CHAPTER - 5

CONCLUSIONS AND SUGGESTIONS

In the present study an attempt has been made to examine the residential and urban characteristics of Bhagalpur city. The main thrust of study is to analyze the residential variation in association with social-amenities and public facilities, and this analysis is made viable by adopting factor analysis method. This study in spite of its certain limitations has succeeded in showing many specific features of the urban environment in Indian social set up. It has led certain findings, deduced conclusions and present broad generalizations.

It was found that there is considerable variation in residential quality based on thirty-six variables. These variables clearly represent a comprehensive description of residential differentiation throughout the city of Bhagalpur. Using the factor analysis or component analysis five factors were extracted from the rotated factor matrix which explains seventy-two per cent of the total variance. Factor-1 contributes almost half of the variance (thirty-four per cent) accounted by the five factors in aggregate. Remaining each of the four factors contribute approximately nine per cent of the total variance in average. Factor-1 which is dynamic one of all the five factors gives a clear picture of the city in terms of its
residential quality and social environment Rest of the factors support in shaping and identifying the typology and variance of residential standards.

Intra-urban structure varies not only in their morphological patterns but also in social patterns. The neighbourhood characteristics involving educational level, income and housing types are highly correlated. The residential houses vary greatly according to income and education. The high status group attain high level of amenities and municipal facilities. The low status group follow business and industrial centres that radiate from the central business district in the middle and industrial pocket in the west which together determines the skeleton of the city. This has close conformity with the idea that lower the income closer the place of work. Further, it is found that a particular ethnic group reside in the segregated part of the city. Thus the internal structure of the city is the outcome of many processes.

The study reveals that there are two overcrowded zones in the city, major one is the central business district and the smaller one is the western industrial pocket. The only recourse for the rural immigrant in search of job and employment is to concentrate in unhealthy pockets of the fringe areas generally devoid of basic infra-structural necessities. This results in the
growth and sprawl of the scattered habitation. Consequently, growth and expansion of slums take place in these parts of the city. The houses in these segments are dominated by substandard huts. These residential clusters hardly have urban look by any standard. Thus, under development of the state of Bihar in general and the improper planning of the cities in particular has influenced residential segregation and the quality of livable environment to a great extent.

On the basis of the spatial pattern of residential features, the quality and availability of urban social infra-structure and the population characteristics, the city space of Bhagalpur exhibits four distinct type of residential areas for example, the very high and high quality residential area, medium quality residential area, low quality residential area.

The high quality residential area where upper middle class people, bureaucrats, executives, academicians and doctors live has developed more recently in the eastern part of the modern city. This is purely outcome of the post colonial period. These are spacious and well planned colonies of the well designed houses mostly single-storied with spacious frontage. The areas are inhabited by the people of high educational and high social status group. These colonies attain high level of amenities and infrastructure available in the city.
The high level of education, high income, single storied houses, spacious houses, less crowding and planned colonies are some of the recognizing features of this type of residential structure. The residents of this type of colonies forms the pressure group who have their say in the administration and municipal corporation of the city. Another characteristics of this type of residential areas is the dominance of high caste Hindu in the absence of scheduled castes and schedules tribes. The over all residential environment is relatively satisfactory and deserves to be kept into the very high and high quality category.

The medium quality residential areas are generally concentrated in the centre of the city and radiate outward from the nucleus of the Central Business District. Another such type of area is the western industrial pocket, where silk and loom activities dominate. Central part of the city dominated by the high caste Hindu businessmen, Banias, Marwaris and Bengalis, while western belt is mainly dominated by the Muslim loom owners and weavers. These two comparatively older settlements, originated during medieval period and flourished during the colonial period, forms the economic backbone of the city. Here higher level of income, high education, multistoried houses, crowding and congestion, lack
of ventilation and semi-planned organization are some of the striking feature of the city. These areas attain higher income than the higher level of education when it is compared with high quality residential area of the city. Secondly, there is dominance of multi-storied buildings in comparison to the single storied in the first case. Thirdly, these areas are very much crowded and congested as a result, ventilation problem is felt severely, while in very high quality of residential areas houses are with spacious frontage and open spaces are frequent. Hence these areas attain higher degree of income, so that relatively satisfactory level of housing amenities and facilities are common. In this part of the city though the houses are very old and built of bricks but they are high rented. Crowding and congestion is too much in this area. Thus the level of infra-structural facilities and social amenities can be said to be of moderate type.

The low quality residential areas generally flank the medium quality residential areas and form a transitional zone between medium and very low class residential areas. The residents of these wards include variety of occupational and cultural groups. A large number of them are engaged in low grade services. Many of them are small shoppers and petty businessman with their small houses in size and areal extent.
Majority of them consume coal as kitchen fuel which gives it a separate identity. A large number of houses consists of brick walls with concrete roofs. Crowding and congestion is relatively higher. Almost all the wards in this category keep a part of its area occupied by the identified and unidentified slums. These low quality residential wards purely dominated by wards namely Mansoorganj, Manikpur, Mandroja, Tatarpur, Nathnagar and Tantitola and they greatly lack in infrastructural facilities and urban amenities. Housing congestion, old dilapidated buildings, lack of open spaces, narrow and winding lanes are physical characteristics of this part. Drainage is poor and water logged which breeds mosquitoes, sanitary conditions are insufficient and substandard, sharing of bath, lavatory and kitchen are the common practices. Thus the overall condition of the livability is unhygienic and unhealthy can be described as substandard.

The very low quality residential areas are generally found along the margin of the municipal boundary. Wards namely Barari, Mayaganj, Sahebganj, Madninagar, Maulanachak and Aliganj comes in this category and other wards partially comprises of this category of houses. These areas in actual sense do not have urban look from any angle and are occupied by the poorest people of the city in the
absence of any urban infra-structural facilities. Slums and squatters made-up of ethnic materials are situated in an unhygienic outer margins of the city. The drinking water, metalled road and sewerage and sanitation facilities are almost non-existent. The responsibility and reach of the municipal corporation can not be traced even for the basic minimum necessities. Thus this part of the city can best be described as sub-human.

It can be inferred from the above analysis that high quality residential areas occupied by high socio-economic status group is purely used for residential purposes, either by the owner or the renter. Due to higher level of education environmental awareness is more among these dwellers. In this type of residential zone emphasis is more on the urban livability than the economic gain. On the other hand in the medium quality residential areas emphasis is more on economic procurement rather than the livability of the ‘environment’. The third category of residential area is mainly devoted to provide accommodation to the low income group, which is partially involved in petty business and shopping activities. While fourth grade residential area is again used purely for residential purposes, which is not suitable for rental purposes in the absence of even low level of basic needs. It is
thus clear that the first and the last categories are majorly available for residential purposes. While the second and the third categories with their increasing and decreasing emphasis on commercial activities are used both for economic attainment and residential purposes both.

The present analysis gives certain important findings. It suggests that, on the basis of qualitative livability, residential areas are differentiated as high, medium, low and very low. Here residential patterns are also influenced by educational attainment than by purely economic reasoning. These patterns are further stimulated by political, cultural and historical circumstances. In general the findings have confirmed that the basic spatial expression is somewhat zonal which shares certain common elements with the other cities of the developing world, due to being colonialised in the historic past.

This study discloses, when a social and welfare effort is examined that there is a overall shortage of amenities and infra-structure throughout the city. In low quality and very low quality (slums) residential areas, these basic necessities are non-existent. And more than two-third residential coverage is noticed below the satisfactory level from the Indian point of standard. Further it is noticed that urban basic amenities and
infra-structure are not equitably distributed over the city space and are confined to the bureaucrats and elite class residential areas, located in eastern segment of the city. It has been also observed by the author that in equitable distribution of the elements constituting urban social environment handled by municipal corporation or other administrative machineries or both caste and class biased.

It is assumed as an essential part of a dutiful research to streamline certain steps which could be executed to improve the habitable environment of any urban structure. Keeping overall picture of the city environment in mind, few remedial measure could be suggested:

i. Urban settlement and particularly residential growth should be a planned venture and it must not be an uncontrolled sprawl of houses.

ii. Urban slums have to be provided with minimum accommodation and civic amenities through cooperative system, and financial assistance or subsidiaries from government, non-government and world development agencies.

iii. Drinking water problem of the city has to be solved with immediate effect by pumping water from the river Ganga through pipe lines.
iv. Sewerage system, another important indicator of health and environment has to be expanded to discharge the water polluted by domestic practices and rainy water as well.

v. An effort should be made to provide motorable access in each and every corner of the city.

vi. Last, but not the least, is the preventive measure to check the population growth of urban poor in the slums, and immigration of rural people has to be regulated by the municipal corporation authorities.

This analysis has faced certain limitations due to small number of the unit of analysis which compelled the author to scrap many variables of socio-economic and residential importance. Secondly, adoption of wards as unit of analysis rather than the mohalla (a smaller ethnic unit) was another important limitation because any information at mohallah level was not available at all.

The present analysis despite its certain limitations has classified the residential expression of a small city which may prove to be an asset in studying a medium size Indian cities in general and cities in the state of Bihar in particular. There are certain questions left which could be traced in any future research of the residential pattern of Indian cities. Do the
findings from this analysis comes true in the context of other Indian cities? And how long these cities differ by virtue of their size, site, function, age and rate of growth?