CHAPTER-12
SUMMARY AND CONCLUSION

1. SUMMARY

Outline of the Study:

In order to achieve the objective of the study, it is directed to examine Bogra along several points of entry e.g., the patterns of growth with the resulting geographical structure of Bogra and its spatial relationship with the surrounding region. This theme comprised an explanation of forms and intensity of land uses and their attendant locational characteristics, the distributions of land values etc. Another point of entry, as its thematic concern relates to the process and forces underlying the functional attributes, this concern stressed explanations of some of the factors and processes which contribute to the evolution of urban functions and comprised of a set of historical, economic, political, administrative and cultural elements.

Numerous forces contribute to the patterns of growth and present state of development in all respects. Factors such as site and situation, excellent locational advantage, two contrasting physiographic divisions i.e., eastern lowlying flood plain and western elevated plain (above flood level), size and rate of growth; more elaborately, the socio-economically developed surrounding region supported by rich agricultural economy, comparatively high literacy rate, courageous and most enterprising people of Bogra district all are worth highlighting.
With a touch on the historical events, the study aims at synthesis of traditional urban genesis in order to investigate the elements contributing to Bogra's growth, its urbanism and character. This type of exercise brings about some vital issues like the nature of urban forms and their structural and functional inter-relationship, understanding of the forms and structures of other similar types of urban centres in Bangladesh and also, to some extent, the western cities. It leads to the examination of the organisation of space for human activities and occupancy and to make a schematic framework and a simplified model of land use of the town and its periphery and to derive the spatial structure of urban influence.

Thus, following these aspects and examining the spatial organisation the study of Bogra town and its different types of zones of influence in respect to number of indices project Bogra's dynamic growth since four decades. Moreover, the complex and multi-faceted historical experience of the region and regional urban system, several political changes and recent trends in urbanisation influence Bogra's growth.

After considering several alternative urban centres, especially five old district headquarters in the Northern Region (Rangpur, Rajshahi, Rangpur, Dinajpur, and Pabna), Bogra is found to be unique in its own way; and as a core area of the Northern Region, proliferation of different types of urban functions have made Bogra comparatively a stronger base from where several activities of the surrounding region can be commanded.
A Spatial Organisation and Urban Structure

However, the study on Bogra town has necessitated reliance on historical records, published data by government organisation, information collected from different offices—all supported by extensive field work.

As regards historic growth Bogra had its start as an administrative town founded by the British in 1821. The study reveals, that, initially administrative function within a small sphere with approximately 4000 population and later (after partition) more expanded administrative set up and other activities promoted its growth from a small administrative town to an industrial-commercial town and finally as a multifunctional urban centre. The process of growth was accelerated after the Partition (1947) coupled with generative economic and social functions which speeded up after the achievement of Liberation (1971).

Bogra's excellent site and situation, increasing linkages with the different areas of Northern Region and also other parts of the country (see, chapter 2) as a consequence of tremendous development of road transport essentially contribute to it, being a vital nodal centre, and leading to a core area of Northern Region (see chapter 8 and 10). Apart from the interregional connections, the intra urban road net-work characterised by primarily radial and subsequently more or less rectangular road pattern is highly developed providing unique accessibility to each and every corner of the town though the
roads, in most cases, are narrow because of their long history.

Over and above, the landscape of Bogra, bears the indigenous character in the strictest sense. The most significant morphological feature has evolved from the process of tentacle growth following major arteries of which the national highway i.e. Dhaka-Rangpur road possesses all sorts of urban functions since four decades. Again, the newly constructed by-pass (now international route) attracts newer establishments of different urban functions. Therefore, the coherent nature (or monopoly) of road side development in the fringe or extension area has given rise to other morphological features amidst traditional villages with plenty of trees, agricultural or open land in between two roads. In view of modern planning concept, the enclaves of agricultural land may be 'green belt' which is a concern of environmentalist as the town is growing fast.

By and large, the different aspects of demography (chapter 3) have a greater impact on all spheres of urban functions and socio-economic patterns of inhabitants of the town and periphery. It is interesting to note that amongst 64 district headquarters of Bangladesh (towns, cities & SMAs) Bogra ranks first in literacy rate, being 61% (Report on Urban Area, 1987, which is based on population census 1981). Increasing number of people in industrial, commercial or other professions/services stand testimony to Bogra's progress in different fields.

Analysis of land value shows different pattern of areal organisation and morphological features like commercial centres,
land adjoining roads or specialised functional areas determine the value of land. On the contrary, in some places land value determines land uses for different purposes. Land values are the highest in the CBA and equally high in other business areas, in highly accessible parts, along road junctions and in high class residential areas. The schematic representation of land value has shown different land value zones confirming three classical models of urban growth (chapter 3).

Over and above, after analysis the process of growth and urban structure, three distinct morphological areas were identified:

1) the central fully built up zone
2) the moderately built-up transitional zone with fully built-up arteries
3) the outer partially built up zone (greater part of the extension area) in which urban and rural characteristics intermingle

More precisely and purposefully, it was possible to recognise three morphological areas:

1) Residential area
2) Commercial area
3) Administrative areas with public institutions

Other than the industrial estate i.e. BSCIC; the other industrial pockets are insignificant. No other zones of land uses except residential area are distinct and easily definable although certain areas of the town are highly specialised in certain functions than others. Above all, residential land is virtually ubiquitous; industrial, commercial or administrative/public land uses are also widespread, but are best measured by the extent to which they are concentrated or dispersed in different locations.
Like most of the urban centres, Bogra also has the highest percentage of land under residential use (45%). The analysis confirms the persistence of traditional and compact pattern of spatial and unplanned growth particularly in the centre, a fully builtup zone, which owes its growth to historical factor. The CBA is an exceptional case i.e. very sparsely populated unlike many historic urban centres. In the same way, the 'shop house' style of mixed residential and commercial occupancy prevails to a lesser extent and the few which exist belong to the descendants of early settlers. The greater part of moderately built-up transitional zone also shows compact growth of houses with traditional features. But these two zones have been undergoing rapid changes with the inflow of population and the recent trend in urbanisation and socio-economic development.

On the other hand, the third morphological zone portrays a stereotype residential structure where higher proportion of local people belonging mostly to low and to some extent medium income groups is concentrated. The migration rate varies from locality to locality. The analysis of housing conditions reveals that upto 1970 there was not any marked change in the house type which was predominantly 'katcha' houses interspersed by some new or old building structures. Large-establishments of the government and semi-government staff quarters have appeared. Since Liberation, different social and economic forces have been working for the construction of new buildings either pucka or semi-pucka which are spreading in the third morphological zone where rural type of houses is predominant. On the basis of different socio-economic
indicators the 'social area analysis' reveals that it is difficult to draw a sharp line dividing each social area, due to admixture of all classes of people, by socio-economic status, descendants of early settlers and new migrants from different social backgrounds. Still, some visible characters help to designate five types of residential areas. High class (Sutrapur-Malotinagar) and low class (mostly extension area) residential areas besides 'Mixed' (e.g. Staff quarters, civil line) are distinct. By invasion succession process, some developed areas show the tendency of homogeneity. It is observed that in spite of the high land value and scarcity of land, the tendency of people is to settle around the core area due to proximity of different urban amenities and central functions though the extension area provides cheap space for construction. This is mainly because of the absence of good social environment, transport and other factors.

From the study of trade and commerce, it is observed that Bogra's importance is largely shared by increasing commercial activities of which the greatest development has taken place since 1970s with the fastest development of road network giving rise to the highest degree of linkages with the surrounding and even far-flung areas. All the transport terminals are adjacent to the core and all the regional roads & highways directly connect the core area (central business area) which is the primate central place for the entire urban and to a greater extent, for the surrounding region also. Thus DBA performs multifarious business activities which lead to the most
congested, eccentric nature of growth. Decentralisation of certain functions and restriction on some business function for further expansion are urgently needed.

Bogra is synonymous to industry. After Partition Bogra took to industrialisation and within a short span of time it occupied fourth place in the country and first place in the Northern Region as an industrial town. Industrialisation was backed up and supported by the local entrepreneurs' zeal and foresightedness that rendered Bogra the status of an industrial town having number of special type of moderate size industries. During and after Liberation, development was hampered and later on it recovered the tempo but turned to less capital intensive small scale industries and majority of the industries are based on imported raw-materials besides local products. It should be mentioned here that all the industries are under private ownership except a few i.e. government and multinational firms which are of very-recent origin. Tremendous development of metallurgy and light engineering industries has attracted government in which Dholaikhai concept (Unaka) is under implementation to patronise the entrepreneurs. Though the government has taken steps for industrial development through private ownership, yet the owners or new entrepreneurs face numerous problems (chapter 7). So the government should take in real sense keen interest to solve the problems and to activate development. Moreover, beside other, some big plants (producing essential products) like fertilizer factory, petro-chemical industry, plants concerning automobiles and other vehicles etc.
can be considered for establishment under the public sector.

The major constraints for industrial development are insufficient power supply and the Jamuna river. The proposed Jamuna bridge and extraction of coal from newly discovered coal field (Appendix II & IV) would promote rapid industrial development. It is quite certain that the entrepreneurs would like to keep the industrial inertia continued.

**Economic and Spatial Interaction**

Analysis of banking services in terms of banking growth, per capita advances and deposits, attraction of private bankers towards Bogra etc. reveals Bogra's growing economy. Amongst five old district headquarters, Bogra, all along, shows its supremacy.

The interesting study on Basic and Non basic economy by taking various components gives the ratio 100:62 respectively which is quite sufficient to understand the interplay of town forming elements. Bogra's service for the surrounding region is well marked.

Another important task of the research was to find out the regional relationship as well as Bogra's influence over the regional development. Therefore, in this study, the extent of services offered by Bogra to the surrounding region, even far-flung areas and vice versa, has been assessed. The interaction pattern on different aspects has given an insight into Bogra's growing importance in the region. The study of site
and situation and historical development gives evidences a direct bearing on the spatial structure of the town's influence over the region which has been increasing with the passage of time depending on various factors. The interaction pattern is attributed initially to the advent of rail transport and later to the motorised transport in general.

The two distinct physiographic and socio-cultural regions i.e. East Bogra and West Bogra have shown varying impact on urban structure. The high density of population in the surrounding region, for example 1074/sq.km in Bogra Upazila and 700/sq.km in greater district (census 1981) has a great impact on the socio-economic structure of Bogra town i.e. on educational and other social or recreational functions, trade and commerce, employment in industrial, commercial, transport and service sectors etc. It is quite evident that Bogra's interaction is rapidly increasing with the rapid development of transport and communication, industrial-commercial activities, and public and private enterprises.

As per convention, the different zones of influence of Bogra are delimited with the help of both empirical observation and theoretical approach. The various indicators have shown different nature and extent of zones. Moreover—the study of employment structure with respect to the place of residence (see chapters 6, 7 and 8), the supply areas of industrial products (chapter 7) have portrayed the immense interaction with the immediate surroundings and also attraction of people form distant
areas towards Bogra, at the sametime, the distribution of industrial products to near and far-flung areas are dealt with.

To delimit the zones of influence, primary and secondary zones are considered. Third order influence zone is mainly dependent upon trade and commerce, where bus frequency is less or nil. Primary zone of influence covers entire Bogra district and greater part of surrounding districts which encompass an approximate area of 4500 sq. km. Secondary zone of influence extends almost to the entire Northern Region excluding Panchgarh, Thakurgaon, Lalmonirhat and Nawabganj districts. Considering third order zone of influence, it varies from area to area in which Dhaka and Khulna are intensively connected with Bogra.
2. CONCLUSION

1. Bogra originally an administrative centre, gradually emerged as an industrial town and finally industrial-commercial town with public and private enterprises.

2. Bogra's excellent site and situation favour its growth immensely.

3. It's high degree of accessibility is due to rapid development of transport system that makes Bogra a nodal centre in the Northern Region.

4. Initially Bogra's growth has taken place along the river Karatoya and Dhaka-Rangpur road in longitudinal direction and later, the urban functions spread along other important roads which shows a clear picture of tentacle growth.

5. Bogra's Fringe area (especially along the road side) possesses majority of urban functions.

6. It's socio-economically developed region has a positive impact on urban growth and on its demographic structure. Moreover, different demographic aspects, affect the demographic structure in the urban and fringe area which are the product of social, economic, political and on the whole, recent trend in urbanisation.

7. Analysis of residential structure shows complex pattern of residential land use and social areas. Age old tradition of livelihood of people in the main town and fringe area, continuous inflow of people in both the areas, rapid construction of pukka houses etc. give rise to some interesting morphological features.

8. Development of trade and commerce has put Bogra in a potential state in the region.
9. Similarly industrial development and recently diversification of industrial activities supported by local entrepreneurs and also government and multinational companies ensures Bogra's industrial development and position in the region.

10. It's increasing and varied influence over the surrounding region, and distant areas through services, distribution of products or collection of commodities from other places, gives wide scope for Bogra to be a regional centre in the Northern Region.

11. To keep the tempo of development continued and to give the town and potential fringe area a systematic and purposeful growth, appropriate planning and involvement of the people are most essential.