Chapter-II

ENVIRONMENTAL SETTING OF THE STUDY AREA

2.1 THE URBANIZATION FACETS OF CALCUTTA (KOLKATA) CONURBATION-A REVIEW:

Kolkata was the largest city of India until 1990 (its former name was Calcutta, changed to original Bengali name Kolkata only in 2004). It had a population of 9.19 million and the larger Kolkata Metropolitan District had 10.3 million population in 1981, which rose to 11.6 million in 1991. According to UN 1994 estimates, Kolkata would reach 15.6 million by the year 2001 and exceed 24 million by 2010. Kolkata is often referred to as an example of urban pathology or a picture of urban future of most mega cities of developing countries—where hundreds of thousands of people are compelled to live on dirty pavements and widespread unemployment and absolute poverty are visible everywhere.

“Calcutta is not considered as World city, though big agglomeration, because not well connected to the world, and play a limited economic role beyond the boundaries of its own nation state”.

Calcutta, thus, as an urban monster, is a city of hell, the worst sitting condition amongst the cities of the world, and it is an urban area of misery, violence, dilapidation and juvenile delinquency to say a little.
Chapter-II

MAP NO.1

KOLKATA – THE CITY OF JOY

Source : NATMO, Kokata
Even then Calcutta is a dream, which demands love as it is the heaven of labourers, pick pockters, business cities and scholars of repute. Calcutta is a fascinating city of millions of people, who have adopted a mosaic of languages, customs, variety of cultures and vibrating sensitiveness which automatically deserve love.

Kolkata as the capital of West Bengal, financial stronghold of India, nerve centre of regional economy, higher education and port location, it has been regarded as the most beautiful city of the East, inspite of having very severe congestion, extremely strained urban amenities and acute shortage of basic infrastructure.

The growth and decline of Calcutta Conurbation may be explained by the political factors (the shifting of the capital to New Delhi in 1912), historical factors (the partition of Bengal in 1947 when million of refugees came) and geographical factors (the agricultural development in the hinterland). Still the conurbation of Calcutta has supremacy over all the cities in Eastern India since times immemorial and it will remain.

The image of Calcutta emerged as the locus of life, place of palaces, mechanized life and a city of furious creative energy.

Dr. Sinha described Calcutta as: “to the poor and middle class citizens of Calcutta, the poverty and violence ridden city has gained the image of a massive uncoordinated human aggregate which has reached an irreversible state of autonomy”.

Kolkata Metropolitan Area is a sheer example of very highly dense compact city, with its immense urban problems, which has transform Kolkata to be a city of nightmare to many outsiders. However, to the insiders, Kolkata is a great City of Joy. India’s great cultural centre, ideal intellectual paradise, a city of immense life, exuberance, intense creativities, very matured political and social consciousness, and with total freedom of expression. So there is a sharp contrast. An extreme contradiction. Thus, Mukherjee (1981), had termed Kolkata as the “city hallowed culture, but with a feet of clay”!

Kolkata is an example of an extended metropolis, or a over blow village. Mc.Gee, et al. also described Indian metros as examples of ‘Desi-Kotha’ settlements, where urban settlements (kotha) merge with ‘Desi’ or rural settlements.

Nevertheless, Kolkata is a unique city in the whole world, where one can immediately feel the pulse of the people of the city, their intense struggle for life non-stop creative activities, music, pottery, frustration, hopefulness, extreme friendliness, and a very warm and sincere hospitality. It is a great friendly city-providing a feeling of great openness and warm heartedness which one may not get so easily in other great cities of the world. Never in Delhi or Mumbai or Chennai. Nor in New York or Paris or London or Berlin or Rome or Bangkok or Hong Kong or Tokyo or Singapore or elsewhere. Kolkata is unparallel city in this sense.
However, Calcutta Metropolitan Development Authority (CMDA) has contributed a lot to upgrade the lives of inhabitants of Kolkata and is still a moving process, the only option is to wait and watch its growth which is a time consuming one. According to Census of India 2001, Kolkata population has increased to 13.3 millions. Urban decay of Kolkata has further ingrained overtime.

**Pic. 1**

![Image of a glimpse of Kolkata](image)

*A glimpse of the city Kolkata*

### 2.2 LOCATION OF KOLKATA CITY:

Kolkata, the metropolitan city of India, is popularly known as the ‘City of Joy’. The location of Kolkata is in a very advantageous position as the river Ganges flow.
MAP NO.3
KOLKATA: RELIEF AND SLOPE

Source: National Atlas and Thematic Mapping Organization (NATMO), Kolkata
Located at the eastern part of India, the Calcutta Municipal Corporation has an area of 185 sq km in total. Kolkata is located at 22°36'N latitude and 88°24'E longitude, at an elevation from 1.5 to 9 mts from sea level.

Pic.2

*Satellite imagery of Kolkata City*
MAP NO. 4
KOLKATA: SOILS

Sources: National Atlas and Thematic Mapping Organization, Kolkata.
The zone of influence or hinterland of Kolkata is a very large ensemble of Indian regions of at least 780,000km² and ranges upto Jabalpur and Lucknow in the west. According to 2001 census this hinterland has a population of about 50 million comprising most parts of Northern India. The Gangetic valley in the west is a plain land, the plateau of Deccan in the south is a rough terrain while the valley of Brhamaputra and plateau of Meghalaya in the east present a mixture of plain and mountain topography both.

The Imperial Gazetteer describes the morphology of Kolkata as “surrounded by huge Maidan. Fort William stood at the heart of the city”. About mid 16th century, Sutanuti extended from Chitpur to the Old Mint House. Thus the area between Old Mint House and Chandpal Ghat could be said to belong to Calcutta proper. Gobindapur occupied the site of the New Fort William, including the Race course. Sutanuti was the principal seat of commerce and industry while Calcutta and Gobindapur are the places of residence. Three roads run from north to south and six roads link the Hooghly river bank with the easternmost parts of the city.

The Calcutta Metropolitan Area (CMDA) is the continuous urban belt in linear pattern on both the east and west banks of the river Hooghly and the rural areas around it and is composed of:

- 3 Municipal Corporation of Kolkata, Howarh and Chandanagore
- 38 Municipalities
- 23 Panchayat Samities consisting 70 non municipal areas and 14 out growths, which have developed urban characteristics but have not yet been formed into municipalities.
Through passage of time the statutory boundary of CMA has changed and now for administering the constitutional mandates in terms of MPC Act of 1994, the re-delineated CMA now has an area of 1785.04sq km.

**AREAS:**

- City-104sq km
- Calcutta Metropolitan District-about 300sq km
- Greater Kolkata-1450 sq km.

The city originally, was a vast wetland (known as East Calcutta Wetlands) and now one of the most populated cities of the world. The city has a total geographical area of 1480sq km. The Sunderban delta which is located at a distance of 154km to the south of Kolkata separates the city from the Bay of Bengal. The city has been divided into different topographical regions. There are mainly 5 geographical units including east, west, north, south and central Kolkata. The adjoining regions include Howarh, Hooghly, North 24 Parganas, South 24 Parganas and Nadia.

The strategic position of Kolkata also helped it to become the most important port of Eastern India. Kolkata lies very close to the Tropic Of Cancer in the north. The distance of Kolkata city from Bay of Bengal which lies to the south is approximately 120 km. Kolkata city is located at a distance of 1461 km from New Delhi, 1987 km from Mumbai and 1676 km from Chennai.
2.3 HISTORY OF KOLKATA CITY:

The discovery of the nearby Chandraketugarh, an archeological site, provides evidence that the area has been inhabited for over two millennia. The city’s documented history however begins with the arrival of the English East India Company in 1690, when the company was consolidating its trade business in Bengal. Job Charnock, an administrator with the company was traditionally credited as the founder of the city. However some academics have recently challenged the view that Charnock was the founder of the city and in response to public interest litigation the High Court ruled in 2003 that the city does not have a specific founder.

The city of Kolkata started its career about 290 years ago. It is situated 92 kms upstream from the Bay of Bengal on the eastern bank of the Hooghly River. The conurbation of Kolkata originated out of the 3 villages of Sutanuti, Kalikata and Gobindapur. In these villages the British had first of all settled and subsequently added new villages to the growing port-city. Kolkata has been studied for several purposes and in different ways. The current interest in its study is due to the tercentenary celebration observed just a few years back in the erstwhile second largest city of the British Empire. Without going into the controversy of the exact date of its birth, the Year 1690 A.D. has been considered as the reference or base year for the study of its growth and expansion through maps available of different times.
MAP NO.5
ANTIQUE MAP OF THE CITY

Source: Geological Survey of India (GSI), Kolkata.
Let’s Not Forget Our Heritage

G M Kaper

This city lost a number of its grand edifices to the bulldozer before the conservation movement began. Among the notable buildings lost were the Senate Hall of Calcutta University, Bengal Club, Chowringhee, Birla House, and the State Bank of India, which were restored by the Centre for Built Environment and Prinsep Memorial which were restored by INTACH through corporate support to create awareness of the city’s history. And this brought heritage conservation to the forefront.

Heritage conservation is, in no way, anti-development. Do we have to destroy all that is aesthetically appealing and attractive to progress? Surely, our builders can demolish thousands of ugly structures in the city and create icons for the future.

EXPERT VIEW

Through the efforts of conservationists, Metropolitan Building, one of the landmarks of Chowringhe, escaped the hammer and is being restored by the owners. The CPWD had already demolished three domes inside the building before the clamour for preservation, buttressed by the weight of the then Governor Viren J Shah, managed to save it. Metropolitan Building has now been notified as “a monument of national importance” and taken over by the Archaeological Survey of India. But the pace of restoration is painfully slow.

Sadly, grand mansions like the Alexandria Court on Chowringhee and Meghalaya House on Russell Street — which in any other city would be considered architectural treasures — were either delisted or demolished even though they were on the protected list of Kolkata Municipal Corporation. But pressure groups have managed to activate KMC into starting the restoration of the demolished gate of the old Bengal Bank on Russell Street.

What is heartening to note is that there is a realization that there is economic value in the “built heritage” of the city. Tourists find these buildings a major attraction. Heritage walks and heritage tram rides have been popular tourism products.

Lately, we have seen the effect of unabated growth of high rises and malls in the heart of the city on traffic movement and basic infrastructure such as water, sewerage and drainage. The carrying capacity of roads has been stretched beyond limits. Is this the development we aspire for? Those of us who remember the boulevards and avenues in the “South of Park Street” would be appalled by the unsightly mess that this area has become in the name of development and growth. Shopping malls and pizzazz, and commercial and residential towers are being built with scant respect to our parking and traffic movement.

Conservation principles can be an effective guide for urban planning and growth. By declaring parts of the city as “Heritage Precincts”, the civic authorities can save them from becoming “High Rise Precincts”.

While the state government and KMC often give the excuse of more pressing problems like poverty alleviation, healthcare and drinking water for not paying much attention to heritage, the question is can we solve them by destroying our past? Are we so poor that we can and other incentives. Do we necessarily have to destroy all that is aesthetically appealing and attractive to progress? Surely, our building programme could demolish thousands of ugly structures in the city and create icons for the future.

The 42nd Constitutional amendment states: “It is a fundamental duty and responsibility of every citizen of India to value and preserve the rich heritage of our Composite Culture”. If not for anything else, we should support conservation as our patriotic duty to the constitution of the country.

(The writer is state convenor of Indian National Trust for Art & Cultural Heritage)

Source: The Times of India, Kolkata, Feb 13, 2008
Whatsoever, it’s a matter of great interest to analyze the situation which led to the birth of this colonial town, later city. What were the forces which joined together to make it from a foothold to a stronghold of British Empire in a foreign soil, thousand miles away from Europe? Was it a part of spreading gospel or creating “little England” all over the world or simply for trade and commerce? These questions are intricate and will require turning several hundred pages even to give a near-comprehensive answer.

**Pic. No. 3**

![The Old Kolkata](image)

*The Old Kolkata*

The origin of Kolkata is somewhat linked with the fate of the East India Company, Job Charnock came to the banks of river Hooghly and took the lease of 3 villages-Sutanuti, Gobindapur and Kolikata(Calcutta) to establish British East India Company in Bengal region.
At that time, Kolkata, under direct rule of the Nawab of Bengal, Siraj-Ud-Daulah, which was a small village and the capital of Bengal, was Murshidabad, which is situated at a distance of 60 miles from the present city. Calcutta was captured in the year 1757 by Robert Clive by defeating Siraj-Ud-Daulah in the Battle of Plassey, and Kolkata was declared a Presidency City and later became the headquarter of the Bengal Presidency. The East India Company was still trying to expand its commerce in Bengal. During this period India was undergoing rapid changes which had long lasting implications in the political process. However; such changes paved the way to the English colonization of India and establishment of KOLKATA. In the year 1686, 23rd of December Job Charnock founded the city and thus was born the great city of Kolkata and Kolkata was named the capital of British India in 17772.

During the time of British rule in India, Kolkata played a key role in both political and cultural reformation. Eminent personalities like Subhash Chandra Bose, Rabindranath Tagore, Swami Vivekananda, had chosen this place as their ‘Karma Bhumi’.

Till 1912, Kolkata was the capital of India, with important establishment like the Supreme Court. The capital was then shifted to Delhi and the city became the capital of West Bengal. By the early 19th century, Kolkata was split into two distinct areas-(i) British (known as the White Town), (ii) other Indian(Known as Black Town). The city
underwent rapid industrial growth from the 1850's, especially in the textile and jute sectors; this caused a massive investment in infrastructure projects like railroads and telegraph but British government. The coalescence of British and Indian culture resulted in the emergence of a new Babu Class of urbane Indians. Thus, throughout the 19th century, a socio-cultural reform often referred as the Bengal Renaissance resulted in the general uplifting of the people.

**PIC NO.4**

*The Old Port City of Kolkata*
PRESENT KOLKATA CITY (2010)

Source: NATMO, Kolkata
2.4 NEED OF THE STUDY:

When referred to as Kolkata it usually includes the suburbs, and thus its population exceeds 15 million, making it India’s third-largest metropolitan area and urban agglomeration. This also makes it the world’s 8th largest metropolitan area as defined by the United Nations.

Kolkata, one of the seven ‘million-plus’ cities of India with an increasing trend in the urbanization process such as rise in population, industrialization, transportation, and other civic amenities etc. Once the centre of modern education, industry, science, culture and politics in India, Kolkata has witnessed intense political violence, clashes and economic stagnation since 1954. Since the year 2000, economic rejuvenation has spurred on the city’s growth. But still like other metropolitan cities in India, Kolkata continues to struggle with the problems of urbanization: poverty, pollution and traffic congestion.

Hence, it faces acute economic problems, harping on the theme that Kolkata is a “hell-city”, the ‘economy is an economy of scarcity’. Thus, its proper planning and management is a necessity for its proper functioning......hence its study is a need!

2.5 USEFULNESS OF THE STUDY:

Studying the urbanization process in a city like Kolkata with its high population and related problems with limited resource in hand, helps us to search various solutions for its various problems-which
involve the ways and means for future planned development of the city, making a way for improvements in other similar cities with such related crisis.

Cities are no longer defined by population size, rather are defined by the operation of their extremely linked functions. In fact the needs of metropolitan Kolkata are truly regional, national and international. There has also been vast changes in the issues, polices and strategies and in almost all facets of planning and development in Kolkata. Consciousness and concern about different urban crisis, urban conservation has come into prominence.

The acute problems of rapid urban growth in spite of revolutionary and effective decentralization in the urban development policy of the state has been focused in this recent study and analyzing its various urban related crisis and planned programmes will help us to look further into the smooth future growth of Kolkata.

2.6 AIMS AND OBJECTIVES:

2.6.1 Aims:

The main aim of the study is to focus on the rapid growth of urbanization and its related issues that has become a part of Kolkata today, which will help us to identify its different urban scenario, giving a picture of its total urban structure that will lead to all round growth and development of the city at present and in the future. Thus considering the multifarious problems of Kolkata, the need for
developing a perspective for formulation of plan for metropolitan area was acutely felt for the urban development and management.

2.6.2 Objectives:

To achieve the above goals the following objectives are to be emphasized:

1. To study the total land cover of the city and its fringe areas.

2. To study the Metropolitan Areas and its region for development.

3. To determine the different urban infrastructural availability and its growth.

4. To determine the population-trends, growth and projection of future growth.

5. To analyze the different urbanization issues: poverty, pollution, crimes etc.

6. To study the availability of the basic civic amenities.

7. To study the different developmental and planning policies for understanding its impact on city’s growth process.

8. To forecast the future pattern of growth of the city and its impact on the surrounding areas.
2.7 CHAPTERIZATION:

For analytical purpose, the present study has been organized in the following 6 chapters:

CHAPTER-I: AN INTRODUCTION TO URBANIZATION: THE OVERVIEW OF LITERATURE

1.1 Introduction
1.2 Defining Urbanization
1.3 Historicity of Urban Growth
1.4 Urbanization Today
1.5 Changing form of Urbanization

CHAPTER-II: ENVIRONMENTAL SETTING OF THE STUDY AREA

2.1 Introduction: The Urbanization Facets of Kolkata Conurbation – A Review
2.2 Location of the Study Area
2.3 History of the Study Area
2.4 Need of the Study
2.5 Usefulness of the Study
2.6 Aims and Objectives of the Study
2.7 Methodology and Sources of Data

CHAPTER-III KOLKATA’S URBAN SCENARIO

3.1 Introduction
3.2 Climate
3.3 Urban Land Structure
3.4 Slums and Urban Housing
3.5 Transport
3.6 Industry
Chapter-IV : DEMOGRAPHIC PROFILE OF KOLKATA CITY

4.1 Introduction
   4.1.1 Population – Concepts and Meanings
   4.1.2 Distribution and Density (World, India, West Bengal, Kolkata)

4.2 Population Trends of Kolkata (Growth, Density)

4.3 Sex-Ratio

4.4 Religion

4.5 Literacy

4.6 Migration

4.7 Occupational Structure

Chapter-V : URBAN STRUCTURE OF KOLKATA CITY :
            PROBLEMS AND PROSPECTS

5.1 Introduction

5.2 Problems of the City
   5.2.1 Environmental Pollution
      5.2.1a) Air Pollution
      5.2.1b) Water Pollution
      5.2.1c) Noise Pollution
   5.2.2 Crime in the City of Kolkata

5.3 Prospects of the City
   5.3.1 Physical Infrastructure
   5.3.2 Doing Business in Bengal (Kolkata)
   5.3.3 Thrust Areas
   5.3.4 Investments
   5.3.5 Human Resource
5.3.6 Housing and Real Estate
5.3.7 Education
5.3.8 Health Care
5.3.9 Hospitality and Travel
5.3.10 Culture of the City

5.4 Urban Structure of Kolkata and the Multiple Nuclei Theory

Chapter VI

CONCLUSION AND FINDINGS, STRATEGIES FOR DEVELOPMENT

6.1 Summary
6.2 Strategies for Development
6.3 Findings

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