Chapter-III

KOLKATA’S URBAN SCENARIO

3.1 INTRODUCTION:

In its 300 years of existence as a city, Kolkata has been variously described as an example of the triumph of urban civilization and as a disastrous result of unchecked urbanization. Often referred as the “city of palaces” during the last century, the city’s importance as a commercial centre attracted thousands of migrants from the surrounding parts in search of better employment and livelihood. Kolkata turned into an overcrowded urban centre where races from all parts found acceptance and settled down to pursue different trades. Initially planned as an urban centre for accommodating a population of only 10 lakhs, the city today is burdened with an ever increasing population whose number has exceeded the 10 million mark long ago. The situation has remained unmanageable owing to the pressure of accommodating waves of migrant. Kolkata still remains to be over burdened with its millions of inhabitants.
Kolkata’s urban scenario shall be discussed with the help of the following parameters:

3.2. Climate

3.3. Urban Land Structure

3.4. Slums and Urban Housing

3.5. Transport

3.6. Industry/Economy

3.7. Occupational Structure
## FACTS AND FIGURES - A BRIEF VIEW OF THE CITY

<table>
<thead>
<tr>
<th>State</th>
<th>West Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td>METROPOLITAN AREA</td>
<td>1480 Sq.Km.</td>
</tr>
<tr>
<td>OFFICIAL LANGUAGE</td>
<td>BENGALI</td>
</tr>
<tr>
<td>LATITUDE</td>
<td>22°30’N</td>
</tr>
<tr>
<td>LONGITUDE</td>
<td>88°30’E</td>
</tr>
<tr>
<td>ALTITUDE</td>
<td>9 m from SEA LEVEL</td>
</tr>
<tr>
<td>TOTAL POPULATION</td>
<td>45,80544 (2001 Census)</td>
</tr>
<tr>
<td>POPULATION DENSITY</td>
<td>24,760/sq.km.</td>
</tr>
<tr>
<td>POPULATION GROWTH</td>
<td>ANNUAL RATE OF 1.79 (1991)</td>
</tr>
<tr>
<td>LITERACY RATE</td>
<td>81.31%</td>
</tr>
<tr>
<td>TEMPERATURE</td>
<td>24-42°C (Summer)</td>
</tr>
<tr>
<td></td>
<td>8-26°C (Winter)</td>
</tr>
<tr>
<td>LANGUAGE SPOKEN</td>
<td>Bengali-55%, Hindi-20%, English-10%, Others-15%</td>
</tr>
<tr>
<td>AVERAGE RAINFALL</td>
<td>1605mm</td>
</tr>
<tr>
<td>VEHICULAR POPULATION</td>
<td>1.05 million</td>
</tr>
<tr>
<td>TOTAL ROAD LENGTH</td>
<td>1850 km</td>
</tr>
<tr>
<td>RELIGION</td>
<td>Hindu, Muslim, Christian, Sikh.</td>
</tr>
<tr>
<td>NO. OF WARDS</td>
<td>141</td>
</tr>
</tbody>
</table>
3.2 **CLIMATE OF KOLKATA:**

West Bengal has a tropical climate. The main seasons are summer, rainy, a short autumn and winter. While the summer in the delta region is noted for excessive humidity, the western highlands experiences a dry summer, with Kolkata having a tropical wet and dry climate. The annual mean temperature is 26.8°C(80.2°F); monthly mean temperature range from 19°C(66.2°F) to 30°C(86.0°F). Summers are hot and humid with temperature in low 30’s and during dry spells the maximum temperatures often exceed 40°C(104°F) during May and June. Winter tends to last for only about two and a half months, with seasonal lows dipping to 9°C-11°C(54°F-57°F) between December and January. The highest recorded temperature is 43.9°C and the lowest is 5°C. On an average, May is the hottest month with daily temperatures ranging from a low of 27°C to a maximum of 37°C,while January the coldest month has temperatures varying from a low of 12°C to a maximum of 23°C. Often during early summer, dusty squalls followed by spells of thunderstorms or hailstorms and heavy rains with ice sheet lash the city, bringing relief from the humid heat. These thunderstorms are convective in nature and are locally known as Kal Baishakhi (norwesters). Rains brought by the Bay of Bengal branch of South-West monsoon lash the city between June and September and supplies the city with most of its annual rainfall of 1,582mm. The highest rainfall occurs during the monsoon in August-306mm. The city receives 2,528 hours of sunshine per annum, with the maximum sunlight occurring in March. Pollution is a major concern in Kolkata and the suspended particulate matter (SPM) level is high when compared to the other major cities in India, leading to regular smog and haze.
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Urban Structure of Kolkata City: A Geographical Analysis

MAP NO. 7

KOLKATA: CLIMATIC CONDITIONS

### Daily temperature analysis of Kolkata from January to December:

<table>
<thead>
<tr>
<th>Months</th>
<th>Temperature/Rainfall</th>
<th>Special Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>January</strong></td>
<td>Average temperature: 13.9°-26.6°C. Average rainfall: 16.8mm</td>
<td>The temperature in the month of January remains cool. Winter rains are rare.</td>
</tr>
<tr>
<td><strong>February</strong></td>
<td>Average temperature: 16.9°-29.7°C. Average rainfall: 22.9mm.</td>
<td>In this month the average daily temperature rises but the weather remains just pleasant.</td>
</tr>
<tr>
<td><strong>March</strong></td>
<td>Average temperature: 21.7°-34°C. Average rainfall: 32.8mm.</td>
<td>This is spring time in Kolkata.</td>
</tr>
<tr>
<td><strong>April</strong></td>
<td>The minimum average temperature is 36.3°C.</td>
<td>The spring season continues in the month of April.</td>
</tr>
<tr>
<td><strong>May</strong></td>
<td>Average temperature is between 26.4° and 36°C. Average rainfall: 101.7mm.</td>
<td>The summer season commences in India from the month of May. The temperature shoots to maximum during this month. There are days when the temperature is as high as 47°C. The Kal Baishakhi storm brings evening rain along with thunderstorm.</td>
</tr>
<tr>
<td><strong>June</strong></td>
<td>Average temperature: 26.5°C-34.1°C. Average rainfall: 259.9mm.</td>
<td>The south west winds bring the monsoon rains. This helps in bringing down the maximum average temperature.</td>
</tr>
<tr>
<td><strong>July</strong></td>
<td>Maximum average temperature: 26.1°C.</td>
<td></td>
</tr>
<tr>
<td><strong>August</strong></td>
<td>The average maximum and minimum temperatures are: 26.1° and 32°C. Average rainfall: 328.8mm.</td>
<td></td>
</tr>
<tr>
<td><strong>September</strong></td>
<td>Average temperature: 25°-32.2°C. Average rainfall: 295.9mm.</td>
<td>This ideally marks off the spring time in West Bengal, but the monsoon season sometimes continues.</td>
</tr>
<tr>
<td><strong>October</strong></td>
<td>Average temperature: 31.9°-</td>
<td></td>
</tr>
</tbody>
</table>
Months | Temperature/Rainfall | Special Features
---|---|---
November | Average temperature: 18.9º-29.8ºC. | Cool months begin.
December | Average temperature: 14.3º-27ºC. Average rainfall: 7.4mm. | It rains least in December and the temperature begins to drop to its lowest.

**TABLE-3.1: CLIMATIC DATA FOR KOLKATA (2010)**

<table>
<thead>
<tr>
<th>Months</th>
<th>Average sunlight (Hours)</th>
<th>Temperature(º)</th>
<th>Discomfort from heat &amp;humidity</th>
<th>Relative Humidity</th>
<th>Average Rainfall (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average record</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Max</td>
<td>Min</td>
<td></td>
<td>am</td>
</tr>
<tr>
<td>Jan</td>
<td>8</td>
<td>26.6</td>
<td>13.9</td>
<td>medium</td>
<td>85</td>
</tr>
<tr>
<td>Feb</td>
<td>9</td>
<td>29.7</td>
<td>16.9</td>
<td>medium</td>
<td>82</td>
</tr>
<tr>
<td>March</td>
<td>9</td>
<td>34.0</td>
<td>21.7</td>
<td>high</td>
<td>79</td>
</tr>
<tr>
<td>April</td>
<td>9</td>
<td>36.3</td>
<td>25.1</td>
<td>extreme</td>
<td>76</td>
</tr>
<tr>
<td>May</td>
<td>8</td>
<td>36.0</td>
<td>26.4</td>
<td>extreme</td>
<td>77</td>
</tr>
<tr>
<td>June</td>
<td>5</td>
<td>34.1</td>
<td>26.5</td>
<td>extreme</td>
<td>82</td>
</tr>
<tr>
<td>July</td>
<td>4</td>
<td>32.2</td>
<td>26.1</td>
<td>extreme</td>
<td>86</td>
</tr>
<tr>
<td>Aug</td>
<td>4</td>
<td>32.0</td>
<td>26.1</td>
<td>extreme</td>
<td>88</td>
</tr>
<tr>
<td>Sep</td>
<td>5</td>
<td>32.2</td>
<td>25.8</td>
<td>extreme</td>
<td>86</td>
</tr>
<tr>
<td>Oct</td>
<td>7</td>
<td>31.9</td>
<td>24.0</td>
<td>high</td>
<td>85</td>
</tr>
<tr>
<td>Nov</td>
<td>8</td>
<td>29.8</td>
<td>18.9</td>
<td>medium</td>
<td>79</td>
</tr>
<tr>
<td>Dec</td>
<td>8</td>
<td>27</td>
<td>14.3</td>
<td>moderate</td>
<td>80</td>
</tr>
</tbody>
</table>

**Source:** Metrological Department of Kolkata (2010)
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Urban Structure of Kolkata City: A Geographical Analysis

Graph-3.1
Minimum and Maximum Temperature(°) Average record of Kolkata (2010)

Graph-3.2
Average Rainfall (mm) of Kolkata during the year 2010
3.3 URBAN LAND STRUCTURE:

Kolkata city, under the jurisdiction of the Kolkata Municipal Corporation (KMC), has an area of 185 sq.km. The Kolkata Urban agglomeration, however, has continuously expanded and as of 2006, the urban agglomeration (Kolkata Metropolitan Area) is spread over 1,750 sq.km and comprises 157 postal areas. The urban agglomeration is formally administered by several local governments including 38 local municipalities. The urban agglomeration comprises 72 cities and 527 towns and villages. The suburban areas of Kolkata metropolitan district incorporate parts of the district North 24 Parganas, South 24 Parganas, Howrah, Hooghly and Nadia.

The suburban towns of Kolkata have developed into Kolkata Urban Agglomeration. Chinsurah, Hooghly, Chandanagore and Serampore were thriving markets patronized by the Portugues, the Dutch and the French. Transportation linkages make effective integration of suburbs and the metropolis into an organic whole. Good transportation helps in increasing the population of suburban residential areas and leads to all round development of the suburbs through opening of new streets, betterment of civic-service schedule and so on. A suburban area is thus essentially dependent on the central city for its growth. The Kolkata Urban Agglomeration is a post-independence addition thereby demarcating much wider territories to indicate a conurbation for the sake of urban planning.
MAP NO.8

KOLKATA: GENERAL LANDUSE

Sources: National Atlas and Thematic Mapping Organization, Kolkata
The east-to-west dimension of the proper city is narrow; stretching from the Hooghly River in the west to roughly the Eastern Metropolitan Bypass in the east, a span of barely 5 km. The north-south expansion is roughly divided into North, Central and South Kolkata. North Kolkata locality is the oldest part of the city, with 19th century architecture and narrow alleyways. South Kolkata grew mostly after independence and consists of well-to-do and posh localities like Ballygunge, Bhowanipore, Alipore, New Alipore and Jodhpur Park localities. The Salt lake city (Bidhanagar) area to the northeast of the city is a planned section of Kolkata. Rajarhat, also called New Town, is a planned township being developed on the north-eastern fringes of the city. Also, the areas on EM Bypass, where the new development are taking place are the newly upcoming upscale-localities of the city.

Central Kolkata houses the central business district around the B.B.D Bagh area. The government secretariat, General Post Office, High Court, Lalbazar Police HQs and several other government and private offices are located here. The Maidan is a large open field in the heart of the city where several sporting events and public meetings are held. Several companies have set up their offices around the area south of Park Street which has become a secondary central business district.
The Role of Kolkata Metropolitan Development Authority (KMDA) in the growth of Urban Land Structure in Kolkata:

KMDA is the statutory planning and development authority for the Kolkata Metropolitan Area (KMA) under provisions of the West Bengal Town and Country (Planning & Development) Act, 1979. It is today the prime agency for planning, promoting and developing the KMA. Besides the planning and implementation of selected schemes, KMDA is also engaged in preparation of existing Land Use Maps and Register (LUMR), Outline Development Plans (OPD) and Land Use Development Control Plans (LUDCP).

KMDA’s role is multi disciplinary—it is the agency of city planning, it sculpts new areas and townships, it develops physical infrastructure as well as provide basic services like water, drainage and waste management. In course of preparation of LUDCP’s, KMDA has also formulated Land Use Prescriptions and framed Development Control Regulations for delineated Development Control Zones.

KMDA is playing a key role in the planning and development of urban infrastructure within Kolkata Metropolitan Area (KMA). Given that the KMA covers an area of 1,785 sq.km and a population of around 14 million, implementation of plans has been a massive task. Moreover, Kolkata’s long history as a colonial city, and its unplanned growth over the centuries, had resulted in the KMDA inheriting a chaotic civic entity with deteriorating urban environment. The Agency
has recently prepared the draft perspective plan titled “VISION-2025”. The plan visualizes the future urban structure and also lists out the development strategies to be adopted for the purpose. KMDA has also been engaged in upgrades to the existing infrastructure and to provision of newer urban infrastructure and services.

Recently, under the Jawahalal Nehru National Urban Renewal Mission (JNNURM), the KMDA has become the nodal agency for infrastructure projects on Urban Renewal in the state comprising of 2 components: viz.; Urban Infrastructure and Governance; and Basic Services to the urban poor.

**TABLE NO.3.2: URBAN LAND STRUCTURE OF KOLKATA CITY**

<table>
<thead>
<tr>
<th>Landuse</th>
<th>Area in Sq./km.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>656.40</td>
<td>37.50</td>
</tr>
<tr>
<td>Agricultural and Vacant land</td>
<td>611.80</td>
<td>34.96</td>
</tr>
<tr>
<td>Commercial and industrial</td>
<td>206.60</td>
<td>11.80</td>
</tr>
<tr>
<td>Parks and Open space</td>
<td>31.00</td>
<td>1.77</td>
</tr>
<tr>
<td>Educational Activities</td>
<td>42.70</td>
<td>2.44</td>
</tr>
<tr>
<td>Transport Activities</td>
<td>93.50</td>
<td>5.35</td>
</tr>
<tr>
<td>Others including Recreational</td>
<td>108.00</td>
<td>6.18</td>
</tr>
<tr>
<td>Total</td>
<td>1750.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*Source: Kolkata Metropolitan Development Authority, Visio, 2025.*
3.4 SLUMS AND URBAN HOUSING:

**Slums: (Official definition)**

According to the *Slum Area (Improvement and Clearance) Act of 1956*, enacted by the Government of India, slums have been defined as those areas where buildings are in any respect unfit for human habitation. Physically, slums consist of clusters of huts comprising several rooms constructed with temporary building materials, where each room is inhabited by a family sharing a common latrine, without arrangements for water supply, drains, disposal of solid waste and garbage within the slum boundaries.

*Pic. No.5*

![Image of slum dwelling and open spaces](image)

*Slum Dwelling and Open spaces*

Registered slums, locally called bustees are recognized by the CMC because of the title of the land, which was owned by local
Zamindars from whom it was taken on the basis of an agreement, after which houses were built on it. These settlements were taken over by the CMC in 1980 and let out directly to tenants. These types of settlements are called **registered slums**. But other settlements have arisen by encroaching either on Government land or on roads, canals etc. and are called **unregistered bustees**.

New definitions have been introduced for the term 'bustee'. As per the definition of the Calcutta Municipal Corporation Act, 1980, a ‘bustee’ was defined as the area containing land not less than seven hundred square meters in area occupied by or for the purpose of any collection of huts or other structures used or intended to be used for human habitation. In the Statistical Abstract we find, as per the definition in the ‘Compendium of Environmental Statistics, 1997’ Central Statistical Organization (CSO), Government of India, a slum is defined as an aerial unit having 25 or more katcha structures mostly of temporary nature or 50 or more households residing mostly in katcha structures huddled together or inhabited by people with practically no private latrines and inadequate public latrines and water facilities.
MAP NO. 9
SLUM (BUSTEES) AREAS OF KOLKATA

33% of the entire population of Kolkata lives in just 16% of its land area—an alarmingly disproportionate figure by any standard and enough to give the city planners sleepless nights.

**2001 CENSUS ESTIMATES:**

1. Total population of the city is 45 lakh. Of this, 16 lakh live in slums.

2. Total number of slums in Kolkata: 5072

3. Sums are spread in the 138 municipal wards of Kolkata.

4. Total number of municipal wards in the KMC area is 141.

5. No slum in ward 45 (Burrabazar), 42 (Dalhousie) and 38.
6. Maximum number of slum dwellers lives in the municipal ward no. 58 along the Eastern Bypass.

7. Total surface area of the 5072 slums is 25 sq km, equivalent to 16% of the entire surface area of Kolkata (total area of the city is 187 sq km).

8. In CMA, about 3 million people live in 5000 slums.

9. 90% of these slum dwellers have one room per family.

10. Usually each slum consists of 9 ‘hutments’ and each ‘hutment’ consist of 5 huts. In the CMA, there are at least 225000 huts, where one room is shared by at least 13 people (on average).

Urban growth, especially in the metropolitan areas, has been exploitative and chaotic, resulting in rising unemployment and low productivity work – sharing in the informal sector, squatting in tuning slums, congestion, encroachment on public spaces, water and air pollution and deteriorating infrastructure and services. In this context another important aspect is that inequality of distribution of resources especially income which has led to the deterioration of the living standards of a section of urban. Thus is one of the causes of origin of slums in cities.
Khalside (Cannal side) Settlements

These types of houses are called Berar Ghar. Their walls are made of bamboo sticks and their roofs are tiled with polythen.
**TABLE-3.3: SLUM POPULATION IN THE FOUR METROPOLITAN CITIES OF INDIA (2001)**

<table>
<thead>
<tr>
<th>Cities</th>
<th>Total Population</th>
<th>Slum Population</th>
<th>% Of Slum Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolkata</td>
<td>13,216,546</td>
<td>43,000,00</td>
<td>32.54</td>
</tr>
<tr>
<td>Mumbai</td>
<td>16,368,084</td>
<td>65,000,00</td>
<td>39.71</td>
</tr>
<tr>
<td>Delhi</td>
<td>12,791,458</td>
<td>19,000,00</td>
<td>14.85</td>
</tr>
<tr>
<td>Chennai</td>
<td>7,424,624</td>
<td>9,000,00</td>
<td>12.42</td>
</tr>
</tbody>
</table>

*Source:* Census of India (2001)

**Graph-3.3 :**
*Slum Population in the Four Metropolitan Cities of India (2001)*
Pic. No. 8

Squatter Settlements in Ultadanga

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Slum population</th>
<th>% of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>3305006</td>
<td>1000094</td>
<td>30.26</td>
</tr>
<tr>
<td>1991</td>
<td>11022000</td>
<td>4408800</td>
<td>40.00</td>
</tr>
<tr>
<td>2001</td>
<td>13216546</td>
<td>4304200</td>
<td>32.57</td>
</tr>
</tbody>
</table>

**Urban Housing:**

Kolkata is another industrial centre showing the heaviest concentration of industrial workers. While there was a rapid development of industries in the city, no attempt was made to provide housing facilities to the workers. A considerable majority of the workers live in bustees (slum) constructed by private landlords. The degree of overcrowding and congestion found in these bustees around Kolkata is probably unequalled in any other industrial centre in the country. During recent years some good housing colonies have sprung up for jute workers in Kolkata. The jute mills in and around Kolkata have provided houses to nearly 50% of their employees. As regards textile workers, it has been estimated that 40% of the workers have been provided with housing by employers. There are also some quarters provided by Port Commissioners to nearly 50% of the workers. A few tanneries in Kolkata also provide free housing to some of their workers. Despite this the housing conditions at Kolkata have been quite unsatisfactory. There is acute congestion and over crowding and the conditions of sanitation, water supply etc. is also bad. In recent years, there has been some improvement in this respect with the implementation of Government Housing Schemes. In urban areas of Kolkata, people are living in pigeon holes due to lack of space and high rent. In one room about 8 to 10 families find shelter from bottom to top.
The condition is so serious that people have been forced to line in slums and squatters. People have even constructed houses on roadside and tramways.

**TABLE-3.4: DECCADAL CHANGE IN NUMBER OF RESIDENTIAL HOUSES IN KOLKATA.**

<table>
<thead>
<tr>
<th>Years</th>
<th>No. of Occupied Residential Houses</th>
<th>No. of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>584391</td>
<td>-</td>
</tr>
<tr>
<td>1971</td>
<td>556478</td>
<td>635257</td>
</tr>
<tr>
<td>1981</td>
<td>593674</td>
<td>605035</td>
</tr>
<tr>
<td>1991</td>
<td>632428</td>
<td>637816</td>
</tr>
<tr>
<td>2001</td>
<td>704532</td>
<td>706592</td>
</tr>
</tbody>
</table>

*Source: Census of India.*

**Graph 3.4:**
Decadal Change in Number of Residential Houses in Kolkata

- **No. of Occupied Residential Houses**
- **No. of Households**
Housing statistics shows that although the population in the old town area increased, on the whole, about 50 times in about 2 centuries, the number of houses increased only 11 times during the same period. It also appears that the increase in the number of houses during the 19th century was only 14%, although the population multiplied not less than 5 times. Even in more modern times, buildings have multiplied at a much lower rate than the population. The enlargement of houses in length, width and altitude accommodated the excess population to some extent. While pukka (solidly-built) buildings increased from 14,230 in 1821 to 38,574 in 1901, i.e. by 178% and huts decreased from 53289 to 49007 the population increased from nearly 180,000 to close to 600,000 by 233%. It is therefore, not a matter of surprise that there should be considerable overcrowding in the oldest areas of Kolkata.

**Housing and Urban Realities in Kolkata:**

Since 1991, Kolkata has implemented housing sector reform based on wider economic reforms. The advent of liberalization has altered the geopolitical histories or social realities of many cities in developing countries. Kolkata is no exception. The city has embraced provocative, and almost, radical discourse on housing policy since 1991. This, with associate changes in regulatory and legislative framework has prompted shifting priorities leading to a very different landscape in the city.
As more and more stately villas make way for lofty highrises, a city that got a distinct character through its colonial past runs the risk of turning into just another Indian town.

Source: The Times of India, Kolkata, Nov. 13, 2011
Kolkata has always enjoyed geopolitical significance throughout the 20th century. During the pre-war era the city was the capital of India, British colonial headquarter and had a million populations already by 1921. Subsequently, mounting demographic pressures, political turmoil, regional industrial decline and poor infrastructure led to poor living conditions of the majority population branding the city a “premature metropolis” (Bose 1973). Continuous onslaught of migrants led to rise in urban poverty, with, homeless and pavement dwellers taking refuge in an unregulated informal economy.

In 2003, the city had up to 6000 bustees (Kundu 2004, p.4) although unofficial figures are much higher. The housing needs statement by KMDA shows a current average annual housing needs at 70,000 units which is projected to shoot up to 90,000 units by 2025. In effect this estimate is obscured by lack of recognition to those living in unauthorized settlements. Christensen (2004) predicts as many as 5 million people live on the streets or in cardboard or bamboo make-shift homes who don’t feature in government records. Housing problems in Kolkata, however is not just quantitative, the city has some of the worst forms of qualitative deficiency ever found. About 37% households were found living in one room units and only 8.8% of households in five rooms unit in KMA while the KMC had 49% and 8% respectively. A prolonged undersupply of housing has made the city an exhibition site for ‘housing poverty’.
Even Alipore, the city's ivory tower, isn't unsentimental. A strictly 'bungalow-only' zone where families of the crème-de-la-creme of India Inc. reside, a 30-story building is under way. Anita Guruxa, an Alipore Park Road resident, is appalled at the manner in which development opposite the house.

When she moved into the locality 15 years ago, there was greenery all around. The area was a haven for birds. Since then, buildings have mushroomed, and trees and birds disappeared. All she gets to see these days are leaking drain pipes that stain the rear portions of buildings.

Now she is forced to lose even the view of the sky. The giant building will overshadow the neighbourhood. It will rob us of our privacy and freedom," she fumed.

Town planners and heritage experts feel there is an urgent need to revisit the heritage policy and view it holistically. Nearly 1,000 buildings of historic, cultural or architectural significance have been protected by enlisting them as heritage properties. But civic officials have failed to use heritage as a tool for urban planning.

"Localities that had bungalows do not have adequate infrastructure for highrise developments. Yet, demands on water, waste and traffic are being thrust on them. Designate sections of the city as heritage zones to preserve Kolkata's character. It has happened in Dalhousie. Include more precincts like Chitpore and Bhawanipore," said GM Kagur of Indian National Trust for Art & Cultural Heritage.

The suggestion of earmarking high-value areas like Ballygunge, Rash Behari and Alipore as low-rise zones does not find resonance with realtors. They argue that the idea is undemocratic and unviable. "How can one deny a land owner the right to develop? Land is so expensive in these areas, low-rise developments won't make economic sense," argued realtor Pradeep Chopra.

Incidentally, Mumbai has enforced it along the Marine Drive where three-storied bungalows have survived the initial skyscraper onslaught. "It's illogical to sell old buildings to then to be destroyed in the UK, something that chief minister Manmata Banerjee, with her interest in 'London', might investigate urgently," added Amit Chaudhuri.

Chopra also argues that by developing vertically instead of horizontally, developers are helping preserve the city's greenery. "Development has not gone up. By building vertically we are leaving more space for trees and parks," he said.

But why not leave the city proper alone and build highrises at New Town or Kona and Bogude Budge? Realtors say so long there is demand for a premium address. In Ballygunge, Alipore and other parts of south Kolkata will continue.

Pradeep Suresh, a prominent member of Confederation of Real Estate Developers' Association of India (CREDAI), an umbrella body of realtors, feels pressure on land in the city proper will persist till there is further clarity on land policy.

"We are fine with the government's policy that builders pay land at market rates. But the government must facilitate by repealing laws like Urban Land Ceiling Act and allow freerender conversion policies so that builders are encouraged to venture out," said Suresh.

There are many instances of villa owners being coerced by builders to sell as there are of families selling off on the own account after falling on bad times or partition of property. Either way, the epitaph for bungalows has been written. But there are some like Saumish Chandra Roy of Nudde House who have the stamina to fight the odds. "Our family is determined to preserve the heritage," said Saumish Chandra Roy, who resides in the 150-year-old ancestral villa on Bright Street.

A decade and a half ago, there were many bungalows with Corinthian pillars. Now, it cuts a lonely figure amidst the concrete jungle. "In the 1890s and '90s, we faced a lot of pressure from realtors. There would be subtle hints to sell out and crude attempts to grab the property. Things came to such a pass that we kept a German Shepherd to ward off intruders," Saumish recounted.

His son Manish takes pride in the ancestral property. He recalled a phrase his grandfather Saurish, the last Raj of Nadia, had uttered when he visited the Royal Calcutta Turf Club for the last time. Unable to reconcile with newfangled riches replacing the gentriness in the stands, he escorted me out on that winter's day three months ago. "Evil pink gin. Enter paan masala!" he had muttered, seeing vulgar wealth stamp over the measured tread.

Back then, Manish had wondered what his forefathers had manumitted, in the years that followed, the meaning soon drowned on him as bungalows in the vicinity were gobbled up by strangers. Now, Nudde House is an alien in its home turf.

Source: The Times of India, Kolkata, Nov. 13, 2011.
Contrast this with demand for luxury apartments rising steadily from growing prosperity, consumer confidence and falling interest rates and the consequent ‘changing skyline’ in the city. Private sector has expanded to capture this growing sub-market as reflected from plethora of newspaper headlines, promotional brochures and advertisement hoardings promoting new housing development in the city. ‘A new city has emerged’, claims a brochure for potential investors, ‘where business pluses like a quartz watch 24 hours a day’. Just outside the airport, on the billboards for new housing estates of Spanish Villas, promises, ‘the idyllic Catalanian countryside’ in Kolkata.

Kolkata today is full of contrast imageries- of bustees and skyscrapers, of human rickshaws and BMW’s and incandescent vitality of wealth and dull, grimy misery of poverty.

A number of policies have been proposed and implemented by the government for the alleviation of poverty. In many cases these programmes are targeted at the slum dwellers.

In Kolkata, the administration forcibly relocated the urban poor from the central part of the city through the implementation of the Slum Areas (Improvement and Clearance) Act 1956. In one way the Kolkata Slum Improvement Project (SIP) is unique in comparison to other cities in that Kolkata considers the slum problem as a totality-improvement of living environment keeping in mind employment generation whereas in other cities managers look at the slum problem
from the mere sanitary point of view, providing only living facilities and not livelihoods for slum people.

The **EIUS (Environment Improvement in Urban Sector)** scheme was introduced as a central sector scheme in 1972 but has been in operation in the states since 1974 as an integrated part of the State Plan under the **Minimum Needs Programme (MNP)**. The EIUS aims at improving the living environment in slum dwellers by providing them with basic civic facilities like water supply, storm water and side drains, community baths and latrines, widening and paving of existing lanes and street lightning. The EIUS scheme provides only for physical infrastructure and does not include social services like health, education, community development etc. Though this scheme has been practically successful in improving the living environment of slum dwellers, it has not helped in preventing growth of new slums, arising due to say fresh migrants or natural increase in existing slums. The scheme suffers lack of community involvement in planning implementation and monitoring. In CMA in many cases this could not be implemented because the type of ownership in many places is still dispute and cannot be solved.

The scheme for **Housing and Shelter Upgrading (SHASU)** is a programme under **NRY (Nehru Rozgar Yojana)** for providing technical training to construction workers in urban areas and financial
assistance to economically weaker sectors of the population for housing and shelter upgrading with government subsidies and housing loans.

Housing reform in Kolkata covers the whole gamut of production, financing and management of new and existing housing and makes some significant structural changes. Infact, the reform brings together entities that have traditionally operated in isolation, boosts the role of private sector as a producer and financer while maintaining a strong state’s role as a regulator.

This naturally leads to greater expectation for the city that has over 80% population classified as low-income group or lower. West Bengal Housing Infrastructure Development Corporation (HIDCO), another State Government undertaking has already generated about 6,600 dwelling units in New Town, Rajarhat. Once completed the New Town at Rajarhat would accommodate about 10 lakh population including 2.5 lakh floating population on the basis of about 2 lakh dwelling units to be created therein. Apart from this, the Department of Urban Development, Kolkata Metropolitan Development Authority (KMDA) and Kolkata Municipal Corporation (KMC) have formed Joint Venture Companies in the housing sector.
Chapter III

Urban Structure of Kolkata City: A Geographical Analysis

Source: The Times of India, Kolkata, Nov. 13, 2011.
Affordable housing facilities are easily available in the Salt lake Area, where the hub for all IT related activities is located, in the New Kolkata Township, of Rajarhat that is being developed adjacent to Salt Lake, and in the colonies along nearby VIP Road and Eastern Metropolitan Bypass. Land cost and rent rates are cheaper when compared to those in Delhi and Mumbai. The general cost of living is low compared to the other metropolitan cities of the country. Other attractive residential locations are widely available in Urban and suburban areas. Once such example of rapid infrastructural and real estate development is the URBANA, the township coming up in Anandapur. Housing Kolkata’s tallest towers, Urbana is designed to vastly improve the quality of life in the city, through lower pollution levels and a focus on energy conservation. The entire area is expected to benefit from Urbana’s unique advantages, as well as from the new roads being built around the region by the KMC and KMDA.

3.5 TRANSPORT SYSTEM OF KOLKATA:

Evolution of Transport Network in Kolkata:

A city became one’s world, self-sufficing and complete, and within that area people moved around on foot. But alternatives became necessary for the old, infirm and disinclined to walk, or those who needed to move faster. For a long time then went on horseback. In Kolkata, the public palanquin used to be hired for transportation. The horse-drawn carriages were the earliest means of public transport. In
days of the purdah system, special screened palanquins were made for women followed by lighter, open ones more like sedan chairs and were called tonjon.

Around 1900 A.D. the rickshaw, was introduced, initially to negotiate the flooded waterlogged streets, but became permanent feature on the city’s roads.

The only form of mass public transport was by water. When the Haora station was built in 1854, to make it easier for people to move from one city to another by train, passengers had to be ferried across the river on launches and country boats. It was around this time that a three-horse-pulled omnibus plied briefly between Dharmatala and Barrackpore. In 1864, horse-drawn buses were also introduced on a common basis, but this venture was not successful.

The transport system was transformed with the arrival of tramcars and these were doubtlessly the most successful form of public transport.

The next entrant on the transport scene was the steam-powered car followed by electric running trams. For a long time, tramcars were the only form of public transport in Kolkata. The first motor car was seen in 1896. Commercial use of cars as taxis started in 1906, and became a popular mode of transportation especially for the elite. A bus service came into operation in 1920’s. Double-decker arrived in 1926 and by 1935 bus service operations were privatized.
As population continued to grow the city of Kolkata was ready to burst with number of people. Only 6.5% of the city’s area was used for roads in contrast to 23 % in Delhi. The inevitable consequences was chaotic traffic, and this kept getting Kolkata famous for its traffic jams, bottle-necked streets and reaching anywhere on time a far fetched dream. Problems kept multiplying and soon a need was felt for a new mass transport that could spread across the city. Thus India got its mass rapid transport system in form of the Metro in Kolkata. Used by thousands of people each day, it has somewhat resolved crisis that could have crippled Kolkata decades ago.

Pic. No.9

Connecting Kolkata
**Different Modes Of Transport In Kolkata:**

The transport system of Kolkata is a mix of modern mass rapid transport and the old transport modalities like the rickshaws. Kolkata is connected to the rest of India by the National Highways, and also by air. Most traffic to North-East India routes via Kolkata. Public transport is provided by the Kolkata suburban railways, the Kolkata Metro, trams and buses. The different modes of transport are as follows:

I) **Railways:**

Kolkata is well-connected to the rest of India by extensive railway network of the Indian railways. Two divisions of the Indian railways— the **Eastern railways** and **South Eastern railways** are headquartered in the city. The two major stations of the city are at Howarh and Sealdah. A third terminal called Kolkata has recently been launched in early 2006. The electrified suburban rail network of the SER and ER is extensive and stretches far into the neighboring districts of North 24 Parganas, South 24 Parganas, Nadia, Howrah, Hooghly etc.

The **Circular Rail** encircles the entire city of Kolkata, and is at present being extended. A new railway line off-shoot is under construction that would connect the airport to the lines going to Sealdah.

II) **Underground Metro Railways:**

Kolkata was the first city in South Asia to have an underground railway system that started operating from 1984.
MAP NO. 10

KOLKATA: METRO RAILWAYS AND ITS EXTENDED ROUTES

Sources: Kolkata Metropolitan Development Authority (KMDA), 2009.
For an overpopulated and congested metropolis like Kolkata, the train or metro offers the ideal solution to decongest the city. It can transport vast multitudes over long distances at peak hours at minimum cost. Priority was given to the busy north-south axis between Dum Dum and Tollygunj, covering a length of 16.45 km. The Kolkata metro, started partial commercial operations, servicing 5 stations—spanning a distance of 3.4 km from Esplanade in Central Kolkata to Bhowanipore in the south. A month later, a 2.15 km stretch was added to the Metro Service—this time in north Kolkata, between Dum Dum and Belgachia. By April 1986, the metro service was extended up to Tollygunj; it covered 11 stations and an overall distance of 9.79 km. By 1995, the service covered 16.45 km, touching 17 stations, each separated from the other by around one kilometer. In 1999-2000, an extension of the metro services from Tollygunj to Garia. The State Government is also keen to introduce a light rail transit facility along major corridors like the Eastern Metropolitan Bypass and Barrackpore Kalyani Expressway. The tube traffic has been growing steadily since 1999. In 1999-2000, the passenger count was 557.83 lakhs; in 2000-2001, it was 706.05 lakhs; in 2001-2002, it was 766.05 lakhs and 2002-2003 it was 773.52 lakhs respectively. At present the total count of passengers traveling daily by the metro is 1.38 crore.
III) **Buses and Taxis:**

Kolkata has an extensive network of government run and privately run busses. There are multiple bus-running organizations, a private organization and multiple government services like **CSTC** (Calcutta State Transport Corporation), **CTC** (Calcutta Tramway Corporation), **WBSTC** (West Bengal Surface Transport Corporation) etc. 

*Pic. No. 10*

_Buses, Rickshaws, Taxi and Trams on the Roads of Kolkata_

There are also various types of privately run buses. The privately-owned buses are of two types. The **regular** ones and the **mini-buses**. The regular buses are colored light-blue and yellow and the mini-buses are of brown and yellow colour. Recently air conditioned buses have been introduces by WBSTC.
The metered-cabs are mostly of the brand “Ambassador”. Recently air conditioned cabs and maroon cabs have been introduced. The all yellow ones have a Bengal permit and the black-yellow ones have a Kolkata city permit. There is also air conditioned Radio Taxi service in Kolkata with the name ‘Kolkata Cab’.

Howrah Bridge and Vidyasagar Setu are two bridges connecting Kolkata with Howrah over the Ganges. Vivekananda Setu is the third bridge over the river. The fourth one and the newest one is Nivedita Setu.

Pic. No. 11

The Huge Flyovers connecting the city around

A network of expressways like Kona Expressway which is partially complete, Belghoria Expressway which is under construction, widening of southern stretch of Eastern Metropolitan Bypass and construction of the Second Vivekananda Bridge will hopefully ease the traffic congestion.
IV) Trams:

Kolkata is the only city in India to have a tram network. Trams are under the administration of the Calcutta Tramways Company, a government of West Bengal undertaking, popularly known as CTC. The environmental – friendliness and the old charm of the trams attract many people. With the tracks now running in the centre of the heavy traffic roads, commuters are encountering difficulties in getting to the trams’ stop through the traffic and as a result, less number of people is able to use the tram easily.

V) Rickshaws and Auto-Rickshaws:

Rickshaws pulled by men and auto-rickshaws are commonplace. Rickshaws are on the list of probable abolishment on humanitarian grounds. Auto- rickshaws have become a very common mode of transport for short distances. They are usually not metered. There are several routes and the autos of a particular route ply between two distinct places of that route only.

VI) Airport:

The Netaji Subhas Chandra Bose International Airport at Dum Dum is the only airport in the city, operating both domestic and international flights.
VII) Port and Water- Transport:

Kolkata is a major port and together with the Haldia dock system, the Kolkata Port Trust has been amongst top performers in the country. Also the twin cities of Kolkata and Howrah are connected by local water ferries through extensive Ghats like Fairlie Ghat, Howrah Ghat, Shibpur Ghat, Princep Ghat, Cossipore Ghat etc.

Besides all this mode of transport, like in other Indian cities, walking is very common. Privately owned cars, though less in number and usage compared to other large cities in India, are growing by leaps and bounds and are slowly becoming the transport of choice for a large number of people.


Among the total number of vehicles in 2001, percentages of different types of vehicles are as follows:
TABLE-3.5: TOTAL NUMBER OF DIFFERENT TYPES OF VEHICLES IN KOLKATA (2001)

<table>
<thead>
<tr>
<th>Types of Vehicles</th>
<th>Percentage (%) of vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor cars/jeeps</td>
<td>36.78</td>
</tr>
<tr>
<td>Two wheelers</td>
<td>44.10</td>
</tr>
<tr>
<td>Taxi, contract carriage, luxury taxi</td>
<td>4.32</td>
</tr>
<tr>
<td>Goods vehicles</td>
<td>8.49</td>
</tr>
<tr>
<td>Mini-bus</td>
<td>0.15</td>
</tr>
<tr>
<td>Stage carriage</td>
<td>1.06</td>
</tr>
<tr>
<td>Auto rickshaw</td>
<td>1.72</td>
</tr>
<tr>
<td>Tractor/trailer</td>
<td>0.62</td>
</tr>
<tr>
<td>Others</td>
<td>2.76</td>
</tr>
</tbody>
</table>

Source: Census of West Bangal 2001.
During the period **2000-2005**, the percentage of vehicular population increased by **54.03%** in **West Bengal** and **25.04%** in **Kolkata**. The vehicular population of Kolkata contributed **41.90%** to the West Bengal vehicular population contributes **34.01%** to the state vehicle population in 2005.

**TABLE-3.6: GROWTH OF VEHICLES IN INDIA, WEST BENGALE AND KOLKATA**

<table>
<thead>
<tr>
<th>Year</th>
<th>India</th>
<th>West Bengal</th>
<th>Kolkata</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total no. of Vehicles(in thousands)</td>
<td>Total(in no.)</td>
<td>Year</td>
</tr>
<tr>
<td>1951</td>
<td>306</td>
<td>304038</td>
<td>1981</td>
</tr>
<tr>
<td>1961</td>
<td>665</td>
<td>918768</td>
<td>1991</td>
</tr>
<tr>
<td>1971</td>
<td>1865</td>
<td>1198733</td>
<td>1995</td>
</tr>
<tr>
<td>1981</td>
<td>5391</td>
<td>1239809</td>
<td>1996</td>
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<td>1991</td>
<td>21374</td>
<td>1346027</td>
<td>1997</td>
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<tr>
<td>1996</td>
<td>33783</td>
<td>1485071</td>
<td>1998</td>
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<tr>
<td>1997</td>
<td>37231</td>
<td>1632560</td>
<td>1999</td>
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<tr>
<td>1998</td>
<td>41369</td>
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<td>2547962</td>
<td>2004</td>
</tr>
<tr>
<td></td>
<td>2681005</td>
<td></td>
<td>2005</td>
</tr>
</tbody>
</table>

**Source:** Department of Road Transport and Highways, Statistical Abstract, 2005, Govt. of West Bengal.
**Transport and Environment In Kolkata:**

Kolkata encapsulates the essence of the ‘mega-city’ transport problem in developing countries. Kolkata has a motor **vehicle population** of over **600,000** with low but rapidly rising levels of **car ownership (at least 20% per annum)** which operates under conditions most likely to maximize air pollution.

**Pic. No.12**

**Traffic Scenario in the City**

The **fuel used is poor quality, predominately leaded and often adulterated. Vehicles are poorly maintained (most emitting black smoke).** Traffic congestion is severe and there are no traffic management systems such as bus lanes. Air quality is as bad as anywhere in the world. **Suspended Particulate Matter (SPM)**
pollution (mainly from diesel engine and auto-rickshaws) frequently exceeds 1000 ug/ cubic meter when the WHO standard which should not exceeded is 70 ug/ cubic meter (Chakraborti 1997, Samanta et al 1998). Noise is also a problem and levels on any of the main roads and intersections render human speech unintelligible.

Road traffic accidents are increasingly threatening the lives of its residents. The pattern of transport development in Kolkata vividly illustrates the major international faultlines between rhetoric and reality between the public espousal of sustainable development objectives and the daily negation of those objectives in plans on the ground.

Kolkata’s Traffic System:

Kolkata’s bedeviled traffic system which has earned from the users many more disquieting appellate than any other public utility is poised for a turn in the next 5 or 6 years.

The optimism stems from the fact that an investment of Rs.120 crore is expected on a transport infrastructure development project for Kolkata from the Japanese Overseas Economic Co-operation Fund (OECF).

The project includes construction of 10 vehicular fly-overs mainly for smoother north-south traffic, 14 pedestrian walk overs at busy intersections in and around the CBD and construction of two multi-storied- ground parking plazas in the CBD.
All roads lead to Esplanade but never seem to get there.

There is awareness among the transport planners here that basic structural changes in the traffic profile are a must in a city which is going to have a population of at least 10-15 million in the metro core area by another 5 years. In the city almost all vehicles pass through the central area and the number of vehicles per kilometer road space averages **740** against **364** in **Mumbai**. Kolkata, again has the largest volume of pedestrian traffic will have to add to these encroachments of the road space by vendors and the presence of slow moving vehicles including rickshaws. Kolkata, a survey shows, has an extremely limited road space which works out to only **4%** of the total land area. In a modern city, the average should be **16-18%**. Compared to other metropolitan cities, Kolkata also suffers from another disadvantage. It has little scope to expand in all directions. The north-south movement of traffic is far greater than the east-west traffic.

**Kolkata On The Road To Change:**

Under the **Jawaharlal Nehru National Urban Renewal Mission**, the State Government has taken the initiative to come up with a **Rs. 27 billion** action plan which includes **extension and widening of arterial roads**, **widening and strengthening of secondary roads**, **construction of pedestrian underpasses, bridges, flyovers, elevated roads**, **traffic and transportation systems including modern passenger dispersal systems**.
For Example:

(i) Four Lane Road Bridges across the Hooghly and Haldi rivers facilitating connectivity between Kolkata and port city of Haldia as well as better connectivity to new Industrial areas such as Nandigram.

(ii) Entire stretch of NH-2 connecting Kolkata to New Delhi is being widened to 4 lanes. The Durgapur and Kona Expressways are fully operational and provide easier access to Kolkata from NH-2.

(iii) Construction of Grand Foreshore Road.

(iv) Flyovers at Park Street, Lockgate road, Lake Gardens and Taratala within Kolkata.

Not so long ago, Calcuttans had to face an arduous journey just to get from one end of the city to another. Then came the great Eastern Metropolitan Bypass and changed Kolkata. For years it has been the lifeline of the city, but in recent times, the rapid increase of vehicles on the roads has clogged this arterial road.

In this response to this challenge, the KMC and KMDA have undertaken several infrastructural initiatives to ease the traffic on the city’s busiest roads.

The EM Bypass is being upgraded from 6 lanes to 8 lanes up to Garia. Work has already begun on a second 6- lane flyover at Bagha Jatin and another one between the EM Bypass and VIP road is
soon to be completed. The entire area around the Ruby rotary has undergone a complete make over and is now a pleasure to drive through, while the stretch from Parama to the Ruby rotary has already been widened.

A 6-lane elevated flyover is also coming up at the Ruby rotary as part of the Bus Rapid Transit System (BRTS) from north to south.

Next on the agenda is Anandapur Road, which is likely to be widened to 4- lanes.

Park Circus, one of the city’s most important connecting roads, will no longer be a rush hour nightmare with a new 4.3 km flyover coming up in 2012, linking it to Parama Island. In fact, work has already begun on the project. There will also be aerial rotaries linking it to Park Street, Sayed Amir Ali Avenue and AJC Bose Road.

Prince Anwar Shah Road will become far more accessible from Chowbagha Road. Within the next 2 years, 2 more lanes will be added to Chowbagha, running parallel to the Bypass, along with a median and streetlights.
Kolkata on the road to change

ANANDAPUR ROAD

CHOWBAGHA ROAD

6-lane flyover at Baghajatin and another one between the KMC Bypass and VIP Road is soon to be completed.

The eastern area around the Ruby rotary has undergone a complete makeover and is now a pleasure to drive through, while the streets from Tollygunge to the Ruby rotary has already been widened. A 6-lane elevated flyover is also coming up at the Ruby rotary as part of the Bus Rapid Transit System (BRTS) from north to south.

Next on the agenda is Anandapur Road, which is likely to be widened to 4 lanes in the next 24 months. Park Circus, one of the city’s most important intersecting roads, will no longer be a rush hour nightmare with a new 4.3 km flyover coming up as well, linking it to Park Circus. In fact, work has already begun on the project. There will also be a new Flyover linking it to Park Street, Syed Amir Ali Avenue and A.C. Bose Road. Prime Anwara Shah Road will become far more accessible from Chowbagha Road. Within the next 2 years, 3 more lanes will be added to Chowbagha, running parallel to the Bypass, along with a median and streetlights.

These initiatives will benefit most major areas, especially the much-anticipated Ultapada township, coming up just off the Bypass. In fact, Ultapada’s residents will enjoy the convenience of living minutes away from the leading schools, healthcare centres and roads in the city. Parents can take their pick from Heritage School, Delhi Public School, Calcutta International School and South City International School.

The best in healthcare is also close by at Ruby Hospital, AMRI and RITICS. It’s also a short drive from Ultapada to Gariahat market, South City Mall, Metropolis Mall and ITC Sonar, as well as the JW Marriott and Ascott Sports Complex coming up near Ruby.

Thanks to these initiatives, Ultapada’s neighbourhood may soon become the most coveted address in Kolkata.

Source: The Telegraph, Wednesday, 7th July, 2010
3.6 INDUSTRIES AND ECONOMY OF KOLKATA:

Kolkata is the main business, commercial and financial hub of eastern India and the north eastern states. It is home to the Calcutta Stock Exchange- India’s second largest bourse. It is also a major commercial and military port. Once India’s leading city and capital, Kolkata experienced a steady economic decline in the years following India’s independence due to the prevalent unstabilised political condition and rise in trade unionism. Between the 1960’s to the mid 1990’s, flight of capital was enormous as many large factories were closed or downsized and business relocated. The lack of capital and resources coupled with a worldwide glut in demand in the city’s traditional industries (eg,jute) added to the depressed state of the city’s economy. The liberalization of the Indian economy in the 1990’s has resulted in the improvement of the city’s fortune. Kolkata’s revival was led largely by IT services, with the IT sector growing at 70% yearly-twice that of the national average. In recent years there has been a surge of investments in the housing infrastructure sector with several new projects coming up in the city. Kolkata is home to many industrial units operated by large Indian Corporations with products ranging from electronics to jute. Some notable companies headquartered in Kolkata include ITC Limited, Bata India Corporation, Coal India Limited, Damodar Valley Corporation, United Bank of India, UCO Bank and Allahabad Bank.
In the conurbation of Kolkata the industrial structure includes the manufacturing activities like jute, textile, hosiery, apparel, leather, basic metal, metal products, engineering goods, machinery, transport equipments, chemicals, paper, printing, food, rice mills, pulse mills and bakeries. In more than 20 towns, manufacturing activities dominate the scene at significant level. These industrial centers are Titagarh, Naihati, Halisahar, Uttarpara, Bally, Champadani, Kotrung, Bhadeshwar, Uluberia, Bauria, Kamarhati and Budge-Budge. All these are jute mills of very high production and well managed. In Halisahar about 75% workers are engaged in industrial activities. In other urban centers industrial activities predominate the scene at significant level associated with heavy transport; e.g.: Howrah is a railway terminus, Kanchrapara a railway workshop town and Ichapur is a gun factory town. In this way, manufacturing activities is dominant in the industrial landscape along the Hooghly River in Kolkata. Service activity is significant in Kalyani, Barrackpore, Baruipur, Nabapally, Jadavpur and Bransdroni. Apart from being the home to a number of industries such as jute, chemicals, leather etc, Kolkata is now emerging as a major electronics and IT industrial hub. Thus, the IT sector of Kolkata is coming out as the most prosperous industry in West Bengal.

West Bengal Industrial Development Corporation Limited (WBIDC), one of the prime movers behind this industrial renaissance. It has set up “Shilpangan” (formerly known as Toy Park), the state-of-
the-art unit for toy manufacturing and light engineering units, all in Salt Lake and is associated with projects like the **Rubber Park, Foundary Park, Apparel Park, Garments’ Park**, etc. in the state.

**West Bengal Industrial Infrastructure Development Corporation Limited (WBIIDC)**, another State Government agency is setting up international-class ‘Industrial Growth Centers’ for large and medium enterprises.

So it is clear that, today West Bengal has repositioned itself as a forward – looking State, changes on the ground have clearly short up its attractiveness as an Investor-Friendly state. The State Government has formulated many action plans and strategies to usher in a changed industrial climate conducive to growth. The size of its markets, quality of certain key resources and the State Governments increasingly pro-investor stance and some of the key- advantages to the investors that the state possesses are some other factors, which have fueled this industrial resurgence.
MAP NO. 11
KOLKATA: INDUSTRIES

Sources: District Industries Centre, Kolkata
Thrust Areas:

The State Government has identified the thrust areas like iron & steel, petrochemicals & downstream industries automobile components, chemicals, IT, ITes & electronics, textile, leather and leather products, food processing, medicinal plants, edible oil, vegetable processing and aquaculture etc.

IMPORTANT INDUSTRIES OF THE REGION

(A) Large scale industries:-

1) Manufacturing Industries
   - Iron and steel industries
   - Jute industries
   - Leather industries

2) Food Processing Industries

3) IT and ITes Industries

4) Automobile Industries

(B) Small scale Industries:-
A. LARGE SCALE INDUSTRIES:-

1) MANUFACTURING INDUSTRIES:

➢ Iron and steel industries

   - In the last one decade, several small, medium-sized and even large steel making units have come up in the state. Hon. Chief Minister Bhuddhadeb Bhattacharjee has laid the foundation stone for one of the biggest steel plants in the country at Salboni near Kharagpur.

   The fact is that investments are being made in all segments of the steel value chain. There are re-rollers making billets and ingots. And there are also high-value products like axles and shafts and cold rolled strips. There are even steel intermediary companies that have decided to set up shop in the state. West Bengal is near the coal belt, which is the biggest factor in its favour. Several new coal bases have been identified in the state. The trend is now to set up a mini-integrated steel unit with a captive power plant using the waste heat generated from the sponge iron making process. The reasons why the steel industry is heading to Bengal aren’t difficult to figure out.

   There are abundance of raw materials and skilled labour in the region. The state has a natural advantage in many aspects, including close proximity to principal raw materials- coal and iron. The cost of power is also very cheap here. Moreover, the State Government provides one of the best incentive packages to investors.
The Bureau of Applied Economics and Statistics has compiled data, which shows that projects in the sector worth **Rs.400 crore (Rs.4 billion)** were implemented between 1999 and 2000. But that has moved up steeply between 2002 and 2004 when around **Rs.850 crore (Rs.8.5 billion)** of investment came into the state. Factors which are influencing the steel consumption are: The booming automobile sector, infrastructure developments, housing sectors. Starting from the basic production of sponge iron and pig iron to ambitious ventures for mini-steel plants, steel bars, billets and Ferro alloys, the state has witnessed the setting up of nearly 200-odd small, medium and large units.

A large number of mega iron and steel projects are in different stages of implementation. **For example:** The city based steel giant, Shyam Steel is setting up a 1.1 MT integrated steel plant along with a 150 MW captive power plant and a 1 MT cement plant. The total investment will be to the tune of Rs.3500 crore over a six year expansion plan. As the steel industry booms, around 60 mini-steel projects are at various stages of implementation. Industry experts indicate that the steel-making capacity of the projects put together would be around 5 million tones. More than 20 projects have already been taken off.

“The trend is now to set up a mini-integrated steel unit with a captive power plant”, said a senior official of the Industries Department.
The reason why the state is attracting investments in steel sector is many. Abundance of raw materials in the region, close proximity to principal raw materials like coal and iron, attractive incentive package to the investors and last but not the least supply of quality power at competitive rates are some of the reasons behind the growth of this sector. The companies are also attracted towards this region by a range of factors including the easy availability of electricity and coal, as well as cheap skilled labour and good port connectivity, which helps the import of machinery and export of, finished products. Other factors, which evinced interest among the entrepreneurs, are a continuous growth in demand following a boom in the real-estate and construction industry and positive attitude of the State Government.

But this ‘steel-boom’ in the state won’t last long unless the availability of iron-ore is guaranteed. According to the study by the UK-based Department for International Development (DFID), Bengal will need 3 million tones of iron ore annually to sustain the current level of production. With the neighboring states imposing barriers on export of iron ore, Bengal will find it difficult to procure iron ore in the future. For this, the DFID suggests, the Government should attract investment in automobile and consumer durable manufacturing sectors.

The state has made a good beginning but it has still a long way to go to emerge as a ‘steel-manufacturing hub’.
**Impact of Global Meltdown on Iron and Steel Sector:**

The impact of global slowdown in the iron and steel sector has also been reflected in the state’s **crude steel production** by the major steel producers. While the crude steel production by the major steel producers declined to **2472 thousand tones** during **2008-09** from **2529 thousand tones** during **2007-08**, a fall of **2.2%**, the secondary producers, comprising **Induction Furnace Units** and **Electric Furnace Units**, increased their production from **1126 thousand tones in 2007-08** to **1735 thousand tones in 2008-09**, an increase of **54.1%**.

**Jute industries**

The jute sector occupies an important place in the economy of the country in general and eastern region in particular. The industry provides direct employment of about 0.26 million workers and supports the livelihood of around 4.0 million farm families. Around 0.14 million people engaged in tertiary sector and allied activities, supporting the jute economy. These apart, the jute industry also contributes to exports of the tune of nearly Rs.10-12 billion.

West Bengal is the leader and pioneer in the country for the manufacturing of Jute Textiles. The development of jute industry is due to availability of raw jute, transportation and cheap labour available in the state. Jute textile manufacturing is the most predominant industry in West Bengal due to availability of raw jute in the state. **First jute mill** was set up in **1859** at **Rishra near Kolkata**.
Main jute products are Hessian, sacking, jute bags and other items produced by jute. Most of the jute mills in West Bengal are located on the top banks of river Hooghly near Kolkata. **Major canters of production** are Naihati, Bhatpara, Titagrah and Kamarhati in **North 24 Parganas** district; Bansberia, Baidyabati, Rishra and Sreerampore in **Hooghly** district; Salkia, Howrah and Uluberia in **Howrah district** and Budge Budge in South 24 Parganas district.

**Production and Export of Jute goods:**

Production and exports in jute sector were affected during the year 2008-09 due to inadequate demand in the overseas market caused by global melt down. Production of jute goods in West Bengal during **April-December, 2008 declined by 9.9%** over the corresponding period in the previous year. The production declined to **10.5 lakh tones** during **April-December 2008** from **1.65 lakh tones** during **April-December 2007**. Production however, **increased by 35.4 % during 2007-08** with **all time high** production of 15.70 lakh tones. The all India production of jute goods during April-December 2008 also declined by 9.2% as compared to April-December 2007. Production – wise production of all the major sector of jute goods viz. Hessian, carpet, backing declined during the period April-December 2008.

**Estimated export of jute goods during April-March 2009 (2008-09):**

The cumulative export during **2008-09**, which is currently estimated at about **Rs.10,661 million equivalent to about US$ 234**
million, is lower by 10% in Indian Rupees and by 20% in average dollar terms as compared to the same period of 2007-08 (Rs.11,785 million/US$ 293 million). This declining trend is cumulative exports in value terms has been mainly attributable to decline in export oh Hessian by 58%.

➢ **Leather Industry:**

Kolkata is the second most important tanning centre in the country. There are about 500 tanneries- majority of them are tiny and small – with a capacity to process approximately 800 tones of raw materials per day. About 22-25 % of the country’s tanning is done in Kolkata.

**Calcutta Leather Complex:**

The integrated leather complex widely known as the “Calcutta Leather Complex” (CLC), has been set up, located at a distance of about 14 km from the main business hub of Kolkata. The complex has been capacity of developing 1000 tones of hides per day. The CLC is spread over a sprawling 1100 acres. Meticulously planned and executed, CLC will lead the resurgence of the leather industry. Presently **200 tanneries are running in Calcutta Leather Complex at Bantala.** A Leather Goods Park in CLC is being established. Kolkata produces 19 crores pairs of all kinds of footwear valued at Rs.2,000 crore annually. Nearly 1.50 lakh people are engaged in Kolkata footwear production.
clusters. Footwear is the focus area in the coming years of state’s Leather Industry.

**Export Performance:**

West Bengal is a major exporter of leather goods. About 55% of the total exports of leather goods from India are originated from West Bengal. The presence of West Bengal in finished Leather and leather garments export were moderate. About 5.0% of the country’s finished leather exports and 4.4% of country’s leather garments exports are originating from West Bengal. However, exports of footwear and Saddlery and Harness are not even 1% of total exports.

The State Government is providing financial incentives to both relocating tanneries and new tanneries and leather units, which do production at Calcutta Leather Complex. Government of West Bengal has taken initiatives for:

a) Upgradation and improvement of existing market centers of raw materials in order to improve both quality and quantity.

b) Setting up of network of small and viable rural tanning centers.

c) Modernization of existing slaughter houses at Beliaghata, Metiabruz and Howrah and setting up of New Slaughter houses at Basirhat (Dist.24 Parganas North) and Beldanga (Dist.Murshidabad).
West Bengal has a share of **19.44% in the country’s output**, **9.10% share in finished leather** and **25.79% in leather products**. As of **mid-2006**, 75 tanneries were operational, of which 32 were new ones. Total number of small scale units engaged in the manufacture of leather and leather products is more than **20,000** providing **employment** to more than **2 lakh persons**.

1) **FOOD PROCESSING INDUSTRIES:**

Bengal is one of the leading producers of agriculture products and so there is tremendous potential for setting up of agro-based industries in the state. The Department of Food Processing and Horticulture is responsible for the promotion of the food processing industries in the state. It has been trying hard to attract small entrepreneurs to invest in the food processing sector. It is in the process of setting up international-standard food parks like ‘Sudha Ras’, the modular food park set up at Sankrail in Howrah district. The Department has been also setting up perishable good cargo complexes, quality control laboratories etc. The State Government has taken steps to facilitate the development of the food processing industry, which includes setting up of ‘Food Parks’ with private investments. At present 6 food parks are under implementation in various parts of the state.

To promote exports of processed vegetables and fruits, the state has set up 8 Agri-Export Zones (AEZs). Another AEZ for “Tea” is planned in the Darjeeling district.
West Bengal Comprising of Six agro-climatic zones offer extensive and diversified variety of environs for the development of temperate, sub-tropical and tropical horticulture produce and therefore have the capacity to cater the market with various items round the seasons. The state is now among the country’s top-two producers in a wide variety of agricultural produce and has attained self-sufficiency in most key crops. Natural resources and bold government initiatives like comprehensive and sustained land reform have helped the state to achieve such strong growth in agriculture.

**Salient Features of the Food Processing Industry:**

a) Largest producer of rice, pineapple and vegetables in the country

b) The state produces 0.25 million tons of fruits and over 10 million tons of vegetables.

c) On an average, the state accounts for 23% of national pineapple production.

d) Second largest producer of potatoes and lychees.

e) The varieties of lychees grown in the state are considered among the best varieties across the world in terms of taste and flavor.

f) A significant producer of mango, mandarin orange and sapota.

g) The state grows the best processable variety of mangoes.

h) The state ranks third in India in flower production. Floriculture turnover in the state is more than Rs. 63 crores annually.
i) The state grows medicinal plants and herbs.

j) In the last few years, the state has witnessed a boost in the production of spices, coconut, cashew nut, areca nut and betel vines.

The agro and food processing industrial sector is one of the largest in terms of its size, **employs over 1.6 million workers** (20% of the production, consumption, export and growth prospects. This sector ranks fifth in the country’s labour force.) and accounts for **15.19% of the total industry output** with **5.5% of the GDP**. The state of West Bengal is a significant producer of many horticulture and agriculture items, which give it a natural advantage to invest in fruit and vegetable processing, spices and grain processing industries. Besides these, the state also produces other food products like fish, meat and poultry products in abundance, which also has enormous processing prospects. According to **FAIDA report of Mckinsey**, West Bengal is one of the **three front running states in India** in the food and agro-processing sector.
**TABLE-3.7: PRODUCTION LEADERSHIP ACROSS SEVERAL ITEMS**

**AT A GLANCE**

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>RANKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>1st</td>
</tr>
<tr>
<td>Jute</td>
<td>1st</td>
</tr>
<tr>
<td>Pineapple</td>
<td>1st</td>
</tr>
<tr>
<td>Vegetables</td>
<td>1st</td>
</tr>
<tr>
<td>Potatoes</td>
<td>2nd</td>
</tr>
<tr>
<td>Lychee</td>
<td>2nd</td>
</tr>
<tr>
<td>Tea</td>
<td>2nd</td>
</tr>
<tr>
<td>Flower</td>
<td>3rd</td>
</tr>
</tbody>
</table>

**Source:** Department of Food Processing Industries and Horticulture, Govt. of West Bengal, (2010).

3) **IT AND ITeS INDUSTRIES:**

Kolkata, once known for its yellow taxis, hand-pulled rickshaws and the site of Mother Teresa, had a negative perception among the investors, especially in IT Sector. However, this scenario changed in last 8 or 10 years. Which is why a late entrant though in joining the IT bandwagon, Kolkata is now fast catching up in a big way, and many companies are realizing the inert potential of this metropolis- thanks to the five key enablers such as huge talent pool, low cost of operation, availability of infrastructure, investor- friendly policies and investor support. Hewitt Associates, a major player in this sector, have projected Kolkata as the next most preferred IT destination in view of huge competitive advantages the city has. Aggressive marketing and a series
of initiatives have put West Bengal on the global map of IT expansion with 235 companies employing more than 44,000 professionals. All major companies are already here.

Mr. Siddharth, Principal Secretary in the West Bengal’s Department of Information Technology avers that the state is firmly progressing towards its ‘VISION 2010’.

By that time, West Bengal have emerged among the top – 3 IT destinations in the country and account for 15% of the country’s revenue and 20% of its ITes revenue.

Thus, the IT sector of Kolkata is coming out as the most prosperous industry in West Bengal. The Kolkata IT sector is the new IT destination of India.

**Kolkata-The New IT Destination:**

The city of joy is the buzzword in the nation’s IT Sector. With sky rise buildings and blue glasses, glowing lights and nice cubicles in AC, client meeting and con calls, onshore and offshore support, IT industry undoubtedly the main haunting job for the young graduate engineers. Before 6 or 7 years back small IT companies were slowly expanding their wings in Kolkata, starting the outsourcing and support projects iv Sector V, Salt lake. It has changed quite rapidly during last few years and taking the shape of a stable industry, maturing and stabilizing with the warmth of globalization.
The Economy of Kolkata:

The economy of Kolkata, to some extent depends on the informal industrial sectors like furniture making, electrical wing, leather works etc. But the Government of West Bengal has adopted some liberalized industrial policies to attract foreign investors, especially in industrial sectors like IT. The government is also trying to strengthen the overall infrastructure of the city by developing several industrial zones. Moreover, Kolkata has an enormous business potentiality due to its strong infrastructure; cheap and skilled labor and proactive government policies. IT plays a significant role and accounts for an appreciable portion to the overall economy of Kolkata. West Bengal is
regarded as India’s 3rd fastest growing economy. The IT sector in Kolkata contributes a major portion to the national average of India—the IT sector is growing at 70% yearly, twice that of the national average.

**Factors Contributing to Rapid IT Growth in Kolkata:**

Kolkata has been always regarded as the knowledge and cultural capital of India. Kolkata’s strengths are as follows:

1) The state has a huge pool of talent to draw upon. There are 52 engineering colleges.

2) A recent survey conducted by the Shanghai Tiao Tong University reveals that 3 universities from India are among the top 500 universities, of which two namely, Indian Institute Of Technology, Kharagpur and Calcutta University, are located in West Bengal—the greatest assets of the state.

3) Kolkata’s domain strength lies in banking, finance and insurance sectors.

4) The state has the lowest cost of living, resulting in better comfort level and saving potentiality.

5) Another important factor going for Kolkata is the low attrition level. In Kolkata, the attrition rates in ITeS stands at only 10% as against 25% in Delhi, Mumbai and Bangalore and 15% in Chennai and Hyderabad.

6) West Bengal offers IT investors one of the lowest operational costs in the country.
7) The power cost is the lowest and the quality is the best among the states.

8) Reliable telecom connectivity, walk-in-physical infrastructure, and local transport, international accessibility- these are the available infrastructure that Kolkata can boast off.

9) Kolkata offers a lifestyle that can be the envy of many. It has emerged as a happening place for the youth, and a preferred destination among young IT professionals.

10) West Bengal offers IT investors one of the lowest operational costs in the country.

**Potentiality of the Kolkata IT Sector:**

The IT sector has a tremendous potentiality in Kolkata. The government of West Bengal is earnestly trying to promote this industry. Leading international software companies are also responding in a positive manner. A considerable number of IT infrastructure project are also coming up in Kolkata. One such project is a 1.3 million sq. ft. IT Park, which is under construction in Rajarhat, Kolkata. ‘Technopolis’ is another IT infrastructure project. Technopolis is regarded as the first Green Building for IT in India.

**The Hindu-Business Line: Sat, Feb 10th, 2007, quoted that:-**

“Lower land acquisition costs in Kolkata- compared with most other metros, lower assets pricing and availability of scalable infrastructure have made the city of favored destination for corporate and developers alike”.
Leading Companies in IT Sector of Kolkata:

Almost all major IT giants have stepped to Kolkata for running their business. Renowned companies like IBM, TCS, Cognizant, Skytech, Lexmark, AIG and HSBC have already started their operational activities in Kolkata. The leading companies like ITC Infotech, Reliance etc. are in the process to start their operation in Kolkata.

Pic. No. 14

Tech Temples in Kolkata

The Growth of the Kolkata IT Sector:

The West Bengal government has identified IT as priority sector to be developed in an engine of growth. A NASSCOM (National Association of Software and Service Companies) study, published in August 2002, on the competitiveness of 9 Indian cities for the IT enabled services (ITeS) industry, ranked Kolkata 5th. The state
government wants the state to emerge as one of the top 3 IT states in India by the end of 2010 and account for **15% of the country’s total IT revenue**. Today its contribution stands around **3%**. According to **NASSCOM** the employability of people having **IT skills** in West Bengal is **40-50%**, way above the **national average of 25%**. “Looking at the intrinsic strength of West Bengal, it can be said that the state is poised for a major IT revolution. We have been progressively marketing West Bengal as a major IT destination through seminars and conferences like ‘INFOCOM 2003’ AND ‘IT EAST’ and others”, G.D. Gautam, Principal Secretary, IT told Frontline. Since 2001 onwards, Kolkata has achieved a **119%** growth in the sector, while Chennai **46%**, Maharashtra **45%**, Hyderabad **36%** and Bangalore **29%**. The all India growth rate is **36%** in the said time.

**Impact of Kolkata IT Sector on Indian Economy:**

The revolution in technology and over growing demand of resources worldwide, IT industry in India is growing intrinsically, especially in Bengal. The Chairman of WIPRO, Azim Premzi opined that IT sector of Bengal has much more to contribute to the overall economy of the country, resulting in appreciable portion to the overall growth in near future.

**The Future of IT in Kolkata: “VISION 2010” –**

Top people in the industry feel that, while all the enables are in place with a view to making “Vision 2010” a reality, it would be imperative and appropriate, to ensure that skilled manpower is available in adequate numbers to make this happen.
What is “VISION 2010”?

The Vision:

- To rank among the top-3 IT states of India by 2010.
- Contribute 15% to 20% of the country’s total IT revenue.
- Create leadership position in executing high value-added IT work developed through intellectual leadership and supported Government initiatives.
- Immediate focus- IT Enabled Services to create brand value for the state.

While at present more than 55000 skilled professionals are engaged in the state IT sector, 2 lakh new jobs are expected to be created within 2-3 years.

The state is all set to fulfill its ‘Vision’.

The government is aware of the negative perception of the state and has taken series of measures to correct this distortion. IT department has held series of road shows in different location, participated in exhibitions and seminars, inviting investors in Kolkata. West Bengal announced the new ‘Information Technology Policy’ in the year 3003, in the form of e-Governance. This approach has paid dividends and people today are convinced about the value portion of Kolkata as preferred IT destination.

Thus in order to have a major boost, the state has identified IT and ITeS as the propriety sector. Improving perception is one of the focus areas.
TABLE-3.8: PROJECTED DEMAND FOR TECHNICAL MANPOWER IN KOLKATA

<table>
<thead>
<tr>
<th>Year</th>
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<th>ITeS+BPO</th>
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<th>Total</th>
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<tbody>
<tr>
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<td>5000</td>
<td>8000</td>
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<td>2009</td>
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<td>13000</td>
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<td>2011</td>
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</tr>
<tr>
<td>2012</td>
<td>27000</td>
<td>30000</td>
<td>23000</td>
<td>80000</td>
</tr>
</tbody>
</table>

Source: Annual Report 2007-08, Dept of IT, Go WB.

Graph-3.6: Projected Demand for Technical Manpower in Kolkata

![Graph showing projected demand for technical manpower in Kolkata from 2007 to 2012.](image-url)

<table>
<thead>
<tr>
<th>Cities</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolkata</td>
<td>38</td>
</tr>
<tr>
<td>Chennai</td>
<td>15</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>14</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>12</td>
</tr>
<tr>
<td>Bangalore</td>
<td>9</td>
</tr>
<tr>
<td>All- India</td>
<td>12</td>
</tr>
</tbody>
</table>

**Source:** Bengal Chamber Of Commerce Newsletter (2003)

**Graph-3.7:**

4) **AUTOMOBILE INDUSTRY:**

The state government feels that the automobile manufacturing, assembling and component sector has immense possibilities and it has, therefore, laid emphasis on development of this sector. The Government of India has already declared its policy to make India a hub for the manufacture of automobiles. In view of this the state government too has strengthened its efforts to attract more investments into this sector. These efforts culminated in the setting up of a number of automobile/auto components manufacturing units in the state.

**Ural India Ltd.** a joint venture of the **Kolkata based Motijug Group**, the West Bengal Industrial Development Corporation and the **Uralaz of Russia** is currently engaged in the manufacture of heavy-duty and high capacity trucks, dump trucks and tippers at its manufacturing facility at Haldia. **Ural India’s** manufacturing facility is the **first automobile** manufacturing facility to be set up in the state after a gap of 64 years. In 1942, Hindustan Motors had set up the country’s **first car** manufacturing plant at **Uttarpara**. Thereafter no significant investment was made in the state in the automobile sector.

Despite conducive environment, withdrawal of Tata Motor from Singur in Hooghly district because of opposition from a section of people of the state has given a major set back on the industrialization in the state. Rs.3000 crore investments in the state have been lost during 2008.
Automobile industry also promises significant employment opportunities in the state. Large number of workers, both skilled and unskilled, will be required to sustain present initiatives for development of automotive sector in the state. A large part of the employment would also be indirect, for sales, finance, insurance, mechanics and other after-sales personal for both semi-skilled and unskilled workers in rural and semi-urban areas.

B) SMALL SCALE INDUSTRIES:

The small scale sector plays an important role in the economic development of our country. The sector contributes to nearly 59% of the GDP. The SSI Sector is next to agriculture in terms of employment generation. It contributes to 60% of Indian exports, which comprises gems and jewellery, handicrafts, garments, agro-products and leather goods.

The West Bengal Government has given considerable priority on the development of cottage and small scale industries in the state because of the fact that this sector plays a lead role for generating employment, especially in the rural and semi-urban areas. It enjoys favourable capital employment ratio and can utilize local resources, plays a significant role in ensuring a more equitable spatial distribution and act as a check to unplanned urbanization. There is no alternative but to give due priority on the development of cottage and small scale industries in an over populated state like West Bengal having a
population density of 904 persons per sq.km and with an extremely adverse land-man ratio.

Kolkata is in the process of reorganization and poised for restoration of glorious past in the sphere of industrialization. During the 9th Plan period (1997-2002), the State Domestic Product (SDP) of West Bengal had annual growth rate of 7.10% against 5.46% of India. Per capita income of Kolkata increased at 5.7% against 3.16 of India and was second highest in the country.

Small-scale sector is playing a vital role in employment generation. At present there are more than 3, 50,000 SSI registered units employing nearly 2.2 million people in the state.

Kolkata has many advantages for investment in this industry. They are as follows:

- Large market for various segments.
- Skilled and educated manpower.
- Long tradition of industrial culture.
- Availability of coal within the state.
- Availability of electricity at reasonable price.
- Stable and investor-friendly Government.
- Considerable investment in large scale industries and IT industries in the recent years.
Easy communication facility through rail, road, air and existence of ports and airports.

Availability of raw materials.

Big industries in Iron & Steel Sector, Chemical Sector, jute and textile sector.

High quality institutions/ knowledge capital.

Leather Complex.

Various Industrial estates of government.

Cultural capital.

After the introduction of **new Industrial Policy, 1991**, the sector is exposed to the world of competition in the wake of economic liberalization. **Urban Development Authorities, Finance Corporation** also has been created with large number of personnel for promotion of small scale industries in Kolkata.

**The West Bengal Small Industries Development Corporation Ltd. (WBSIDC) was set up in the year 1961.** Since its establishment, it has been acting as a friend, guide and promotional agency for growth and development of industries and commercial activities in the small scale sector all over Kolkata. It has created industrial and commercial infrastructure like **industrial and commercial estates and complexes** in Kolkata. Some of the important industrial estates are:
i) Kasba Industrial Estate (3 Phases).

ii) Tangra-I Industrial Estate.

iii) Tangra-II Industrial Estate.

iv) Udayan Industrial Estate.

v) Behala Industrial Estate and Commercial Complex.

vi) Kalyani Industrial Estate.

WBSIDC has chalked out some ambitious future plans. It plans to set up industrial estates in different parts of Kolkata.

For example:

(a) A **new Industrial Complex for leather goods** will be coming up at **Beliaghata**. A modern industrial estate will come up at Shibpur.

(b) WBSIDC in association with Bengal Global Techno centre Ltd, a private partner in setting up, **‘SIDCO Global Tower’, a state-of-the-art IT Park** at the Salt lake Electronics Complex in Salt Lake.

(c) It will also take up **extension and renovation** work at all major Industrial Estates and Commercial Complexes in the areas such as **Behala, Santoshpur, Tangra, Garia and Kasba all located in Kolkata**.
KOLKATA-INDUSTRIAL POLICY:

Well developed infrastructural facilities make the healthy environment for the promotion of new industries and investment in Kolkata. Availability of skilled and trained human resources plays an advantageous role to establish a new industrial set up in the city. The liberalization in the industrial policy of the Government of West Bengal by offering attractive incentives to the investors has widened the scope of industrial development in the city.

Connectivity by various means of transport is another important factor to generate the place for industrial development. Kolkata is fortune to be well connected by rail, road and air with major parts of the country and abroad. The city has become an important industrial hub of the country providing enormous opportunities for the investors and job seekers. Kolkata has well equipped key facilities like power, water, road network and communication. The city’s growth in industrial sectors like jute, textile, IT, electronics and medicines has drawn international attention. Various plans and project are being carried out to revamp the industrial scenario of the city.

Industrial Policy:

The salient features of the policy on industrial promotion and economic development are to welcome foreign technology and investment, private sector investment in power generation, improvement and up-gradation of industrial infrastructure etc. The
thrust areas for special attention are petrochemicals and down stream industries, electronics and information technology, iron and steel, metallurgical and engineering, textile, leather and leather products, food processing, medicinal plants, edible oil, vegetable processing and aquaculture, rubber, tea etc. For the purpose of determination of types and quantum of incentives available under this scheme for the approved projects, according to their location, the state shall be classified in the following groups:

**Group-A:** Calcutta Municipal Corporation.

**Group-B:** Hooghly, Howrah, North 24 Parganas, South 24 Parganas excluding the area under the jurisdiction of the Calcutta Municipal Corporation.

**Group-C:** Mursidabad, Birbhum, Midnapore, Nadia and Burdawan Districts.

**Group-D:** Purulia, Bankura, Malda, Coochbehar, North Dinajpur, South Dinajpur and Darjeeling Districts.
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