Chapter-1

INTRODUCTION

1.1. Introduction:

Infrastructure refers to the basic facilities, services and installations needed for the functioning of a community or society. Social infrastructure includes housing, educational, recreational and law and order facilities that support the community's need for social interaction. Housing not only satisfies the basic necessities, but also plays a significant role in the socio-psychological development of individual. As the World Bank Housing Policy paper observes, “Well planned housing can increase national productivity, economise on urban space, minimise the cost of urban infrastructure. Improved location of dwellings in relation to jobs leads to reduction in traffic congestion and increased household take-home pay by reducing commuting expenses” (Francis Cherunilam and Odeyar D. Heggade, Page no.1). Housing is also important from economic point of view. It contributes to the national income of the country. In fact, as far as the industry wise attraction of FDI flow is concerned, housing and real estate industry holds second position in the country after service sector.

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP of Dwellings at Current Price (Croc)</th>
<th>GDP at Factor Cost (Croc)</th>
<th>Percentage of Total GDP to GDP at Factor Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-1994</td>
<td>43507</td>
<td>781345</td>
<td>5.6</td>
</tr>
<tr>
<td>1994-1995</td>
<td>47206</td>
<td>917058</td>
<td>5.1</td>
</tr>
<tr>
<td>1995-1996</td>
<td>50899</td>
<td>1073271</td>
<td>4.7</td>
</tr>
<tr>
<td>1996-1997</td>
<td>55380</td>
<td>1233546</td>
<td>4.5</td>
</tr>
<tr>
<td>1997-1998</td>
<td>59716</td>
<td>1390148</td>
<td>4.3</td>
</tr>
<tr>
<td>1998-1999</td>
<td>67568</td>
<td>1598127</td>
<td>4.2</td>
</tr>
<tr>
<td>1999-2000</td>
<td>77564</td>
<td>1761838</td>
<td>4.4</td>
</tr>
<tr>
<td>2000-2001</td>
<td>87259</td>
<td>1902999</td>
<td>4.6</td>
</tr>
<tr>
<td>2001-2002</td>
<td>96983</td>
<td>2081474</td>
<td>4.7</td>
</tr>
<tr>
<td>2002-2003</td>
<td>105519</td>
<td>2254888</td>
<td>4.7</td>
</tr>
<tr>
<td>2003-2004</td>
<td>114070</td>
<td>2519785</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Source: NBO, 2006

Housing is a major urban problem in India. Indian metropolitan cities have not been keeping pace with population growth. As a result, an acute housing shortage is evident. There is around 24.7 million-house shortage in India on an average (NBO & NHHP 2007).
Most of the shortage (99 percent) is for the lower income group (LIG) and economically weaker section (EWS) as per NBO and NHHP 2007.

**Table-1.2. Housing Shortage In Different Income Groups, India, 2007**

<table>
<thead>
<tr>
<th>Income Category</th>
<th>Housing Shortage In Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWS</td>
<td>21.78</td>
</tr>
<tr>
<td>LIG</td>
<td>2.89</td>
</tr>
<tr>
<td>MIG</td>
<td>0.04</td>
</tr>
<tr>
<td>HIG</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: CREDAI, July-September, 2009

Kolkata is one of the oldest cities of India and not an exception regarding this problem. According to official estimates almost 32 percent of Kolkata’s population lives in slums, refugee colonies and road side shanties. In spite of the Government’s direct intervention in housing industry for last fifty years the problem of housing shortage is still acute, because demand far outstrips the supply.

1.2. The Problem:

The main feature of housing problem plaguing the city is an acute shortage of residential dwellings. Historical inequalities in British period, rapid urban growth, huge population pressure and influx of refugee in post Independent era have contributed to the housing shortage and unhealthy living condition of the city dwellers. Recently the real estate boom, economic development and social change have created aspired lifestyle, of urban Indians, resulting into a greater housing demand. Housing in Kolkata is still limited due to-

a) A doubling of land price in last two decades, high price of building material and labour cost had increased the price of flat by 20 to 30 per cent.
b) Problem of land shortage due to the city’s linear location, legal problem in land acquisition.
c) Problem in site selection for EWS and LIG housing projects.
d) Lack of finance facility for the poor and uncertainty in cost recovery.
e) Delay in execution and allotment of new housing units.
f) Problem of maintenance of built up houses.
The above mentioned problems have given rise to deterioration in quality of life; slums have been growing like mushrooms causing serious environmental problems. Therefore, it needs to be emphasized that the problem is not simply of a certain magnitude of housing shortage, it is essentially multidimensional.

1.3. Area of Study:
The study area of this research work is confined within the limits of Kolkata metropolis, covering total area of 187.33 sq.km within the jurisdiction of Kolkata Municipal Corporation (Map.1.1). Kolkata, the Capital of West Bengal is situated on the left bank of River Hooghly in the lower Gangetic deltaic plain. The city lies between 22°28’N to 22°37’30”N and 88°15’E to 88°30’E. The Kolkata Municipal Corporation comprises of 141 Wards within 15 Boroughs. According to Census of 2001, the city holds 4.57 million population (male 2500040, female 2072836). The population of Kolkata according to provisional Census report of 2011 is 4486679.

1.4. Hypotheses:
I. Residential location is an expression of work place relationship and in the absence of any other control is strongly influenced by accessibility factor.
II. Where location rents are a significant factor, household consuming larger quantities of space will make larger journey to work than those consuming lesser qualities.
III. In Kolkata the Government has been playing an active role in supplying mass housing, but the supply never matches the increasing demand. Thus the housing shortage is prevailing in the city.
IV. With the real estate boom in Kolkata since 1990s the private sector has started to invest in housing sector which cater only to HIG and MIG people. They also have access to private financing and easy bank loans. Therefore, the actual shortage lies with the UG and EWS.
V. Apart from quantity, housing infrastructure also includes amenities and living conditions. To provide affordable housing with all necessary amenities to all income category people, the Government has to depend upon the Joint Venture Companies.
VI. Group or mass housing and infrastructure are not uniformly distributed throughout the city.

Introduction
LOCATION OF KOLKATA METROPOLIS

Introduction
1.5. Objective of the Study:

The research study has the following objectives:

I. To make a structural analysis of existing housing stock and to identify the constraints of housing market within the study area.

II. To study the role of public and private (Joint Venture Companies) sectors in the growth and development of group housing production.

III. To identify the housing shortage in all income categories, projection of future demand for housing.

IV. To assess the present level of living in different income groups and highlight the behavioural aspect of household as reflected through perception of residential neighbourhood and mobility.

V. To make an appraisal of emerging trend, pattern, policies in the housing situation of the city.

VI. To draw a comparison with some other metropolitan cities of India.

1.6. Literature Review:

World

- **Walter Bor (1974)**, in his book, *The Making of Cities*, has discussed various urban problems of the world. In Chapter 7 of the book the author has discussed housing in different urban context with examples from Great Britain. Housing characteristics in city centre, inner areas, suburbs, newtowns are discussed in details. Housing for the poor, need and scope of social planning are also discussed. Three case studies of redevelopment in London are also discussed in detail. This study is relevent for the formulation of housing policy.

- **Geoffrey K Payne (1977)**, in his book, *Urban Housing in the Third World*, discussed the settlement pattern in the context of urban growth, relationship between urban development and housing pattern, models of urban planning. He has also incorporated several case studies in different areas of Delhi explaining the factors of housing. Lastly, he has also dealt with the present housing problems and suggested planning, policies in the Third World countries like Turkey, Brazil etc.
India

- **Kamal Nayan Kabra (1975)**, in his book, *Urban Land and Housing Policies: Ceiling and Socialisation*, has discussed urban housing, land problems and State policies. This book has also suggested numerous direct and indirect regularatories and redistributive measures.

- **Vijaya Bhole (1988)**, *Housing and Urban Development in India*, has studied the growth, spatial pattern of residential areas and a gradual shift from south to northern part of Hyderabad city as the consequence of population growth and socio-economic changes. The author has also suggested some measures to control housing shortage in the city.

- **Cedric Pugh (1990)**, in his book, *Housing and Urbanisation-A Study of India*, has shown the change in national housing policy in India due to economic growth and urbanization on one hand and active presence of the World Bank on the other hand in major cities as Kolkata, Mumbai and Chennai. It revealed how the rapid urbanization has led to the proliferation of slums and stress has been given on accessible, habitable, low-income housing in these cities based on affordability, cost recovery and replicability. He argued for a shift in emphasis in housing policy from radical development to a system of feasible upgradation and betterment. This book also offers the different theories of housing elaborately.

- **K. N. Reddy (1996)**, in his book, *Urban Development: Study of High-Rise Buildings*, has emphasized the role of a well planned multistoried buildings in rehousing the existing population to replace the old dilapidated houses in ancient part of Hyderabad city. He has discussed the advantages, problems, socio-economic characteristics and environmental impact of these high-rises.

- **K.P. Bhattacharya (1998)**, in his edited book, *Affordable Housing and Infrastructure in India*, has edited eighteen papers on housing policies and perspectives, rent affordability, infrastructure and finance in different major cities of India. The papers emphasised particularly on the urban poor.

Kolkata

- **The Bengal Secretariat Book Report (1920)**, in its publication, *Report of the Committee Appointed to Enquire Into Land values and Rent in Calcutta, 1919*, has
recommended some direct and some indirect strategies on increasing rent and price of land and housing in British Kolkata.

- **The Bengal Secretariat Book Report (1924)**, in its publication, *Report of the Calcutta Housing and Communications Committee, 1923*, has pointed out the problems of housing shortage in Kolkata and also suggested some practical solutions to the problem and measures of improvement of communication between the city and its suburbs.

- **The Government of West Bengal (1955)**, in its publication, *Report on the Enquiry into the Housing Conditions in 21 Urban Centres in the States, 1955*, has investigated on the housing situation on the basis of a sample survey conducted in 21 towns of West Bengal. This report has taken into account the structure of housing, monthly rent occupancy rate and housing amenities in the city of Kolkata and also did a comparative study between 21 towns.

- **Calcutta Metropolitan Planning Organisation (1962)**, in *First Report 1962*, in collaboration with KIT had surveyed the demographic, socio-economic and land use changes in Kolkata. The problems were also identified and based on that, some suggestions were made by CMPO. Chapter 5 of the report discusses the housing problem of the city, in which CMPO suggested at least 24000 dwelling units ought to be built every year to meet the housing need of the city. It also emphasized on low cost self-help housing for lower and middle income group, opening up new areas for housing, new housing prototypes, including multi-storied structure, Slum Improvement with Work-cum-Living project.

- **Government of West Bengal (1963)**, in its publication, *Survey of Housing Conditions in Calcutta Corporation Area, 1963*, has pointed out the occupancy characteristics, family and structural characteristics, housing quality, rent and related characteristics in Corporation area on the basis of a sample survey. This is a very good document of existing housing conditions and housing amenities prevailing in the city in 1960s.

- **Calcutta Metropolitan Planning Organisation (1966)**, in *Basic Development Plan for Calcutta Metropolitan District 1966-'86*, has identified the deficit areas, future need in urban services and other physical, socio-economic constraints, resulting
out of rapid growth of city’s population. Two major housing problems were identified—overcrowding and poor housing condition. This also included a perspective plan for the metropolitan district during 1966-’86. The plan suggested an annual requirement for 65000 dwelling units. The housing recommended preservation of existing housing stock, elimination of barriers to efficient market functioning, direct public investment in shelter. 15 sites were selected for development of HIG, MIG and LIG housing plots. Slum Improvement Programme was also taken up in the 2000 acres fringe sewered and unsewered areas of Kolkata, Howrah and Bally.

- **Calcutta Metropolitan Development Authority (1972),** in *Calcutta Development-Programmes and Projects,* has proposed policies for several infrastructure developments in KMD. Based on income category three types of housing programme was recommended. These are-Subsidised Housing, Hire-Purchase housing and Rehousing of slum dwellers. Apart from these, land acquisitions for new area development were also included.

- **Government of West Bengal (1975),** in its publication, *Housing Survey in Calcutta Corporation Area, 1975,* has presented a detailed report on the housing situation and amenities in different income groups based on sample survey. This report did not take into account the households living in ownership houses.

- **Santa Chakraborti (1984),** in a paper, *Housing in Calcutta-A Brief Review,* has explained the structure, amenities and problems of housing in the city since 1961. The problems of Bustee dwellers were also addressed. The author also suggested few policy measures to mitigate the housing problems.

- **Manimanjari Mitra (1990),** in her book, *Calcutta in the 20th Century: An Urban Disaster,* has identified the insufficient urban amenities in Kolkata such as housing, water supply, drainage, Bustee and health for the first sixty years of 20th century. She has also analysed the historical, social, economic, political factors which are responsible for an urban disaster. The unplanned growth of the city, its demographic trend, occupational mobility and concentration of metropolitan economy were discussed to probe the root of these problems.
• **State Planning Board (1990)**, in its publication, *Perspective Plan for Calcutta: 2011*, has discussed existing housing condition in the city in detail. It has provided the housing supply by different housing agencies, problem of slum dwellers, hawkers, refugee colonies, high-rises and pavement dwellers are also discussed. The publication has also assessed the housing need in different income categories for 2011 for entire metropolitan region. It has also provided recommendation for housing in the metropolitan region. The publication did not project the housing need for the city of Kolkata.

• **Forum of Scientists, Engineers and Technologists (1996)**, in its publication, *Action Plan for CMA 2011*, has identified the problems of Kolkata and suggested some policies and steps to be followed to reach the target set for 2011, comprising slum conservation and upgrading, site and service project in metro fringes, identification of future residential areas, support to co-operative movement outside KMC, redefining housing norm and standard, giving emphasis on housing finance.

• **Calcutta Metropolitan Development Authority (2000)**, in *Vision 2025*, has explored existing housing situation, assessment and projection of future need within KMA. This report has highlighted the future shelter programmes by KMDA and also identified new settlement areas to solve the housing problem of the city.

1.7. Existing Housing situation:

The existing housing situation in Kolkata is far from satisfactory. Still, if compared to India and west Bengal, Kolkata is in a better position. The existing situation in India, West Bengal and Kolkata are presented in the following table.

**Table-1.3. The Existing Housing Situation in India, West Bengal and Kolkata, 2001**

<table>
<thead>
<tr>
<th>Housing Situation</th>
<th>India</th>
<th>West Bengal</th>
<th>Kolkata</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population in million</td>
<td>1027.02</td>
<td>80.22</td>
<td>4.57</td>
</tr>
<tr>
<td>Household in Million</td>
<td>191.96</td>
<td>15.72</td>
<td>0.92</td>
</tr>
<tr>
<td>Residential Housing stock in Million</td>
<td>179.28</td>
<td>14.90</td>
<td>0.88</td>
</tr>
<tr>
<td>Ratio of Household to Houses</td>
<td>1.07</td>
<td>1.06</td>
<td>1.05</td>
</tr>
<tr>
<td>Persons per Household</td>
<td>5.35</td>
<td>5.10</td>
<td>4.97</td>
</tr>
<tr>
<td>Persons per Houses</td>
<td>5.73</td>
<td>5.38</td>
<td>5.19</td>
</tr>
</tbody>
</table>

Source: Computed by the Author from Census of India, 2001
A detailed structural condition of the residential housing stock, occupancy characteristics and housing amenities provided to the households in respect to India, West Bengal and Kolkata are as follows:

1.7.1. Housing Situation in India, 2001:

According to Census 2001, India has got a housing shortage of 24.7 million. Housing shortage in India has been increasing more or less steadily since 1961.

Census of India 2001 also estimated that 51.62 percent of houses are pucca, 30.12 percent are semi pucca and 18.25 percent are kutcha. 87 percent of households reside in ownership houses, 11 percent in rented houses and 2 percent in other accommodations. In India 1.94 million people are houseless of which 40.17 percent are found in urban areas. 40.30 million people are slum dwellers. About 77.9 percent households receive safe drinking water, 55.85 percent households have electricity connection and 36.41 percent of households have access to exclusive toilet facilities.
1.7.2. Housing Situation in West Bengal, 2001:

In 2001 West Bengal has experienced a housing shortage of 1.73 million. Number of houseless population is 0.11 million of which 82 percent are urban population. 3.82 million people are slum dwellers.

![Fig. : 1.3. Distribution of Households by Number of Dwelling Rooms, west Bengal, 2001](image)

Data Source: Census of India, 2001, Series 20

In West Bengal 2001, 86 percent of households stay in ownership houses, 10 percent stay in rented houses and 4 percent in others. Nearly 40.44 percent houses are permanent, 37.27 percent are semi permanent and 22.29 percent are temporary or kutcha houses. As far as the housing amenities are concerned, 88.5 percent of households have access to safe drinking water, 37.45 percent have electricity connection, 43.71 percent have toilet for exclusive use and 67.56 percent households have separate kitchen facility.

1.7.3. Housing Situation in Kolkata, 2001:

In 2001 Kolkata had a slum population of 1485309 and approximately 60000 people were houseless. About 56 percent of houses are in good condition, 39 percent of houses are livable and 5 percent are dilapidated. 91.25 percent of households live in permanent houses. Approximately 45 percent of households have access to ownership accommodation, 61.06 percent have access to safe drinking water, 94.90 percent have electricity connection, 75.22 percent possess exclusive bathroom facilities and 71.87 percent of population enjoy separate kitchen.
Table 1.4. Distribution of Households in Percentage According to House Status, Kolkata, 2001

<table>
<thead>
<tr>
<th>Permanent</th>
<th>Semi Permanent</th>
<th>Temporary</th>
<th>Unclassified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Serviceable</td>
<td>Non Serviceable</td>
</tr>
<tr>
<td>91.25</td>
<td>7.6</td>
<td>0.25</td>
<td>0.84</td>
</tr>
</tbody>
</table>


Table 1.5. Distribution of Households in Percentage Living in Census Houses by Predominant Material of Roof, Kolkata, 2001

<table>
<thead>
<tr>
<th>Grass, thatch, Bamboo, Wood, Mud</th>
<th>Plastic, Polythene</th>
<th>Tiles</th>
<th>Slate</th>
<th>G.I. Metal Asbestos Sheet</th>
<th>Brick</th>
<th>Stone</th>
<th>Cement</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.52</td>
<td>0.82</td>
<td>34.26</td>
<td>0.32</td>
<td>8.3</td>
<td>1.354</td>
<td>0.61</td>
<td>52.96</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Source: Census of India 2001, Series 20

Table 1.6. Distribution of Households in Percentage Living in Census Houses by Predominant Material of Floor, Kolkata, 2001

<table>
<thead>
<tr>
<th>Mud</th>
<th>Bamboo, Wood</th>
<th>Brick</th>
<th>Stone</th>
<th>Cement</th>
<th>Mosaic</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.40</td>
<td>0.17</td>
<td>2.41</td>
<td>0.78</td>
<td>78.07</td>
<td>12.07</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Source: Census of India 2001, Series 20

Table 1.7. Distribution of Households in Percentage Living in Census Houses by Predominant Material of Wall, Kolkata, 2001

<table>
<thead>
<tr>
<th>Grass, thatch, Bamboo, Wood, Mud</th>
<th>Plastic, Polythene</th>
<th>Mud, Unburnt Brick</th>
<th>Wood</th>
<th>G.I. Metal Asbestos Sheet</th>
<th>Burnt Brick</th>
<th>Stone</th>
<th>Concrete</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.89</td>
<td>0.46</td>
<td>2.69</td>
<td>0.24</td>
<td>0.85</td>
<td>82.8</td>
<td>0.3</td>
<td>7.45</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Source: Census of India 2001, Series 20

Introduction
1.8. Database and Methodology:

In this study both primary and secondary data have been used, collected from different sources. Primary data was collected on demography, housing characteristics, amenities, infrastructure, neighbourhood problem, level of satisfaction and residential mobility from questionnaire during a door to door household survey in 33 housing complexes situated in different parts of the city.

On the other hand, data and maps on location, plinth area, sale price, rent structure, year of construction, design, layout and other structural details of HIG, MIG, LIG, and EWS housings were collected from the Housing Department of West Bengal Government, the West Bengal Housing Board, Kolkata Metropolitan Development Authority, Kolkata Improvement Trust, National Sample Survey Organisation, Bureau of Applied Economics and Statistics, National Atlas and Thematic Mapping Organisation, National Buildings organisation (Delhi), Office of the Registrar of Cooperative Housing societies and office of the Registrar General of Census Operation, West Bengal. The base map of study area was collected from Planning and Development department of Kolkata Municipal Corporation in 2002. Moreover, some historical data was collected from National library. Several websites of Kolkata Municipal Corporation, Delhi Development Authority, Mumbai Metropolitan Regional Development Authority, National Buildings Organisation, Bengal Shrachi, Bengal Ambuja, Bengal Peerless, and Bengal Shelter were accessed. Data table on housing and household amenities for different states of India, ward wise population of KMC were taken from Census of India, 2001. The leading Bengali and English daily newspapers, periodic journal were also consulted throughout the research work to obtain relevant information. Although the research work is expected to be submitted in June 2011 the work is based on Census data of 2001 since the provisional Census data of 2011 is not published till June 2011. Only the provisional population of the city is collected from the official website of the Census of India. Since the name of the city was used as “Calcutta” prior to 1st January 2001, the name has been kept unchanged for publication and organisations used before 2001 to maintain parity with reference.
The methodology adopted can be divided into the following parts;

- **Pre-field:** In this stage, general literature survey was carried out and collection of maps and secondary data was done from Government and non-Government sources. Two separate questionnaires for HIG, MIG, LIG and EWS were prepared for household survey.

- **Field:** As the study area is densely populated with 4.57 million population, 0.9 million households, residing in 0.88 million housing units, it becomes a difficult task to conduct a primary survey. To cope with this problem an areal sampling was done on random basis. There were 41500 group housings existed in the city of which 500 households (1.2 percent) of all income categories, residing in 33 housing complexes in different parts of the city were surveyed. The city was delineated into 7 quadrants. Then 1.2 percent of houses from each quadrant were chosen as sample. Some snaps were also taken during the survey. Some experts, planners and executives in different organisations were personally met and interviewed.

- **Post-Field:** This stage involves computation of master data table from the questionnaire, statistical application, cartographic representation, drawing maps using GIS techniques, analysis of data and information obtained in order to understand the present housing situation, growth and future trend of Kolkata city. Corel Draw, Map info and Arc Info and Adobe Photoshop software have been used for digitization and drawing of maps. It also includes a comparative study of housing growth in other mega cities of India. Finally, recommendations are suggested for future housing activities in Kolkata.

**1.9. Limitations:**

The main constraint of such study is the lack of reliable data. The primary data reliability sometimes suffered from the problem of suppression of facts by the respondents. Moreover, indifferent behaviour, lack of awareness or biased opinion among the residents are also constraints for carrying out perception studies.

In some cases the secondary data was not available in Government offices due to absence of proper records, legal obligation and lack of co-ordination between different departments of the Government organisations. Records of application, brochures of...
previous housing projects were not preserved. As a result, it becomes difficult for researchers to acquire past data. Sometimes, even the contemporary data becomes unavailable, because, neither the documents are published nor their respective websites are updated properly. Census data in form of soft copy is also not adequately available for the entire country in the regional offices. Moreover, the Census of India has stopped to publish ward wise data on the residential houses and houseless population since 2001 at the city level.

1.10. Overview of the Study:

The study is categorised into several chapters for convenience. The following 2nd Chapter deals with the concept and different approaches to the study of housing. The 3rd Chapter examines the background of the housing crisis in British and Post Independence India till 1970. The role of different public and private authorities in housing development of Kolkata is studied in chapters 4 and 5. Chapter 6 analyses the perception study on housing in Kolkata. Chapter 7 offers a study on role of public agencies in housing development in Delhi and Mumbai. The existing problems of the housing in Kolkata and its probable solutions are provided in Chapter 8. Finally, the recent trends of housing in Kolkata, comparison between different organisations and a critical appraisal of the future public policies are studied in Chapter 9.

Selected References:

- Bhattacharya, K.P. (1998): Affordable Housing and Infrastructure In India (ed.), Reliance Publishing Housing, New Delhi
- Bhole, Vijaya (1988): Housing and Urban Development In India, Classical Publishing Company, New Delhi
• Government of India (1996): National Housing Seminar-Adequate Shelter for All, Vigyan Bhaban, New Delhi, India
• Government of West Bengal (1963): Survey of Housing Conditions in Calcutta Corporation Area, Calcutta
• Government of West Bengal (1975): Survey of Housing Conditions in Calcutta Corporation Area, Calcutta
• Government of West Bengal (2000): Vision 2025 Perspective Plan, for CMA, Calcutta Metropolitan Development Authority, Calcutta
• Government of West Bengal (1972): Calcutta Development-Programmes and Projects, Calcutta Metropolitan Development Authority, Calcutta
• Government of West Bengal (1974): The Origin and Growth of Calcutta, Calcutta Improvement Trust, Calcutta
• Pugh, Cedric (1990): Housing of Urbanisation-A Study of India, Sage Publications India, New Delhi, India

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