Chapter 1

Introduction
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1.0 Introduction

All over the world, development is bringing about enormous changes in society. The pace of growth is faster in developing countries, which are trying to achieve within fifty years all that was accomplished over two hundred years in Western society. This has put enormous pressure on scarce resources; as a consequence large sections of the population are not receiving the benefits of developmental growth.

It is an undeniable fact that healthy communities require affordable housing and the lack of affordable housing is an issue that impacts the economic health and stability of all societies. It is also widely understood that housing is a bundled good comprising the twin components of land and housing; and the rising cost of shelter is the cause for the number of people living in sub-standard housing and for the incidence of homelessness. Housing is the only basic need left unfulfilled.

The cost of house construction can be met by the users incrementally, by self help or by group effort. The cost of land is an insurmountable hurdle that cannot be cleared by the underprivileged sections of society.

1.1 Urbanization

The world over, increasing urbanization and the rapid development of large urban centers has become an irreversible trend. Karl Polanyi\(^1\) described this as "the fatal irreversibility of urbanization". The positive relationship between urbanization and economic development is today established beyond doubt. The link between higher levels of economic welfare and urbanization is a strong one as consistently confirmed by various studies. No nation in modern history has managed to attain sustained levels of per capita

\(^1\)Polanyi, K., The Great Transformation. 1944
income growth without a substantial relocation of population from villages to the city\(^1\). Urbanization is an inevitable outcome of economic development.

The World Bank mentions a global growth rate of 4.5 percent per annum for urban populations in the new Millennium, with the world’s populations equally divided between urban and rural settlements. However the principal component of this urban growth was recorded in the developing countries of the Third World.

Urbanization is the increase in proportion of population depending on non-agricultural occupations; this implies profound social and cultural change, as there is a vast gulf between the quality of urban living, and rural life with traditional living patterns. Urbanization is the spatial dimension of the economic and social development brought about by the industrial and technological revolution. As such urbanization is a process of growth, but more importantly an instrument of social change. The economic role of the city can vary from generative to parasitic depending on the relation of the city to its region\(^2\). But the growth of cities per se does not necessarily reflect a healthy economic growth since urban expansion may be more a symptom of rural distress than urban prosperity.

It is observed that an over emphasis on the problems of the big cities created by the ‘human avalanche of migration’\(^3\) underestimates the positive role of migration in relieving rural poverty. There is an inadequate comprehension of the role of cities as reception centers of the rural poor. The tendency to look at migration as an aggravation and urbanization as an evil shows a lack of comprehension of the economic reality. Urban centers will henceforth continue to play a dominant role in the country’s economy; trying to halt urban growth or reverse the migration process is neither possible nor desirable in view of the population explosion. The following observation deserves attention: “Perhaps the most realistic policy would be to accept that the best qualities of urban life will be the goal of most people in the future; instead of bemoaning this trend,

\(^1\)Ramanathan, R., Towards Sustainable Cities in India. 2004.
\(^3\)Polanyi, K.. The Great Transformation. 1944
it would be more positive to plan constructively for the variety and number of human settlements needed to fulfill human aspirations\(^1\).

### 1.2 Urbanization in India

India is a part of the global trend towards increasing urbanization in which more than half of world's population is living in cities and towns. 27.8 per cent of India's population of 285 million lives in urban areas as per 2001 census.

The rate of urbanization has been rather slow; nonetheless the sum total of urban growth has been voluminous. Existing urban settlements have borne the brunt of the process of urbanization. Lack of infrastructure facilities in small towns coupled with the advantage of the economy of scale in large cities has encouraged the polarization of urban growth. The primacy of large cities is sustained by non-economic factors also e.g. the concentration of much political, administrative, educational and cultural authority.

It is important to note that the contribution of the urban sector to India’s Gross National Product (GNP) is currently in the range of 50-60 percent of the total\(^2\). In this context, enhancing the productivity of urban areas is the key focus of the policies of the Ministry of Urban Development. Urban centers hold tremendous potential as engines of economic and social development, creating employment and generating wealth through economies of scale. National economic growth and poverty alleviation will be increasingly determined by the productivity of cities and towns. High urban productivity can sustain and augment the country's economic growth. For Indian cities to become growth oriented and productive, it is essential to achieve a world class urban system. This in turn depends on attaining efficiency and equity in urban development.

Urban growth in each decade is affected by a dominant trend that affects urban growth, like stagnation of small towns, increased migration, etc. The issues of urbanization and

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\(^{1}\) Bolan, R., Luce, T., Lam, H.K., Can Urban Growth Be Contained? 1997.

\(^{2}\) Bulletin of Ministry of Urban Development, 2004
urban development have not received adequate Government attention; the five year plans leave it as a subject to be dealt by the local administration, even though national issues are involved. Municipal Administrations are not in a position to deal with these problems, as they are weak in resources and not financially sound. The concerns arising from urbanization and development are complex and have to be understood in the wider context of economic growth and social change.

Urban development was previously viewed as a costly exercise requiring disproportionate efforts and urban growth as merely adding to the unemployment. Today the growth of cities is increasingly seen as essential to human development. Urbanized nations have a higher GNP due to the higher productivity of urban labor, which in turn translates into greater employment opportunities and higher wages. Despite the obvious efficiency advantages, the negative consequences of urbanization for the lower income groups are overwhelming. A high percentage lives in crushing poverty and in appalling living conditions.

In developing countries like India, the challenge of urbanization is more serious when viewed in the context of urban poverty, which is largely an extension of rural poverty. In the past, though the urban population in absolute terms was high, the level of urbanization was low. Today the pace of urbanization itself is accelerated and the whole structure of urban centers pose a challenge to urban development. Comparing figures for slum population in urban India between 1981 and 2001, there was a 45 percent increase in the total number of people living in slums.

Most government intervention in urban development has been singularly inappropriate and unsatisfactory. The essential justification for government intervention in urban development, as elsewhere in the economy, is the failure of the market mechanism to provide an outcome that is satisfactory to society as a whole. The market mechanism offers considerable benefits as a system of economic management; but it is often highly

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1. Bose, A. 2001
2. McAuslan, P., Urban Land and Shelter for the Poor, 1985
3. Census of India 1981 and 2001
imperfect and fails to produce a socially desirable outcome. Often externalities arise where the pattern of costs and benefits to an individual do not match the pattern of benefits and costs to society as a whole. The nature of cities, with their high population densities means that negative externalities are likely to be a significant problem.

In all societies, wealth is unequally distributed, both in terms of capital and labor, and in terms of skills and capabilities; the market mechanism tends to perpetrate these inequalities, through differences in the bargaining power of the different classes of society. Thus it is unquestionably the role of the State to protect the rights of the poor and to redress the inequalities.

1.3 Housing

Housing is a major and integral component of urban development and the single largest land use in any urban area. Access to shelter and safe water are the two basic human needs which determine the quality of human life. Globally, availability of housing stock in adequate quantity and quality with the provision of basic amenities of water, sanitation

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and electricity are the main indicators of development. The provision of housing and basic services for the growing population is the central issue of increasing urbanization. There has not been much progress in the area of framing policies for settlements. Urban development programs have generally been ad hoc in nature. Resources for this sector have never been adequate enough to cope with the magnitude of the challenge. There are various factors, which seize the planning and development process as it evolves. Urban networks have always functioned with minimum necessary allocation of resources and have therefore not been able to meet the burgeoning requirements. The economics of urban land and its development are still largely not understood at the policy level. Thus the majority of the urban population is unable to afford housing that meets any standard of minimum requirements, without external assistance and subsidies.

Over the past twenty years, many governments and virtually all international development organizations have shifted direction from the direct provision of housing to providing an enabling environment for private markets. Studies show that:

- At a given level of development, in both market and mixed economies, the responsiveness of private markets largely determines housing conditions.
- Public actions can greatly affect this responsiveness, for good or ill.

A cost benefit analysis of a set of government interventions in Malaysia showed that:

- The interventions were the primary cause of high cost of housing, not excessive labor or material costs.
- High regulatory costs prevented the development of a healthy middle housing market.

A study and analysis of aggregate prices and supply in the same context established that enabling regulatory environments are associated with elastic supply, while overly strict environments result in inelastic supply.

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1 Singh, R., City, Society and Planning, 2004
In the fast changing urban scenario, legislative support has also proved either inadequate or unsuitable. No Act or Regulation provides suitably for the requirements of the informal sector. Slums and squatter settlements are rapidly increasing and urban fringe areas for the most part have escaped development control. Lack of basic amenities, severe energy shortages and rampant poverty has made the life of the urban poor absolutely miserable.

Also, it is a fact that it is profitable to build luxury houses and not profitable to build shelter for the masses; and it is most profitable to buy land and hold it for long intervals to capitalize on the unearned increment in value. Thus it is necessary to think in terms of the economics of the housing industry and imperative for the Govt. to encourage the housing industry to develop. The polarization in housing standards has been continuously increasing in the last few years.

1.4 Land Supply for Housing

One vital and overpowering issue stands out from this phenomenon of inexorable city growth: the need for land in the city for all activities – housing, infrastructure, open spaces and waste disposal. For many years, this need for land and the problems associated with meeting this need have been included under such heads as shelter needs, or master planning, or improving the lot of the poor. It is observed that Government policies may have contributed to land shortages rather than availability; emphasized controls and regulations over land use and supply rather than enabling and facilitating the supply and use of land; stressed the maintenance of standards - often inappropriate ones and imposed unsuitable legal systems on traditional land tenure practices, thereby inhibiting the release of land with clear titles for urban use. Excessive emphasis has been placed on public ownership and development and the associated bureaucracy has impeded the release of land.


\[2\] McAuslan, P., Urban Land and Shelter for the Poor, 1985.
Rapid urbanization and the explosive growth of population has posed the problem of the availability of land to meet the requirements for various uses in the future. The future supply of land is a major aspect of the general problem of the availability of natural resources to satisfy demands that are increasing as a result of technological progress and economic growth 1.

The supply of serviced land for housing in appropriate quantities and locations to all sections of the population is an important component of any housing development plan. This is especially true where development is taking place at a very fast rate. Land is fixed, in both supply and use in the short term. Land is a major, though limited, resource and also a marketable commodity showing high price rise in urban areas, which put it out of reach of the majority of the population. The extent of service delivery tends to gradually improve over time. Yet the Government is evidently unable to provide adequate urban land with municipal services and other civic amenities to meet the shelter requirements of the large number of new households, even if there is no provision for backlogs. This means the urban population must essentially fend for itself to meet its shelter and service needs i.e. market solutions are relied upon. Those who can afford to do so turn to solutions within the formal housing sector with standards adhering to building and town planning codes. However this is not possible for a sizeable and increasing segment of the urban population, who are forced to depend on informal solutions at lower quality levels. This results in the formation of slums and squatter settlements as well as the densification of existing low income housing areas, particularly in inner cities. This is largely caused by the failure to deliver of public land development agencies. In fact the operations of such agencies have often tended to deaden the urban land market and to obstruct the affordable supply of urban land rather than enhance it 2.

All studies show the central importance of an effective urban land supply in determining settlement patterns. The serious deficiencies in land supply through public land development agencies in major urban centers have contributed to rapid increases in land prices and have acted as a driving force in pushing increasing segments of the urban land

1 Habitat Agenda, UN Habitat I, 1978.
population to informal settlement patterns. The availability of land, its acquisition and control are the essential pre requisites for implementation of any urban development program. Zoning regulations, building bylaws, subdivision rules, and layout approvals are means of directing urban growth; but these are not complete and effective if overall development policies and programs do not complement them. Periodic acquisition of land and the creation of an adequate stock of developed land are essential for planned growth. The existing procedure for acquisition under the land acquisition act is too dilatory and time consuming, and therefore does not suit the requirements of Development Plans.

Public intervention is absolutely necessary in promoting equity, especially by –

- providing the lowest income groups with access to critical resources like land for housing, provision of services, etc. so that the poor can house them in reasonable comfort.
- removal of constraints to the supply of developed land, development of infrastructure and services, etc.

Land is the platform of all human activities. In urban areas, land is more intensively used and consequently it tends to be a scarce resource. All urban land therefore becomes an object of speculation and investment for higher return. In this context, the issue of social control, or socialization, is raised.

Complete control of all aspects relating land, its sale and transfer is ruled out in a free economy. Also, when other forms of investment are relatively free from restrictions e.g. shares, gold, etc. restrictions on property transactions alone may not succeed. All investments are subject to economic pressures and the market mechanism operates to the advantage of those who control the resources.

Most government intervention in urban development has been singularly inappropriate and unsatisfactory. The essential justification for government intervention in urban

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1 Bijlani, H.U. - Urban Problems, 1977
2 Kopardekar, H.D. Social Aspects of Urban Development, 1990
development, as elsewhere in the economy, is the failure of the market mechanism to provide an outcome that is satisfactory to society as a whole. The market mechanism offers considerable benefits as a system of economic management; but it is often highly imperfect and fails to produce a socially desirable outcome. Often situations arise where the pattern of costs and benefits to an individual do not match the pattern of benefits and costs to society as a whole. The nature of cities, with their high population densities means that negative externalities are likely to be a significant problem.

In all societies, wealth is unequally distributed, both in terms of capital and labor, and in terms of skills and capabilities. The market mechanism tends to perpetuate these inequalities, through differences in the bargaining power of different strata of population. Thus it is unquestionably the role of the State to protect the rights of the poor and to redress the inequalities. Since land is more intensively used in urban areas it tends to become a scarce resource and therefore an object of speculation and investment – as a result the issue of social control, or socialization, is raised.

The price structure of urban land serves to allocate scarce urban land to the most productive uses. The main role of intervention in the Urban Land Market is therefore to regularize tenure where clouded titles are an impediment to private housing investment, assist selectively in the subdivision of new land particularly for the benefit of the poor and those displaced from central locations due to expansion of commercial uses, limit private monopolies and develop effective land registry and cadastral records. Large-scale land banking is not likely to be an effective tool of urban management given the limitations of public management and the scope for corruption and abuse.

A study on land prices in UK reports that “The operation of the market has been distorted by a volume of legislation which tended to put a brake on development; undoubtedly one of the factors in the rapid increase in land values was the fact that there was little development in the preceding years with a resultant pent up demand, combined with the

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1 Devas, N, and Rakodi, C. -Managing Fast Growing Cities, 1993
2 Linn, J.F., Urban Public Finance in Developing Countries, 1992
general increase in wage levels for a small section of the population. As far as residential land is concerned, the Town and Country Planning Acts have been an inflationary factor since they tend to limit the amount of land available in the market\(^1\).

As cities become larger, and unbuilt land becomes scarcer, the availability of all land is determined by price. Evers\(^2\) notes that ‘population increase and other social processes have intensified the pressure on urban land and have led to a wave of land speculation and spiraling land prices’. There is no doubt that the higher profitability and lower risk associated with land transactions as compared with other investment opportunities attract large amounts of capital and push up prices. In a statistical analysis of the effects of land prices, Grimes\(^3\) shows that costs are ensuring that public housing is built on the cheap edges of cities and that many of the poor are being priced out of the land market. What makes matters worse is that Government servicing and zoning policies frequently have the effect of valorizing land and increasing prices still further; intervention accentuates land shortages and fuels further price rise.

India’s urban population is expected to double over the next 20 years. The need for additional land to meet the future household and employment expansion is enormous. Without an adequate supply of additional land with infrastructure and basic services, household formation and employment generation will occur in new informal settlements primarily in peripheral locations. Such unplanned growth will consume premium locations which are of strategic importance for future development. The cost of servicing such developments will be phenomenal. Lack of serviced land is a major constraint to increased productivity. It is estimated that approximately 60 percent of India’s Gross Domestic Product (GDP) is produced in urban areas with poor access to services and infrastructure. The National Institute of Urban Affairs (NIUA) estimated in the year 1996 that an investment of Rs.1500 Crores would be necessary to bring existing urban areas up to basic standards of infrastructure. The budget allocation for water supply, sanitation and

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\(^1\) Rao, Prakasa V.L.S., Tewari V.K., The Structure of an Indian Metropolis: A Study of Bangalore, 1982

\(^2\) Evers, H-D, Urban Expansion and Landownership in underdeveloped Societies, 1975

\(^3\) Grimes, O.P., Jr. Housing for Low-Income Urban Families, 1975
infrastructure development was only Rs 2626.22 Crores in the Ninth plan. This has been increased to Rs.27, 390.00 Crores in the Tenth plan, a ten fold increase in plan outlay\(^1\).

Since 1992, India has been on the path of Liberalization. This implies a substantial reduction in funds for social issues routed from the center to the states and from the state to the local Government. In this context, the only viable alternative is to mobilize private sector capital and managerial resources.

1.5 Non Formal Housing:

The unaffordability of land at the market price by a large section of the population is an indicator of market failure. The problem of the poor is not unaffordability of land per se, but unaffordability in desired locations\(^2\). Since the low income groups cannot compete with rising prices and vested interests, they are often cramped in large numbers into the least amount of space\(^3\).

Spontaneous settlements are allowed to develop by Governments or political parties that require the political support of the poor. Land occupied by the poor does not directly threaten the principle of private ownership\(^4\); and informal settlements indirectly support or at least reduce the need for changing the economic and social system. While illegal urbanizations are expensive to service and encourage very high-density patterns of urban growth, they do provide land for the poor.

Population groups with a slightly higher affordability purchase land in speculative subdivisions in urban fringe areas (known locally as revenue sites). In such cases, the important difference with the commercial market is that the land lacks planning permission and basic services. Extensive unregulated development is often permitted by the Government as a means of keeping the poor in the land market. This supports the

\(^1\) Ninth and Tenth Plan Documents, Planning Commission, GOI.
\(^3\) Banerjee, B., Security of Tenure in Indian Cities: Overview of Policy and Practice, 1999
principle of private land ownership by reducing the need to squat and encouraging the poor to turn into land owners.

The process of spontaneous settlement supports the existing social, political and economic systems. Self-help keeps the Third World economy functioning since it lets the poor into the housing market by keeping costs low. The very cheapness of spontaneous housing allows the labor force to sustain and reproduce itself despite the low wages. Economic development occurs fundamentally due to the availability of cheap labor - industrial labor, plentiful supply of domestics, and numerous other low-priced services. Thus spontaneous settlements are functional to the system since they lower the cost of labor, accelerate capital accumulation and allow reproduction of labor supply.\(^1\)

The Habitat Agenda notes that “Uncontrolled urban settlements are the product of the difference between the popular demand for housing and that demanded and supplied by institutionalized society. Policy objectives and the institutional frame work for their fulfillment are often geared to one sector of society (the wealthy minority) which makes them economically unacceptable to the remainder - this remainder being composed of four fifths of the urban population”.\(^2\) The note concludes that uncontrolled settlement is not the product of willful lawlessness but the only solution for large and often dominant sectors of the population whose housing needs are in adequately served by society’s formal institutions.

The above argument can be summed up as follows:

- Urbanization is inevitable with development.
- Urbanization needs to be regulated and coordinated to prevent wide spread unplanned growth.
- Land as a major resource and a marketable commodity plays a critical role in the process of urbanization.

\(^2\) Habitat Agenda, UN Habitat I, 1978.
A free market situation with respect to urban land would result in:
- distortion by a few to the detriment of many.
- artificial price rises and pricing out of the lower income groups.
- increase in non formal housing.
- congestion and over crowding.
- deterioration of primary networks.

Thus public intervention is absolutely necessary in promoting equity, especially by:
- providing the lowest income groups with access to critical resources like land for housing, provision of services, etc. so that the poor can house themselves in reasonable comfort.
- removal of constraints to the supply of developed land.
- development of infrastructure and services.

The availability of land, its acquisition and control are the essential prerequisites for implementation of any urban development program. Zoning regulations, building bylaws, subdivision rules, and layout approvals are means of directing urban growth; but these are not complete and effective if overall development policies and programs do not complement them. Periodic acquisition of land and the creation of an adequate stock of developed land are essential for planned growth. The existing procedures for acquisition under the Land Acquisition Act are perceived to be too dilatory and time consuming, and therefore unsuitable to meet the requirements of Development Plans.

Much can be achieved by:
- phased provision of community facilities.
- revised bylaws framed to suit Indian conditions.
- shift in decision making from negative controls to affirmative action, coupled with punitive measures.

The price structure of urban land serves to allocate scarce urban land to the most productive uses. The main role of intervention in the urban land market as outlined by
UN Habitat is therefore to regularize tenure (where clouded titles are an impediment to private housing investment), assist selectively in the subdivision of new land (particularly for the benefit of the poor and those displaced from central locations due to expansion of commercial uses), limit private monopolies and develop effective land registry and cadastral records. Large-scale land banking is not likely to be an effective tool of urban management given the limitations of public management and the scope for corruption and abuse.\(^1\)

The globalization of the economy that has its impact not only on economic activity but also on social structure, creating what Soja\(^2\) calls the dual city where the differentiation of rich and poor, native and immigrant, etc. becomes more pronounced. The social restructuring of urban areas involving decentralization of population to suburbs serves only to cause re-centralization around new suburban poles creating greater complexity in the redistribution of jobs and housing. The impact of new technology and telecommunications causes further dispersal of urban activity and the combination of these forces create increased demands and stresses on public infrastructure that is beyond the fiscal and regulatory capacities of local governments.\(^3\)

Traditional urban theory that postulates a nuclear form with urban growth radiating out from a single center (often formed around a port or railhead or other transport advantage) is very much in question today. The idea here is that the competition for central space pushes up land values at the city center and there is a diminishing gradient of land values and density of development as one moves away from the center. As development around the center achieves higher densities, new growth occurs at the periphery.\(^4\) A number of theoretical contributions have been postulated based on the assumption of the economically dominant center. While accessibility has always been viewed as a critical component, it has largely been assumed to be relatively static; and the focus has been on the inter-play of other forces that shape land markets and urban form. In contrast, in the

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\(^1\) Linn, J.F., Urban Public Finance in Developing Countries, 1992

\(^2\) Soja, E.W., Post metropolis: Critical Studies of Cities and Regions, 2000

\(^3\) ibid.

\(^4\) Mieszkowski P., Mills ES, The causes of metropolitan suburbanization, 1993
present context accessibility is a fundamental creator of value in land and improved access is the gateway to development.

The recent (Draft) National Slum Policy states that “The proliferation of slums and non-formal housing can be obviated by ensuring continuous supply/recycling of serviced and semi-serviced land suitable for high density occupation by lower income groups; the urban poor represent an extremely important element of the workforce and it is vital to recognize their contribution to urban prosperity and to make provision for access to affordable land and services. The present planning and development framework is exclusive of slums and informal settlements, and views them as ‘problem areas’ requiring corrective action. There is a need for an institutional re-orientation by adopting a more ‘enabling approach’ through planning, management and delivery.”

The policy also states that the bulk of housing units in the country are constructed by the people themselves, with their own resources, without recourse to government agencies or financial institutions. This clearly shows that people can and do build the bulk of the housing units themselves. However what they cannot do is to obtain land, assemble it in large sizes, arrange the basic infrastructure of water supply, sanitation, roads, lighting, etc. Thus we see that the crucial role of the government is in creating an environment which enables the resources of the people to be utilized and where all constraints to housing as an activity are removed. The policy endorses the Improvement and Upgradation approach with provision of access to basic minimum services.

1.6 Study Area – The City of Bangalore:

Bangalore is the capital of Karnataka. It is the largest city in the State, and India’s fifth largest metropolitan area. According to the Census of India 2001 results, the population of the Urban Agglomeration is 5.68 million and the slum population of Bangalore

is approximately 3,45,200 i.e. 8 percent of the population of Bangalore live in slums.

After Independence, Bangalore was promoted as a heavy industry manufacturing hub with the setting up of the Hindustan Machine Tools, Hindustan Aeronautics Limited, Indian Telephone Industry, Bharat Heavy Electricals Ltd., etc. Bangalore is also the chief center of scientific research in India with the world renowned and the oldest Research University, Indian Institute of Science located here. The other research institutes in Bangalore are the Indian Institute of Astrophysics, the Raman Research Institute, the Jawaharlal Nehru Centre for Advanced Scientific Research, the National Center for Biological Science and the Indian Statistical Institute. The establishment of the Indian Space Research Organization here is another major landmark. The Defence services have a strong presence in the city, with a large area of land in the heart of the city under unclassified (Defence) use.

From the mid-Nineties, Bangalore has evolved as a Information Technology (IT) hub with IT firms employing about 35 percent of India's pool of 1.5 million IT professionals. Bangalore is also a major center for higher education with numerous Technical / Engineering and Business Degree Colleges.

Bangalore achieved metropolitan status in the decade 1961-71 and soon achieved the distinction of being the fastest growing city in India. The city achieved urban primacy in the state of Karnataka by the decade 1971-81. The extent of the urbanized area has been extending rapidly, as seen below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>140 Sq. Km.</td>
</tr>
<tr>
<td>1950</td>
<td>600 Sq. Km.</td>
</tr>
<tr>
<td>1981</td>
<td>800 Sq. Km.</td>
</tr>
<tr>
<td>1991</td>
<td>1300 Sq. Km.</td>
</tr>
<tr>
<td>2001</td>
<td>2190 Sq. Km.</td>
</tr>
</tbody>
</table>

Bangalore is now a city of international repute, a Global City, and the back office of the world. The sprawling metropolis has the topographical advantage of being located in the center of the Deccan Plateau with no barriers to its growth. The stupendous growth of the
city was not envisaged and the lack of foresight in planning to pave the way for
development in terms of accommodating the influx of population and investment in
infrastructure and service provisions, etc are at the root of the city’s present problems.

Appropriate regional development that can mitigate migration to the primate city has not
occurred. The development of satellite towns like Yelahanka and Kengeri has not helped
in diverting industrialization away from Bangalore. The urbanized area of Bangalore has
expanded from about 600 Km. in 1950 to 800 Km. in 1981 and 1300 Km. in 2001.
During 1991-2001, the population growth was about 40 percent for the Bangalore Urban
Agglomeration, whereas the area under city limits grew only by 24 percent. Urban
growth in the fringe areas is not governed by planning controls; yet the growth has been
phenomenal in the periphery, recording a decennial growth rate of 180 percent. The
census 2001 also gives a figure of 2195 per sq.km. as the population density, which
places Bangalore among the top ten districts in the country having a density of over 2000
persons per sq.km.

Due to the city’s attractiveness, Bangalore has experienced a rapid and unprecedented
population growth during the past two decades - from 4.10 million in 1991 to 5.68
million in 2001. There has been an exponential rise in the demand for services and
infrastructure provided by the Municipal body, the Water Supply and Sanitation Board,
the Electricity Board, the public transport system, the Police, the Telecom Department,
etc. In parallel, the expansion in business has created an employment addition of an
average of 1.2 to 1.5 lakh jobs/year in the formal sector during the past 5 years\(^1\).

This has been accompanied by a tremendous increase in new real estate and land
development. The entry into the market of global real estate players has made possible
the analysis of land and built space addition. About 15 km\(^2\) of developed land is being
added to the city every year together with 3 million m\(^3\) of built up space, of which 80
percent is for the IT sector. A record number of 200 villages have been mopped up in the

\(^1\) SCE-CREOCEAN India for BDA, Bangalore
course of Bangalore's evolution into a mega city. Correspondingly there has been a rapid growth in the formation of slum and squatter settlements and estimates of the slum population vary from 8 – 20 percent of the total.

The Bangalore Urban Agglomeration has a total area of 1279 sq.km of which 40 percent or 495 sq.km has already been urbanized and the remaining is under pressure of urbanization. In order to restrict the growth of the city, a green belt has been initiated in the Comprehensive Development Plan 1995 and amended in the Revised Comprehensive Development Plan 2005, as a limit to the unrestrained development.

The context of Bangalore has transformed from a peaceful cantonment city, to a state capital, now a world IT icon heading to be a global metropolis, in less than 50 years requiring a dynamic reconsideration of the functions of the city.

Urbanization is always accompanied by a parallel growth in the numbers of the urban poor; at 2 ½ times the rate of urbanization as per some studies. Thus there is a proliferation of slums and squatter settlements with poor living conditions and a deplorable quality of life.

Shortage of housing coupled with availability of dried up lake beds in prime locations and poor policing of illegal activity have led to housing activity in these locations. In fact the Government itself has led the way for such activity by occupying tank beds for public use. The drying up of lakes is occurring due to blockage of feeder channels by construction of buildings and roads.

The problem of illegal sites has assumed vast proportions on the periphery of Bangalore; it is estimated that the area under revenue sites may be as large as 45000 Sq.Km. i.e. 5-7 times agglomeration area by 1991 census. The Task force report on Bangalore Green Belt states that 'there is a parallel illegal city in co-existence'.

Urban land is increasingly commercialized and politicized, a location for land grabs, speculation and profiteering by vested interests at the cost of the survival of the city and its people.

1.7 Housing Situation in Bangalore

The housing and land market in Bangalore are adversely affected by the phenomenal increase in land prices over the last decade, compounded by the high cost of construction. According to the latest Census figures, there is a housing shortage of 3.28 lakh dwelling units in the Bangalore Urban Agglomeration.

In order to cope with the yearly population increase of nearly 2 lakhs per year, the City needs an annual addition of at least 40,000 dwelling units. Such a massive shortage would lead to a large number of unauthorized settlements and a tremendous increase in the slum population of the city.

Government action and measures are restricted due to inadequate resources. Additions to the housing stock through the private market are catering largely to the upper income categories only. The addition to the housing stock does not follow the income distribution pattern; therefore the housing needs of all categories of the population are not met.

1.8 Aims and Objectives of the study:

The main objective of the study is to understand the existing housing conditions, to compile existing housing supply practices with an analysis of their effectiveness and the various aspects of the scenario with regard to housing like types of housing development, beneficiaries, increase in housing stock, prevailing prices, etc. as detailed below -

- To study prevailing practices of land supply for housing development in the public, private and other sectors in the selected case study area.
- Study the role of Public Agencies in aiding / regulating land supply in the study area in terms of adequacy and appropriateness in fulfilling housing objectives.
- Study the real property market situations prevailing in study area in terms of land values and land price.
- Suggest actions for streamlining supply applicable to specific study area, in terms of achieving an equitable and appropriate scheme of distribution/access.

The study also identifies the main problem areas requiring innovative solutions where such can be found. The process of compiling data and information for the questionnaire can assist the local governments to analyze their land management system and stimulate the staff and officials to find ways of improving it. Since the approaches to land supply and management problems contained in the study are derived from global best practices, they should be made implementable depending on the context.

It is expected that the study will also find use as a basic research platform on which further research can be structured. The included data and research findings will be useful for research and comparative purposes in other cities.

1.9 **Scope and limitations:**

The scope of the basic study in terms of documentation is restricted
- to the Bangalore Metropolitan Area, in extent
- and to the post Independence period, in time.

There are several limitations in collecting data on sale of land. The prevalence of two sets of prices, in white and in black money raises several methodological issues. In view of all these difficulties, the portions of the study relating to land price can be at best only an exploratory one.

The other limitation pertains to the mapping of slum locations. So far, no comprehensive map exists that shows the location of the slums in Bangalore city. Both Declared and Undeclared slums are only listed, with descriptions of approximate locations.
The main objective of the study is to understand the nature of the supply mechanisms in the study area. Due to the complex nature of the study context, the research recommendations may be limited to outlining policy guidelines for the regulation of land supply practices and not result in formulation of strategies and detailed proposals for the regulation of land supply practices with respect to housing the urban poor.

1.10 Study Methodology:

In addition to an extensive survey of existing literature, several researchers/ institutes were approached to provide literature and specific information.

The study has been divided into the following major stages:

- Detailed demographic study of Bangalore City to assess the current housing need, housing demand and the housing deficit.
- Study of functioning of various agencies since inception and their contribution to Housing Development in Bangalore:
  - Bangalore Mahanagara Palike
  - Bangalore Development Authority
  - Karnataka Housing Board
  - Slum Clearance Board
- Identification and evaluation of existing practices of land supply in respect of target populations and beneficiaries.
- Tabling of findings regarding various supply modes, quantitatively and qualitatively.
- Study pricing patterns of Government Agencies and in open market.
- Identify possible bottlenecks to the supply of serviced land for housing the urban poor.
- Outlining recommendations in three main areas i.e. land policy and areas of possible intervention; methods of ensuring equitable supply to benefit the lower income groups and defining the role of the public agency in achieving these objectives.
Fig. 1.2  Flow Chart of Sequence of Study

Theoretical background of Land Management
Study of Indian/Asian scenario and Comparable research

Profile of City
Settlement Morphology
Urban primacy

Demographic Profile
Socio Economic Characteristics
Economic Base

Ground Studies
Primary Data Collection

Action Areas for Improvement
Areas of Intervention
Community Participation

Existing Housing Need
Housing Demand
Need Categories

Land and Housing
Supply Characteristics
Housing Sectors and Agencies

Future Housing Need
Housing Demand
Need Categories

Possible areas of failure
- Accuracy in establishing Housing Need and Category
- Development of relevant Strategy

Development Options
Supply Strategy
1.11 Chapter Format

The thesis is organized into eight chapters.

Chapter One comprises of an introduction to the study context, the need for this line of inquiry and information about objectives, methodology and structure of the study.

Chapter Two establishes the theoretical framework in which this study is based drawing on research and reports in the Western, Asian and Indian contexts.

Chapter Three describes the profile of the city of Bangalore which is the case study, the stages of its growth, its status of urban primacy in Karnataka State, and the socio-economic characteristics of the city.

Chapter Four is divided into two parts as a method of profiling the Housing characteristics and the Residential Land Supply characteristics of the city under study.

Part A examines the Housing characteristics of Bangalore city in terms of housing stock, housing shortage, densities, Qualitative Description of Housing Stock and the growth of non-formal housing.

Part B examines land supply systems for housing, particularly housing for the urban poor.

Chapter Five describes the housing sectors in Bangalore and goes on to identify the major forms of land supply for housing, the public agencies involved in housing provision, the major housing schemes in operation and housing activity on a sectoral basis including public, private, cooperative, NGO and informal sectors.
Chapter Six is a presentation of the analysis of the primary data including the method of selection of slums for sampling, the sampling methods adopted, location maps of the slums and the inferences drawn from data analysis.

Chapter Seven lists, categorizes and describes the issues, constraints and lacunae with reference to the public and private initiatives in land supply for housing the urban poor in Bangalore.

Chapter Eight is an attempt to find solutions to the issues identified in Chapter seven. The study recommendations are detailed in three main areas i.e. land policy and areas of possible intervention; methods of ensuring equitable supply to benefit the lower income groups; and defining the role of the public agency in achieving these objectives, which are perceived to be the three key areas of concern.

1.12 Conclusions

A preliminary study of the housing scenario in Bangalore, particularly with reference to the urban poor shows that the weaker section of the population has been especially hard hit by the phenomenal rise in land prices witnessed by all areas in the city in the wake of its extraordinary growth and development over the last two decades. This is the prime reason for undertaking a study of this nature at this point of the city's growth.