sex-ratio better than the average for urban India in respective years. Therefore, majority of the urban centres of North Bengal reported a better sex-ratio compared to that of the average for urban India during the study period. Thus, although most of the urban centres of North Bengal have good sex-ratio but the ones with abnormally low sex-ratio should be earmarked and efforts should be undertaken to rectify the imbalance.

The percentage of main, marginal and non workers in total population of any urban centre gives an idea about the work participation rate. The percentage of main workers in about 27%, 48% and 51% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively was above the national average for urban India in respective years. The percentage of marginal workers in nearly 18%, 44% and 59% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively was above the national average for urban India in respective years. The percentage of non workers in 80%, 50% and 37% of total urban centres of North Bengal in 1991, 2001 and 2011 respectively was above the national average for urban India in respective years. Therefore, the percentage of urban centres with a higher proportion of marginal workers than the average for urban India increased during the study period while the same for non workers declined. This may be the result of more people entering the urban informal sector in search of employment. To tackle this problem of increasing marginalization of workers the government machinery should open more avenues for generating formal employment opportunities across urban centres of North Bengal. North Bengal dotted with innumerable tourist spots attracting tourists from all across the globe is ideally suited to develop this sector with sincere efforts from the government and private entrepreneurs. This is very important because one of the major sources of employment in North Bengal is the tea gardens which are gradually losing their profitability and ultimately resulting in closure making thousands of people unemployed overnight.

Urban infrastructure is the cornerstone for rapid urban development. The urban centres of North Bengal are suffering from huge infrastructural deficits. A number of indicators related to urban infrastructure ranging from physical, social and economic was taken into consideration to find out the levels of infrastructure development across urban centres of North Bengal. The composite index of infrastructure development shows a lot of disparity across the urban centres of North Bengal with respect to availability of urban infrastructure. Haldibari recorded the highest level of infrastructure development in 1991 and 2001. However, in 2011 it was Alipurduar Railway Junction which recorded the highest level of infrastructure development. Majority of the urban centres in the district of Darjeeling and Koch Bihar have high to medium level of infrastructure development during the study period while majority of the urban centres in the district of Maldah have low to very low level of infrastructure development. The urban centres in the district of Jalpaiguri, Uttar Dinajpur and Dakshin Dinajpur have improved in terms of their

level of infrastructure development during the study period. Statutory towns of North Bengal in general have better infrastructure facilities compared to census towns. Most of the new census towns which emerged in 2011 have low to very low level of infrastructure development in 2011. Therefore, there is immediate need to improve the level of infrastructure across urban centres of North Bengal because the importance of this region will increase many fold in near future with the central government's 'look east policy' and also because of the agreement signed among India, Bangladesh, Nepal and Bhutan for seamless movement of road traffic, the trade and commerce will increase many fold in this region. This will bring in opportunities for urban centres of North Bengal to act as nodal centres of international trade and commerce among neighbouring countries. However, this requires huge amount of investment in urban infrastructure to make these urban centres prepared to take advantage of many fold increase in international trade in near future. In this regard the urban centres of North Bengal can tap resources from various central and state governments' schemes to improve the urban infrastructure like Smart City Project, JNNURM, Green City Project and AMRUT project.

The urban centres of North Bengal suffer from a lot of problems associated with the process of rapid urbanization in this region. Problems which are very eminent are slum proliferation, problems of housing condition, quality of drinking water, noise pollution, air quality and traffic problems. In 2001 only 7 urban centres of North Bengal reported slums which in 2011 increased to 22 urban centres. This study shows that in 2011, 7 urban centres have more than 50% of the total households living in slums while in 14 urban centres more than 33.33% of total households lived in slums. Slums are like cancer for any urban centre. They are the epicenter of all kinds of urban problems ranging from poverty, housing condition, environmental pollution, health and anti-social activity. Since the urban centres of North Bengal witnessed rapid proliferation of slums therefore various slum improvement programmes should be implemented across the urban centres affected by slums in North Bengal. In this regard the schemes like Pradhan Mantri Awas Yojana (PMAY), Swachh Bharat Mission, JNNURM, AMRUT, National Urban Sanitation Policy and National Urban Livelihoods Mission are worth mentioning.

Non availability of safe drinking water is a very big problem for residents of urban India. In North Bengal 25% and 29% of total urban centres in 2001 and 2011 respectively reported more than 33.33% of their households without access to safe drinking water facility. The problems of availability of safe drinking water in the urban centres of Darjeeling Himalayas are

even more acute. It is a common picture to see vehicles loaded with water tanks from the plains travelling to Darjeeling town to meet their drinking water requirement. The problem becomes more critical during the peak tourist season when the demand for water increases manifold. In general the availability of safe drinking water is better in statutory towns compared to census towns of North Bengal.

In North Bengal around 52% and 39% of total urban centres in 2001 and 2011 respectively recorded more than 33.33% of the total households without electricity facility. The electricity facility in the urban centres of Darjeeling district was far better compared to rest of the districts of North Bengal. Again the statutory towns have better electricity facility compared to census towns of North Bengal.

Availability of latrine facility is not only important from the point of view of personal hygiene but also helps in controlling environmental pollution and spreading of disease. In north Bengal around 35% and 44% of total urban centres in 2001 and 2011 respectively reported more than 25% of the total households without latrine facility. Again the statutory towns have better latrine facilities compared to census towns of North Bengal.

Availability of bathroom within house is another important component of housing condition. In North Bengal around 90% and 73% of total urban centres in 2001 and 2011 respectively reported more than 33.33% of the total household without bathroom facility within house. Again bathroom facility was better in statutory towns compared to census towns of North Bengal.

Proper waste water exit is another important aspect of housing condition. In North Bengal around 85% of total urban centres both in 2001 and 2011 reported more than 33.33% of their total households without drainage facility. Again statutory towns have better drainage facility compared to census towns of North Bengal.

Another important aspect of housing condition is the availability of separate kitchen. North Bengal around 40% and 57% of total urban centres in 2001 and 2011 respectively reported more than 25% of the total households without separate kitchen.

Therefore, majority of the urban centres of North Bengal showed substandard housing condition during the study period. The problems were more for the people living in census towns and also for the urban centres in the districts of Jalpaiguri and Maldah. Therefore, specific programmes like Pradhan Mantri Sahaj Bijli Har Ghar Yojana, Rajiv Awas Yojana and Swachh

Bharat Mission should be implemented in urban centres to improve the electricity facility and sanitation facility. However, to improve the safe drinking water facility local bodies have to ensure majority of households have access to treated water for drinking purpose. This can be achieved by increasing the piped water supply or by providing portable treated water where piped water cannot be supplied.

Another important problem associated with rapid urbanization is issues related to quality of drinking water, noise pollution, air quality and urban traffic. The pH and TDS level in drinking water for about 13% of urban centres surveyed was beyond the limits set down by the Bureau of Indian Standards. The noise level in about 90% of total urban centres surveyed exceeded the limits set down by the Central Pollution Control Board. The TVOC and HCHO concentration in around 16% and 24% respectively of total urban centre surveyed exceeded the safe limits. The volume of traffic in larger urban centres was very high in North Bengal resulting in a longer waiting period at traffic intersections. Since air quality, volume of traffic and waiting period at traffic intersections are intricately related so a comprehensive policy should be at place to solve this problem across urban centres of North Bengal. Smart traffic management is very important by the competent authority in this respect. Since most of the urban centres of North Bengal grew haphazardly so the road density is very low in these urban centres. Keeping in mind the difficulty of constructing new road within any urban centre the solution lies in controlling the entry of large vehicles inside the urban centre during busy hours, where national highways passes through the heart of the city it is very important to create bypass so that heavy vehicles need not enter the central part of the city, maximum synchronization of traffic signals so that a green corridor is formed and vehicles should not stop at every traffic crossing, encouraging vehicles with non polluting source of energy like battery operated car, electric car, CNG fuelled public transportation, car pooling, congestion tax, development of an efficient public transportation system to discourage use of private vehicles, creation of separate lanes for slow moving vehicles and fast moving vehicles wherever possible, creating dedicated cycle lanes within the city to encourage cycling and keeping the footpaths of major arterial roads within the urban centre free from hawkers and encroachment to encourage pedestrian traffic.

All these problems associated with rapid urbanization in North Bengal require immediate attention from the policy makers. One of the important aspects of finding solution to these problems will be to analyze them in their local context and to find solution keeping in mind the

local conditions. Therefore, the solutions should not be imposed from outside by some expert who does not have any idea about the local factors which needs to be considered, thus ‘one size fits all’ kind of solution is never advocated here. Since majority of these problems involve individuals living in urban areas so it is imperative to take them into confidence before going for any kind of solution. In this respect the institutions like the urban local bodies in statutory towns and gram panchayets in census towns need to take extra initiative. Since these local bodies work at the urban centre level so they are in the best position to analyze the problem and find solution to these problem keeping in mind the local available resource, weather condition and sentiments of people. Moreover, if planning is done at the local level then the views of common people can also be incorporated in the planning process because one thing is for sure that local residents living in an urban centre for years have developed their own indigenous methods gained by experience to deal with these problems. So the future of urban development in North Bengal should follow a course which is sustainable in future taking into account the locally available resource and their potential for development. For this to take pace decentralization of administrative power and financial autonomy with respect to urban governance is the need of the hour.