



SECOND UNITED NATIONS CONFERENCE ON HUMAN SETTLEMENTS : HABITAT II ISTANBUL 1996



INDIA

National Report

GOVERNMENT OF INDIA

MINISTRY OF URBAN AFFAIRS & EMPLOYMENT

DEPARTMENT OF URBAN EMPLOYMENT & POVERTY ALLEVIATION

FOREWORD

Nearly two decades have passed since the first United Nations Conference on Human Settlements was held in Vancouver in 1976. The count-down has started for the Second United Nations Conference on Human Settlements (Habitat II) in Istanbul (Turkey) in June, 1996. During this period the various actors in the human settlements sector all over the world have made strenuous efforts to plan, develop, and manage human settlements to ensure better quality of life for the entire humanity.

Habitat II provides the last opportunity to member countries of the United Nations during this century to have an introspective assessment of the developments in the human settlements sector. From this platform, the member countries of the U.N. will be able to make a realistic assessment of their achievements and failures in their endeavours to provide adequate shelter for all. It provides an occasion to take into account the wisdom and experience of a series of interactions among the international community over the last two decades focussing on selected aspects of human settlements, which can be now effectively implemented through a comprehensive Habitat agenda.

In this endeavour, it is imperative that countries share experiences and do not venture to "re-invent the wheel", matching well-tryed solutions across the world to their specific problems and development constraints. India's National Report is a contribution to the global efforts to extend the participatory approach to human settlements development at the national level, endorsed in the Indian National Housing Policy and the UNCHS Global Shelter Strategy, to facilitate a global participatory endeavour. The National Report reflects a participatory and consensus approach of the key actors in India, ensured through local, regional and national consultations, under the aegis of the National Steering Committee. This report projects a panorama of human settlements in this country during the last 20 years. It also depicts the aspiration of the nation to achieve the objectives of the Habitat Agenda through a pragmatic national plan of action.



(K.S. SHARMA)

Chairman
National Steering Committee for
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ACRONYMS

ADB	Asian Development Bank
AR	Accommodation Reservation
BMRDA	Bombay (Mumbai) Metropolitan Regional Development Authority
BMTPC	Building Materials and Technology Promotion Council
CAPART	Council for Advancement of People's Action and Rural Technology
CBD	Central Business District
CBO	Community Based Organisation
CIDCO	City and Industrial Development Corporation
CITYNET	The Regional Network of Local Authorities for the Management of Human Settlements
CMDA	Calcutta Metropolitan Development Authority
CSIR	Council of Scientific and Industrial Research
CSO	Central Statistical Organisation
EIUS	Environment Improvement of Urban Slums
ESCAP	Economic and Social Commission for Asia Pacific
EWS	Economically Weaker Section
FSI	Floor Space Index
GDP	Gross Domestic Product
GIC	General Insurance Corporation
GNP	Gross National Product
GSS	Global Shelter Strategy
HDFC	Housing Development Finance Corporation
HIG	High Income Group
HSMI	Human Settlement Management Institute
HUDCO	Housing and Urban Development Corporation
IAY	Indira Awas Yojana
ICDS	Integrated Child Development Scheme
IDSMT	Integrated Development of Small and Medium Towns
IRDPI	Integrated Rural Development Programme
ITEC	Indian Technical and Economic Cooperation
IYSH	International Year of Shelter for the Homeless
JRY	Jawahar Rozgar Yojana
LIC	Life Insurance Corporation
LIG	Low Income Group
MHADA	Maharashtra Housing and Area Development Authority
MIG	Middle Income Group
MMDA	Madras Metropolitan Development Authority
MRTS	Mass Rapid Transport System
MUDF	Municipal Urban Development Fund
NBO	National Building Organisation
NCR	National Capital Region
NCU	National Commission on Urbanisation

NEFA	North-East Frontier Agency
NGO	Non-Government Organisation
NHP	National Housing Policy
NPA	National Plan of Action
NRY	Nehru Rozgar Yojana
NSC	National Steering Committee
NSSO	National Sample Survey Organisation
PMIUPEP	Prime Minister's Integrated Urban Poverty Eradication Programme
PMRY	Prime Minister's Rozgar Yojana
R&D	Research and Development
RITES	Rail India Technical and Economic Services Limited
RLEGP	Rural Labour and Employment Generation Programme
SAARC	South Asian Association for Regional Cooperation
SDS	Society for Development Studies
SEWA	Self-employed Women's Association
SPARC	Society for Promotion of Area Resource Centre
S&S	Site and Services
Sulabh	Sulabh International Social Service Organisation
TCPO	Town and Country Planning Organisation
TDR	Transfer of Development Rights
TPS	Town Planning Scheme
TRF	Times Research Foundation
UBSP	Urban Basic Services for the Poor
ULCA	Urban Land Ceiling Act
UMP	Urban Management Programme
UNCHS	United Nations Centre for Human Settlements
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WWB	World Women's Bank

EXECUTIVE SUMMARY

1. Introduction

a) Preparatory Process

The Habitat II Report is a joint effort of all key actors in the human settlements sector in India. The Report presents an assessment of the current status of human settlements in the country, covering also basic services and livelihood programmes that are critical to the development of sustainable human habitats. The Report also takes a note of the achievements in the past, particularly after Habitat I brought the habitat sector on the centrestage of policy issues in 1976, and in the process, identifies the priority areas where interventions are required, to achieve the objectives of adequate shelter for all and for sustainable human settlements. A national action plan, based on a consensus among the key actors, brings out the short-term and long-term activities for the next two decades.

b) Key Actors

The participatory approach to the National Report is an innovative feature, enabled through the constitution of a National Steering Committee (NSC) by the Government of India, through its Habitat II nodal ministry, the Department of Urban Employment and Poverty Alleviation. The work of the NSC was decentralised through three key groups representing the main actors, such as, the human settlements managers from all the three tiers of the Indian system of governance, namely, the National, state and local governments, including their elected representatives and parastatals; the private sector, including financial institutions and developers; the research and academic community; and NGOs and CBOs. The regional issues, essential in a country of India's dimensions, were brought into the participatory process through 12 regional consultations across the country. The National Human Settlements Forum, including all the key actors, finally examined the Report.

c) Indian Scenario

The India Report represents the housing scenario, problems and development prospects of one of the major political entities, the largest democracy, with a subcontinental level area (3,29 million sq km) and population (almost 900 million), varied geoclimatic zones and housing typologies, and a wide range of socio-, cultural and economic systems.

Within this setup of democratic traditions, a growing population, a large and enlightened intelligentsia and middle-class households, rising aspirations, and substantial poverty, the current state of human settlements presents a mixed scenario. There have been significant improvements in the coverage of the population to basic human settlement-related amenities and the quality of the habitats has improved, with longer durability and more use of market-sourced materials in both urban and rural areas, suggestive of higher levels of affordability. At the same time, housing costs are rising, floor area per capita is falling and a growing number of people are being pushed out of the formal housing market. The impact situation is reflected in the proliferation of urban slums.

2. Broader Setting

a) Urbanisation Dynamics and Processes

Urban India has 25.7 per cent of the national population, aggregating to 217.6 million, one of the largest urban systems in the world. During the last four decades, annual incremental population has averaged 5–6 million, about three-fifth through natural population growth, and two-fifth through out-migration from rural areas and administrative changes in classification of urban and rural areas (the merger/declassification route). Urban processes have been varied. The conventional routes of large industry, trade and seat of governance are still important but other routes are evident all over the country, typical of processes in developing countries. Urbanisation through development of '*mandi*' (village marketing outlet) towns, small towns, social and cultural activities, including educational and medical centres of excellence, religious, cultural and historical centres, tourism, and induced growth of new economic activity centres have been some other urban processes that have successfully developed sustainable urban settlements. Urban India has four mega-cities (population 5 million plus), 19 metro-cities (1 million plus), 300 large towns (0.1 million plus) and 3,396 small and medium towns (less than 0.1 million). By the turn of the century, India will have some 40 metro-cities.

b) Rural India

In spite of rapid and widespread urbanisation, India still has a large rural population, 629 million, living in 580,706 villages. The average population of an Indian town is 60,297 and that of an Indian village 1,083. The attractiveness of rural development programmes has been a contributory factor for villages with 10,000 plus population preferring to remain in the rural category. These include, in particular, the Integrated Rural Development Programme (IRDP), Rural Labour and Employment Generation Programme (RLEGP), Jawahar Rozgar Yojna (JRY) and Indira Awas Yojna (IAY), which have improved housing conditions, income opportunities and accelerated economic growth. Rural areas have contributed to the sustainability of urbanisation by providing inputs for urban industry, trade and services, a large market for urban products, a source of competitively priced labour and household savings to the financial system. The strengthening of rural-urban continuum is high on the habitat agenda.

c) Impact of Urbanisation

Urbanisation has had distinct impact on human settlements and people's lifestyle. Construction technology and land constraints have changed the housing typology in urban areas from single-unit plotted development to vertical structures and multi-household complexes. This changing pattern is seen in mega- and metro cities as well as in large towns, but is not so evident in small towns and rural areas. There is, however, clear improvement in services and the durability of the dwelling units in these places also.

Urbanisation has raised housing costs and reduced housing size, best reflected in floor area per person indicator. These changes are seen in formal as well as informal settlements. UNCHS recommended city indicators show, for example, that a house in the formal settlement requires annual household income of 13 years in Mumbai, 12 years in Delhi and 11 years in Bangalore, a few mega- and metro cities, and between 3 and 5 years' income in small and intermediate towns. The pattern is similar in informal settlements: less than one year's income in small towns and two to three years' income in mega- and metro-cities. Similarly, floor areas per person is around 2 to 3 sq m in informal settlements and 6–7 sq m in formal settlements.

d) Urban Concerns

The major concerns of city managers include the widening gap between the needs and supply of urban services, which has had a deteriorating impact on the urban environment, inadequacy of urban planning, urban poverty and degradation. The parallel development of formal and informal housing has produced the multiple-city syndrome in urban India: a city of the poor and a city of the rich, with distinct variations in levels of amenities, types of structures, level of income and quality of life.

3. Current Situation

a) *Human Settlements*

Housing has been a people's activity, with the private sector investment contributing 70-80 per cent of total investment in housing during the first 20 years of planning and even higher, around 90 per cent, subsequently. Public housing activity has been largely directed towards the lower segments of the housing market and a wide range of options have been provided, including site and services, core housing and complete units. The Indian housing stock comprises 148 million units in 1991, including 39.3 million units in urban areas and 108.8 million in rural areas. The value of this housing stock is estimated at Rs. 3258 billion. There has been visible improvement in the housing structure and quality and more of market-sourced materials are being used. The major actors in the housing delivery system are state parastatals, cooperative housing societies, the private sector builders and the people themselves.

While housing shortage is modest at around 5 million units in terms of new construction, the problem is serious in terms of upgradation and renewal of existing housing stock.

b) *Infrastructure and Services*

Development of housing infrastructure and services has not kept in tune with the growth of housing. The problem of upgradation and renewal of basic services like potable water and sanitation is serious. A similar situation of inadequacy is seen for social services, particularly for the poorer segments, slum settlements, women, children and others in the vulnerable groups. The National Plan of Action places special attention to meeting the backlog in housing and infrastructure assets, including upgradation activities.

c) *Land*

Land remains the most critical constraint in the development of the housing sector, particularly in the larger cities. Legislative provisions like the urban land ceiling and rental laws and planning codes are among the major constraints and conservative land-use norms have restricted the supply of land into the market. Apart from these constraints, there are substantial vacant land holdings in the possession of government departments, educational institutions, religious and charitable trusts and corporate organisations and bringing them into the land market would help to augment land supply.

d) *Finance*

Financial intermediation in housing has been developed, especially to promote home ownership programme, but the reachout to the lower segments of the market has not been adequate; credit instruments for rental and upgradation programmes have to be developed. The financial intermediation for infrastructure sector is also not adequately developed. Reducing the transaction costs and risks, as well as accessing low-cost funds in the country and abroad are major concerns. Initiatives in these direction will be taken up during the next two decades, including appropriate fiscal and legislative measures to improve the financial environment and bringing new credit instruments for specific activities and groups.

e) *Poverty*

While the proportion of people below the poverty line has declined, in terms of numbers, poverty remains a major concern in urban and rural areas. There are also significant disparities in income distribution. Supporting informal economic activities and improving access of the poor to development inputs is a major issue for the national habitat agenda.

f) *Women and Children*

Urbanisation has improved the status of women in the Indian society because of accessibility of education, health services, information and better employment opportunities. Deficiencies in terms of access to basic services necessary for congenial habitats particularly for women in low-

income settlements, is a major concern. Equally important is the need to bring in gender-sensitivity in human settlements planning and development.

A closely-related concern is of the special needs of children in settlement planning and access to basic services, particularly children belonging to the most vulnerable groups identified in several national and international documents in recent years.

4. Recent Policies and Programmes

The National Report brings out some of the major developments, policies and programmes in the post-Habitat I period and presents a brief inventory on specific measures taken to implement the Vancouver Action Plan, the Global Shelter Strategy, Agenda 21 and recommendations of a number of global meetings in recent years especially focussing on issues concerning environment, women, social development, children, among others. The National Report also documents the best practices that have been submitted by the country to the Habitat II Secretariat. Major legislations relevant for development of human settlements are examined, together with identification of areas where some of them have to be modified, and also the areas where new legislations are required to create the legal environment to facilitate all actors in the country to play their roles most effectively to provide adequate shelter for all.

As one of the original signatories to the Vancouver Action Plan, 1976, India has introduced approaches in its human settlements programmes that seek to effectively access the people, especially in the vulnerable groups, to adequate and affordable shelter in human settlements that encompass the shelter unit and basic physical, economic and social services, including access to livelihood programmes. India initiated the process through formulation of specific housing policy at the national and state levels, urbanisation strategies, poverty eradication programmes, socially-oriented schemes for providing access to basic services in slums and squatter settlements, particularly to potable water, and sanitation, development of small and medium towns, rural industrialisation, promotion of self-employment and micro-enterprises, among a wide range of activities. Specific initiatives were taken to develop and strengthen the housing finance system through formal sector institutions and cooperatives, as well as trying to integrate the informal and formal financing system through the involvement of NGOs and CBOs. Changes have been also made in settlement planning, implementation and monitoring of the activities. Constitutional amendments have been made to devolve effective political, administrative and financial power and decision-making responsibility to the local government and the people, including women, who will now have a minimum of one-third representation on all elective positions in the local governments. Gender-sensitivity in human settlements programmes will be induced through this and other measures.

Alot remains to be done but the foundation that has been strongly laid down in the last 20 years, would enable the activities to gather momentum and take the directions that are considered necessary to implement the Habitat II National Plan of Action.

5. Priority Issues

Major priority issues are identified to form the base for the National Plan of Action. The objective is to create the enabling environment in which actors outside the government system can become more active in the delivery of housing solutions and provision of services, so that the outreach is extended to all segments of the market, especially the vulnerable groups. In particular, the priority issues include:

- | | | |
|------------------------------|---|---|
| 1. Enabling Inputs | : | Legal and Fiscal Policies, and Capacity Building |
| 2. Development Inputs | : | Land, Technology, Finance |
| 3. Institutional Development | : | Housing and Infrastructure Delivery Development System, for New Upgradation of Assets, with Specific Roles for Key Actors |

- | | | |
|------------------|---|---|
| 4. Social Issues | : | Poverty, Women's Programmes, Children Issues, Eviction, Displacement and Housing Rights |
| 5. Policy Issues | : | Market Approach to Housing, Urban and Rural Planning and Management, Conservation of Environment, Housing Norms, Monitoring and Evaluation Systems, Local Governance. |

6. National Plan of Action

The National Plan of Action, a consensus effort of all the key actors, has two critical objectives, namely, enabling people access to adequate and affordable shelter and social infrastructure and services, and developing sustainable settlements in an urbanising world, covering both urban and rural areas.

The NPA subscribes to the nine goals adopted by the international community in the Global Plan of Action to determine its priorities and to lay down strategies. These include, for example, equality, eradication of poverty, sustainable development, liveability, family, government responsibility and assistance. The thrust of the NPA is on three issues, namely, adequate and affordable shelter for all, sustainable human settlements development in an urbanising world, and capacity building and institutional development.

The NPA has two components, the first phase covering the five years from 1996–97, and the second phase, the period beyond 2001 AD. The activities in the NPA are based on some quantitative dimensions of the housing stock and related physical and social infrastructure to be newly created as well as upgradation and extension of some of the existing assets. In order to provide a house to each household in the country, an estimated 140 million units will be required over the next 25 years. In the short-term perspective of the next five years, the requirement would be 17.1 million units. This magnitude of housing activities seems to be within the capacity of the country as the annual production of housing stock was already 3.11 million during 1981–91 and this will have to increase to 5.6 million units per annum. In the meanwhile, there have been significant developments in the housing delivery system, technology and financial intermediation and more are likely to take place as the country enters the 21st century. The financial flows for these tasks, estimated to be in the region of Rs.6,580 billion (1995 prices) or Rs.263 billion per annum in the next 25 years, can be also mobilised, as the bulk of it will come from the people and financial institutions.

Specifically, the NPA is addressed to all components to the housing market, including home-ownership, rental housing, and upgradation and renewal, particularly aiming to reach out to the lower segments of the housing market comprising informal settlements, people below the poverty line, women, children, marginal and landless farmers and others who constitute the most vulnerable groups in the Indian society. The canvas of operations would be extensive, encompassing all key actors, and the government at the central, state and local levels will largely operate as facilitators but would take up a role of a provider of housing solutions to segments of the population whose needs may not be adequately provided by other actors.

Infrastructure planning and development would be taken up simultaneously with housing programmes so that the gaps between services and settlements is reduced. To facilitate these activities, special initiatives would be taken to strengthen and extend the financial system, promote and transfer technology to the field to provide affordable solutions and develop capacity of the actors to participate in the programmes, including the people, the NGOs and CBOs. Housing programmes for the poor would be linked up with poverty eradication programmes so that income and shelter upgradation becomes an integrated activity.

The local government will play a major role in the NPA. During the last few years, specific action has been taken to effectively decentralise political, administrative, and financial powers and decision-making processes to the local governments. This activity will be further strengthened by setting up new institutions and introducing capacity-building programmes for actors in the local governments as well as outside, including the NGOs, CBOs and the community.

The decentralisation process provides key role to women, who are now entitled, constitutionally, to one-third of all elected positions in local government bodies; their empowerment and capacity building now becomes a part of the mainstream local government activity.

The development of a strong monitoring and evaluation system by extending the UNCHS City Indicators Programme is also a major NPA activity. Specific initiatives will be taken by the Government of India to encourage and support state and local governments to prepare specific shelter policies and action plans, which would comprise not only the shelter unit, but also the related social, physical and economic infrastructure and services. In order to create the appropriate enabling environment for non-government actors to effectively contribute to the housing programme, the government will take special measures to rationalise the legal, financial and fiscal systems in the country so that they are more friendly to the human settlements sector.

The NPA has, specifically, the following major activities:

- * Creation of an enabling environment;
- * Development of all types of housing and related services;
- * Eradication of poverty and strengthening the activities in the informal sector;
- * Accessing women, children and other vulnerable groups to housing and basic services;
- * Monitoring and evaluation systems;
- * State shelter policies and action plans.

All the key actors are committed to the implementation of the NPA and the Global Plan of Action, to which the NPA is closely linked. The Government of India, in particular, reaffirms to promote and strive to ensure the realisation of the rights set out in the relevant international instruments and documents relating to education, food, shelter, employment, health and information, particularly in order to assist people living in poverty.

7. International Cooperation

The Habitat II goal of adequate shelter for all in sustainable human settlements is an international responsibility. A healthy, safe, more equitable and sustainable human settlement would contribute directly to achieving world peace, harmony, justice and stability. An innovative framework for international cooperation must be developed to ensure timely, appropriate and responsive technical and financial cooperation. In this context, the international community must aim to attain its committed target of 0.7 per cent of GNP for Overseas Development Assistance, apart from new and additional resources, including from multilateral and bilateral assistance agencies, to support shelter-related activities in the developing countries. These resources should be available commensurate with the needs and priorities of the developing countries and without any conditionalities.

The international community should establish linkages with the informal sector activities and credit mechanisms so that this growing segment of the economy, which is a major component in the countries of the South, gets access to the global pool of resources. In this endeavour, the participatory efforts of the NGOs, CBOs and the community must be developed.

India looks forward to technical assistance in selected areas, such as, management of mega-cities, urban renewal, public-private partnerships, data base and information technology, financial intermediation, social planning, technology development, and capacity development. India is in a position to provide technical assistance in areas like preparation of human settlements policy and action plans, housing finance systems, poverty programmes, social programmes, decentralisation processes, legal and fiscal environment, low-cost technology, monitoring and evaluation, and capacity building and institutional development.

India is committed to South-South as well as South-North cooperation and assistance.

PART I

INTRODUCTION



Information Centre, Auroville.

Using cost-effective construction technology of mud blocks for wall, arches, corbelling and *jalli*.

CHAPTER 1

INTRODUCTION

1.1. Perspective

HABITAT II provides an unique opportunity to assess the human settlements* situation, identify development needs and plan the future programme in a rapidly urbanising world. Urbanisation must go beyond the development of physical infrastructure to social and economic development and must be assessed by its impact on human well being. The concern in India is to provide adequate and affordable housing to all people, to make available housing solutions to the lowest income and other vulnerable groups. The groups have been identified in the National Housing Policy (NHP), the Global Shelter Strategy (GSS) of the United Nations Centre for Human Settlements (UNCHS) and Agenda 21, and at the Child Summit, Social Summit, Population Conference and World Women's Conference. These are the urban and rural poor, the tribal population, and women, children and other segments of the population whose housing needs have been neglected in the past. To address the problems of housing and social infrastructure for sustainable human settlements, Habitat II provides an opportunity to share the rich and varied range of experiences among the member nations of the United Nations family. The India National Report is a contribution towards this cooperative and participatory endeavour.

The National Report focusses on development and policy issues that India feels are common concerns and causes in a large part of the world and for which national governments and

other key actors are seeking answers to attain the goals of Adequate Shelter for All and Sustainable Human Settlements in an Urbanising World.

1.2. The Process

The Department of Urban Employment and Poverty Alleviation in the Ministry of Urban Affairs and Employment is the nodal agency in the government of India for all Habitat II activities. A National Steering Committee (NSC) was constituted in October, 1993 representing all key actors, to guide the preparatory process. To give wide representation to key actors and different regions in the country, the NSC constituted three key groups, which represented — human settlements managers (elected and official), the business community, and non-government organisations and community-based organisations (NGOs/CBOs, see Annexure 1).

The NGO/CBO Key Group organised four regional consultations in Patna (Eastern Region), Surajkund (Northern Region), Bangalore (Southern Region), and Pune (Western Region) followed by a national consultation in Delhi in January, 1995. The Human Settlements Managers Key Group held regional consultations in Lucknow (Central Region), Bangalore (Southern Region), Chandigarh (Northern Region) and Guwahati (Eastern Region). The Business Community Key Group had its regional consultations in Mumbai, Madras, Delhi and Calcutta. More than 825 people took part in the regional and national

* The term 'human settlements' encompasses, besides the shelter unit, basic services essential for congenial living, such as, potable water, electricity, drainage, sewerage, solid wastes disposal, health, education, other social services, community facilities and livelihood sources; in totality, the "infrastructure to live".

level consultations held in 11 towns across the country. Work on the drafting of the India National Report was initiated in January 1995. The Human Settlements Management Institute (HSMI), a Division of the Housing and Urban Development Corporation Ltd. (HUDCO), was entrusted with the responsibility of drafting the National Report. The Institute appointed Dr. Vinay D. Lall, Director, Society for Development Studies, as its Chief Consultant for the exercise. Working drafts were made available from March, 1995 onwards and were examined by an Advisory Committee constituted by the Government of India to monitor the progress and quality of the National Report. The Draft was examined by the National Steering Committee (NSC) on February 26, 1996 and then placed before the National Human Settlements Forum on March 8, 1996. The National Report has utilised the inputs of these consultations.

The consultations sought to bring about a consensus on the assessment of the current status of human settlements, the processes of urbanisation and its impact, identify current and future priority issues in the perspective of an enabling role of governments, economic reforms and development of people's participatory processes in the human settlements sector. The exercises for a national consensus were undertaken at two stages — firstly, among the sectors representing the major constituencies (Key Group meetings), and secondly, among all the actors in the country (NSC and Human Settlements Forum meetings). The National Plan of Action was formulated on the basis of a broad consensus on the priority issues, and the agenda for international cooperation and assistance has emerged from the National Plan of Action.

During the preparatory process it was agreed to use the UNCHS City Indicators Programme in a substantial manner to capture the varied scenario in different parts of a large

country, particularly in selected mega-cities, large cities and intermediate cities. The Society for Development Studies (SDS) was appointed by UNCHS as the National Consultant for the Indicators Programme in consultation with the Government of India. The India Indicators Programme was funded by State governments, UNCHS and USAID. It covers 11 towns in the States of Karnataka, Maharashtra, Tamil Nadu and Uttar Pradesh and the Union Territory of Delhi. The towns include urban centres at different tiers of the urban hierarchy: mega-city, metro-city, large town and intermediate town. Though not fully representative of all categories of urban situations in a country of India's dimensions, they represent different urban processes.

The Best Practices is another important part of the India National Report. The Housing and Urban Development Corporation (HUDCO), with support of the Government of India, initiated the process to obtain a large number of innovative practices from across the country in areas suggested by the UNCHS as suitable for candidature for the best practices competition to be held in Istanbul in June, 1996.

1.3. The Participants

The national preparatory process has been a joint effort involving a large number of key actors from different parts of the country to incorporate regional and state-specific perspectives and dimensions. These actors included particularly the human settlements managers, both elected representatives of local bodies and officials of the Central, state and local governments, representatives of the private sector including financial institutions and developers, researchers, academicians and NGOs/CBOs.

PART II

ASSESSMENT AND PRIORITIES



Housing for gas victims, Bhopal.
Rehabilitation of shelterless gas victims by cluster housing design using mini-neighbourhood concept.

CHAPTER 2

THE BROADER SETTING

2.1. India : An Introductory Profile

India is the home of 846 million people. It is the seventh-largest country with a total area of 32,87,263 sq km, the second most populated nation and the largest democracy in the world. It has a wide geoclimatic diversity, with a myriad of social and religious traditions, customs and institutions and has a rich legacy of art, culture and architectural monuments, which form the mosaic of Indian civilisation. It is more a subcontinent than a country. The settlement patterns in India bear the distinct marks of topographical characteristics and socio-cultural life styles. A little over one-fourth of the population live in urban areas and the rest in villages.

India is located in the northern hemisphere, its mainland extending between 80°4' latitudes and 37°6' North and longitudes 67°7' and 92°25' East.

India has a sophisticated administrative and political structure, a large supply of educated manpower, especially scientists, who form the third-largest pool of scientists in the world, and a well-trained bureaucracy. India has a federal structure comprising a three-tier system of governance—the Central, the state and local governments, all elected on the basis of universal adult franchise. The federation, the Republic of India, consists of 25 States and 7 Union Territories, with different levels of economic development and urbanisation (Fig. 1). For facilitating governance, the states are divided into districts and currently India has 466 districts, with an average size of 7050 sq km with 1.82 million people. The Constitutional Amendments in 1992 further widened the scope of grassroot level participation in the political process. The Constitution of India confers equal rights and opportunities to

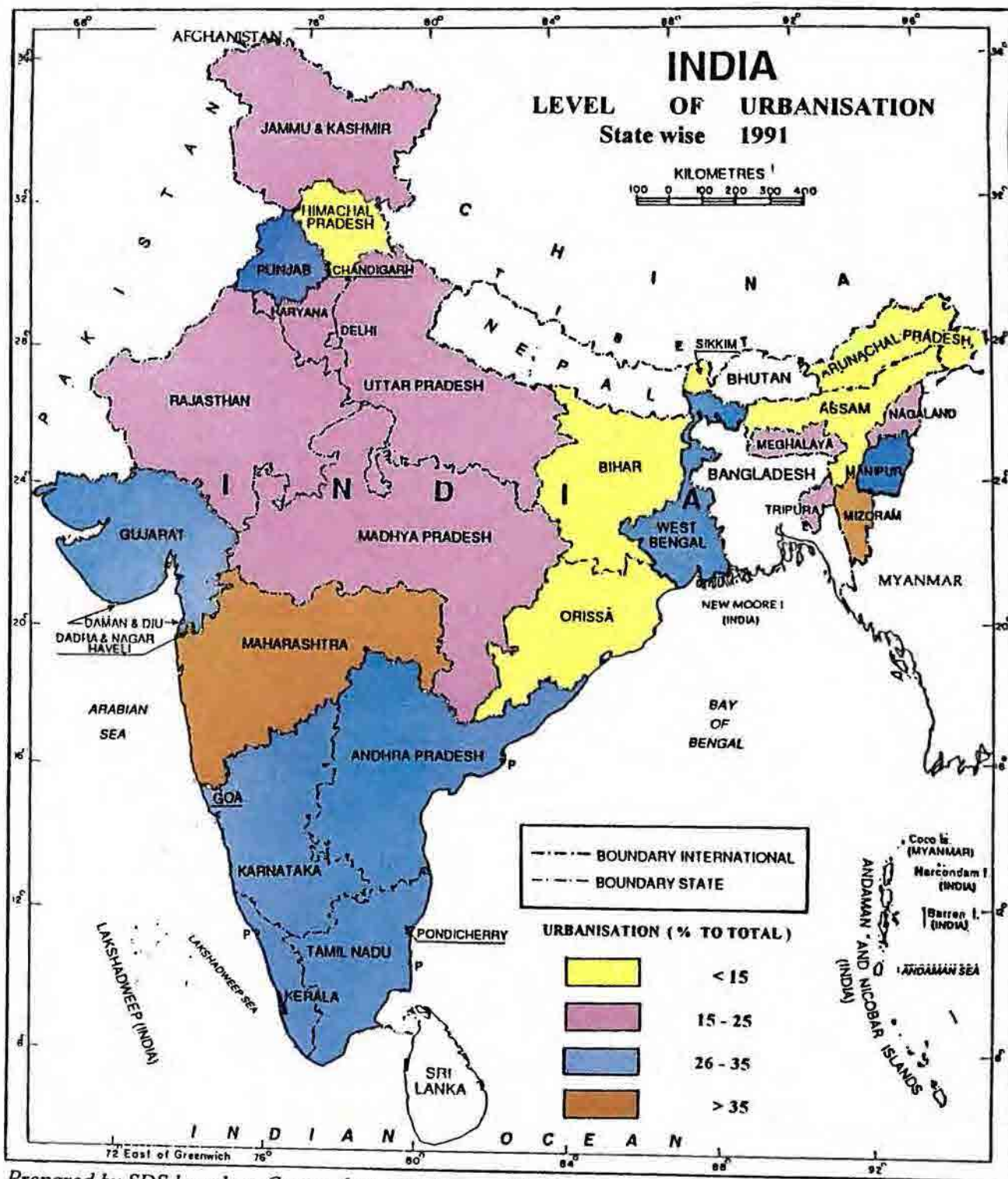
men and women in the political, economic and social spheres.

Since independence in 1947, India has made great strides in development and invested significantly to create a stable agricultural and industrial base. It has achieved self-sufficiency in agricultural production and is among the first 20 industrialised countries in the world.

2.2. Urbanisation Dynamics and Processes

a) Urbanisation as a Catalytic Force

A fundamental relationship exists between urbanisation and economic growth. The experiences over the last four decades in India and even longer elsewhere in the world have shown that cities expand effective market size and stimulate economic activities, and population agglomerations make per capita investment on basic services a viable proposition. Cities, towns and other urban areas have facilitated the evolution of knowledge and have been the incubators of civilisation and the engines of growth. They have spread intellectual flows and thereby increased the human capital fund and the rate of technological adaptation and progress, promoted savings and channelled them into financial transactions. Urbanisation sets in motion a series of activities that ultimately broaden the employment base of the country and contribute a higher value-added component per unit of investment as compared to investment in the rural environment. Urbanisation in India, as in other developing countries, is being looked upon as a catalytic agent of economic growth, human resource development and social and cultural integration. Urban India contributed 29 per cent of GDP in 1950-51 and 47 per cent in 1980-81. Its contribution is expected to cross 60 per cent



Prepared by SDS based on Census data and Survey of India map

1. BASED UPON SURVEY OF INDIA MAP WITH THE PERMISSION OF SURVEYOR GENERAL OF INDIA.
2. THE TERRITORIAL WATERS OF INDIA EXTEND INTO THE SEA TO A DISTANCE OF TWELVE NAUTICAL MILES MEASURED FROM THE APPROPRIATE BASE LINE.
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Figure 1: Level of Urbanisation

by 2001 (Eighth Five Year Plan, p. 345).

One clear advantage of urbanisation is that urban-sourced inputs improve productivity of agriculture and, thus, release a part of the rural population from agricultural activities. This development activates a process of out-migration from rural areas, which results in the growth of urban population.

It is in this context that the Habitat II theme of sustainable human settlements and adequate shelter for all in a rapidly urbanising world has set in motion the process of self-assessment of the Indian human settlements and urban situation.

b) Urban Dynamics

The last four-and-a-half decades have witnessed phenomenal growth in the urban population in India. During this period, some 5 to 6 million people have been added to urban India every year. In fact, India has one of the largest urban systems in the world. The recorded urban population in 1991 was 217.6 million and is around 250 million in 1995. India has 4 mega-cities (5 million plus) and 19 metro-cities (1 million plus), and they provide a home for one-third of the urban population. The number of metro-cities almost doubled during the eighties and is projected to grow to 40 by 2001. There are 300 large towns (0.1 million plus) and 3,396 small and medium towns (<0.1 million). The share of the urban population in the total population has also grown in

the last five decades; from 13.9 per cent in the pre-independence era (before August 15, 1947), it reached 25.7 per cent in 1991 and is anticipated to cross the 30 per cent mark by the turn of this century. The growth pattern in urbanisation during 1901-91 is presented in Table 1 and Fig. 2. The state-wise growth pattern is shown in Fig. 3.

The major factors contributing to a lower decadal growth of the urban population during 1981-91 as compared to 1979-81 were a fall in the rate of growth of the urban employment, and lower rates of new town formation and out-migration to urban areas; the urban population increased largely due to natural growth.

The urban employment growth rate has declined from 42.0 per cent in 1971-81 to 36.0 per cent during 1981-91. The share of employment in the manufacturing sector in urban areas has particularly fallen sharply from the level of 1981; indeed its growth was much below the growth rate of total employment (Table 2). The tertiary sector achieved a spectacular growth, but it was less than in the rural areas. Further, a decline in the rate of new town formation was found among the lower hierarchical settlements during 1981-91, especially at the entry point, the class VI towns (population <5000). The Census of India 1991 (Paper 2 of 1991) has observed (p.53): "Thus lesser number of places emerging as new towns in 1991 is a factor accounting for the decline in the growth rate of urban population during 1981-91 compared to 1971-81."

Table 1: Urbanisation Trends in India, 1901-2001

Year	Total Population (million)	Urban Population (million)	Rural Population (million)	Urban to Total Population (%)	Decadal Urban Growth Rate(%)
1901	238.4	25.9	212.5	10.8	—
1911	252.1	25.9	226.2	10.3	0.4
1921	251.3	28.1	223.2	11.2	8.3
1931	279.0	33.5	245.5	12.0	19.1
1941	318.7	44.2	274.5	13.9	32.0
1951	361.1	62.4	298.7	17.3	41.4
1961	439.2	78.9	359.3	18.0	26.4
1971	548.2	109.1	439.1	19.9	38.2
1981	683.3	159.5	523.8	23.3	46.1
1991	846.3	217.6	628.7	25.7	36.4
2001*	1006.2	306.9	699.3	30.5	41.0

Sources: 1. Registrar General and Census Commissioner, Census of India 1991, Final Population Totals. Series I, India, Paper I of 1992, Vol-1.

2. Planning Commission, Government of India, Eighth Five Year Plan, 1992-97, Volume I.

Note : * Planning Commission estimates

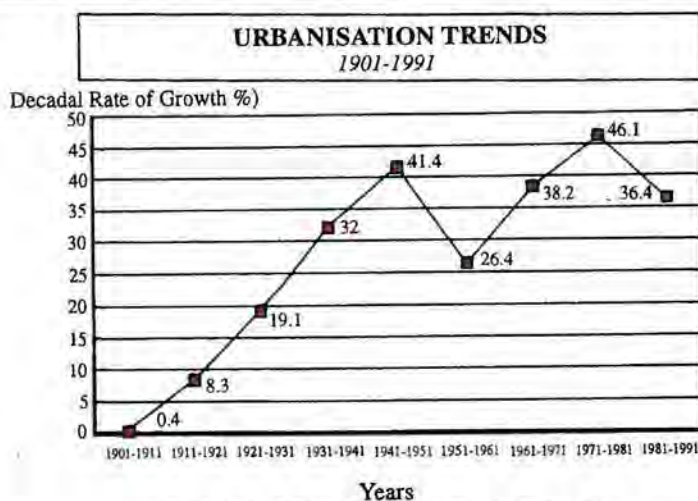


Figure 2: Urbanisation Trends 1901-91

Table 2: Structure of Employment, 1961-91

Sectors	Per cent				Decadal Rate of Growth (Per cent)		
	1961	1971	1981	1991	1961-71	1971-81	1981-91
A. Total							
1. Primary	68.0	69.9	65.6	62.9	18.8	11.8	19.7
2. Secondary	12.7	11.9	14.5	13.8	8.2	45.8	18.8
3. Tertiary	19.3	18.3	19.9	23.3	9.4	29.3	46.5
4. Total	100.0	100.0	100.0	100.0			
(in thousand)	(129,170)	(149,075)	(177,543)	(221,658)	15.4	19.1	24.9
B. Urban							
1. Primary	10.2	11.5	11.7	12.1	44.1	44.0	40.6
2. Secondary	32.6	33.0	35.4	32.1	29.6	52.3	23.3
3. Tertiary	57.2	55.5	52.9	55.8	24.3	35.3	43.6
4. Total	100.0	100.0	100.0	100.0			
(in thousand)	(22,419)	(28,667)	(40,713)	(55,365)	27.9	42.0	36.0

Source : Census of India, 1961, 1971, 1981, 1991

Notes : 1. Primary sector includes cultivators, agricultural labour, livestock, fisher and forests.

2. Secondary sector includes mining, manufacturing and construction.

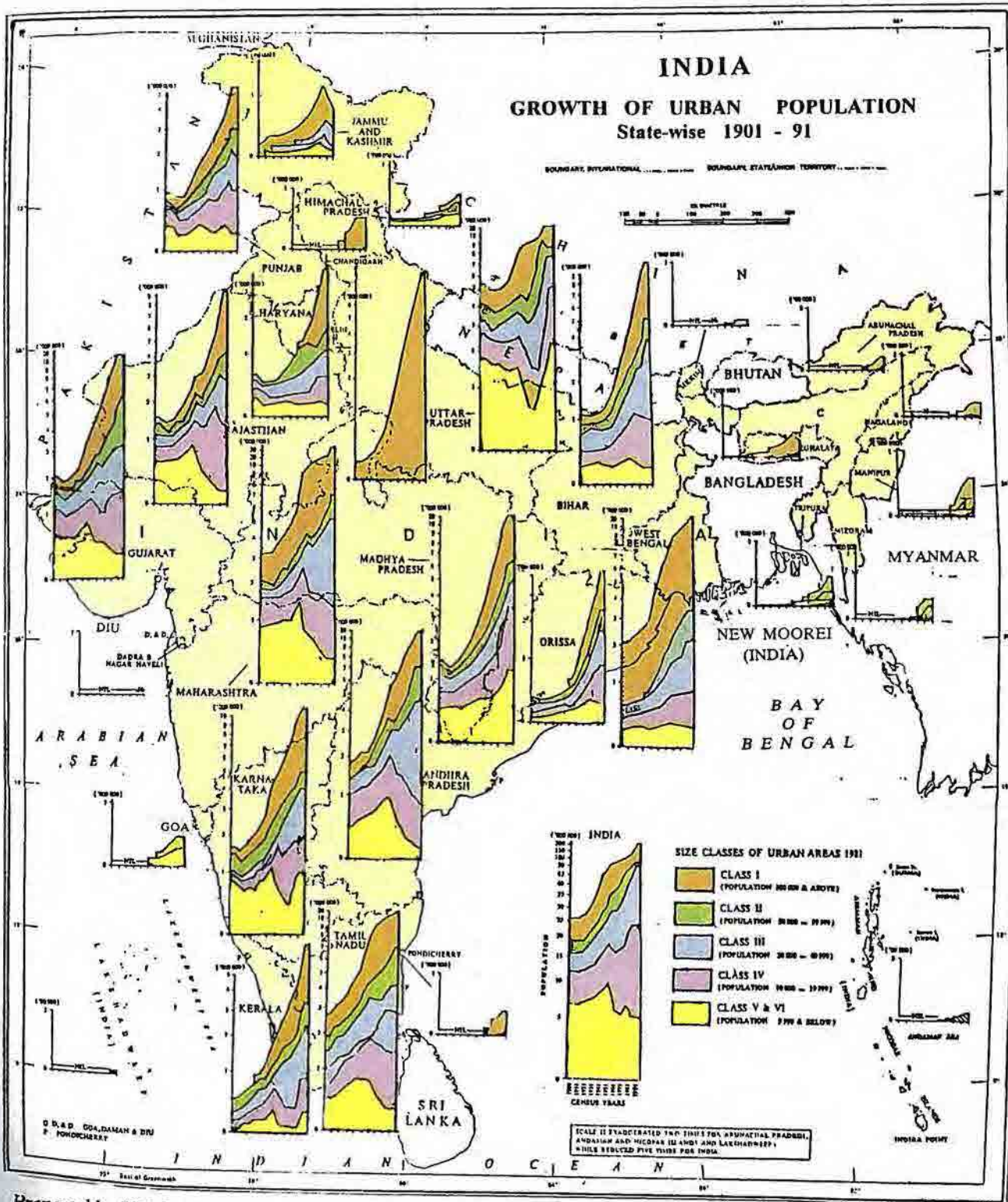
3. Tertiary sector includes trade and commerce, transport, other services.

4. Only male workers have been considered because of changes in definitional problems between censuses rendering the data on female workers non-comparable.

Census 1991 shows a steep decline in net migration to urban areas from 39.4 per cent in 1981 to 22.6 per cent in 1991. A large part of the urban growth was due to natural increase, about three-fifth of urban growth in 1991 as compared to two-fifth in 1981.

The concentration of urban population in larger towns is another significant development. The number of class I towns (population 100,000 plus) has gone up from 226 to 300. In fact, out of the total increase of 58 million population in the urban

areas during 1981-91, 44 million were added to the cities alone, accounting for three-fourth of the decadal growth in urban population. A clear indicator of this scenario is the concentration of 65.2 per cent of urban population in 300 class I towns, which form only 8.1 per cent of the 3696 urban agglomerations/towns in the country. The four mega-cities of India (Calcutta, Mumbai, Delhi and Madras) have 17.1 per cent of the urban population. There are 19 other metro-cities in 1991, up from 7 cities in 1971. The share of urban



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Figure 3: Growth of Urban Population

population in the Indian metro-cities has increased from 25.5 per cent to 32.5 per cent during 1971-91. Yet another major contributing factor towards the concentration of urban population is the constituent towns of city agglomerations. One-third of new towns, accounting for 45 per cent of the population of new towns in 1991 belong to this category.

If adjustments are made to trace the growth of towns in a particular category in 1981 to their position in 1991, the urban dynamics is brought into proper focus. Out of 12 metropolitan cities in 1981 belonging to class I category, only one

had graduated into the mega-city status in 1991 and 11 of class I cities (0.1 million plus) had joined the metro-cities category (1.0 million plus). The transition within the class I category was, thus, modest. The highest upward transition took place in class V and VI size towns; over one-third of them graduated into class IV and V size towns, respectively. There has also been some increase in the number of Class II and III towns but the number of towns in the lower level of the urban hierarchy, class IV, V and VI, declined due to the non-compensating additions of new towns during the decade (Table 3 and Fig. 4).

Table 3 Urban Population by Class Size, 1981 and 1991

S. No.	Class	No. of UA/ Towns		Population Distribution (%)		Decadal Growth (%)
		1981	1991	1981	1991	
1	I	226	300	52.6	64.9	46.9
2	II	325	345	14.0	11.0	28.1
3	III	883	947	17.1	13.3	25.3
4	IV	1247	1167	11.2	7.9	10.7
5	V	920	740	4.4	2.6	-1.3
6	VI	348	197	0.7	0.3	-21.7
7	Total	3949	3696	100.0	100.0	

Source: Office of Registrar General of India and Census Commissioner

Notes : 1. Data exclude Assam in 1981 and Jammu and Kashmir in 1991

2. The population size of each class is:

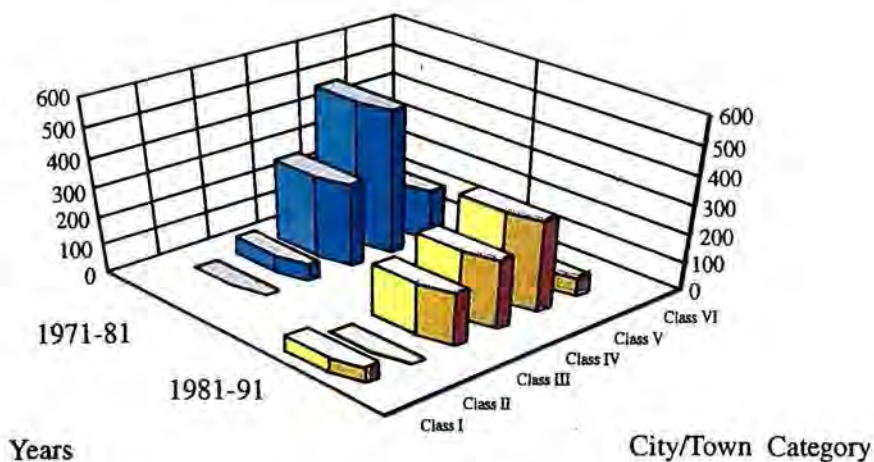
Class I: 1,00,000 and above, Class II: 50,000-99,000; Class III: 20,000-49,999

Class IV: 10,000-19,999 ; Class V: 5,000-9,999 ; Class VI: < 5,000

3. UA: Urban Agglomeration

NEW CITY/TOWN FORMATION CATEGORY-WISE

1971-91



The attractiveness of rural poverty alleviation and rural development schemes as compared to urban programmes, is an important contributory factor for villages with over 10,000 population in various parts of the country preferring not to be classified as towns. Many of the smaller towns have also been reclassified or merged with neighbouring towns.

c) *Urban Density and New Urban Centres*

The impact of concentration of the urban population is seen in the urban density indicator, which has increased from 2,998 persons per sq. km. in 1981 to 3,462 persons in 1991. The average population in urban centres has gone up from 42,129 persons in 1971 to 47,206 in 1981, and then, more sharply, to 60,297 in 1991. The growth has been largely due to the natural growth of population. The density in mega-cities is very high, ranging between 8,800 and 13,500 per sq km in Madras, Calcutta and Delhi. The development of new towns in the vicinity of mega-cities and metro-cities has had some impact on the density. The decline in density in Mumbai city from 13,671 per sq km to 10,697 between 1981 and 1991 was due to the development of New Mumbai.

Spatial dispersal of urbanisation is presented in Box 1, which indicates the areas where high rates of urbanisation during 1981-91 was a result of industrial and commercial activities during the earlier decades.

d) *Rural Centres and Contribution to Urbanisation*

Within a growing urbanising situation, India continues to live in her 580,706 villages. The predominant rural composition of the Indian population is presented in Fig. 5. The rural settlements provide shelter and work opportunities in the farm sector and an expanding non-farm sector to some 629 million people, comprising 74 per cent of India's population of 846 million. On an average, an Indian village has a population of 1,083 and approximately 200 households. The rural population density in India ranges between 9 and 3,742 persons per sq km. The rural India will continue to provide shelter and work place for the majority of the people for a considerable time. This large population base might generate urban migration in the future, as it is doing currently, unless effective interventions are made to improve the quality of life of the rural people, particularly by eradicating poverty, facilitating access to basic housing-related services and income-generating opportunities, and empowering them to take decisions in the true spirit of the 73rd Constitutional Amendment Act that seeks to devolve political, administrative and financial powers to local governments in rural areas.

The Indian rural hinterland has played a critical role in sustaining urbanisation. Rural India is the source of primary inputs for industry, trade and household consumption, a large market for

BOX 1 : SPATIAL DISPERSAL OF URBANISATION

The areas with favourable geographical conditions, where industrial and commercial activities have been taken up in the earlier decades, have shown a high rate of urbanisation. These include the areas around the metropolitan and mega-cities and core areas of mining and industrial belts. The major urban clusters identified on the basis of 1991 census data are:

1. Punjab-Haryana-Upper Ganga plain, covering about 27 districts of the Punjab, Haryana, Delhi, Chandigarh and parts of western Uttar Pradesh.
2. Lower Ganga plain and Ranchi-Hazaribagh-Singbhum-Sundergarh plateau region, covering 9 districts of southeastern Bihar, southern West Bengal and northern Orissa.
3. Gujarat plain-Kathiawar peninsula-Kutch peninsula, covering 12 districts of Gujarat and Daman & Diu.
4. Sagar plateau—Bhopal plateau—Ratlam plateau-Narmada region-Mahanadi basin and Tapi-Purna valley-Wardha-Penganga-Wainganga plain along with the eastern and western plateau of Maharashtra, covering 21 districts of Madhya Pradesh and Maharashtra.
5. Maharashtra, littoral—Goa coast-Karnataka coast-South Karnataka plateau-Central Karnataka plateau-Telangana plateau-Rayalaseema region-Krishna delta and north Andhra coastal plain covering 17 districts of Maharashtra, Karnataka, Andhra Pradesh and Goa.
6. North, central and south Kerala coast and sandy littoral-Coromandal coast-Tamil Nadu uplands and eastern flanks of Sahyadris, covering 21 districts of Kerala, Tamil Nadu and Pondicherry.

Source: Census of India, 1991, Paper-2 of 1991, Provisional Population Totals: Rural-Urban Distribution.

URBAN, RURAL & TOTAL POPULATION

1951-91

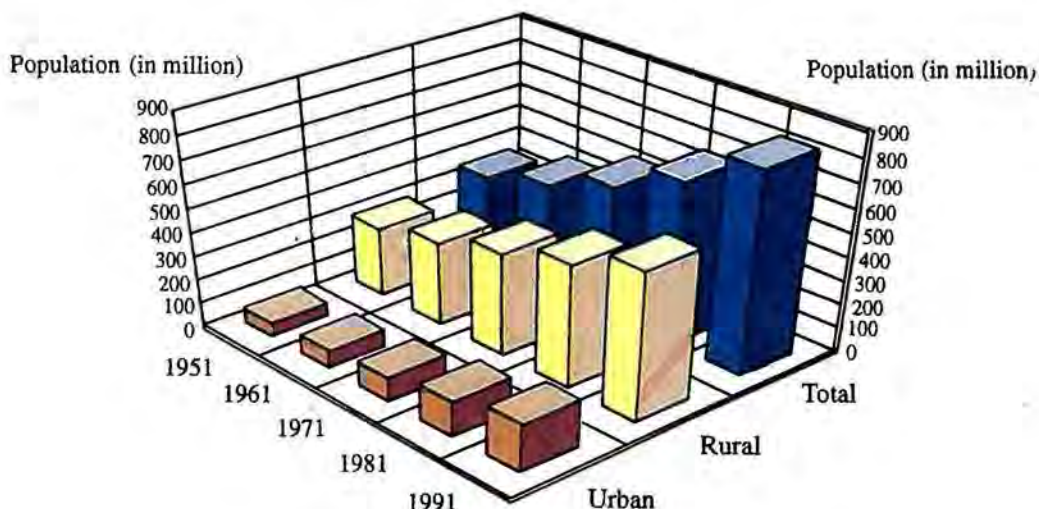


Figure 5: Urban, Rural and Total Population 1951-91

urban products and a source of competitively priced labour for urban economic activities; it is also a source of funds for urban economic activities as reflected in the urban and rural credit deposit ratios. The momentum of urban development activities has also been sustained by rural manpower resources. At the same time, the income opportunities have improved and economic growth accelerated through programmes like the Integrated Rural Development Programme (IRDP), Rural Labour and Employment Generation Programme (RLEGP) and Jawahar Rozgar Yojana (JRY).

Urbanisation has brought about a distinct structural shift in the nation's employment and output structure: agriculture now accounts for less than two-thirds of the labour force and one-third of India's GDP, a sharp shift from the 70-75 per cent and 55-60 per cent levels, respectively, existing prior to the commencement of Indian planning (1951). The effect has been felt in the rural economy, with the non-farm sector becoming an important part of the rural economy and increasing the value-added component in rural activities. This is a major positive impact of the rural-urban continuum, although the multiplier effect of urban development on the rural economy has not been as high as would be desirable. The

gap between rural and urban areas in terms of basic services has widened (Fig 6). The work participation rate of women in rural areas has improved during 1971-91, much more than that of women in urban areas, due to male migration, resulting in women's greater participation in agricultural and related activities.

e) *Urban Concerns*

The major urban concern that emerges from the assessment of the urban situation is the gap between the demand and supply of basic infrastructure components. While there has been a steady improvement in the housing stock, infrastructure and services, there is, nevertheless, a widening gap between demand and supply of infrastructure services such as energy, housing, transport, communication, education, water supply, sewerage and recreation amenities. The emerging characteristic of 'the city within a city' in mega- and metro-cities is a gap syndrome arising out of inadequate income opportunities and city management response. The manifestations are the fast growth in slum settlements and population, illegal construction and undesirable land-use changes, deterioration in air and water quality, all of which adversely affect the human environment and threaten social order. Pollution,

URBAN RURAL GAP IN AVAILABILITY OF SERVICES

1981 & 1991

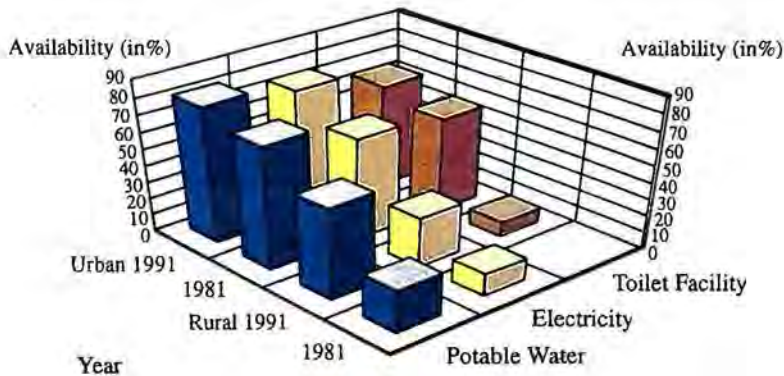


Figure 6: Urban-Rural Gap in Availability of Services, 1981 and 1991

lack of green spaces and an increasing vulnerability to disasters have seriously challenged the capacities of the cities. In recent years, the police forces in mega- and metro-cities have come under severe and sustained pressures by a wave of criminality which can be traced to the vulnerability of rapidly-expanding cities.

Another major concern is settlement planning. The need for a spatial canvas cannot be underestimated in the context of population growth and its concentration in major city agglomerations. With the continuing restrictions on conversion of land use from agriculture to non-agriculture, densification and redensification assumes high importance.

The major environmental concerns in an urbanising India relate to high levels of water pollution due to poor waste disposal, inadequate sewerage and drainage and improper disposal of industrial effluents. Air pollution levels are rising mainly because of congested streets, poorly maintained vehicles, fuel burning, and industrial activities. The dumping of solid waste in low-lying areas contributes to land- and ground-water pollution and high levels of noise pollution arise out of vehicular traffic, industrial operations, construction, etc. Apart from these, there has been increasing loss of fragile ecosystems, such as wetland, mangroves, agricultural land and vegetation. Box 2 presents an illustrative case study of coastal water quality in India. All these developments have contributed to the deterioration of the urban environment, a

critical concern that needs specific interventions for sustainability of human settlements.

Urban poverty, impoverishment and human degradation, characteristics of growing urban conglomeration the world over, are other critical concerns. While the level of poverty has declined during the period 1972-73 to 1987-88 from 41.3 per cent to 20.1 per cent, as per official estimates, there is an unanimous view that calorie intake and financial indicators do not adequately bring out the poverty situation as non-economic manifestations of poverty are equally significant, and particularly important in the urban context, more so than in the rural context. This thinking is reflected in the recently introduced urban poverty eradication programme, Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPEP). Within the poverty group, the concerns of women, children and other most vulnerable groups are most important.

While there has been continuous growth in large cities and fast growth in some of the intermediate towns, the growth of new towns has not been substantial. The migration trails now lead from small and intermediate towns to larger towns, where income-generation opportunities are perceived to be better. In fact, Indian studies on motivating factors of migration suggest that the most important determinant is the "pull" factor of better income generation opportunities. If these opportunities are mainly available in the larger cities, there is a strong case for promoting and sustaining income opportunities in

BOX 2: COASTAL WATER QUALITY : ILLUSTRATIVE EXAMPLE OF ENVIRONMENTAL POLLUTION

Coastal and estuarine water resources in India depict the following quality characteristics :

- an exceptionally high concentration of lead and cadmium, 820 µg/l and 336 µg/l respectively, were observed in Thane creek of Mumbai coast, while the mercury concentration is 0.778 µg/l. The high levels of pollution particularly in Thane creek and Mahim creek are caused by the discharge of huge quantities of domestic and industrial wastes. A major portion of the waste is released in Ulhas river and Bassein creek also. Sediment along the creeks and near-the-shore stations showed significant concentration of lead;
- the Cochin region of the Kerala coast (South West Coastal Zones of India) is found to be most affected by petroleum hydrocarbons. During the pre-monsoon period, a concentration of 162 µg/l was recorded in the estuarine area, while in the coastal area, the concentration recorded was 49 µg/l. This has been mainly due to the operation of oil tankers as well as the movement of mechanised fishing vessels. Further, it was also observed that the concentration of nutrients is high in the estuarine part, and that in the coastal and offshore regions, being in descending order except for a few observations; and
- along the coasts of West Bengal and Orissa, the coastal water quality remains almost stable. However, the Dissolved Oxygen (DO) was found near critical level in some localised area. Lead, cadmium and mercury were found in very low concentrations in the ambient water. The sediment samples were rich in metals, particularly lead.

Source: Ministry of Environment and Forests, Government of India, *Environment Action Programme India*, 1993.

intermediate towns. The centrally-sponsored scheme of Integrated Development of Small and Medium Towns (IDSMT Scheme), initiated in the Sixth Plan and recently restructured to focus on economic and financial viability, is a specific activity that promotes the growth of small towns by providing the basic infrastructure to initiate and sustain income-generating activities away from the mega- and metro-cities and large towns. The Scheme provides improved infrastructure in selected towns with growth potential to emerge as regional centres of economic growth and employment and become effective speedbreakers on the migrant trails to large cities. A major urban concern is to bring in sustainability to this endeavour.

There are other reasons for promoting the growth of intermediate towns. Housing costs have become prohibitive in the mega- and metro-cities and larger towns. Housing indicators clearly bring out this situation with house price for a median house being equivalent to 13 years of annual household income in Mumbai, 12 years income in Delhi and 11 years income in Bangalore. The house price ranges from three to five years' annual income in the small and intermediate towns. This is for housing in the formal

settlements. In informal settlements also, a similar pattern is seen. Less than one year's income is required for a housing solution in the small towns and two to three years' income in metro- and mega-cities (Indicator 1)*.

Rental housing is another critical issue. In the mega-cities of Delhi and Bangalore, such housing utilises 45–50 per cent of monthly income; in Madras 38 per cent and in Mumbai 31 per cent. In the intermediate towns, the situation is comparatively better but rents remain high and rental housing solutions take up around 25 per cent of the monthly income. These evidences provide some explanation for the proliferation of slums and squatter settlements in an urbanising scenario, especially in the mega- and metro-cities, where formal housing is unaffordable to the majority of the population.

The main reason for the current urban situation is that urbanisation has been largely the result of other development and sectoral policies that encouraged industrial and commercial activities in urban areas. These included, among others, the strategies of heavy industrialisation, capital-intensive infrastructure assets and export promotion. Many of these activities were initiated by

* The City Indicators presented in the Report are developed as per the methodology recommended by the UNCHS. For details, see Technical Note (Annexure 2).

Indicator 1: House Price to Income Ratio and House Rent to Income Ratio, 1993

No.	Cities		House Price to Income Ratio Settlements		House Rent to Income Ratio
			Informal	Formal	
1	Mumbai	(10.26)	3.53	13.38	0.31
2	Delhi	(8.96)	0.88	11.99	0.44
3	Madras	(5.65)	1.38	7.01	0.38
4	Bangalore	(4.47)	2.59	11.27	0.49
5	Lucknow	(1.80)	1.53	4.59	0.37
6	Hubli-Dharwad	(0.68)	0.70	3.58	0.32
7	Bhiwandi	(0.57)	0.27	3.33	0.01

Source: SDS : UNCHS City Indicators Programme, based on the data on housing stock from official records of housing and urban development agencies, local government and town-specific research studies.

Notes: 1. Figures in parentheses are population in million, 1993

2. Data relate to median values

3. Data on house rent relate to total household

public-sector-led development processes. They built the foundation in the form of infrastructure for agriculture and industry, materials and markets, which then encouraged the private sector to contribute to industrial and economic development. Development of social infrastructure like education and medical centres and religious and cultural activities have also contributed to urbanisation. Development of housing, basic urban services and land supply were overlooked in the overall development strategy. There was also no coordination among the different sectoral development activities. This has invariably led to a situation where the gap between the need and supply of basic urban services and social infrastructure has been progressively widening.

3.3. Urban Processes

Urbanisation in India has been the outcome of a range of processes common to many developing countries. The Indian urban process has a chequered history, dating back to the Indus Valley Civilisation, a legacy some 5000 years old. It provides the earliest evidence of planned human settlements, with distinct location of residential and commercial centres and access to settlement services, such as water, drainage and sanitation considered essential in the 20th century. The urban process was linked with economic activities, trade-directed and market-oriented, and was sustained by the advent of the seat of

governance, the acquisition of new territories, and an increasing population.

a) *Economic Activity, Trade and Industry Routes*

More recently, around the beginning of the 20th century, the industrial development process, a variant of the earlier economic activity and trade route process, became a major path to urbanisation. The early industrial cities of Mumbai, Ahmedabad, Calcutta and Madras were centres of rapid urbanisation, giving rise to a view that urbanisation is synonymous with industrialisation. Later, Kanpur, Bangalore, Pune, Visakhapatnam and Surat emerged as industry and trade-led urban centres and this process still continues. Town development was also led by a single enterprise, such as Jamshedpur by the private sector and Bhilai, Durgapur and Rourkela by the public sector, all in the steel industry. Petroleum, chemicals, textiles, heavy engineering, power, aviation, electronics, and tourism have been some other specific industrial and economic activities that have stimulated the urbanisation process. Economic activities opened up employment avenues. Certain activities are also better performed in agglomerations of people as these bring in economies of scale in provision of urban services and economic activities. Industry-led states have, therefore, attained higher urbanisation levels, exceeding the national average of 25.7 per cent. Maharashtra ranks highest at 38.7 per cent, with Gujarat 34.4 per cent and Tamil Nadu 34.2 per cent.

b) 'Mandi' Town Process

Agricultural development, or the Indian 'green revolution' of the seventies saw the emergence of several 'sustainable "mandi" towns (village produce market centres) nation-wide. Their main function was to serve the rural surroundings as well as small towns at the regional level as market and service centres. Punjab and Haryana offer several classic examples: urban population increased in the Punjab from 23.1 per cent in 1961 to 29.7 per cent in 1991 and in Haryana, from 17.2 per cent to 24.8 per cent. Economic growth and

urbanisation in the northeastern states in India, among the least developed, has been due to the informal "haats" and rural marketing centres. The "mandi" has contributed to the growth of the small towns under the IDSMT scheme of the government of India, with one-fifth of them being linked to the mandi-led process during 1979 to 1995. A canal region human settlement programme in Rajasthan has an innovative three-tier activity, starting with basic village settlements, graduating to amenity village complex and culminating into mandi towns (Box 3).

BOX 3 : MANDI TOWN PROCESS : CASE STUDY OF INDIRA GANDHI CANAL REGION, RAJASTHAN

Length of Canal	640 km
Length of Distribution System	8187 km
Total Cultivable Command Area	1.75 million hectares

Construction in two stages :

Stage I: Construction of a 189-km long main canal. Completed in 1964. Irrigation potential of 0.57 million hectares created. Construction cost Rs. 2646 million.

Stage II: Construction of a 256-km long main canal. Completed in March 1990. Irrigation potential of 1.01 million hectares. Total construction cost Rs. 4551 million.

Regional Plan: The policies and proposals relating to population distribution, regional land use, settlement pattern, transport and communication, physical and social infrastructure and forest development are incorporated.

Settlement Pattern:

	3-tier System of Settlements (Numbers)		
	Stage I	Stage II	Total
Basic Village Abadi (settlement)	513	258	771
Amenity Village	58	27	85
Mandi Town	18	9	27
	589	294	883

- a. Basic Village Abadi:** Smallest unit of settlement system with primary school, filtered water, dispensary, post office, few shops, small godown and village nursery.
- b. Amenity Village:** To service itself and six basic villages. Additional facilities provided are veterinary dispensary, higher secondary school, electricity and transport.
- c. Mandi Town:** To serve seven amenity villages and 40-45 basic villages, three types of mandi towns are proposed depending upon their population (10,000-50,000), radius 16 km. Additional facilities include wholesale market, offices of govt. departments, medium- and large-scale industries, and medical and educational institutions.

The Success :

- * 0.84 million hectare land allotted to 112,437 allottees.
- * 9682 residential plots and 8564 commercial plots allotted under mandi development activities.
- * Annual harvest of 1.5 million tonnes of agricultural produce.
- * Drought problem resolved on a permanent basis.
- * Intensive afforestation.
- * Drinking water supply.
- * Employment generation.

Source: Government of Rajasthan, Town and Country Planning Organisation.

c) Administrative Decentralisation

Another contributory factor to the urban process was administrative decentralisation. The carving out of new states in the Indian Union gave an impetus to the growth of urban centres, particularly the state capital. The emergence of Gujarat as a separate state, for example, led to the growth of Gandhinagar, the capital of Gujarat. The transformation of the northeast into a number of new Indian states and Union Territories extended the urban process in that part of India, beyond the boundaries of Guwahati, till then the "urban hub" of a vast geographical area of 245,083 sq km. The formation of the Punjab and Haryana produced similar results, with Chandigarh becoming a major urban centre.

Administrative centres or seats of governance impelled yet another type of urbanisation, centred around government complexes and liaison offices of business and trade. The resultant impact on

the level of urbanisation was, however, less than that of the industry-led process. In the immediate post-independence period, a special factor fuelled the urbanisation process — migration of population from across the newly created international boundary in the Indian subcontinent. This is evident in the sharp increase in urban population between 1941 and 1951 in the large towns of Delhi and Mumbai, about 1.5 to 2 times the average decadal growth thereafter.

In Calcutta, another major part of the country affected by post-independence population transfers, there was not much variation as the in-migration process was compensated by the out-migration process (Box 4).

d) Social Development

Social development initiatives have also contributed to the Indian urbanisation process. A large number of urban centres have emerged due

BOX 4: URBANISATION IN LARGE CITIES, 1941 TO 1991

		Year				(Population in million)	
		1941	1951	1961	1971	1981	1991
Calcutta	Total Population	3.62	4.67	5.98	7.42	9.19	11.02
	Decadal Growth	—	28.94	28.14	24.01	23.90	19.88
	Rate %						
Greater Mumbai	Total Population	1.69	2.97	4.15	5.97	8.24	12.60
	Decadal Growth	—	75.96	39.95	43.80	38.07	52.80
	Rate %						
Delhi	Total Population	0.70	1.44	2.36	3.65	5.73	8.42
	Decadal Growth	—	106.58	64.17	54.57	57.09	46.95
	Rate %						
Madras	Total Population	0.93	1.54	1.94	3.17	4.29	5.42
	Decadal Growth	—	65.78	26.08	63.02	35.31	26.40
	Rate %						
Bangalore	Total Population	0.41	0.78	1.21	1.65	2.92	4.13
	Decadal Growth	—	91.51*	54.94	37.02	76.67	41.36
	Rate %						
Lucknow	Total Population	0.39	0.50	0.66	0.82	1.01	1.67
	Decadal Growth	—	28.33	31.96	24.91	23.03	65.66
	Rate %						
Visakhapatnam	Total Population	—	—	0.18	0.36	0.60	1.06*
	Decadal Growth	—	—	—	99.70	66.08	75.13
	Rate %						
Surat	Total Population	0.17	0.22	0.30*	0.49*	0.91	1.52
	Decadal Growth	—	30.18	34.10	64.89	85.36	66.22
	Rate %						

Source: Census of India, 1971, 1981, 1991

Notes: 1. Data on population relate to urban agglomeration.

2. Decadal growth rates are computed on the basis of actual population figures and may not necessarily be the same when taken in million numbers.

The variation is generally between 0.01 and 0.87 per cent points and in a few cases (*), the difference is slightly more.

to education networks (Manipal, Hubli-Dharwad, Shantiniketan, Vadodara), health-care facilities (Vellore), religious activities (Shirdi, Ajmer, Amritsar, Pushkar, Nanded) and home-based cottage industries (Bidar in Karnataka, Azamgarh and Ramnagar in Uttar Pradesh, Sivakasi in Tamil Nadu).

e) Urban Growth Centres

In the last 15 years, India has embarked on the development of new small and medium towns. The IDSMT scheme, in operation since 1979-80, has facilitated, as of March 1995, the development of 749 towns with another 35 in the pipeline, as intermediary towns to arrest step migration as well as absorb rural-to-urban migration. Regional centres are being promoted to induce people living in mega-cities to shift to emerging settlements and work centres in the vicinity. The National Capital Region Plan seeks to develop 10 priority towns as counter-magnets to Delhi, the national capital. The township development programme of New Mumbai was initiated in 1970 as part of a strategy to set up an additional growth centre near Mumbai and also provide for growth in the Mumbai region. Today, New Mumbai has become a thriving urban centre.

2.4. Impact of Urbanisation

a) Human Settlements

Urbanisation has brought in a mixed package of changes in human settlements in urban and rural India. Construction technology and land constraints have changed the housing typology

in urban areas from single-unit plotted development to vertical structures and multi-household complexes. A shift from single unit to vertical structures is evident in mega- and metro-cities and the apartment scene is emerging in intermediate cities also. In small towns, as in rural areas, plotted single-unit housing still dominates the settlement scenario, with improvement in durability of the structure and improved access to water and electricity. While density has gone up, per capita living space/ floor area has declined. There is significant variation in the floor area per person in formal and informal settlements in all tiers of the urban hierarchy. While the floor area is around 2 to 3 sq m in informal settlements, it is around 6 to 7 sq m in formal settlements in small and medium towns, but no clear pattern is seen in the mega-cities (Indicator 2).

The parallel development of formal and informal housing stock and settlements in urban India has produced a phenomenon seen all over the developing World: city within a city — a multiple-city syndrome. The distinct settlements of the poor and the non-poor are a classic testimony to the process of urbanisation. The contrast is often referred to as "island of affluence in a sea of poverty" and is seen in all mega- and metro-cities. Box 5 brings out, as an illustration, a comparative situation on squatter settlements with other settlements in Delhi, the former clearly being in a disadvantaged position, with respect to basic services and living conditions.

Urbanisation has had some positive impact on rural housing and settlements. New construction technology, designs and tastes are emerging in the rural environment, and access to essential

Indicator 2 : Floor Area per Person, 1993

No.	Cities	Floor Area per Person (sq m)	
		Informal	Formal
1	Mumbai	3.49	8.95
2	Delhi	2.21	14.08
3	Madras	2.55	6.38
4	Bangalore	2.59	10.37
5	Lucknow	2.19	6.48
6	Hubli-Dharwad	2.23	6.22
7	Bhiwandi	2.41	7.14

Source: SDS, UNCHS City Indicators Programme, based on the data from official records of housing and urban development agencies and local governments.

services are evident. Trends in housing design are changing and the aspiration of people for more facilities, comparable to urban areas, is surfacing, especially in urban-linked rural settlements. This process is likely to gather momentum. However, the natural resources that the people have been using for housing are getting more scarce.



Rural housing using indigenous building material and technology—casting of blocks

b) Environment

The pace and level of urbanisation in India, as in most urbanising countries, has exceeded the growth of urban services. Anticipated demand for services as cities and towns grow have not been given due recognition. Also, the public-sector-dominated institutional system for the creation and maintenance of infrastructure assets has concentrated on new asset creation, linked to some target, fixed largely on the basis of plan resource allocations rather than on actual needs. The maintenance, replacement and upgradation of existing assets, often 50-100 years old, has not received enough attention. Asset productivity has, therefore, declined, and operational costs have spiralled. The low-income base of government actors, especially the local government, has become an inhibitive factor for new asset creation. The demand-supply imbalance in urban services has emerged as the main concern of city managers. The degradation of the environment has been a direct consequence of this imbalance.

Environment degradation was often activated, and invariably accentuated, by the mix of urban-specific economic activities, with high pollution-generating potential. The tanneries in Kanpur, chemical complexes in Mumbai, engineering industry in Calcutta and textile-processing units in Panipat and Coimbatore are a few examples. Poorly maintained transport vehicles have been a major environment-degrading factor, with the

capital city of Delhi being on top of the chart of vehicle-linked pollution in urban agglomerations (Box 6). Water bodies in the clusters around industries have been found to be contaminated, often unfit even for irrigation. Industrial effluents are not always degradable and are mostly beyond the natural assimilation capacity of the rivers. This pollutes the water bodies and affects urban health and productivity. Economic activities and transport services are now recognised as major pollutants of the river Ganga.

The collection and disposal of solid wastes is another area of concern of city management in India. No city collects and disposes of all its solid wastes in a



Construction of houses with the involvement of beneficiaries as labour

BOX 5: INFORMAL SETTLEMENTS IN DELHI, 1991

	Urban Total	Informal
1. Population (thousand)	8472.00	3875.00
2. Households (thousand)	1700.00	775.00
3. Household size	4.97.00	5.00
4. Occupied residential units (thousand)	1629.00	767.00
5. Occupancy ratio		
a. Persons per house	5.17	5.05
b. Households per unit	1.04	1.01
c. Persons per room	2.59	5.00
d. Area per house (sq m)	34.20	10.00
e. Per capita living space	6.90	4.40
6. Access to amenities (per cent)		
a. Potable water	96.24	77.50
b. Electricity	81.38	98.00*
c. Toilet facility	66.64	—

Sources: 1. Census of India, 1991, Housing and Amenities; Occasional Paper No. 5

2. NSSO, 44th Round Data, July 1988–June 1989, Sarvekshna, 50th Issue, Volume XV No 3.

(i) Strategies and Action Plan for Resettlement of Squatters of Delhi in New Townships of the National Capital Region, 1994.

(ii) Delhi Urban Poor Financial and Development Organisation. A Report 1994

Note: * Illegal Connection

BOX 6: DELHI POLLUTION LEVEL

The World Health Organisation has identified Delhi as one of the 10 most polluted cities in the world. The Central Pollution Control Board estimates that 2000 tonnes of pollutants are emitted in the atmosphere every day in Delhi. Carbon monoxide tops the list with 53 per cent (1063 tonnes) emission, followed by nitrogen dioxide 16 per cent, hydrocarbons 16 per cent, sulphur dioxide 9 per cent and particulate matter 6 per cent. Vehicular sources contribute about 64 per cent of total pollutants, followed by thermal power plants (16 per cent), industry (13 per cent), and domestic sector 7 per cent.

Source: Central Pollution Control Board, Government of India, Pollution Statistics — Delhi 1993–94.

safe manner and the coverage is often inadequate. An ORG study of 24 cities in 1989 revealed that, while daily solid waste generation was about 15,000 tonnes, only 11,500 tonnes was collected, leaving almost one-fourth of the waste to degenerate within the city environment. Even when the collection rate is high, say, 90 per cent, the collection frequency is not satisfactory. City indicators illustrate the current status. There is no relationship between coverage of solid waste collection and city size. Furthermore, collection does not necessarily suggest regular service and the frequency varies from twice a week in the mega-cities to fortnightly collection in the intermediate towns. This relates to domestic wastes as collection of industrial and commercial wastes

is more regular. The disposal of wastes is another issue of concern to city managers. The method seems to improve with the level of urbanisation, from open-dump in the small and intermediate towns to sanitary landfills in the mega-cities. Recycling of waste is a recent phenomenon evident in Bangalore (Indicator 3).

c) Urban Services

Indicators for a few major urban services suggest that the accessibility improves with the level of urbanisation. Household connection is inadequate in small and intermediate towns and also in slum settlements. Water consumption is generally higher in the large urban centres, though consumption levels remain below desirable norms

Indicator 3 : Solid Wastes Collection and Disposal , 1993

No.	City/Town	Collection	(per cent)	
			Disposal by	
			Open Dump	Sanitary Landfill
1	Mumbai	90.00	0.00	93.94
2	Delhi	76.92	0.00	99.00
3	Madras	90.00	100.00	0.00
4	Bangalore	96.00	82.50	0.00
5	Lucknow	73.66	70.00	30.00
6	Hubli-Dharwad	89.08	0.00	0.00
7	Bhiwandi	40.00	100.00	0.00

Source: Local governments

(Indicator 4). City data for Class I and II towns corroborate this scenario (Table 4). Per capita water consumption varies from a low of 61 litres per capita per day (lpcd) in Udaipur to a high of over 200 lpcd in major mega-cities, with Madras being an exception; the consumption levels are much lower in slum settlements in all categories of towns. Rural areas, comparatively, also lag considerably behind urban areas in terms of access to basic services like potable water, electricity and toilet facilities (Fig. 6). Besides basic physical infrastructure, cities require social services to meet essential habitat needs including health, education, child care, ICDS, extensive public distribution services and other programmes involving both private and government service providers. However, there is a lack of intra-urban data, particularly income disaggregated data on the coverage of urban population by these services. Therefore, while the overall city profile generally exceeds the rural indicators for literacy, preventive health care, primary school completion, nutritional status, among other parameters of quality of life, these overall aggregate statistics mask the disparities, particularly among the urban poor. Micro-studies in cities show wide variation in services outreach, coverage and qualitative factors among different income groups.

Therefore, the data base needs to capture such variations more visibly and social service programmes need to be responsive to meet the demands. In the context of rural-urban migration, the extent and impact of inadequate social infrastructure and services as a factor in urbanisation requires particular consideration.

d) Gender Issues

The process of urbanisation has made a distinct impact on the status of women in Indian society because of the availability of educational facilities and better employment opportunities. Socio-economic development indicators confirm a qualitative upgradation. The levels of income and urbanisation are two significant determinants. At moderate- and high-income levels, urbanisation has extended the avenues for higher education and employment, in many cases breaking age-old bastions of male exclusivity, and also promoting women entrepreneurship and empowerment. In many specialised and highly urban-oriented employment areas, women now constitute a sizeable proportion of the total workforce : 34 per cent in banking, 30 per cent in advertising, and 25 per cent in journalism and media. The proportion of women in higher education programmes and professional courses of medicine, engineering and architecture is progressively rising. Thus, for example, while women architects were only 3.3 per cent of the total architects registered with the Council of Architecture in 1975, the proportion was 19.1 per cent in May, 1995. A more important aspect is that the entrance into this specialised profession is predominantly from outside the four mega-cities of Mumbai, Calcutta, Delhi and Madras, which have 44 per cent of the total women architects; the others come from intermediate cities and towns. It is, however, desirable to reorient the curriculum towards gender-sensitive issues in human settlement planning.

On the employment front, Indian women have made inroads in male-exclusive occupations. They are among the top rankers in competitive selections to the civil services and there is a good

Indicator 4: Household Access : Select Indicators

	State	Safe Drinking Water (%) 1991	Water Consumption (lpcd) 1988	Access to Sewerage (%) 1988	Electricity (%) 1991
1. Mumbai	Maharashtra	96.39	207.84	80.00	89.61
2. Calcutta	West Bengal	92.24	226.70	NAV	77.17
3. Delhi	Delhi	96.27	258.04	75.00	81.37
4. Madras	Tamil Nadu	59.90	75.79	77.00	81.91
Metro					
5. Bangalore	Karnataka	80.89	113.86	85.00	81.82
6. Ahmedabad	Gujarat	92.01	200.09	75.00	80.26
7. Lucknow	Uttar Pradesh	88.21	262.25	NAV	76.25
8. Visakhapatnam	Andhra Pradesh	65.76	136.76	NAV	70.26
Large Town					
9. Rourkela	Orissa	75.48	188.10	NAV	69.57
10. Udaipur	Rajasthan	91.85	160.54	NAV	85.02
11. Agartala	Tripura	86.71	105.85	NAV	92.16
12. Shimla	Himachal Pradesh	92.94	281.92	75.00	95.09
Small Town					
13. Guruvayoor	Kerala	18.09	334.95	NAV	61.32
14. Rewari	Haryana	92.61	170.40	NAV	93.04
15. Firozpur	Punjab	94.64	89.81	NAV	94.85
16. Chhindwara	Madhya Pradesh	81.05	107.24	NAV	79.66

Sources: 1. Census of India 1991, Housing and Amenities, Occasional Paper No. 5 of 1994.

2. Central Pollution Control Board, "Status of Water Supply and Wastewater Collection, Treatment and Disposal in Class I Cities and Class II Towns -1988".

Notes : 1. Safe Drinking Water : Census of India defines safe drinking water as water supplied from a tap, hand pump or tube well situated within or outside the premises.

2. Electricity : Households having access to electricity.

3. Sewerage : Households connected to the sewer network.

4. Major source of drinking water in Kerala is well water, which is considered safe water.

5. NAV : Not Available.

6. lpcd : Litres per capita daily.

7. Mega : >5 million, Metro : > 1 million, large > 0.1 million and small < 0.1 million.

representation of women managers at the highest echelons of political and public office, the corporate ladder, the judiciary, police services, aviation, etc.

At the lower income levels also, the process of urbanisation has contributed to the upgradation of the status of women. The shift to urban centres (from rural areas or to higher levels of urban centres) has exposed women, often illiterate, to the new developments in knowledge, education and health care services, and this is reflected in their keenness to join adult education classes and send their children to primary schools. In these communities, rural and urban women are generally responsible for mobilising and providing

basic resources for the household—water, food and fuel. This role that women play, though integral to the survival of their communities, is largely invisible to planners and policy makers who determine the course and content of development of these settlements.

Data across the country show that the girl child is a common feature of the student profile in academic institutions, particularly those that serve the poor. The focus on girl child education is yielding results. Fertility has declined and literacy rate has improved (Box 7). The life expectancy of women has gone up. New avenues of employment have emerged, improving the work participation rate. While construction labour and

Table 4: Water Consumption in Class I and II Towns, State-wise, 1988

PER CAPITA CONSUMPTION OF WATER (lpcd)											
No.	State	Town Nos.	Class I				Class II				
			<100	100- 145	145- 200	>200	Town	<40	40- 100	100- 140	>140
1.	Andhra Pradesh	17	10	4	2	1	26	2	23	-	1
2.	Bihar	11	4	3	3	1	10	-	4	3	3
3.	Gujarat	11	3	3	4	1	23	5	11	4	3
4.	Goa	-	-	-	-	-	2	-	1	1	-
5.	Himachal Pradesh	-	-	-	-	-	1	-	-	-	1
6.	Haryana	9	5	0	3	1	6	-	3	1	2
7.	Jammu & Kashmir	2	0	0	0	2	-	-	-	-	-
8.	Karnataka	14	5	7	2	0	12	-	10	2	-
9.	Kerala	6	0	3	3	0	7	-	2	-	5
10.	Maharashtra	29	7	7	8	7	22	3	12	3	4
11.	Meghalaya	1	1	0	0	0	-	-	-	-	-
12.	Manipur	1	0	1	0	0	-	-	-	-	-
13.	Madhya Pradesh	14	4	7	1	2	23	-	12	7	4
14.	Mizoram	-	-	-	-	-	1	-	1	-	-
15.	Orissa	6	0	0	1	5	5	2	-	1	2
16.	Punjab	7	2	2	3	0	10	-	1	4	5
17.	Rajasthan	11	7	1	3	0	10	3	5	1	1
18.	Tamil Nadu	19	13	6	0	0	39	10	25	1	3
19.	Tripura	1	0	1	0	0	-	-	-	-	-
20.	Uttar Pradesh	29	7	11	2	9	27	2	7	9	9
21.	West Bengal	21	10	8	1	2	17	1	8	5	3
22.	Chandigarh	1	0	0	0	1	-	-	-	-	-
23.	Delhi	1	0	0	0	1	-	-	-	-	-
24.	Pondicherry	1	0	0	0	1	-	-	-	-	-
Total		212	78	64	36	34	241	28	125	42	46

Sources : 1. Central Pollution Control Board, Status of Water Supply and Wastewater Collection, Treatment and Disposal in Class I Towns—1988
 2. Central Pollution Control Board, Status Water Supply and Wastewater Collection, Treatment and Disposal in Class II Towns—1988

Notes : 1. Relate to selected towns for which data were available.
 2. Class I : Population 1,00,000 and more
 Class II: Population between 50,000 and 99,999

domestic services are major employment avenues for the poor and the illiterate women from low-income households, they provide little scope for vertical mobility in economic status. This is a special concern and upgradation of skills, better wages and work environment are areas that require new initiatives and intervention.

The filtering effect of urbanisation is seen in the rural society from social indicators relating to rural fertility, female life expectancy and child mortality. Indian data on the education of girls at the primary education level in rural areas are revealing; in 1981, 25.6 per cent girl children (age 5-9 years) were in the process of acquiring primary education as compared to

18.9 per cent in 1971 and 14.4 per cent in 1961.

While these developments are encouraging, access to basic services for women is low. The situation in lowest income households in slum settlements is extremely depressing. Women and girls from poor families bear the brunt of poverty and environmental degradation, lack of access to health, education and nutrition. A striking example is the access to sanitation facilities; to have some element of privacy, women in slum settlements in mega-cities have to leave their houses under the cover of darkness to defecate in the open. Crime against women is on the increase. Another indicator of the weak position of women is the number of women-headed households.

BOX 7 : DEVELOPMENT INDICATORS FOR WOMEN

	1971	1981	1991
Fertility rate	5.2	4.5	3.6
Literacy rate	22.0	29.9	39.2
School enrolment rate (Girls at primary level)	37.4	38.6	41.4
Life expectancy (in years)	44.7	50.0	59.1
Work participation rate	14.2	19.7	22.3
Women in organised sector (Public/Private)	11.0	12.2	14.1

Sources : 1. Planning Commission, Government of India : Sixth Five Year Plan, 1980-85 and Eighth Five Year Plan, 1992-97.

2. Registrar General and Census Commissioner, Government of India : Sample Registration System, Fertility and Mortality Indicators, 1992.

3. Census of India, Primary Census Abstract, India, 1971, 1981 and 1991

4. National Family Health Services, Ministry of Health, Government of India.

5. Directorate General Employment and Training, Ministry of Labour, Government of India.

Urbanisation seems to facilitate women to head their own households, such households being more than 10 per cent of total households in mega- and metro-cities but considerably lower in the intermediate cities. In the underdeveloped states, the proportion is lower than where economic activities are substantial. While a considerable proportion of women-headed houses may emerge due to economic opportunities, destitution and the process of social exclusion are also the contributory factors. Equally significant, the proportion is increasing.

Urbanisation has the potential of radically transforming the status of women. Exposure to information, technology, new developments in education and health will have far-reaching impact on women and girls. The challenge lies in extending the access to these services in both rural and urban areas, particularly to those in low income groups.

The Constitution (73rd and 74th) Amendment Acts will contribute to the process of empowerment of women. These acts have accorded legal status to the right of women to take part in all major decision-making processes, most critical at the level of the local government. One-third per cent of elected positions in them are reserved for women, and almost one million women will soon be managing the grassroot level political, administrative and financial activities through the decentralised local government system. The new systems will enable women to be decisive participants in the development processes. Women would, however, need capacity-

building inputs to equip them to take up their new responsibilities.

e) Child Issues

An estimated 30 million children in urban areas live in conditions of poverty. They do not benefit from a wide range of development and social programmes, resulting in low immunisation coverage, poor nutritional intake, high school drop-out rate, which cumulatively affect their potential to improve their quality of life. In addition, family poverty and deprivation pushes large number of children into the labour market, thus depriving them of their childhood. Children are pushed into the labour market also due to broken homes, child abuse, neglect and exploitation - some direct consequences of industrial growth and urbanisation.

It is estimated that in the six Indian cities of Mumbai, Madras, Calcutta, Hyderabad, Bangalore and Kanpur, the population of street children is around 400,000 to 500,000. A UNICEF study has estimated that around 47.4 per cent of them spend their nights on the open street; on Calcutta almost all street children and in Mumbai more than three-fifth live on the open street.

A considerable proportion may live with their parents and other family members but the realities of drudgery and hopelessness have deprived them of even the smallest of childhood pleasures and comforts, deprivations which are visible on their faces.

A basic development package must be avail-

able to all poor and disadvantaged children with particular reference to children living in conditions of poverty, irrespective of their gender, caste, class and ethnicity, keeping in view their location, and age-specific needs. Broadly, the package may include :

- A safe and secure shelter and a congenial environment that includes access to potable water, privacy for bathing and defecation, support-systems to protect children (especially girls) from abuse, protection and care of children of working parents, and provision of adequate recreational spaces;
- Accessible, affordable, and quality health care and creche services;
- Universal access to education, particularly basic education, and pre-school facilities;
- Protection from labour, abuse and economic exploitation;
- Opportunities for skill training.

Many NGOs have initiated activities to improve the life of disadvantaged children, particularly in the areas of education, health care and skill development. Government programmes have to be further extended. Local governments are becoming sensitive to their existence and the Ministry of Welfare, Government of India has initiated a scheme for the welfare of street children in the Eighth Five Year Plan. Some 59 NGOs have been provided financial support in 16 cities, aggregating to around Rs.30 million during a two-year period, 1993-94 and 1994-95. This is a small beginning and the process must be accelerated.

Some Habitat II indicators present an insight into the status of children. A critical indicator is child mortality. Child mortality is considerably lower in the urban areas as compared to rural areas, which indicates availability of better medical facilities in urban areas (Indicator 5).

Indicator 5 : Child Mortality, 1993

(Per 1000 live birth)

No.	State	Total	Rural	Urban
1	India	23.7	26.6	13.4
2	Andhra Pradesh	17.1	19.0	11.9
3	Assam	29.9	31.6	14.8
4	Bihar	25.3	26.5	13.7
5	Gujarat	20.7	23.5	14.6
6	Haryana	20.3	21.1	17.0
7	Himachal Pradesh	16.1	16.7	8.7
8	Karnataka	20.0	22.9	13.7
9	Kerala	3.4	3.5	2.9
10	Madhya Pradesh	36.9	41.4	17.8
11	Maharashtra	14.1	17.2	9.4
12	Orissa	33.7	35.3	19.5
13	Punjab	16.1	18.4	9.6
14	Rajasthan	26.2	28.4	15.4
15	Tamil Nadu	13.6	15.4	9.4
16	Uttar Pradesh	32.9	35.2	22.0
17	West Bengal	17.0	18.7	9.0

Source : Registrar General India; Sample Registration System, Mortality Indicators, 1993.

CHAPTER 3

2 CURRENT SITUATION

3.1. Introduction

Independence in 1947 provided an unique opportunity to the latent energies of the people of India to develop the country on a sustainable basis. The country experimented with a number of models, sometimes replicating what was considered as good practices, innovated its own strategies and invariably learned from mistakes. Much of the development was undertaken on the basis of the country's vast reservoir of natural and human resources. A major challenge was faced at the dawn of independence, when millions of people were displaced across a new international boundary and had to be provided employment and shelter. The magnitude of this rehabilitation effort was enormous for a newly independent country with limited infrastructure and financial resources. Ingenuity and the spirit of accommodation, a legacy of a 5000-year-old civilisation, as well as the approach of the new government to assume the role of a provider, enabled the country to overcome the problem and integrate the displaced millions into the mainstream of Indian socio-cultural and economic environment. This spirit has been evident in the last five decades, with migrants from all parts of India and outside being integrated in the expanding urban scenario across the country.

The country has a history of adapting the best practices from across the world, and introduce new approaches which might enable her to meet the growing challenges of economic development, employment generation, poverty alleviation and human settlements and regional development. Since 1991, India is in the process of economic reforms: the basic objective being to facilitate private sector entry into areas which were formerly the preserve of the public sector, and pave

the way for globalisation of the economy. In this process, economic activities and financial rules have been significantly freed from regulatory controls, that existed in the past.

It is in this perspective that this analysis of the current situation is presented. The analysis covers the status of housing, infrastructure and land markets, and the financial system that is directly concerned with these markets. A major urban service, transport, critical to the sustainability of urban settlements, is examined. The impact of demographic developments and growth of the informal sector, both of which are critical issues in the context of urban societies, are discussed. As the efficiency of urban activities ultimately depends on the local governments and the city managers' capacity in devising viable solutions to critical problems, a strong monitoring and evaluation system is a basic requirement. This issue, therefore, has also found a place in the analysis of the current situation.

While economic development and industrialisation have contributed to the process of urbanisation, they have had a serious impact on the human settlements sector. The developments in the latter sector have been also influenced by socio-economic changes — as people migrated from the rural to the urban environments, from traditional socio-cultural situations to a world where lifestyles and economic activities undergo rapid transformation. The migrants faced challenges in finding solutions to the priority needs of shelter and income generation, and many of them, especially the poor, found their own solutions through informal work and shelter. Their entrepreneurial talent often came out in these trying conditions and lack of access to the formal labour market stimulated (and often compelled) the latent talent to surface out and undertake a wide

range of small businesses and micro-enterprises. Learning by "watching and replicating" became the hallmark of transfer of skills and the capacity-building processes that the people evolved for themselves. A market-driven growth model of the informal sector has become an increasingly visible characteristic of urbanising India.

3.2. Housing

a) *Housing as a Development Activity*

The main concern of India in the initial decades after independence was socio-economic development. The thrust of development programmes was to build an industrial and agricultural base, including infrastructure like power, roads and communication. As financial, entrepreneurial and managerial resources were limited, the government developed a public sector approach to economic and social development, the latter directed towards human resource development. Housing remained largely a private sector and people's activity. The concern of the government was to meet directly the housing needs of the middle- and lower-income groups, mainly through cooperatives. Social housing was provided by the state parastatals, who also provided some housing for other income groups. More important than housing was the concern with social issues and providing safeguards to the large mass of population living in the rural economy.

Government's intervention in the housing sector was limited. The First Five Year Plan provided 7.4 per cent of the public sector plan resources (Rs. 2.5 billion in 1951) for meeting the challenges of housing millions of people from across the newly demarcated national borders; thereafter, the share of housing in plan allocation was modest, ranging from 1.2 to 4.9 per cent. The private sector has always been the major source of funds, providing 70 to 80 per cent of total investment in housing in the first five plans and 92 per cent in the Sixth and Seventh Plans. Creating a conducive environment for private sector investment and operations was accepted as a policy objective, but was not adequately carried out at the policy formulation level. A private-sector-led housing programme did not, therefore, take off in the desired direction and at the required pace. The creation of housing-related infrastructure assets and their maintenance was largely the

responsibility of the local governments and to some extent, the State governments, but a weak resource base and unimaginative pricing policy, made the pace of development slow. Public sector activities in the infrastructure market were mainly resource-allocated programmes.

In more recent years, particularly after the initiation of economic reforms, the government recognised the need to utilise housing and related infrastructure activities as a part of the economic development programme. The intention is clear in recent documents like the Eighth Five Year Plan (1992-97) and particularly the National Housing Policy (1994) which states (p. 1): "Shelter and development are mutually supportive. Housing forms an important part of the strategy of the government for the alleviation of poverty and employment generation, and is to be viewed as an integral part of overall improvement of human settlements and economic development."

b) *Housing Market*

During the last two decades, housing contributed around 10 to 12 per cent to annual gross capital formation and income from housing in GDP averaged 5 per cent. One of the reasons for this low contribution was the non-monetised form of activity, prominent in housing stock in rural, hilly and tribal areas. This scenario is changing with increasing monetised activities, particularly in large rural centres. In slum and squatter settlements in the metropolises, large cities and small and medium towns, there has been increasing use of market-sourced materials, particularly second-hand and recycled materials. Some amount of non-monetised inputs, especially labour, is used for developing the housing stock. Some other restrictive factors are the lack of a proper operational environment, reflected in an inefficient land market, restrictive legislative provisions and limited access to financial resources.

The Planning Commission estimates of 1987-88 placed the average annual capital formation in housing at Rs. 15.5 billion for the period 1950-90 and only 16 per cent of this amount was accrued from the formal financial system. The annual capital formation in the housing sector has increased from Rs. 2.3 billion during the First Plan period to Rs. 8.9 billion during the Fifth Plan period and to Rs. 62.9 billion in the Seventh Plan period. While the institutional housing finance system has expanded considerably in the last

decade, housing is still predominantly financed by the people.

The Indian housing stock of 148 million units in 1991 includes 39.3 million units in urban areas (26.5 per cent) and 108.7 million units in rural areas. This stock is valued at Rs. 3258 billion in 1991 (Table 5). The composition of the housing stock by typology and materials used for wall and roof clearly shows a distinct improvement over the last two decades. More market-sourced mate-

rials are in use both in the urban and rural areas, and in the latter is particularly notable. It is indicative of the growing supply of building materials as well as affordability of the people. From environmental considerations also, this is a healthy development. Government programmes like Indira Awas Yojana (IAY) and rural house sites and construction assistance schemes for rural landless workers and artisans have contributed to this improved housing scenario.

Table 5: Composition and Value of Housing Stock, 1981, 1991 and 1995

	Kutchha		Semi-pucca		Pucca		Total	
	No.	Value	No.	Value	No.	Value	No.	Value
1971								
Rural	32.7 (43.89)	11.7	27.6 (37.05)	27.6	14.2 (19.06)	50.4	74.5 (100.00)	89.7
Urban	2.4 (12.97)	1.3	4.3 (23.24)	4.2	11.8 (63.78)	71.0	18.5 (100.00)	76.5
Total	35.1 (37.74)	13.0	31.9 (34.31)	31.8	26.0 (27.95)	121.4	93.0 (100.00)	166.2
1981								
Rural	36.6 (41.26)	39.6	33.3 (37.54)	100.8	18.8 (21.20)	201.9	88.7 (100.00)	342.3
Urban	3.1 (11.07)	5.1	6.8 (24.29)	20.1	18.1 (64.64)	329.5	28.0 (100.00)	354.7
Total	39.7 (34.02)	44.7	40.1 (34.36)	120.9	36.9 (31.62)	531.4	116.7 (100.00)	697.0
1991								
Rural	35.7 (32.84)	116.4	37.2 (34.22)	338.3	35.8 (39.94)	1158.6	108.7 (100.00)	1613.3
Urban	3.3 (8.40)	15.7	6.2 (15.77)	53.4	29.8 (75.83)	1575.6	39.3 (100.00)	1644.7
Total	39.0 (26.35)	132.1	43.4 (29.33)	391.7	65.6 (44.32)	2734.2	148.0 (100.00)	3258.0
1995								
Rural	37.5 (32.44)	182.4	37.6 (32.56)	524.29	40.5 (35.00)	2023.95	115.6 (100.00)	2730.64
Urban	3.2 (7.06)	21.14	6.8 (15.04)	91.59	35.4 (77.90)	2887.93	45.4 (100.00)	3000.66
Total	40.7 (25.28)	203.54	44.4 (27.58)	615.88	75.9 (47.14)	4911.88	161.0 (100.00)	5731.30

Sources : Census 1971, 1981, 1991, National Building Organisation (NBO) Society for Development Studies (SDS) for 1995

Notes: 1. Numbers in million units. Value in Rs. billion at current prices.

2. Figures in parentheses are percentage distribution.

3. The housing stock estimates are from Census 1971, 1981 and 1991 and 1995 estimates are by SDS.

4. The estimates of value of housing stock are on the basis of NSSO 44th Round data on cost of construction and average floor area per building (1988-89), adjusted by CSO data on building cost index at current prices.

5. Census of India defines *kutchha*, *semi-pucca* and *pucca* in terms of the durability content of the materials used, particularly in walls and roof.

The housing shortage in terms of minimum housing needs is estimated at 5.0 million units in 1991 and is projected to increase by 0.5 million units over the next six years (Table 6). The other components of the housing shortage are more substantial. These relate to the congestion or overcrowded houses and upgradation and replacement demand. Total housing shortage is estimated at around 23 million units in 1991. Upgradation demand is the main concern, both in rural and urban areas. The housing shortage estimates are suggestive of the volume of activities that need to be taken up in the NPA.

The cost of housing solutions is high in terms of household income. Taking the median households in the cities included in the India Indicators Programme, house cost to income increases sharply with the size of the urban centre, both in formal and informal settlements. In the small towns, a median house requires an investment of 3 to 4 years' household income, in intermediate cities 5 years' income and in mega-cities considerably more, 13 years' income in Mumbai, 12 years' income in Delhi, 11 years' income in Bangalore and 7 years' income in Madras. In the informal housing market also, a similar pattern is

observed; 2 to 3 years' annual household income is required for a housing solution in the slum and squatters settlements in the metro- and mega-cities and less than one year's income in the small and intermediate towns. The rental housing indicator points out the need to develop rental housing stock. House rent accounts for 20 to 25 per cent of household income in small and intermediate towns, and 30 to 50 per cent in metro- and mega-cities.

c) Delivery System

The main delivery system is built upon people's own efforts. While in urban areas people generally acquire basic inputs from the market and hire skilled and unskilled labour to construct a housing unit, in semi-urban, rural and tribal areas, which account for the larger part of housing activity, family and community participatory efforts are prominent in the construction of the housing unit and often in acquiring the materials as well.

The role of NGOs and CBOs in the delivery system of housing to the poor in rural and urban areas as well as other vulnerable groups has become important in the last decade. As per the

Table 6: Housing Stock and Housing Shortage, 1991, 1995 and 1997

	(in million)								
	1991			1995			1997		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
1. Population	846.3	628.7	217.6	905.7	656.0	249.7	937.7	670.2	267.5
2. Households	153.2	112.5	40.7	166.4	119.1	47.3	174.1	122.3	51.8
3. Housing Units	148.1	108.8	39.3	161.1	115.6	45.5	168.5	118.7	49.8
4. Housing Shortage	22.9	14.7	8.2	31.1	22.6	8.5	33.0	23.5	9.5
i. Minimum Need	5.2	3.8	1.4	5.3	3.5	1.8	5.6	3.6	2.0
ii. Congestion	1.9	—	1.9	10.9	8.5	2.4	11.4	8.7	2.7
iii. Replacement Upgradation	15.8	10.9	4.9	14.9	10.6	4.3	16.0	11.2	4.8

Sources: 1. Census of India : Tables on Houses and Household Amenities, 1991 Housing shortage estimates, NBO for 1991, and SDS for 1995 and 1997

- Notes:
1. Minimum need is the difference between households and housing stock.
 2. Congestion housing reflects households with more than one married couple per room.
 3. Upgradation demand represents the housing need of households living in unserviceable *kutcha* units in rural areas and *kutcha* units in urban areas.
 4. Congestion factor is not included in rural areas in 1991 as the joint family system is predominant. This factor is, however, included in 1995 and 1997 estimates, to take into account the possible growth of nuclear families and new housing typologies.



Women discussing problems in their communities and taking charge



Women participate in every part of construction

estimates of the NGO Key Group, the housing need of these people is around 2.1 million new units, and upgradation backlog of 11.4 million units (Table 7). The lack of an institutional mechanism to coordinate and channel NGO/CBO inputs to shelter construction is a major constraint in this direction. Resources are also limited for NGO activities in housing, as compared to resources in the social sectors of welfare, literacy and health care.

Table 7: Housing Needs of Urban and Rural Poor, 1991

	(Number of units)		
	Urban	Rural	Total
New Unit	0.56	1.50	2.06
Upgradation	2.63	8.72	11.35

Source: SDS

The Ministry of Rural Areas and Employment, through the Council for Advancement of People's Action and Rural Technology (CAPART), is developing programmes to build the capability of NGOs and support their direct intervention in rural housing programmes. The Department of Urban Employment and Poverty Alleviation of government of India is assessing the capacity-building requirements of NGOs as dynamic actors in housing programmes for the low-income groups. HUDCO has set up an NGO-facilitating centre for this purpose.

The role of the government in the human settlements sector has to become progressively that of a facilitator, ensuring access to developed land, basic services and, where necessary, access to building materials, technology, construction skills and finance so that housing can be undertaken as a people's programme. However, the public sector is not absolved of its responsibility of providing housing to those segments of the people who cannot be served by other actors.

The public sector housing activities have been mainly undertaken through State Housing Boards and Development

Authorities, based on specified norms, standards and cost ceilings for houses for different income categories. The State delivery system has developed a wide range of housing programmes that particularly seek to provide housing to the lower segments of the market, such as the households in the economically weaker income categories. Apart from providing built units, these agencies also provide developed sites and services and core housing units. The investment by the public sector in housing and building construction activity during the five-year period from 1987–88 to 1991–92 has been Rs. 70.49 billion; on an average Rs. 14.10 billion per annum. HUDCO has financed two-fifth of this investment; Rs. 5.73 billion per annum. The Indira Awas Yojana (IAY), the rural housing programme introduced during the Seventh Plan (1985–86), has contributed as many as 2.63 million units till 1995–96 and provided 22.1 million plots to the landless poor, supplemented by a construction credit to one-third of these plot holders (7.45 million) up to 1994–95. Under the 20-Point Programme, government of India has provided 2.5 million houses to the low-income households and four-fifth of them were for households in the economically weaker section category.

The cooperative sector has developed a strong institutional infrastructure. It has a network of 85,000 primary housing cooperatives with 5 million membership in 1992–93, indicating a sharp growth from 5,564 primary housing cooperatives with membership of 0.32 million in 1959–60. These primary cooperatives are part of the institutional infrastructure at the state level through 25 Apex Cooperatives Housing Federations, and all of them are members of the National Cooperative Housing Federation of India, which is the umbrella organisation of the cooperative housing movement in the country. As of end of March, 1995, the apex federations had mobilised Rs. 33,228 million from the financial institutions and disbursed the resources to the primary societies.

The cooperative sector's contribution has been 1.4 million housing units and as many as 0.54 million housing units have been developed during the period 1989–90 to 1994–95. The cooperatives cater mainly to the economically weaker sections and the low-income group households, who account for three-fifth of the housing stock of this sector. The middle-income households account for two-third of the cooperative housing stock. The cooperative housing solutions have

been found to have a higher satisfaction level in terms of design, quality of structure, services and cost than of other actors. The achievement is mainly due to the participatory endeavour of the members, who become effective "watchdogs" of the construction and development process.

The cooperative sector has also played an important role in rural housing, where the institutional infrastructure consists of 2000 primary societies, mainly for the economically weaker sections of the population. The Tamil Nadu cooperative housing system has made a significant contribution of 0.6 million units. Considerable activity has been also undertaken in the states of Maharashtra, Gujarat, Punjab, Orissa, West Bengal, and Meghalaya.

The organised private sector activity has been mainly operating in major metropolitan cities. In recent years, it has extended to small and medium towns in close proximity to metro-cities, where land is available and costs are substantially lower. Apart from constructing apartments and plotted unit housing for the middle- and high-income groups, it has also taken up the development of full residential complexes, including the provision of basic services and community amenities. In some of the housing programmes, specific provision is made for the low-income and economically weaker section categories. The provision for low-income groups is often due to the stipulation of the local or state land allotment agency. Private developers have also played an important role in the development work for individual plot owners and cooperative societies. Some have diversified into housing finance intermediation to provide a total package. The development of housing finance institutions will enable the private sector builders to initiate activities in small- and medium-sized towns. This delivery mechanism is expected to play a major role in the years to come.

3.3. Housing-related Infrastructure

Estimates of the total value of urban infrastructure assets in the country are not available mainly because the larger part of the existing assets were developed several decades ago, a significant proportion being five to six decades old. Some upgradation has taken place but this has not been monitored. Investment in the infrastructure sec-

tor since the beginning of India's planning (1951) has been primarily through plan allocations. Some estimates of plan allocations during the last two decades for a major component like water supply and sanitation, presented in Table 8 are illustrative of the magnitude of the activity. Infrastructure development also takes place through public sector corporations and large private sector industry, especially when they develop industrial townships. These are however, not likely to be significant as urban infrastructure development has been traditionally the responsibility of local governments and in recent years, also of some of the urban and housing sector parastatals.

The backlog demand is a major concern of the urban infrastructure sector. Infrastructure programmes have been largely funded externally from international, national, and state government resources and they have a weak relation to local requirements. Upgradation and renovation activities were infrequently undertaken mainly due to the constraint of financial resources. Major investments in sewerage, for example, in some of the mega- and metro-cities in India were made almost a 100 years ago and little has been done ever since.

Estimates are presented in Table 9 on the backlog investment requirement up to 1997 and projections over the next 25 years for water supply, sanitation, solid waste disposal and roads. These estimates are based on certain assumptions and data which are elucidated in Annexure 3. The estimates are indicative of the magnitude of the

future tasks in the urban infrastructure sector and the composition of the infrastructure market such as new asset creation and replacement, renewal and upgradation of the existing infrastructure assets. As per the estimates, a minimum amount of Rs. 357 billion (at 1995 prices) would be required to meet the 1997 backlog for water supply related infrastructure utilising the groundwater system. The minimum investment requirement would be higher, Rs. 407 billion, if the surface system is developed for this purpose. The backlog investment is around 50 per cent of the total investment required up to 2021. The proportion is comparable even if we take the "high" estimates of investment requirement for water supply assets, covering both backlog and the new demand. In addition to the capital investment, expenses on operational maintenance and depreciation would have to be met, but these would be in the form of operational cost and not capital investment.

In the case of other infrastructure assets too, backlog investment would be a major part of the investment programme over the next 25 years. Taking the low investment requirement for development of sanitation facilities, a minimum investment of Rs.250 billion is needed to meet the backlog (53 per cent of total investment) if twin pit pourflush system is adopted and progressively higher amounts for septic tank system (Rs. 416 billion) and water-borne system (Rs. 728 billion). In the case of solid wastes disposal, however, the backlog investment is a considerably lower proportion of the total investment: 35.0 per cent or Rs.

Table 8: Water Supply and Sanitation Housing Sector : Plan Outlay

(Rs. million)

Plan Period	Total Public Sector	Water Supply and Sanitation			Housing		
		Total	Rural	Urban	Total	Rural	Urban
5th Plan (1974-79)	392874.9	10306.8 (2.62)	4812.4 (1.22)	5494.4 (1.40)	6009.2 (1.53)	550.0 * (0.14)	5459.2 (1.39)
6th Plan (1980-85)	975000.0	39220.2 (4.02)	21542.4 (2.21)	17677.8 (1.81)	14908.7 (1.53)	5370.0 (0.55)	9538.7 (0.98)
7th Plan (1985-90)	2190292.0	65224.7 (2.98)	35567.2 (1.62)	29657.5 (1.35)	24582.1 (1.12)	5769.0 (0.26)*	18813.1 (0.86)
8th Plan (1992-97)	4341000.0	167110.3 (3.85)	107287.5 (2.47)	59822.8 (1.38)	63770.2 (1.47)	14540.0** (0.33)	13413.5** (0.31)

Source: Planning Commission, Government of India: Five Year Plans.

Notes : Figures in parentheses are percentage of total public sector outlay.

* Data on social housing not included.

** Only central sector distribution.

Table 9: Infrastructure Investment in Human Settlement, 1997-2021

(Rs. in billion, 1995 prices)

	1997-2002		2002-11		2011-21		Total	
	Low	High	Low	High	Low	High	Low	High
I. WATER SUPPLY								
Estimate I—Surface System								
1. Capital Cost	124.2 (61.1)	177.3 (87.2)	350.6 (244.3)	500.7 (349.0)	386.5 (101.8)	552.1 (145.4)	861.3 (407.2)	1230.1 (581.6)
2. O & M and Depreciation	72.3	103.2	227.4	324.7	402.8	575.4	702.5	1003.3
3. Total	196.5	280.5	578.0	825.4	789.3	1127.5	1563.8	2233.4
Estimate II—Ground Water								
1. Capital Cost	101.4 (49.9)	151.9 (74.8)	286.3 (199.5)	428.9 (299.0)	315.6 (83.2)	472.9 (124.6)	703.3 (332.6)	1053.7 (498.4)
2. O & M and Depreciation	59.1	88.4	164.9	278.3	266.1	492.9	508.9	859.6
3. Total	160.5	240.3	451.2	707.2	581.7	965.8	1212.2	1913.3
Estimate III								
1. Capital Cost		443.3 (218.2)		1251.6 (872.4)		1379.9 (363.5)		3074.8 (1454.1)
2. O & M and Depreciation		258.0		811.8		1438.2		2361.8
3. Total		701.3		2063.4		2818.1		5436.6
II. TOILET FACILITIES								
Estimate I—Water-borne System								
1. Capital Cost	199.2 (109.2)	284.5 (155.9)	588.6 (436.8)	840.6 (623.9)	588.7 (182.0)	840.8 (260.0)	1376.5 (728.0)	1965.9 (1039.8)
2. O & M and Depreciation	78.3	112.1	311.1	444.4	583.1	832.7	1003.2	1389.2
3. Total	277.5	396.6	899.7	1285.0	1171.8	1673.5	2379.7	3355.1
Estimate II—Septic Tank								
1. Capital Cost	113.9 (62.4)	128.1 (70.2)	336.5 (249.7)	378.4 (280.8)	336.5 (104.1)	378.5 (117.1)	786.9 (416.2)	885.0 (468.1)
2. O & M and Depreciation	44.9	50.5	177.9	200.0	333.3	374.9	556.1	625.4
3. Total	158.8	178.6	514.4	578.4	669.8	753.4	1343.0	1510.4
Estimate III—Pit Latrine								
1. Capital Cost	68.3 (37.4)	85.3 (46.8)	201.9 (149.8)	252.1 (187.1)	201.9 (62.4)	252.1 (78.0)	472.1 (249.6)	589.5 (311.9)
2. O & M and Depreciation	26.9	33.6	106.7	133.4	200.1	249.8	333.7	416.8
3. Total	95.2	118.9	308.6	385.5	402.0	501.9	805.8	1006.3
III. SOLID WASTE DISPOSAL								
1. Capital Cost	10.2 (3.7)	16.3 (6.0)	25.8 (15.0)	41.4 (24.0)	35.2 (6.2)	56.5 (10.0)	71.2 (24.9)	114.2 (40.0)
2. O & M and Depreciation	24.9	39.7	65.8	105.7	105.0	168.5	195.7	313.9
3. Total	35.1	56.0	91.6	147.1	140.2	225.0	266.9	428.1
IV. ROADS								
1. Capital Cost	110.7 (59.2)	165.8 (88.7)	323.4 (236.7)	484.6 (354.6)	331.1 (236.7)	496.1 (147.8)	765.2 (532.6)	1146.5 (591.1)
2. O & M and Depreciation	153.0	211.9	505.6	757.4	1051.5	1575.6	1710.1	2544.9
3. Total	263.7	377.7	829.0	1242.0	1382.6	2071.7	2475.3	3691.4

Source: SDS Estimates

Notes: 1. Figures in parentheses are investment for meeting the backlog demand. Estimates are based on the assumption that 15 per cent of the backlog demand would be met during the period 1997-2002, 60 per cent during 2002-11 and 25 per cent during 2011-21.

2. Depreciation relates to new and existing costs.



Shelter upgradation of existing dwellings



Existing dwelling and homes under construction in Kerala, South India

24.9 billion out of an investment of Rs. 71 billion over the next 25 years. The larger part of the investment requirement for human settlements-related infrastructure is in the rural areas (Annexure 3).

The backlog investment cannot be undertaken with a short period of five years, and would have to be spread over a 25-year period. The minimum investment requirement for meeting the backlog for water supply is estimated at Rs. 10.0 billion per annum over the next five years, Rs. 22.2 billion per annum between 2002 and 2011 and Rs. 8.3 billion per annum between 2011 and 2021. In respect of sanitation, the annual requirement over the 25-year period would be between Rs. 10.4 and Rs. 43.3 billion, depending on the type of system developed. The analysis of the infrastructure market suggests that clearing the backlog is critical to the sustainability of human settlements in urbanising India.

The state of urban basic services in the mega and metro-cities, particularly in the city centres, inner city and new development areas, is indicative of the substantial upgradation and urban renewal task ahead. For this purpose, it is not only essential to make funds available but also to provide access to the latest technology, to change planning norms and standards (especially in inner city areas), provide fiscal inputs to activate investment flows, and create the conducive legal environment.

The data base on access to selected infrastructure and services provides an insight into the coverage of the urban and rural population in terms of potable water, sanitation facilities, electricity and public transport. National indicators establish that accessibility has improved during the last decade, 1981-91, in both rural and urban settlements. Thus, for example, access to safe drinking water has gone up during 1981-91, from 38.2 to 62.3 per cent and the improvement has been extremely significant in the rural areas (from 26.5 to 55.5 per cent) and substantial in the urban areas (75.1 to 81.4 per cent).

The delivery system has several operational constraints, such as lack of control over sources of water and high level of leakages and line losses. The accessibility of the urban poor to the public distribution system is extremely limited. The per capita availability of water in urban slums is 27 lpcd, as compared to a desirable national norm of 90 lpcd and minimum norm of 70 lpcd (NCU



Improved facilities for water



recommendations). Slum and homeless households in Mumbai consume 16 lpcd and their women spend a few hours in the early hours of the morning to collect and store the day's requirements. The average per capita water supply in a class I city is 165 lpcd, slightly higher than the national target of 140 lpcd. In 12 metro-cities, the per capita supply is 189 lpcd, but within the metro-cities, as also in other cities, there are significant variations depending on the location of the habitat, jurisdiction of the local body, and income of the people.

In terms of toilet facility, rural India is inadequately served. Less than one-tenth of rural households have a toilet facility. In urban India, 63.9 per cent of households had toilet facility in 1991, up from 58.2 per cent a decade ago. The situation is appalling in urban slum settlements. The

provision of a few toilets for a settlement having several hundred households may provide a statistically satisfying coverage of slum clusters but does not mean much in terms of service level. A priority issue in the NPA is to extend the coverage and quality of these services.

In terms of access to electricity, there has been an improvement during 1981-91, but the gap to be bridged for the coverage of 100 per cent remains substantial. Some 42.4 per cent of Indian households had an electricity connection in 1991, a considerable improvement over 26.2 per cent in 1981. A similar situation is evident at the disaggregated level in rural and urban India (rural 30.5 per cent and 14.7 per cent, and urban 75.8 per cent and 62.5 per cent, respectively). Within the rural and the urban areas, there is inequitable access to electricity.

3.4. Land

Land scarcity is one of the key impediments to the development of housing and urban infrastructure services in urban India. Legislative provisions like the Urban Land (Ceiling & Regulation) Act, 1976, whose basic objective is to make land available to all income segments in the society in urban agglomerations, has in practice, led to distortion in the land market operation, giving rise to a monopolistic situation, rampant speculation, profiteering and proliferation of illegal settlements. The land supply has been frozen through owner-

ship by government departments, large corporate enterprises, public, religious and charitable trusts, academic institutions and members of former princely families. Many private landowners who might have released their vacant lands have been restricted in doing so as they are frozen, neither being allowed to develop them or transfer to others for development until the cases are settled and land is either taken over by the government or released back to them.

On an average, around two-fifth of the land is normally used for residential purposes, formal and informal. In the smaller towns the proportion of land for the purpose varies between 20 and 30 per cent. The transport and business sectors account for one-fifth to one-fourth of the land. Delhi is an exception; with business accounting for 6.3 per cent only of total land in use (Indicator 6).

The basic issue, is how to flatten the supply curve without delay and with efficiency. While efficient functioning of land market is a *sine qua non*, it is crucial to ensure that the urban poor are not pushed out of the market in this process.

3.5. Housing and Urban Finance

Specialised financial intermediation for housing and related infrastructure has a history of about 25 years. Within this period, a wide range of resource mobilisation and credit instruments have been introduced. Almost from the beginning, the Indian housing finance system mobilised

Indicator 6 : Land Use, 1993

No. Cities	Total area (sq km)	Residential Formal (%)	Residential Informal (%)	Business (%)	Agriculture (%)	Transport (%)	Others (%)
1 Mumbai	446.35	35.89	2.25	12.83	0.00	9.83	39.20
2 Delhi	624.28	21.19	19.62	6.31	2.36	12.54	37.98
3 Madras	612.11	18.40	12.78	9.86	17.70	10.30	30.96
4 Bangalore	284.00	26.43	12.12	9.62	0.00	28.41	23.42
5 Lucknow	91.71	22.00	30.50	9.50	0.00	9.80	28.20
6 Hubli-Dharwad	109.32	20.10	6.81	8.50	25.22	18.94	20.43
7 Bhiwandi	26.36	22.40	0.76	8.73	0.00	8.96	59.15

Source : SDS, UNCHS City Indicators Programme, based on data from local government, directorate of town planning and development authority in the specific towns.

Notes : 1. "Others" include industries, parks, playground, public, semi-public and vacant land.

2. Informal residential includes only unauthorised clusters. Slums taken up for *in situ* development and upgradation are not included, as per UNCHS definition.

funds from the international financial market, a test of its viability. The Housing Development Finance Corporation (HDFC), a private sector actor, took the lead in establishing the viability of a market-driven housing credit instrument in a socio-economic environment where subsidised housing credit was the guiding principle. The success was achieved through resource strategies and home loan practices that resulted in low resource cost and high recovery rate. A foundation was built for a viable home ownership market and, later, the model was adopted by other actors in India, and other countries (See Box 8).

The public sector leader, HUDCO developed credit packages to reach out to the lowest income deciles, first in the urban areas, then in the rural areas. It utilised the network of public agencies in the state sector to attain an effective outreach to the poor, apart from other income groups. An innovative concept of State government guarantee was evolved and fine-tuned to give the initial breakthrough to institutional housing credit to reach out to the poor and the disadvantaged.

At one period, when individual home ownership finance market was in its nascent stage in urban areas, and there was no institutional organisation to take up responsibility of loan approval, sanction, disbursement and recovery in the rural areas and small towns, the only organised network was of public housing boards and state cooperative housing societies. These were nurtured and developed by HUDCO as a part of its credit delivery system. In some cases, the agencies also provided cash credit directly to the people (Box 9).

Prior to the emergence of specialised housing finance institutions, the insurance sector was the

lead actor in financing housing and urban infrastructure, as part of its statutory obligation to provide a proportion of its funds to socially-oriented sectors, one of which was housing. The banking system provided nominal funds through its directed credit programme. Less than one per cent of the population, having wage employment in the organised sector, had access to house-building advances from the employers or withdrawal facility from a provident fund (pension fund) for financing a housing programme. However, the mortgage to credit ratio remains small, in spite of the growth of housing finance programmes.

The vast majority of Indians still depend on their own savings and other resources. With the successful programmes of HDFC and HUDCO, the confidence of the banking sector and other actors in the viability of housing finance intermediation was built up and many specialised housing finance institutions emerged within the last seven years. The cooperative sector has played an important role and almost every State in the country has a cooperative housing finance mechanism; their total resource mobilisation from financial institutions aggregates to Rs. 33,228 million.

Recognising the potential of the housing market and the need to strengthen it, the government of India established the National Housing Bank (NHB) in 1988. This premier refinancing institution is also a regulatory body to promote, stimulate and develop the housing finance system. The effectiveness of the interventions of the NHB is reflected in the developments in the demand and supply side of the housing finance market, particularly in terms of an extensive network of outlets that provide individual home

BOX 8 : MARKET-DRIVEN HOUSING FINANCE SYSTEM : HDFC MODEL

The Housing Development Finance Corporation (HDFC) is one of the first Indian private sector housing finance companies, established in 1978, in an era of public-sector-led housing and subsidised housing finance activities. The vision was to expand household access to market-oriented housing finance and services. Equity capital and loans were raised from the market with the participation of national and international financial institutions, and credit appraisal and loan recovery were given equal importance. In 1990-91, HDFC disbursed housing loans of Rs. 6.7 billion, which accounted for 36.4 per cent of the formal financial flows in the housing sector. In 1992-93, HDFC disbursed housing loans of Rs. 7.2 billion and financed more than 0.1 million dwelling units. In response to the existing regulatory environment, cumbersome mortgage foreclosure procedures, high stamp duties and problems of verification of loan applicant's income, HDFC developed innovative mechanisms, such as higher loan-to-value ratio, step-up repayment, innovative collection techniques and third-party guarantee. HDFC has mobilised resources from households directly through retail deposits.

BOX 9 : REACHING HOUSING FINANCE TO THE POOR : HUDCO MODEL

The Housing and Urban Development Corporation (HUDCO), a fully-owned company of government of India, is a techno-financing agency for housing and infrastructure projects. It provides capital finance to State housing agencies, on State government guarantee, and in the process facilitates the access of the people to housing finance. Low-income housing schemes are given preference. HUDCO formulates norms for cost ceilings and physical standards for various segments of the housing market to be serviced through the public, cooperative, NGO and private delivery systems. The responsibility for implementation of HUDCO-financed projects, recoveries and other aspects of management rests with the borrowing agencies.

HUDCO's contribution over its 25 years of specialised financial intermediation lies in establishing the viability of channelling funds to low-income settlement activities on an institutional basis. The activities have been carefully developed to service both rural and urban habitats : 10,713 projects have brought in an investment of Rs. 15.6 billion, with HUDCO meeting 61 per cent of the project cost (Rs. 9.55 billion). Rural housing projects, numbering 1558, account for more than one-tenth of the HUDCO's loan portfolio but constitute almost one half of the total dwelling units created through HUDCO intermediation : 2.8 million units out of 5.7 million units. On an average, HUDCO has contributed to the development of 27,700 dwelling units per year over the last quarter century.



Shacks to shelter . . . transformation through HUDCO

loans through housing finance institutions, commercial banks and cooperative banks and bulk credit through HUDCO and housing cooperatives. In response to the need for various types of credit instruments to cater to specific needs of clientele who are not adequately covered by the existing credit programmes, NHB has introduced and promoted the marketing of clientele-specific instruments to service the needs of women, rural households and economically weaker sections (Box 10).

Several initiatives have been taken in recent years to provide specialised credit for housing-related infrastructure, in particular, water supply, sanitation, transport, and electricity. While two insurance corporations, Life Insurance Corpora-

tion of India (LIC) and General Insurance Corporation (GIC) are pioneers in institutional financing of urban infrastructure, HUDCO and the private sector are emerging as leaders in providing specialised credit instruments for components like roads, bridges, water, sewerage and sanitation. The emerging infrastructure financial system provides a mix of leasing finance options also. Some initiatives are being taken up at the level of the states also, particularly in internationally funded projects, to develop a financial system for local governments. A Municipal Urban Development Fund (MUDF) has been constituted for financing infrastructure development in Tamil Nadu under the Tamil Nadu Urban Development Project. The MUDF is being restructured into an

BOX 10 : BUILDING THE INSTITUTIONAL MECHANISM FOR HOUSING FINANCE

The National Housing Bank (NHB), the apex financial institution of the housing sector was set up by an Act of Parliament in 1988 to promote and develop a viable and self-sustaining housing finance system that would have an extensive outreach to all segments of the home loan market. An important responsibility entrusted to the NHB was to promote and regulate the growth of the housing finance institutional infrastructure, primarily because it would tap people's savings and they had to be provided due protection. In response to these mandates, NHB evolved a cost-efficient system of reach out mechanism through the network of 115,000 already existing branches of commercial, cooperative and regional rural banks and as many as 350 of them now constitute the core operational mechanism, the "dedicated" and decentralised retail outlets. Apart from this, the NHB has promoted the growth of specialised housing finance institutions, presently around 300 in number that service 200 of the 452 districts in the country and 21 of them have been recognised for refinancing and other supports.

The NHB strategy of integrated projects encompassing serviced land, construction technology and housing development has contributed to the sustainability of the housing activities. As at present, NHBs portfolio includes 218 loan development and shelter projects that would contribute a projected output of 17,432 plots and 73,210 housing units, resulting in an investment flow of Rs. 6790 million, with a loan component of Rs. 5190 million. Recognising its responsibility towards the largely over-looked slum settlements segment of the housing market, NHB has extended its support to 6 major slum redevelopment projects that would channel an amount of Rs. 60 million in this priority activity, largely on the basis of loan capital (85 per cent). This initiative will provide a congenial habitat to around 17,000 people in some 3300 housing units.

The NHB interventions in the development of specialised housing finance companies has led to increase in their deposits base to Rs. 20 billion and housing credit portfolio even more, to Rs. 22.8 billion. The direct reach out of NHB is reflected in two critical indicators, the total financial assistance of Rs. 25 billion over a period of seven years and total savings mobilisation through its "Home Loan Accounts Scheme" amounting to Rs. 4 billion from about 0.5 million depositors. As much as 70 per cent of NHB's support is in the small home loan sector, comprising home loans below Rs. 0.1 million.

innovative Trust Fund Asset Management Company, a public-private sector partnership activity to finance municipal infrastructure asset creation by not only urban local bodies in the state but also the private sector.

The housing finance system has still to overcome a number of operational constraints and these have to be taken up in the NPA. In many activities, subsidy is a major concern and it is not transparent. The issue is to first make existing subsidy transparent and then to direct it more carefully. India's concern is that institutional credit flows to the economically weaker sections of the population must not be affected. The NGOs are most concerned on this issue and human settlements managers recognise the gravity of the problem. The other issue is the transaction cost. This is found to be high not only for the financial institutions but also to its clientele. Equally important is to link up housing credit with income generation credit as invariably the latter is a higher priority need for the poor and access to this credit will also facilitate the repayment of the former.

A few experiments on credit delivery mechanisms through the network of NGOs and CBOs

deserve special mention. The initiatives of SEWA (Self Employed Women's Association) Bank in developing a full-fledged cooperative bank for women in the informal sector and SPARC's (Society for Promotion of Area Resource Centres) networking with formal sector financial institutions for credit to the poor household are notable. The process of learning has to continue, and capacity-building of the new actors is recognised as a crucial concern of the government and of the financial institutions.

A major concern is to reduce the cost of funds as subsidised public funds are visibly on the decline. It is now recognised that the cheapest source of funds is people's own savings. An Indian household is estimated to have a credible saving rate of 21 to 23 per cent. This is without the tapping of some segments of the saving community, particularly in rural and urban informal sectors. It has been estimated that 16 per cent of the saving potential in India is with urban informal sector households, 34 per cent with rural households and 50 per cent with urban formal households. The task is to gain access to the savings of households in the informal sector as they still

remain largely outside the formal saving zone. Apart from this, funds already being mobilised in the economy could be increasingly channelled into housing programmes. The provident and pension funds are best sources as housing is a major security in the post-working period and also in the case of unforeseen calamities. It would be appropriate to develop special linkages of these funds with housing activities, possibly through housing finance institutions and there could be special provisions for utilising a part of these funds for housing programmes at the lower segments of the housing market. The corporate savings could be brought into the housing sector by appropriate fiscal incentives and employee-linked housing programmes. Equally important would be to facilitate housing finance institutions to have full access to the capital market both in India and abroad.

Finally, there are several unresolved problems that constrain the development of the housing finance system. These include fiscal and legislative instruments that require to be modified and constitute a part of the priority agenda.

3.6. Transport

a) *Connectivity and Urbanisation*

Urbanisation receives an impetus with improvement in connectivity. Transportation is, thus, an important ingredient of the infrastructure and services that determine the rate of urbanisation and the quality of life of the people. Modal split, quality of service and tariff structure are issues of concern.

b) *City Transport Models*

India has a wide range of transport services. An important component of the transport network is the animal-drawn vehicle, a prominent mode in small and intermediate cities and also visible in the mega-cities. Cycle and the motorised two-wheeler constitute the common man's personalised transport modes, and rickshaws drawn by these vehicles and buses and taxis form the public transport system. A car is the personalised transport mode in the higher income deciles. Apart from road transport, railways are a major connectivity mode across the country, and in some mega-cities like Mumbai, Calcutta and Madras, they also provide critical suburban trans-

portation services. The average annual railway passenger carrying capacity in India is 2,282 million in suburban areas and 1,467 million in non-suburban areas. While Mumbai has a good system of suburban rail services, the systems are not so extended in other mega-cities, though services in Calcutta and Madras make a definite contribution to connectivity within the city. The Delhi suburban rail services, however, make a marginal contribution.

The urban poor depends largely on public transport, particularly the bus, and a sizeable proportion also rely on non-motorised system including walking. A SPARC study on modes of transport of pavement dwellers in Mumbai (1985) indicated that 70 per cent of them travelled by cycles and walking. It would be interesting from the point of view of policy formulation to have an idea at what point of time tariff structure of motorised mode induces a change in travel mode (Indicator 7).

In this context, it would be useful to know the income groups using motorised public transport modes that derive maximum benefit from the subsidised tariffs. The public transport system, in particular the bus system, is relatively developed in the mega-cities and Mumbai has the distinction of operating the most systematic network, although in terms of the modal split, the train meets three-fifth of the transport needs of Mumbai.

In the case of other mega-cities, the bus is the most important mode of transportation but there is a sharp demand-supply imbalance and privatisation is being introduced to augment the supply. Delhi has introduced a range of privatised bus services to supplement the government-owned fleet of the Delhi Transport Corporation, and these are based on a combination of fare structure and stoppages between specific points. In Calcutta, the privatised service is in the form of mini-buses. Two-wheelers, cycles and walking are important components of the modal split in the small and intermediate towns (Indicator 7).

In the case of intermediate towns, the public transport system is most inadequate, and this has encouraged alternative types of transport modes. In many intermediate cities, scooter- and motorcycle-drawn carriages provide point-to-point services with an effective carrying capacity that is a multiple of the normal permissible capacity. The conventional scooter-drawn rickshaw that normally has a capacity of three passengers is

Indicator 7 : Modal Split, 1993

(percentage to total work trips)

No.	Cities	Car	Train	Bus	2-Wheeler	Cycle	Walk	Other
1	Mumbai	3.98	60.27	19.15	2.23	3.40	6.30	4.67
2	Calcutta	1.27	24.57	64.33	1.54	0.37	-	7.92
3	Delhi	6.00	0.50	52.20	17.00	8.00	14.00	2.30
4	Madras	1.50	4.10	37.90	7.00	14.20	29.50	5.80
5	Bangalore	2.22	0.00	45.98	12.57	6.88	23.97	8.38
6	Ahmedabad	1.63	0.00	15.76	21.54	14.16	39.32	7.59

- Sources :
1. RITES : Traffic and Transportation Policies and Strategies in Urban Areas in India, 1994.
 2. RITES : Traffic and Transport Study for Delhi, 1994.
 3. W. S. ATKINS International : "Comprehensive Transportation Study for Mumbai Metropolitan Region, 1993."
 4. MMDA : Comprehensive Traffic and Transport Studies for Madras, 1993.
 5. BMRTL : Feasibility Study for Bangalore Mass Rapid Transit System, 1994.
 6. SDS, UNCHS City Indicators Programme, 1996.

- Notes :
1. "Others" include auto-rickshaws, cycle-rickshaws and 'tongas' (horse-drawn carriages).
 2. In Calcutta the study excludes 'walk trips'.

redesigned to carry more than twice this number, with adjustment made to accommodate passengers with the driver. Walking is the most important travel mode in the intermediate and small towns, partly also because the public transport system is underdeveloped.

The priority requirement in intermediate cities in India is an efficient bus system, as is the case in many other developing countries. This bus service has to be operated mainly through the non-government sector. To make such a programme viable, a package of fiscal and financial incentives is required, together with rationalisation of the road transportation norms and regulations. This strategy would be also relevant to the bigger cities, though alternative modes of MRTS and taxis would continue to play an important role. However, from the pollution point of view, it would be desirable to encourage a modal split that would restrict the use of personalised vehicles. This would also have a good effect on the travel speed and movement of people within cities, particularly in the inner city areas.

Urbanisation has had a distinct impact on the modal split. With increase in the population size of urban centres, there is a shift from personal modes to public modes. In Mumbai, for example, the transport system is highly developed and the public transport system accounts for 80 per cent of the modal trips. The proportion is still higher in Calcutta, 89 per cent, due to the public mini-bus

and tram services. In Delhi and Madras the coverage is lower at 53 per cent and 42 per cent, respectively. Among the mega-cities, Delhi has a very large proportion of personalised mode, with private motorised vehicles accounting for 23 per cent of the total trips, as against 6 to 9 per cent in the other mega-cities. This is reflected in the comparatively high automobile ownership indicator of 192 vehicles per 1000 population in Delhi as compared to 93 in Madras, 40 in Mumbai and 35 in Calcutta (Indicator 8). The large vehicle population and their poor maintenance in Delhi has given the city the dubious distinction of being the most polluted city in the country.

The comparative transport situation in urban centres comes out clearly from the City Indicator 9: Mumbai, has the highest average travel speed of 2.7 min/km, in sharp contrast to Delhi (5.3 min/

Indicator 8 : Automobile Ownership, 1991

(per 1000 population)

No.	Cities	Automobile Ownership
1	Mumbai	40.24
2	Calcutta	34.60
3	Delhi	192.32
4	Madras	92.51
5	Bangalore	127.59
6	Ahmedabad	84.38
7	Lucknow	117.48

Source : Ministry of Surface Transport, Motor Transport Statistics, 1989-91.

km), although the average travel distance in Mumbai is 150 per cent that of Delhi (12.36 km and 8.34 km, respectively), and much more than other cities. Travel speed is generally lower in intermediate towns as compared to the mega- and metro-cities because of the heterogeneous mix of modes in former towns, dominated by slow-moving vehicles. In the smaller cities, the travel length is also small, less than 5 km, and this encourages walking, cycling and other personalised travel modes, which contribute to a lower travel speed (Indicator 9).

c) *Urban Transport in Delhi : Case Study*

Among the mega-cities of India, Delhi has the most under-developed transport system. A case study of Delhi is presented to illustrate the tasks ahead for a majority of urban centres that are growing rapidly. To manage the transportation requirements of a growing population in a situation of resource constraint and tariff structure, Delhi has introduced a process of partial privatisation of the public bus services. Transport indicators suggest an improvement.

The volume of traffic in Delhi has increased with urbanisation. It generated 9.27 million person trips per day in 1993, as compared to 5.34

million in 1985 and 3.89 million in 1981, up by 138 per cent over a period of 12 years, although the population increased by 46.1 per cent during 1981-91. The public transport system did not contribute much to the trip generation; only one additional public vehicle was inducted in the transport system per 2665 people in 1993, as against one for every 1600 people in 1991. The increase in personalised modes was in response to the shortage of public transport facilities. The personalised vehicle ownership has gone up at an annual rate of 10.6 per cent during a period of eight years, 1985-93. There has been a remarkable change in the modal split, with two- and three-wheelers and cycles playing a more important role in 1993 than in 1986 (increased by 30 per cent in 7 years). The predominant transport mode, however, continues to be the public bus.

The cost of transport in 1993 as a proportion of household income (for medium income households) is substantial (7 per cent) and the average travel time is 44 minutes now, up from 30 minutes in 1985. A contributory factor to the increased travel time is the slow-down in journey speed as traffic progresses from the peripheral areas towards the inner city and central business district. Travelspeed indicators show that in the periphery

Indicator 9 : Travel Time, 1993

(average time in minutes for a work trip)

No.	Cities	Trip Length (km)	Travel Time (minutes)	Travel Time (minutes/km)
1	Mumbai	12.36	33.37	2.70
2	Calcutta	4.88	18.35	3.76
3	Delhi	8.34	44.34	5.32
4	Madras	8.10	21.62	2.67
5	Ahmedabad	3.19	16.00	5.02
6	Lucknow	6.21	23.04	3.71
7	Bangalore	6.70	17.60	2.63
8	Rourkela	4.50	15.00	3.33
9	Udaipur	2.30	10.40	4.52
10	Agartala	2.25	16.84	7.48
11	Shimla	4.18	34.93	8.36

- Sources : 1. RITES : Traffic and Transportation Policies and Strategies in Urban Areas in India, 1994.
 2. RITES : Traffic and Transport Study for Delhi, 1994.
 3. W. S. ATKINS International : "Comprehensive Transportation Study for Mumbai Metropolitan Region, 1993."
 4. MMDA : Comprehensive Traffic and Transport Studies for Madras, 1993.
 5. BMRTL: Feasibility Study for Bangalore Mass Rapid Transit System, 1994.
 6. SDS: UNCHS City Indicators Programme, 1996.

Note : Travel time is the average of all the modes, including walk trips.

areas in Delhi, the travel speed is 37 km/hr, in outer areas 30 km/hr, in Central Business District (CBO) 21–24 km/hr and in the walled city 8 km/hr. The speed may be better than in many other countries, but “waiting time”, is invariably higher in Delhi, due to the imbalance between demand and supply of services. The consequences are reflected in a wide gap between subsidised public trip cost and private trip cost. For similar trip length (10 to 11 km), the extensive Delhi indicators show the fare in public bus is Rs. 2.75, in private bus Rs. 4.11 and personalised 2-wheeler Rs. 5.50. Two factors, seem to determine the switch in transport modes in Delhi : relative speed and price of the service.

3.7. Socio-economic Development

Socio-economic developments have a far-reaching impact on the human settlements typology, structure, environment and related facilities. A few socio-economic indicators are examined in this context.

a) Demographic Development

Demographic transformation in India has been a result of both urbanisation and economic development. The sex ratio, a key indicator, is higher in the rural areas as compared to the urban areas. India still has many rural areas that have a “money-order economy”, as male members in the cities regularly make remittances to family members in the villages. More important is that the sex ratio in urban areas has improved during the last three decades (Table 10), suggesting a settled settlement pattern. The cities and towns included in the City Indicators Programme point to a higher sex ratio in the intermediate towns as compared to the mega-cities, suggestive of the relatively better access to family accommodation in the former.

Another distinct feature of India's demographic profile is that the child population below 15 years constitutes two-third of the total population.

The average household size, another indicator of demographic transformation, has remained relatively stable in the last three decades, though urban households continue to be smaller than rural households (5.3 and 5.6 members). The urban household size seems to reduce with urbanisation. (Indicator 10). Household formation rate is, however, higher in urban areas (3.98) as compared to rural areas (2.28), indicating fresh migration and new household formation.

b) Poverty, Employment and Productivity

Before the process of urbanisation gathered momentum, poverty was essentially a rural phenomenon, linked to drought, famine, natural calamities, marginalisation of farmers, bonded labour, landless farmers and arid lands. The development programmes in the urban areas dispersed the concentration of the poor from rural areas to the urban areas and created a different poverty scenario, dominated by inadequate incomes, degraded living environment and illegal settlements. The rural poor who migrated to urban centres could not enter the formal housing market and the formal employment avenues.

The official estimates on poverty bring out significant decline in the poverty level in both urban and rural areas (Table 11). Nevertheless, in numerical terms, poverty remains a major concern. If poverty is seen from the perspective of access to housing and basic urban services, including social services, it has larger policy implications.

An interesting aspect of urban economy is the disparity in household incomes. While the income seems to rise with the status of urban centres, the income disparity also widens. The resultant

Table 10 : Sex Ratio in Urban and Rural India

	(women per 1000 men)			
India	1961	1971	1981	1991
Total	941	930	934	927
Rural	963	949	952	939
Urban	845	858	880	894

Source : Census of India, Primary Census Abstract, India, Series I, 1961, 1971, 1981 and 1991.

Indicator 10: Household Size and Formation Rate

	Household size		Household formation rate	
	1981	1991	1981	1991
All India	5.55	5.52		2.69
	5.59	5.58	1.42	2.28
Rural				
Urban	5.45	5.34	3.85	3.98
Cities				
1 Mumbai	5.07	4.75	2.41	6.32*
2 Calcutta	5.29	5.11	2.40	2.34
3 Madras	5.14	4.76	4.22	3.66
4 Delhi	5.06	4.98	3.96	4.92
5 Bangalore	5.59	4.98	6.38	5.87
6 Ahmedabad	5.40	5.16	4.58	3.61
7 Lucknow	5.51	5.69	1.83	6.02
8 Vishakhapatnam	4.95	4.59	6.79	8.90
9 Rourkela	4.65	4.73	6.45	2.14
10 Udaipur	5.25	5.12	3.63	3.61
11 Agra	3.47	3.73	4.42	3.02
12 Shimla	5.36	4.90	—	3.02

Source : Census of India, Primary Census Abstract, Series I, Part II B, 1971, 1981 and 1991.

Note : * In 1991, Greater Mumbai urban agglomeration comprised of Greater Mumbai Municipal Corporation and Thane district. The data for 1981 relate to Greater Mumbai only.

Table 11 : Poverty in India

Year	Rural	Urban	India
1972-73	54.1	41.3	51.5
1977-78	51.2	38.2	48.3
1983-84	40.4	28.1	37.4
1987-88	33.4	20.1	29.9

Source : Planning Commission, Report of the Expert Group on Estimation of Proportions and Number of Poor, 1993.

situation is the increased disparity in mega- and metro-cities as compared to that of intermediate towns, although in terms of the poverty line, poverty is less evident.

City indicators on household income distribution bring out the inequity. It is most evident in Delhi, where the average income in the first quintile is less than one-tenth of the average income in the fifth quintile; in Mumbai it is 15 per cent, Bangalore 13.8 per cent and Madras 12.5 per cent (Indicator 11).

Indicator 11 : Household Income Distribution, 1993

(average annual income in US\$)

No. Cities	Quintile I	Quintile II	Quintile III	Quintile IV	Quintile V
1 Mumbai	373.84	619.97	938.53	1552.92	2496.55
2 Delhi	290.00	679.30	1082.00	1495.90	3291.90
3 Madras	346.52	530.88	771.78	1492.23	2780.80
4 Bangalore	385.29	669.51	1143.91	1436.67	2486.77
5 Lucknow	290.50	482.38	761.62	1331.06	2180.60
6 Hubli-Dharwad	284.07	698.21	845.12	1472.93	2008.56

Source : SDS, UNCHS City Indicators Programme, based on city data from surveys conducted by BMRDA, NSSO, TRF, BMRTL, RITES

Several strategies have been tried to tackle poverty *per se*, directly and indirectly through improvement in income, shelter and environment. The Indian package includes grants, subsidies, subsidised food, skill training, credit, site and its services, environment improvement (of slums) and provision of urban basic services. Some of the major programmes are Jawhar Rozgar Yojana (JRY) Integrated Rural Development Programme (IRDP), Food for Work, Nehru Rozgar Yojana (NRY), Prime Ministers' Rozgar Yojana (PMRY), Urban Basic Services Programme (UBSP), Environment Improvement in Urban Slums (EIUS), Site and Services (S&S), and most recently in October 1995, the Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPEP). While the majority of income programmes were for the generation of wage employment, promotion of self-employment through micro-enterprises is being increasingly encouraged.

Some of the programmes have not been effectively implemented due to operational difficulties, target-oriented approach and inadequate resource allocation. Evaluation of these programmes revealed that they were structured at the national level and had little feedback from the ground-level situation. They were adopted uniformly across the country without taking into account location-specific, and group-specific dimensions of poverty and poverty eradication input requirements. The delivery system was bureaucratic, channelled through a two- or three-tier system of Central government, state government and local government. In the case of credit programmes, there was little coordination between the government agency selecting the beneficiary and the bank providing the credit. Realising these deficiencies in the on-going programmes, the government of India shall utilise the inputs of NGOs and CBOs at all possible stages, such as, to assess the people's needs, formulate projects and implement and manage them.

The informal sector is a major component of the urban economy. The share of unorganised/informal sector in total employment has increased over the period 1981-91. In all the major sectors it provides more than one-half of the employment.

The share of informal employment is high in the mega-cities. More than 60 per cent of employment in these cities is generated by the informal

Indicator 12 : Informal Employment, 1993

(per cent to total workers)

No.	Cities	Informal Employment (%)
1	Mumbai	68.10
2	Delhi	66.67
3	Madras	60.60

Sources: 1. Mumbai Metropolitan Region Development Authority
2. Madras Metropolitan Development Authority
3. SDS

sector (Indicator 12). During the 1980s, employment in the unorganised informal sector increased by 2.61 per cent, while the total employment increased 2.34 per cent — public sector 2.22 per cent and private organised sector 0.12 per cent. The growth of the informal sector and its contribution to urban productivity and income generation is now widely recognised. By the turn of the century, if the projected contribution of urban economy to GDP to the extent of 60 per cent is to be achieved, it is essential to promote the productivity in the urban informal sector. At the same time, poverty eradication through enhanced productivity of the informal sector would induct the much-needed success factor and this would be feasible through access to development inputs to the informal sector.

Women and child development have to be integral components of the poverty alleviation programmes and for them as well as others, a total perception of poverty is essential, including not only inadequate income but also access to basic needs like food, shelter, education, health, employment and information. Specific attention would have to be given to the poverty-related issues concerning street children and disabled children.

c) Social Sector Infrastructure and Services

Development of social services, aimed at improving the quality of life in human settlements, has been a priority in India ever since the First Plan and particularly since the focus on minimum needs in the Fourth Plan onwards. An extensive network of Primary Health Care comprising 150,000 health centres in the rural areas and a network of facilities in urban areas have been

developed. There are special schemes in urban areas such as the All Hospital Post-Partum Programme, and several special programmes such as the Urban Revamping Scheme, Urban Family Welfare Centres, and under World Bank support for the largest cities of the country, the Integrated Population Projects, most of which specifically target the urban poor.

In the area of education, the government is committed to the achievement of "Education for All" which includes universal primary education, women's literacy, with a focus on girl and women's education and related programmes. In rural areas, 84 per cent of children have access to a primary school within 1 kilometre of their homes. The National Literacy Mission, operational since 1988, has mobilised over 7 million volunteers and to date made over 46 million adults, a majority being women, literate. Early childhood education programmes are also found through the ICDS network and in urban areas includes the UBSP programme. An elaborate public distribution system, creche services, a new scheme for street children in urban areas and a national programme for eradication of child labour are some of the other important programmes in the social sector.

Urbanisation and the problems of migration have, however, brought in their wake major challenges regarding availability, quality and access with respect to social services. The absence of

informal, community-based social safety networks in urban areas and the fact that women and children represent two-thirds of the poor underscore the urgency of the challenge. Whether it is health services, education, ICDS or creche services, a lot more needs to be done in urban areas with regard to coverage, quality and an effectively coordinated delivery system ensuring proper targeting and reaching the poorest.

NGOs play an important role in complementing the role of the state in the provision of social services, and in mobilising both rural and urban communities towards self-reliant development.

3.8. Local Governance

The Indian federal system has a three-tier institutional infrastructure, with the Central government at the top, state governments at the second level and local governments at the grassroot level. The responsibility for providing basic services and implementing and monitoring many development programmes is mainly of the local government (Box 11). India has the distinction of having possibly the largest number of democratically elected local governments in the world: more than 250,000 rural and urban local bodies managed by almost 3 million elected representatives. While there have been operational

BOX 11: MUNICIPAL FUNCTIONS IN INDIA

1. Urban planning, including town planning.
2. Regulation of land use and construction of buildings.
3. Planning for economic and social development.
4. Roads and bridges.
5. Water supply for domestic, industrial and commercial purposes.
6. Public health, sanitation conservancy and solid waste management.
7. Fire services.
8. Urban forestry, protection of the environment and promotion of ecological aspects.
9. Safeguarding the interest of weaker sections of society, including the handicapped and mentally retarded.
10. Slum improvement and upgradation.
11. Urban poverty alleviation.
12. Provision of urban amenities and facilities such as parks, gardens, playgrounds.
13. Promotion of cultural, educational and aesthetic aspects.
14. Burials and burial grounds, cremations, cremation grounds and electric crematoriums.
15. Cattle pounds, prevention of cruelty to animals.
16. Vital statistics including registration of births and deaths.
17. Public amenities including street lighting, parking lots, bus stops and public conveniences.
18. Regulation of slaughter houses and tanneries.

problems and the financial position of many local governments is not as strong as may be desirable, an institutional system has been developed to decentralise the administration and establish the first-point contact between the government and the people. This facilitates fine-tuning of the basic programmes of local governments to stimulate and sustain economic and other developments.

The network of local government institutions has been developed gradually, keeping in view the recommendations of several expert committees on decentralisation of administrative and financial powers. These included Local Finance Enquiry Committee (1951), Taxation Enquiry Committee (1954) and B.R. Mehta Committee (1957). The 73rd and 74th Constitutional Amendment Acts (1992) aim at transfer of effective powers to the local government. An important function assigned to urban local bodies under the 74th Constitution Amendment Act, 1992, is urban planning, including town planning and planning for economic and social development. To facilitate this process, a provision has been made to establish a District Planning Committee for consolidating plans prepared by the municipalities and panchayats (local government in rural areas) in the district and to prepare a draft District Development Plan to be forwarded to the state government. For metropolitan areas having a population

of 1 million or more, a Metropolitan Planning Committee is to be set up. Apart from these initiatives, the Act defines the role of local government in specific areas of infrastructure. To effectively decentralise political, administrative and financial powers to the local government, the State Election Commissions have been constituted to conduct free and fair elections to the local bodies, with one-third reservation for women, and the State Finance Commissions have been set up to devolve fiscal powers.

While an institutional infrastructure has been established in India for effective local governance, the tasks ahead are substantial. The majority of local governments have inherited a weak resource base and have failed to rationalise their tariff structures and user charges. This is reflected in low per capita capital expenditure in new asset creation. In the case of smaller cities, the amounts are as low as \$ 0.43 per capita in Gulbarga, \$ 2.57 in Mysore and \$ 2.79 in Varanasi. Delhi and Varanasi have a zero debt service status only because of their inability to secure loans. In the case of other cities, the debt service charge is low because of poor capacity to mobilise institutional finance. Other indicators also suggest the weak financial base of local governments: In a few local governments, contractual activities are important (Indicator 13). The operations are typical of a top-down resource channelling system, with activities

Indicator 13: Local Government, 1993

No.	Cities	Income per Capita (US\$)	Distribution (%)					
			Taxes	User Charges	Own Sources	Grant	Loans	Others
1	Mumbai	83.17	42.65	37.17	1.87	0.94	9.56	7.81
2	Delhi	17.10	48.72	1.85	20.67	28.78	0.98	0.00
3	Madras	14.41	75.21	4.77	0.09	5.86	7.34	6.73
4	Bangalore	16.73	67.28	1.08	4.76	9.47	3.76	13.65

No.	Cities	Capital Expenditure per Capita (US \$)	Debt Service Charges (%)	Employees per '000 Population	Wages in Budget (%)	Contracted Expenditure (%)
1	Mumbai	13.75	1.05	14.00	42.93	4.17
2	Delhi	5.63	0.00	8.87	71.83	30.00
3	Madras	4.94	2.64	7.50	51.50	2.00
4	Bangalore	6.25	0.14	6.25	45.05	80.00

Note : 1US \$ is equivalent to Rs. 35 approximately

Source : Annual Records/Reports of Municipal Corporations

at the local level being adjusted to fit into the resource position. The basic function of the local government to prepare need-based projects is, thus, sidelined.

Another major objective of decentralisation of activities is to strengthen the local governments to undertake certain functions that are presently performed by the state government or its agencies. The local government have not been able to take up these activities mainly because of inadequate expertise and financial resources. In the case of smaller local bodies, there is the additional disadvantage of scale which may make the activities uneconomical. Specific capacity-building inputs would have to be also inducted to strengthen the capability of the local government to perform these activities.

The current stage of management of urban development covers a wide variety of experiences. In some of the larger cities the management of urban development is well developed, in others there is no organised system of management and in the case of some local governments there is a multiplicity of agencies. The general practice in Indian cities is to govern them through municipal bodies but many were suspended for a considerable period due to weak financial base, poor city management capabilities and sometimes, political consideration. The 74th Constitutional Amendment Act would change the urban local government scenario. It is now mandatory to conduct election of local governments within six months of their suspension. The devolution of financial powers to the local government will also contribute to a healthy financial base. The National Plan of Action has an agenda that would make local governments function effectively.

3.9. City Data Base

Urban planning is now an important function of the local government and, in this context, India considers the development of a strong data base and management information system as critical for effective monitoring and evaluation. It has become a priority issue in the changing operational scenario wherein the government is to play the role of a facilitator more than that of a provider. An institutional system and specialised skills are needed to effectively coordinate the

work programme of all the actors, with many not being liable for regular monitoring by the government. To ensure that all segments of the housing and urban services market are adequately serviced by the key actors and the end products meet the felt needs of the people at affordable prices, a strong city level data base and monitoring system must be developed on a priority basis. Eleven Indian urban centres have been covered in the City Indicators Programme developed by the UNCHS as a part of the Habitat II preparatory process and will contribute to the development of city data base systems. Extension of this programme will be taken up in the Ninth Five Year Plan.

Two critical areas to which the Indicators Programme must be extended are women and children, with particular coverage of issues such as mortality, life expectancy, nutrition, education, drop-out rate, incidence of major illness, violence, crimes, savings and access to critical urban services that contribute to congenial human settlements. Another critical area is the living conditions of the poor. The exercise must be extended to the poor income groups so that valuable inputs would be available for monitoring the increased number of development programmes covering women and children. The development of a strong data base, monitoring and evaluation system becomes a sustainability-promoting requirement for proper management of the programmes and the agencies providing and supporting these services must take up the responsibility to develop these indicators with inputs from professionals in the field.

Apart from this, several other initiatives have been taken over the last two decades. These include, in particular, the Management Information System being developed by the Town and Country Planning Organisation (TCPO), housing statistics data base being developed by the National Building Organisation and the extensive support provided by the government of India to research and training institutions to conduct base line surveys and research studies which would ultimately go into the National Data Base for human settlements and urban sector. The Registrar General of Census and the National Sample Survey Organisation are extending the data base on human settlements-related issues. Financial institutions are also developing their data base.

3. 10. Changing Role of Key Actors

The National Housing Policy outlines the critical role of the non-government actors, mainly the private sector and the NGO, in human settlements programmes in a rapidly urbanising world.

The government sector is now expected to play the role of a facilitator of housing and urban programmes. The role is more onerous than that of a provider. In the latter role, the government and its agencies fixed some targets, based on resources that could be accessed and then the responsibility of the whole government system was to attain those targets, irrespective of their coverage of the market. A total market approach was missing from government programmes. As a facilitator, the government has to now assess the total market and, in consultation with other actors, decide who would cover what part of the market, even if all activities are not going to be market-driven. The government's role as a facilitator includes ensuring that all segments are covered over time and those segments which are unlikely to be covered by non-government actors, in spite of providing them access to services and inputs, have to be then taken up by the government in its role as a provider. This role of a provider is endorsed by national, state and local governments in India. Liberalisation and economic reforms do not absolve the government of its responsibility to reach segments of the market that cannot be served by other actors.

The frequent failure of the market where it comes to providing the basic needs of the poor and reflecting their priorities, makes it the state's primary responsibility to ensure that there is convergence of all social and economic services meant for the poor. Building people's capacities to enable them to access services without the constraints of gender, age, caste or religion and networking with the concerned service providers such as health, education, training, ICDS, support services like creches etc. are essential for sustainable human settlements. Proper coordination and partnership among all the agencies is equally important.

An important implication of the government's facilitator's role is that it has now a special responsibility of monitoring and evaluating the implementation of the programmes of all the actors. This requires building up in-house capacity and entering into partnership with non-government actors to monitor and evaluate their activities. New management tools, including the UNCHS recommended Housing and Urban Indicators as also aerial surveys, benefit cost analysis, capacity building of actors and institutional building are part of the development agenda. The indicators, in particular, have been developed after considerable research and pilot studies in several countries to provide to city managers a compact package of key data that facilitate an assessment of the current status of major urban services and human settlements activities; the indicators also facilitate an analysis of critical problems besides evolving a set of solutions.

THE NATIONAL HOUSING POLICY
GOVERNMENT OF INDIA
1997

CHAPTER 4

PAST TWENTY YEARS

4.1. Vancouver Declaration and Action Plan

Twenty years ago the world community adopted an agenda for human settlements development at Habitat I (Vancouver Declaration). It brought the human settlements sector for the first time on the international agenda and encouraged national and international initiatives in formulating their own approaches and strategies for the built environment. It incorporated 64 resolutions, aimed to integrate the constituents of human settlements into a composite approach, encompassing planning, settlements and housing development, and integrating their relationships to environment and national and international development. It drew up an action plan, commonly known as the Vancouver Action Plan (VAP). The responsibility for implementing the VAP was entrusted to national governments, with the mandate "to develop spatial strategy plans and adopt human settlements policies." The international community was assigned a supportive role for national efforts through financial and technical assistance.

4.2. National Experiences in Implementation of Vancouver Action Plan

India, one of the original signatories of the VAP accepted the task of implementing the Vancouver Declaration and has introduced approaches in its human settlements and urbanisation programmes that take into account the VAP and seek access for all her people to adequate and affordable housing in congenial human settlements. The government of India realised that total commitment and involvement of all actors was necessary in view of the magnitude of the human settlements problem in India. The

immediate task was to promote, facilitate and ensure that human settlements activity came into the mainstream of development programmes and actors outside the government were stimulated to enter into this sector. In the past, housing and urban development did not receive a high priority in national programmes on the presumption that housing was a consumption good and housing investment may not have the type of multiplier effects on economic development as investment in industry, agriculture and basic infrastructure. It was also felt that activities in housing and urban services were the responsibilities of the state and the local governments and hence plan allocations for housing averaged between 1.1 and 5 per cent of the total plan allocations (a falling pattern) during the first four decades of Indian planning, 1951-90 (excluding the First Plan when it was a high 7.4 per cent). The major constraint was the absence of a clear-cut policy and strategy document, which was available for other sectors in the country. The aggravating factor was a weak financial system. The Government of India realised that if India was to implement the VAP in letter and spirit, immediate interventions were required in the formulation of sectoral policies, development of institutional mechanisms, including delivery systems, financial networking and advocacy to bring the human settlements sector as an integral part of economic development.

a) Settlement Policies and Strategies

Formulation of human settlements and urbanisation policies and strategies was given a high priority in India, and there was a clear thrust on housing of the economically weaker sections and integrating housing in the national economic development activity. A major

initiative was taken in the Sixth Plan (1980–85), when the public sector was entrusted with a promotional role in housing in general and restricting its direct operations to housing for the urban poor and provision of house sites and construction assistance for rural landless labourers. The Integrated Development of Small and Medium Towns (IDSMT) scheme was introduced to promote and sustain intermediate township activity. The Seventh Plan (1985–90) went further: allocations were made to set up institutional financial systems for housing and urban infrastructure, and stress was laid on slum upgradation (*in situ* development) and provision of basic services for the poor. A National Commission on Urbanisation (NCU) was constituted in October, 1985, and its recommendations in August, 1988, paved the path for new initiatives (Box 12 summarises major recommendations of the NCU).

Work on the National Housing Policy (NHP), a high priority activity of the Government of India, was taken up in the mid-eighties (together with preparatory work to set up a National Housing Bank) and the process gathered momentum during the International Year of Shelter for the Homeless (IYSH), 1987. The first draft of the NHP was in hand in the IYSH and it preceded the Global Shelter Strategy (GSS) of the UNCHS. The strategies in the GSS and the inputs of all key actors in the human settlements sector were taken into account before the document was officially adopted in Parliament in August, 1994. The NHP has recognised that housing and settlements development is an

integral part of the overall economic development activities, and that it is a key employment-generating activity for the alleviation of poverty. Basic goals to be achieved by the turn of the century have been elucidated in the NHP, together with specific strategies for achieving them. An important aspect of the NHP is its dynamic component, that provides for periodic revisions in the light of changing needs and demands in different parts of the country, arising from changes in the social, cultural and economic environment.

Preparatory work on the NHP stimulated state governments to formulate their State housing policies, as it is the state government's responsibility to develop human settlements in the country. As many as 13 States and Union Territories have a State Housing Policy and Strategy document. These include Arunachal Pradesh, Assam, Chandigarh, Goa, Haryana, Karnataka, Meghalaya, Orissa, Pondicherry, Rajasthan, Sikkim, Tamil Nadu and Uttar Pradesh. The state documents have given consideration to the VAP and are a follow-up on the NHP.

b) Settlement Planning

An important objective of the NHP is to achieve balanced settlements planning and, as such, it envisages a revision of the Master Plan standards, land-use plans, building byelaws and infrastructure standards based on the national building code, which is periodically updated by the Bureau of Indian Standards. The revision takes into account the developments in the

BOX 12 : NATIONAL COMMISSION ON URBANISATION: PRINCIPLES OF URBANISATION

1. A policy of 'selective discrimination' in favour of Class I cities other than metros, and district headquarter towns to enable them to emerge as viable 'growth centres'.
2. A complementary crash programme of accelerated infrastructural development of fast growing, medium-sized cities, in an orderly hierarchical order.
3. Priority development of cities of medium category, in the context of generating urban employment.
4. Top priority to supply of urbanisable land in the context of anticipated rising demand.
5. Legislative measures to maintain the water table for assured supply of potable water, and enforcement of existing laws for control of pollution.
6. A policy bias in favour of land-use planning to achieve city efficiency.
7. Development control measures to achieve low-rise, high-density urban form.
8. Policy guidelines for conservation of total built heritage.
9. Policy shift to supplement economic development planning for inter-sectoral coordination through the spatial planning process.

Source: Government of India, Report of National Commission on Urbanisation, Volume II, August, 1988.

social and economic planning processes at the national, regional and local levels.

An urban settlement planning document was another priority need. The absence of such a document was a severe constraint to developing a total approach to urbanisation, particularly the concerns of renovation of urban infrastructure and planning for new asset creation to meet the demand of all segments of the market. With the acceptance of the role of the private sector in these activities and to promote public-private partnership and financing urban programmes with market cost funds, the Planning Commission and Ministry of Urban Affairs and Employment, Government of India, brought out a Draft State Urbanisation Strategy document in July, 1994. Even prior to that, the process was initiated by the Government of India to encourage state governments to prepare their State Urbanisation Strategy. In many cases the state preparatory process was linked with the IDSMT Scheme. As at present, all the states, except Haryana, Himachal Pradesh and Meghalaya have a State Urbanisation Strategy document. Work is at an advanced stage to bring out the National Urban Policy.

Indian planners and administrators have long been concerned with the poor reach of government programmes. They found the existing settlement planning system inadequate to meet the challenges of human settlements development and urbanisation. It was essential to properly coordinate and implement the

programmes and one growing segment, the urban informal sector, earlier overlooked in the settlement planning process, had to be inducted. Master Plan exercises began to give *ad hoc* recognition, and mixed land use, composite housing and income generation programmes are no longer alien issues at the city and town level. The National Housing Policy, Draft State Urbanisation Strategy and Planning Commission documents have endorsed these developments. The National Capital Region Plan provides for these components and is using the mixed land-use concept to induce slum households from Delhi to migrate out to new townships to be developed outside Delhi (Box 13); Calcutta introduced one of the earliest integrated strategies in India (Box 14).

With the acceptance of the informal settlements as part of the expanding urban situation, settlement planning processes and policies are now changing in India from one of slum eviction and resettlement of squatter households from city centres to the periphery, to *in situ* development and provision of basic urban services like potable water, sanitation and electricity to these settlements. The Urban Basic Services Programme (UBSP) initiated in the Sixth Plan and fine-tuned in the Seventh and Eighth Plans has emerged, together with the Environment Improvement of Urban Slums (EIUS) and special Urban Poverty Alleviation Programme, as a strong triumvirate of strategies for some of the disadvantaged segments of the population,

BOX 13 : INDUCED DEVELOPMENT STRATEGY : NCR PLAN

The National Capital Region (NCR) Plan is to restrict the population of Delhi to 11.2 million as against the projected 13.2 million by 2001. The NCR strategy of induced development of self-contained integrated townships in the vicinity of existing towns is a major initiative, wherein, development would be concentrated around core economic activities. Social facilities of a high order would be promoted so that they become places of regional/national importance. One of the NCR strategies to achieve the population redistribution targets by 2001 is to induce out-migration of selected categories of squatter households in Delhi to the new integrated townships. The efforts of the implementing agencies would be concentrated on improvement in the housing conditions and upgradation of the economic status in an integrated manner. This strategy is aimed at achieving the dual objective of decongestion of Delhi and housing and economic upgradation of Delhi's squatter households, while promoting regional development and growth of intermediate cities. The endeavour would be to facilitate the absorption of migrant households in the economic, social and cultural environment that is to be promoted and developed in the new townships.

Source : Government of India, Reports of the National Capital Region Plan Board, especially NCR Plan 2001

BOX 14 : INTEGRATED PROGRAMMES FOR URBAN POOR — CALCUTTA

The Calcutta Metropolitan Development Authority (CMDA) formulated an innovative mechanism of integrating spatial and economic planning. Health and employment components of the programmes are part of physical and socio-economic improvement of the slums in the city. These responses are linked to the low affordability of the poor to participate in exclusive housing programmes. CMDA is among the first housing agencies in the third world to undertake income generation and economic support programmes in the slums along with provision of physical and social services.

Source : Reports of Calcutta Metropolitan Development Authority

seeking to improve, in an integrated manner, the habitat and its settlement environment, together with the level of income.

The past twenty years have been a period of model experiments in settlement planning. The framework of settlement planning is mainly based on the Delhi Master Plan, which came out in 1962. This plan was built on the principles of development modules with segregated functional use-zones. Calcutta Metropolitan Development Authority (CMDA) adopted a different approach from the top-down model of the Delhi Master Plan. CMDA adopted a grassroot development plan of integrated projects in a loose framework known as Development Plan. Madras Metropolitan Development Authority (MMDA) brought out in the mid-seventies the main focus of which was flexibility in norms and convenience in monitoring. In the process, MMDA plan lost much on development aspects. The Hyderabad model has emphasised community development programme and an innovative aspect of its approach was to consider natural water courses as a main determinant of growth and sought to cater for such *force majeure* through state expenditure. The Mumbai Metropolitan Region Development Authority (BMRDA) experimented with a development plan in the scale of a region and major policies were related to land development, shelter, transport, environment, infrastructure, information system and institutional development. The thrust was to make the plan work with a policy from the top. The National Capital Region (NCR) Plan extends the regional concept beyond state boundaries to cover four contiguous political entities of the states of Rajasthan, Haryana and Uttar Pradesh and the Union Territory of Delhi. India has now some 55 development authorities at the city, regional and state level and settlement planning is one of their major responsibilities. What

has emerged in the last decade is the widening of the concept of traditional city master plan and this is a major development in the management of urban development.

c) Shelter, Infrastructure and Services

The NHP is a major policy initiative that has given clear directions for development activities in the housing sector. Public housing programmes have focused on new housing construction, particularly for the lower segments of the housing market. The requirements of the middle and high income groups have been also covered, but a large part of their housing activities are taken up by the cooperative sector and private developers. A wide range of housing programmes have been developed that provide built units, developed sites and services and core housing units. The NHP has also indicated areas where the Government can play a facilitator's role and these include, among others, access to developed land, services, building materials, technology, construction skills and finance as well as creating the legal and fiscal environment conducive for the expansion of housing programmes.

NHP has focussed on the need to provide infrastructure facilities and services for the development of sustainable and congenial human settlements and for this purpose, has emphasised larger investment flows and promotion of activities by the private sector and NGOs. It is envisaged to attain 100 per cent coverage of urban population for potable water and 75 per cent coverage for basic sanitation by the turn of the century. Community participation will be an important component of the programme.

India is moving towards integration of spatial, economic, social and financial planning. Development of economic infrastructure with social and physical infrastructure is now an

upcoming strategy. This is a high priority issue for low income settlements so that the linkages between shelter and work place can be established. The NHP has endorsed this strategy. In addition, effective convergence of inputs from various social sector partners, including the government, NGOs and the private sector, has to be strengthened at all levels of the government, particularly at the city/town level and made an integral part of the NHP action plan.

A new entrant in the institutional framework has been the NGO/CBO. They have been working for a considerable time in social sector programmes of literacy, health care, income generation, and have now extended their activities to housing-related activities like anti-eviction, housing right, access to urban services. Coverage of the NGO/CBO delivery system in housing development, per se, is still small, primarily because no specific resources are allocated to their intervention, unlike the situation in some other sectors. There is a strong need to build up their professional capacity.

An important issue that has emerged during the last 20 years is of affordability to absorb solutions in housing, infrastructure and services sector. Earlier, the focus was on reducing costs through building technology and materials and to some extent, the delivery system. India has realised that specific interventions are equally important to raise the income levels of the people as affordability is a function of income and cost; how to bring about a judicious balance between these two components of affordability, has become a priority issue. It is in this context that India has taken a lead to extend the scope and coverage of its income-generation and poverty-alleviation programmes. The government of India introduced in August 1993, the Prime Minister Rozgar Yojana for the educated unemployed youth and in 1994 the integrated urban poverty alleviation programme. This latter programme is a progress on the earlier programme of the Nehru Rozgar Yojana (NRY). The Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPEP) launched in October 1995, is the latest activity in this area.

d) Land

The NHP has taken cognition of the critical role that land plays in the development of sustainable human settlements. The Central and

State governments have to take initiatives through new legislations and more effective use of the existing legislations for ensuring optimum land use as a key resource for housing and urban services. Initiatives have been taken in the country to develop a balanced pattern of urbanisation in order to reduce the pressures in the metros and the larger cities. Initiatives have also been taken to control unregulated peripheral development of agricultural land, unwanted conversion of land use and degradation of land use. A system of proper assessment of land values, levy of land-related taxes, and development of a land information system are some other activities that have been initiated in the country, as a follow-up of the VAP.

e) Public Participation

The need for public participation in the planning, implementation and management of human settlements and urban services has been felt since long. As a follow-up of the NHP, community-based organisations and non-government organisations are being encouraged to participate at the state and local level in all activities covering human settlements development. State housing policies and action plans have also recognised the need to involve the people in such activities. Saving mobilisation schemes and community-based home loan programmes have been encouraged by Central and state governments and housing finance institutions like HUDCO and HDFC.

Initiatives have been also taken to develop the delivery system for infrastructure on the principle of public-private partnership. Areas of partnership include land assembly, housing, infrastructure and financial intermediation. The public-private partnership activity is largely between the formal institutions in the government and the private sector, but some attempts have been made to also develop formal and informal sector partnerships. This is crucial to the effort to bring the programmes within the reach of the poor, and the underdeveloped as well as less accessible tracts of the country.

f) Institutions and Management

An institutional framework for the formulation, implementation and management of human settlements programme is well established in India. Public agencies were created at the

town and state level in the form of parastatals like development authority, housing board, slum board and special organisations for certain categories of households (backward class, scheduled caste, scheduled tribe, etc.) The cooperative delivery mechanism for housing was stimulated through fiscal and financial support and capacity-building programmes for cooperators and the professionals managing them. The organised private sector was supported mainly through fiscal incentives. Institutional financial system was extended during the period with the development of a network of specialised housing finance institutions, with the National Housing Bank as the apex institution. Specialised financial mechanisms for urban infrastructure have been also developed, both in the public and the private sector.

While the Central government laid down the broad policies on human settlements, the state governments and their agencies formulated and implemented schemes and programmes. A network of housing finance institutions and research and training institutions have been established, many of them in order to effectively decentralise the planning and development of human settlements. The 73rd and 74th Constitutional Amendment Acts, a major institutional development to transfer power to the people, would facilitate the strengthening of the institutional framework at the local level. Another area of institutional development is a mechanism for the convergence of all social services and other development inputs for the poor and others in the vulnerable group.

An important feature of the NHP is that the

Government role is being directed more towards facilitating the human settlements development process, and the development of an institutional framework is critical for this purpose. Non-government actors would utilise the institutional system for delivery of housing and urban service solutions to all segments of the market, including the lower income groups.

An important component of the institutional development programme is the building up of the capacity of the key actors. The post-VAP period has seen the growth of a number of research and training institutions specialising in human settlements and urban programmes. Prior to this development, research and capacity-building inputs for this sector were only incidental to activities in other research and training centres and invariably the best professional expertise was not easily available. The Government of India, state governments and financial institutions have been providing financial support for research and training activities and development of specialised centres of excellence in these areas. Regional urban centres were established in different parts of the country and chairs on urban and housing finance and administration were funded. Support was given on a continuing basis to many autonomous research and training institutions, who, as a result, were able to specialise in housing and urban sector research and training.

In more recent years, the Central government and state governments have given high priority to the development of a strong monitoring and evaluation system, using the latest information system, technology and skills.

CHAPTER 5

GLOBAL STRATEGY FOR SHELTER AND AGENDA 21

5.1. Perspective

Several international contributions in the last decade have imparted firm purpose and direction to the development of strategies and programmes across the world. These include the Child Summit (1990), Environment Summit (1992), Population Conference (1994), Social Summit (1995), and the World Women's Conference (1995). The Global Shelter Strategy to the Year 2000 (GSS) brought out by the UNCHS in 1988, and Agenda 21 endorsed at the Rio de Janeiro Environment meeting of 1992 are significant documents that have acted as sign-posts for countries in their human settlement strategies and beyond. India has committed herself to the considered goals of the global community.

5.2. Global Strategy for Shelter

The GSS is based on an enabling approach to shelter development and improvement, with the basic objective of meeting the adequate shelter needs of all the people. Eight specific activities have been recommended and the Government of India has given full recognition to them in its policy and developmental activities.

a) Establishing a Political Commitment to Enabling Strategies

The National Housing Policy (NHP) is based on an enabling strategy to ensure access of the people of the country to adequate shelter. The political commitment to the enabling strategy is reflected in the Indian Parliament adopting this policy document in August 1994. As many as 13 States and Union Territories have also brought

out their official State Housing Policy and Strategy, based on the enabling strategy and endorsing the objectives and enabling approach of the NHP.

b) Developing a Policy and Institutional Framework

The NHP as well as the State Housing Policies have recognised the participatory approach to shelter development, involving all the key actors. These include the three levels of the government and their parastatals, the private sector, the cooperatives, the community and NGOs and CBOs. An attempt is being made to encourage and support the participation of all stakeholders in programme formulation, implementation and evaluation. Incentives and development support are provided in the form of access to land, finance and technology, rationalisation of procedures to speed up approvals of schemes, and modifications in legal and other statutes to create the enabling environment. Similar initiatives in terms of policy and institutional framework are being developed in inter-related activities that provide access to skills and social sector inputs to the most vulnerable groups such as women, children, economically weaker section, which would contribute to the sustainability of the human settlements.

The government of India is committed to the process of decentralisation of activities and the 74th Constitutional Amendment Act will effectively empower the local government and develop the appropriate local institutional framework. A number of financial, research and training institutions and other development agencies have also been established to provide

the institutional framework for the implementation of the enabling strategy.

c) Regulating Land and Housing Development

NHP has recognised that the supply of serviced land at affordable prices is a critical input for affordable housing programmes. To develop an efficient land market, the existing legal and regulatory framework is being modified to stimulate the supply of land. At the same time, the Central and state governments are promoting a balanced pattern of urbanisation to reduce the burden on the metropolitan areas and large cities. This would also help to control the unregulated peripheral development on agricultural land, unwarranted conversion of land use, and the degradation of land resources. Mixed land use is being encouraged to take cognisance of the ground level realities, particularly of activities in the informal sector and also to enable women-headed households to engage in productive self-employment at home. For this purpose, the concept of Master Plan and conventional norms on land use are being reviewed, together with building byelaws, infrastructure standards, land acquisition processes, etc. Model rent control legislation, apartment ownership legislation, and legislation for the regulation of activities of private builders have been formulated by the Government of India and provided to the state governments for necessary action.

A major programme that is being implemented in the country is "Guided Land Development", where public housing and development agencies take up the activities in partnership with private developers and builders. In urban areas, a land-consolidation and land-pooling mechanism is also being adopted with the support of private land owners.

As regards housing development, a network of public housing agencies and cooperative societies have been developed and the private sector builders are being provided support to take up development work. Community participatory efforts in housing development are being encouraged by supporting the activities of NGOs and CBOs.

d) Developing Property Rights

The Indian land registration system is well developed but the land record management

system needs improvement, especially for urban areas and tribal areas. Studies have been undertaken in the country to introduce the "Torrens System" of land records management for guaranteeing title to the owners.

The Transfer of Property Act, 1882, which provides the legal code for the transfer of property, requires modifications. The rights of property owners and tenants are protected under the Rent Control Acts and a model rent control act has been formulated to safeguard the interests of both the landlord and the tenant.

The NHP is committed to safeguard the housing rights of the urban poor and restrict forced eviction activities by conferment of property rights on squatters and slum dwellers, wherever feasible. For the rural areas, reforms have been underway to confer homestead rights to occupants, ensure proper rehabilitation of people displaced by development projects, protect tribal families from eviction, and preserve user's rights over forest and common lands.

e) Developing Long-term Housing Finance

The NHP envisages that 20 per cent of investment in housing would be through the specialised housing finance institutions. The country, at present, has an apex level National Housing Bank for regulating housing finance activities and providing refinance services and a network of about 20 regional housing finance institutions operating in the public and the private sector. The coverage of the population is still limited. Differential rate of interest policy is under implementation to cater to the affordability standards of the people, particularly in the lower income groups. A number of initiatives are in the pipeline to further contribute to the development of a viable housing finance system and these include the instruments of mortgage insurance, foreclosure and fiscal incentives.

f) Rationalising Subsidies

Direct budgetary subsidy is provided through grants for construction of low-income housing, infrastructure development and maintenance and in allotment price of land for low-income housing and to cooperative societies. The indirect subsidy is channelled through a negative interest rate on home loan, deferred repayment of loan and fiscal incentives for home

ownership programmes. While it would be desirable to phase out subsidy, this cannot be eliminated from the Indian housing and urban infrastructure activities but an attempt is being made to target them more carefully and make them transparent. Direct subsidy in the form of free housing or grant in cash or kind would be gradually restricted to only the poorest of the poor and the major component of the subsidy will be in direct form.

g) Providing Infrastructure

Human settlements cannot be sustainable without an adequate level of infrastructure and services. In the past, the investments, largely through the public sector, focussed on new asset creation for provision of water, sanitation, electricity, drainage and roads. The NHP envisages 100 per cent coverage for potable water and 75 per cent for basic sanitation by the turn of the century. Not much attention has been given, however, to the renewal and upgradation of the existing infrastructure.

In order to accelerate development activities in housing-related infrastructure and services, both in the form of new asset formulation and urban renewal programmes, the private sector is being encouraged to participate in the development and maintenance of some of the infrastructure assets. Apart from access to finance and provision of fiscal incentives, the private sector would be encouraged to also take up infrastructure development activities using the leasing finance instruments. Specialised

urban infrastructure finance institutions are to be also developed to facilitate larger flows of investment.

h) Organising the Building Industry

An important component of the enabling strategy enshrined in the NHP and the GSS is strengthening the building industry through access to cost-efficient technology and materials. In this context, the Building Materials and Technology Promotion Council (BMTPC) was established as an apex inter-ministerial organisation to operationalise an integrated system for technology transfer and delivery in the housing and building sector. The BMTPC coordinates its activities with those of Central and state level decision-making machinery and the R&D and standardisation organisations, construction agencies, financial and industrial promotion agencies, corporate sector and professionals to facilitate the lab-to-land transfer process and develop and validate cost-effective innovative building materials and construction technologies and promote decentralised production of building materials and components in different geoclimatic regions of the country. The new approach of technology transfer enables the promotion of new technologies through entrepreneurial activity supported by credit facilitation and policy backup to improve access to low-cost building materials based on local raw material resources. NGOs and CBOs are being encouraged to develop and utilise alternative building materials using local inputs and meet local



Building Centre Jaipur, Rajasthan

shelter specifications. The National Network of Building Centres established across the country is promoting the use of cost-effective building material technologies through training, demonstration and production at the grassroot level.

5.3. Agenda 21

Agenda 21 laid stress on the deteriorating situation in human settlements conditions, assessed to be a result of low levels of investment because of resource constraint. At the same time, it observed that the multiplier effect of investment in the human settlements sector was the best: "every dollar of UNDP technical cooperation expenditure on human settlements in 1988 generated a follow-up investment of \$122, the highest of all UNDP sectors of assistance." (Source: UNDP, "Reported Investment Commitments Related to UNDP-assisted Projects, 1988", Table 1). Promoting sustainable human settlements development is, hence, identified as a high priority issue; the focus is to be on the urban and rural poor and "special interest groups, such as women, indigenous people, the elderly and the disabled" (Agenda 21 Document, Chapter 7, p.65).

Agenda 21 recommends promotion and improvement of activities in eight priority areas and government of India has responded positively. A National Urban Environment Policy, on the anvil, will promote environmentally sound urban land-use planning and develop programmes that are environment-friendly in areas of potable water, solid and hazardous wastes management, industrial location, pollution control, sanitation, traffic, transportation and energy.

a) Adequate Shelter for All

The NHP has, in clear terms, stipulated that its objective is to provide access to adequate shelter for all. At the national level, the Central government has introduced centrally-sponsored schemes and institutional financing through HUDCO and other institutions for enabling people to have access to adequate shelter. State governments, which have the basic responsibility for shelter provision, have introduced the same approach in their state housing policies

and action plans. A number of enabling programmes have been initiated, such as, the establishment of a housing finance system with a National Housing Bank at the apex level; amendment to the Urban Land (Ceiling and Regulation) Act to expand the supply of land; formulation of a model Rent Control Act; model Apartment Ownership Bill; and schemes to link up housing- and income-generation programmes for the poor.

b) Human Settlements Management

As part of the strategy to strengthen the human settlements management activities, the Central government has introduced several schemes such as: Environment Improvement of Urban Slums, a state sector scheme; Integrated Scheme of Low-cost Sanitation; Nehru Rozgar Yojana (NRY) with three components Scheme of Urban Micro Enterprises (SUME), Scheme of Urban Wage Employment (SUWE), and Scheme of Housing and Shelter Upgradation (SHASHU); Urban Basic Services for the Poor (UBSP); Scheme of Integrated Development of Small and Medium Towns (IDSMT); Scheme of Infrastructure Development in Mega-cities (IDM); Integrated Rural Development Programme (IRDP); Jawahar Rozgar Yojana (JRY); Development of Women and Children in Rural Areas (DWCRA); Accelerated Rural Water Supply Programme (ARWSP); and Minimum Needs Programme (MNP).

Keeping in view the Agenda 21 objective to promote sustainable human settlements management, the Ministry of Urban Affairs and Employment has formulated an Intermediate City Development Scheme with an investment outlay of Rs. 3650 crores.

c) Sustainable Land-use Planning and Management

In order to improve the land-use planning capabilities at the city/town level, the Central government has launched an urban mapping scheme which utilises advanced technologies such as remote sensing and aerial photography to prepare physical and utility maps on appropriate scales. Capacity-building programmes are being supported across the country and the approach to a Master Plan is being rationalised to take into account new types of land use

emerging with the process of urbanisation. A geographic information system (GIS) is also to be developed in due course.

d) *Integrated Provision of Environmental Infrastructure*

The Central government is assisting towns with population up to 0.5 million in preparing water supply plans and providing institutional finance through project-tied grant and loan from HUDCO and also providing grant and loan for implementation of low-cost sanitation schemes. Other schemes include the Accelerated Urban Water Supply programme (AUWSP) in small towns (population less than 25,000), and pilot solid-waste management programmes in selected towns in environmentally-sensitive zones such as hilly areas, coastal areas, pilgrim centres, river fronts in a joint collaborative venture of the Central, state and local governments. At the same time, capacity-building study tours and training programmes are being organised.

e) *Sustainable Energy and Transport System*

To promote sustainable energy and transport systems, initiatives are being taken to develop Mass Rapid Transport System (MRTS) in large cities. The shift from buses to electric trains will not only be an energy-saving programme but would also contribute to the reduction of atmospheric pollution and traffic congestion, besides reducing travel time. MRTS is being planned for Delhi and a light rail transit system for Hyderabad.

f) *Human Settlements Planning and Management in Disaster-prone Areas*

Two-third of Indian states and urban territories are vulnerable to natural disasters like flood, drought, cyclone and earthquake. In order to understand and appreciate the relationship between social, economic and spatial activities in the context of human settlements and natural disasters, and to develop policies and strategies for planning human settlements in disaster-prone areas, the Government of India has set up the National Centre for Disaster Management. Further, to promote settlement planning and management in disaster-prone areas, the Town and Country Planning Organisation is preparing an integrated development plan. A

vulnerability atlas is also being developed to indicate disaster-prone sites in the country.

g) *Sustainable Construction Industry Activities*

The rapidly growing demand for housing and infrastructure is exerting heavy pressures on the natural environment. To promote sustainable development of the construction industry, the Government of India has taken several initiatives to promote energy-efficient building materials and shift reliance from non-renewable raw material resources to renewable resources like industrial and agricultural wastes and byproducts. The national network of Building Centres is disseminating information on these eco-friendly and energy-efficient building materials and construction technologies and the BMTPC is promoting large-scale utilisation of agro-industrial wastes like flyash, phospho gypsum, alumina red-mud, slags and industrial sludges in the manufacture of building materials. Following a ban on the use of wood in Central government works, the Council of Scientific and Industrial Research (CSIR) is coordinating R&D activity on the development of new wood-substitutes for use in housing and building construction. The Department of Environment, Government of India, has launched a scheme of labelling ecofriendly materials and products, including building materials and components, and the Bureau of Indian Standards (BIS) has formulated a Standards, Specifications and Code of Practice on several innovative building materials which are cost-effective, energy-efficient and based on recycling of different types of wastes, byproducts and residues which otherwise contribute to environmental pollution. Large construction projects of building and infrastructure development and the extraction of natural raw materials are subjected to Environmental Impact Assessment to prevent the adverse impact of construction activities on the natural environment.

h) *Human Resource Development and Capacity Building*

Human resource development and capacity building programmes are being supported by the Central and state governments and financial institutions through regional centres for urban studies and research and training

institutions for housing and urban management programmes. These capacity-building programmes cater to the needs of government officials, NGOs, CBOs and the private sector.



Appropriate grassroot-level intervention for cost-effective housing delivery



Transfer of technology through training and skill upgradation on cost-effective technologies

i) *Empowerment of Women*

The 73rd and 74th Constitutional Amendment Acts have taken a major step as women are both a critical actor in the sustainable development process as well as the beneficiary. Many of the programmes in the urban sector focus on women, such as the urban basic services programme. The Department of Women and Child Development, Government of India, has taken initiatives to follow up on the recommendations of the World Women's Conference. These include the National Policy on Women, which is being finalised and will guide and inform action on all gender-sensitive issues, and the establishment of the National Resource Centre for Women and a Commissioner for Women's Rights, work on both being at an advanced stage for implementation. Apart from these initiatives towards a comprehensive policy and an institutional mechanism for promoting and sustaining women's programmes, specific activities have been taken

up to extend the Indira Mahila Yojana and Integrated Child Development Scheme. A Rashtriya Mahila Khosh has been established to provide micro-enterprise loan to women entrepreneurs.

j) *Well-being of Children*

Highest priority has been accorded to this critical issue in the National Policy on Children and the National Plan for Children (1992) lists out specific time-bound targets, which are also incorporated in the national programmes in the health, nutrition and education sectors. The Government of India has ratified the Convention on the Rights of the Child and have introduced specific legislative and administrative action to attain set goals. A National Children's Board is to be constituted with counterparts in the states to ensure continuous planning, review and coordination of all critical services identified as necessary for the healthy development of children, including their need for housing and related services, and safe and secure environment.

CHAPTER 6

BEST PRACTICES

6.1. Introduction

In order to promote and strengthen cooperation and partnership in developing sustainable human settlements among the UNCHS member countries, a select inventory of successful policies, programmes and projects is presented. These practices are assessed to have had a tangible impact and contributed to the sustainability of the activity. The best practices were selected after assessing that they met the selection criteria recommended by the UNCHS. These include:

- i) Positive and tangible impact on improving the built environment of the people in the area of sustainable shelter and community development, sustainable urban and regional development, or sustainable, efficient, transparent and accountable settlements management;
- ii) Developed a partnership approach, involving two or more actors; and
- iii) Demonstrated lasting effect in terms of legislative, regulatory and procedural frameworks, social and sectoral policies, institutional framework and decision-making processes, management systems and partnerships, and activities that make more efficient and effective use of human, technical, financial and natural resources.

Recognising the guiding principles of GSS and Agenda 21, the Indian presentation of best practices is focussed on the "special interest groups" like the urban and rural poor, and women. The empowerment of the people, including women, and generating people's resources and channelling them into the human settlement activities are issues that have been given special consideration.

A select inventory of **best practices** in the Indian human settlement sector covers three

theme areas prioritised for Habitat II:

- Sustainable Shelter and Community Development
- Sustainable Urban and Regional Development
- Sustainable, Efficient, Transparent and Accountable Settlements Management.

6.2. Sustainable Shelter and Community Development

Sustainability of housing solutions is dependent on the utilisation of low-cost materials, technology and delivery system, in which the people are closely involved at all stages to ensure that the housing product meets their requirements and costs are maintained within their self-assessed level of affordability. At the same time, planning and development control regulations should be flexible and must stimulate human settlements development in a manner that will contribute to affordable housing solutions to reach the lower segments of the housing market. Ten select practices are presented to demonstrate the Indian approach. In their totality, they bring out the distinct participation of major actors to evolve, develop and sustain affordable housing solutions in an equitable, healthy, safe and congenial human settlement.

a) Sustainable Approaches to Housing Finance

HDFC

Housing Development Finance Corporation (HDFC), a private sector leader in housing finance, introduced a market-driven viable approach to housing finance in India in an era when there was marginal access to institutional housing finance and almost the entire housing

finance activity was highly subsidised. Its major clientele has been the salaried income group and professionals, and credit costs covered full cost of funds. HDFC brought in a wide range of credit instruments for ownership, construction, extension and renovation activities. In a period of 17 years, (1978–95), HDFC has financed 950,000 houses, stimulating an investment of Rs.150 billion (\$ 5 billion) into the housing market, with an enabling contribution of Rs.57 billion. The multiplier effect of HDFC home loan has been 2.63.

In the post-economic reform scenario, HDFC has initiated a process of consolidating its position in the financial sector by developing housing-related financial services, including consumer finance, banking, and rural housing finance. Its success has created a demand for its professional services to other countries, through the Coalition of Housing Finance Institutions in Asia, a NGO promoted with the support of UNCHS.

HUDCO

In sharp contrast is the approach of the Housing and Urban Development Corporation (HUDCO), a public sector housing finance institution established in 1970. Its target group is basically the low-income segment of the housing market. HUDCO has successfully enabled them to access institutional credit. Its portfolio, developed over a 25-year period, includes an investment of Rs. 10,000 crores (US \$ 3.3 billion), has facilitated 6 million households to have congenial shelter. The important feature is that 92 per cent of the financial intermediation has been targeted to the lower income groups, for whom there is no other alternative source.

HUDCO's route to sustainability has been through its total approach to shelter solutions, operating not only as a financial institution but also as a development catalyst. It provides a basket of flexible menu for the consumer, including credit instruments for site and services, skeletal housing, core housing, *in situ* development, integrated housing and workplace, upgradation and renewal, and low-cost sanitation. The effective reach-out has been successfully extended through a low-cost operational strategy that utilises the intermediation of the large network of government parastatals, cooperative societies, NGOs and CBOs. Equally

important is the promotion of low-cost technology and materials through a network of 375 building centres which have diversified their activities from low-cost materials and training of artisans to environment and ecology sensitisation and income generation; a foundation has been built for a programme of housing support centres that would provide a total package for sustainable human settlements development. More recently, HUDCO has diversified into housing-related infrastructure development areas, as also basic urban infrastructure services, so as to provide a complete and sustainable financial programme.

b) *People's Participation and Women's Empowerment*

SPARC

Society for Promotion of Area Resource Centres (SPARC) has been a leader in securing to the urban poor their basic rights and facilitating them to have access to credit through a community-based and managed organisational mechanism. Their constituency includes pavement dwellers in Mumbai, who are not covered by any of the slum improvement programmes. SPARC utilised the power of women, developing their capacity through training and advocacy inputs; and fuelling the women's movement to provide them access to adequate shelter.

An important component of the activity was the mobilisation of the people's savings aggregating over a period of eight years to Rs. 60 million. This fund has been used to develop a people's credit programme that covers their multiple credit requirements. Its sustainability is evident in the interest of major financial institutions and international agencies, who are providing lines of credit. In the process, the capacity of the community has been developed and the SPARC approach is being replicated.

c) *Integrated Housing Programme: Path to Sustainability Handloom Weavers Project*

Affordability of housing solution is a function of reducing housing construction cost and raising people's income. The latter component has been largely overlooked in the approaches to sustainable housing solutions. The GSS of the UNCHS and the National Housing Policy (NHP)

of India has highlighted the desirability of integrating housing and income programmes for providing sustainable and affordable solutions. The integrated house-cum-work area project that has been successfully implemented for handloom weavers at a major handloom centre in India (Kancheepuram in the state of Tamil Nadu) is a good example of the effectiveness of this strategy.



Weaver's home in Kancheepuram, Tamil Nadu

This project was conceived and implemented as early as in 1974, much before the initiatives taken in the GSS and NHP. It was a partnership endeavour of the Government of India, state level cooperative society (Tamil Nadu) and a housing finance institution (HUDCO). The absence of a workplace within the residential complex had degraded the environment and restricted the participation of family members, especially women, in the handloom-weaving activity. An integrated housing programme that provided for a workshed attached to the house, had a distinct impact on the levels of income through full participation of all family members in the economic activity. It also improved the quality of product having a higher value-added component and this contributed to improved productivity and incomes. The experiment also brought about an attitudinal change in the local planning authority, which formally endorsed the mixed-use pattern in the housing programme. The success of the activity is reflected in almost 100 per cent recovery of loan through the mechanism of a cooperative society. The integrated

housing and income programme is now being replicated in other parts of the country as a route to sustainability in human settlements.

d) Human Settlements Development Support System Slum Networking Approach

The sustainability of a housing programme is equally dependent on technological inputs, and, in the case of the urban poor, also on developing a congenial environment and slum networking. A slum improvement project in Indore, in the state of Madhya Pradesh, has evolved an innovative and cost-effective approach to a technological solution for a social objective of improving the environmental conditions of human settlements of the urban poor. This is especially significant when public agencies are faced with the almost perennial problem of resource constraint and high cost of delivery of urban services through the conventional system. An unconventional approach has utilised the advantages of natural topography, earth regradation and constructive landscaping, as the slum habitats are often interconnected and located near natural water courses (*nullahs*). The project has been a participatory venture of the state government through its city development authority and the local government, and an international development agency, with the NGO playing a major role in motivating communities, mobilising people's resources and converging people's efforts with inputs from the local government. This is to be replicated in a few other cities.



Slum after networking



Indore river, after networking

Low-cost Sanitation Approach

Another major contribution to the improvement of the living environment of human settlement has been the innovative programme in developing a cost-effective sanitation system by Sulabh International. This programme has constructed/converted low-cost sanitation units in 700,000 houses and 3,000 public places to provide sanitation facility to 10 million people and liberating 35,000 scavengers from the task of manual scavenging. The programme has attained 100 per cent liberation of the scavengers in some 240 towns in the country. The Sulabh approach is to convert dry household latrines to a twin-pit pour-flush latrine that not only improves the

habitat environment but provides an opportunity to use the wastes to produce manure and fuel. Water consumption is only 20 per cent (2 litres) of requirement under conventional water closets. The cost of the unit is low and the on-site disposal of solid wastes requires no additional investment for further treatment. This makes the solution affordable to the people.

The Sulabh system promotes people's participation; services are extended beyond community toilets to cover cloakroom, health care, potable water, bathing, washing, as per local needs. Sustainability is ensured through the "pay-and-use" pricing policy with zero-cost access to children and women for certain services.

The Sulabh approach has also contributed to the improvement of the status of women, who play a catalytic role in spreading the message of low-cost sanitation. The success of the programme is reflected in the several national and international awards received by the organisation. The Sulabh technology is now a recommended programme of the World Bank and UNDP.

Building Centre Movement: Cost Reduction Approach

Another route to sustainability is through reduction in transaction and delivery cost of the housing solution. The Indian Building Centre Movement, a joint programme of the government of India (Ministry of Urban Affairs and Employment), Housing and Urban Development



Lady doctor examining patients at a Sulabh centre



Community toilet with bathing washing and urinal facilities at Mumbai

Corporation (HUDCO), Building Materials and Technology Promotion Council (BMTPC) and State agencies, is an endeavour that has demonstrated the effectiveness of a low-cost housing delivery system through grassroot level organisations. The initiative for this activity, now ten years old, was taken in Quilon in the Indian State of Kerala. At that time, the Building Centre (Nirmithi Kendra) was established to improve access to building materials and technology for the rehabilitation of housing destroyed by natural calamities.

The R & D efforts in low-cost building materials and technology have, in the past, not been effectively transferred to the field and awareness among the people was limited. In a situation where construction costs were increasing sharply due to the building materials and labour, the Building Centre Movement was initiated to stimulate locally-relevant R & D activity in building materials and technologies and linking them with direct utilisation in housing programmes. At the same time, an important activity was to promote the utilisation of the new technologies by training local construction artisans. In recent years, the building centre activities have diversified into providing advisory services for housing development, apart from production of cost-effective building materials and generating employment.

The success of the Building Centre movement has been recognised by the government of India and major national institutions as well as by the international community, with the KFW (German Reconstruction Bank) providing major funding for capacity-building programmes. The activity has now been given a national status. The UNCHS adopted a resolution in 1993 recommending governments to set up institutions on the model of the Building Centre at the national, provincial and local grassroot level (Resolution No. 14/16 Para 20, 14th Session of the Commission, Nairobi). Several countries have shown interest in adopting the model.

Rationalisation of Development Control Regulations

Another important route to attain sustainability in housing and community programme is through rationalisation of development control regulations, which have been a major impediment to implementing sustainable low-income housing programme. A major

initiative to meeting the challenge of housing the poor has been taken by the Municipal Corporation of Greater Mumbai, the local government, in partnership with the Mumbai Metropolitan Regional Development Authority (BMRDA) the planning agency, and Maharashtra Housing and Area Development Authority (MHADA) the implementing agency, with full support and cooperation of the State government of Maharashtra. This strategy, the new development control regulations (1991), has three major components. Under the Accommodation Reservation (AR) component, a landowner has to provide specific public utility services to the satisfaction of the Mumbai Municipal Commissioner and in that event he can utilise as part of his floor space index (FSI) entitlement to the part of the property used for other construction activity to meet the AR requirements, which include parking lot, dispensary, library, post office, maternity home, police station. The Transfer of Development Rights (TDR) component allows a landowner to transfer his FSI to another place to use it himself or by any other person, if his land is required for development of public amenities. The TDR can be utilised outside the island city of Mumbai, primarily in the suburbs of Mumbai that are not congested. The third component, the additional FSI component, is for slum redevelopment and urban renewal and a FSI of 2.5 is allowed against the normal FSI of 1.00/1.33 so that private builders and investors can generate resources for investment in the slum redevelopment and urban renewal activity. When buildings are beyond economic repair and have to be reconstructed under the urban renewal programme, FSI has been relaxed to accommodate the existing tenants and also provide basic civic and social infrastructure.

Disaster Management : Innovative Shelter Delivery System

A major earthquake on September 30, 1993 in Latur and Osmanabad districts of Maharashtra destroyed 35,000 houses, injured 14,000 people and completely reduced to mounds of rubble as many as 25 villages, apart from loss of 9000 people and a large number of animals. The absence of earthquake-resistant technology and materials was the critical reason for the extensive destruction. HUDCO has evolved a participatory approach to undertake

the rehabilitation challenge, directly involving community participation in planning and designing the programme and in its implementation, with support from building centres, state government, professionals, NGOs and international financial institutions.

institutional mechanism has been developed which will enable the programme to continue, with active participation of the people. The project management system is based on a bottom-up approach.



Gender participation in designing the design process, Latur

A cluster-based layout planning and designing model was developed for five HUDCO-adopted villages. The housing plan covers 2072 units of different categories with 10 to 12 houses forming a cluster, with 7.5 m wide entrance, 13.5 m wide middle court and 6 m wide rear access. Basic facilities include *panchayat* office, health centre, police station, bus stand, community hall, places of worship, shopping centres. The earthquake-resistant technology in the building construction programme utilises vertical and horizontal reinforcing in masonry and solid concrete block walls suitable for MM Intensity VIII earthquake zones.

The HUDCO model has had a direct impact on development and local skills, employment creation and income generation through the establishment of 10 building centres in the districts of Killari and Osmanabad. These centres assist the district administration in construction activity, training of artisans, and supply of materials. The project has also developed community skills for its formulation, planning, design and decision-making. The quality of the habitat and its environment is considered to be better than in the pre-earthquake period, and an

6.3. Sustainable Urban and Regional Development

a) *Poverty Alleviation and Credit Mechanism : Essential for Sustainability in Development Programmes*

Two practices that have been successfully formulated and implemented in India are the Urban Basic Services for the Poor (UBSP) and credit programmes of Self-employment Women's Association (SEWA). In both these practices, the participatory capacity of the people has been upgraded and women have played the lead role.

UBSP

The UBSP is an example of international cooperation, a joint programme of the government of India (Ministry of Urban Affairs and Employment), state governments, local governments, NGOs and the UNICEF. It has evolved over a period of almost four decades, initiated as an urban community development project in 1958, subsequently extended to 20 other countries in 1966–67, and proposed to cover 500 cities and towns during the Eighth Plan period, 1992–97. In its present form, it is a comprehensive activity that empowers urban poor women and involves them at the stages of planning and implementing community development activities, focussing on urban poverty-related issues. At present the UBSP activity has been initiated in 280 urban centres and involves a Resident Community Volunteer Force of 33,000 women from low-income households. The reach out of the UBSP is estimated to be 5.5 million urban poor.

The success factor of the programme is a community-based organisation, with participatory and management system through a series



Community Development Societies of Kerala

of community centres, such as Neighbourhood Group of 20–25 households at the grassroot level, Neighbourhood Committee with 200–250 households, and Community Development Society with 2000 households. Activities are decentralised, with women playing the key role. Apart from poverty alleviation, the UBSP includes the formulation of thrift and credit groups that have contributed to improve the credit status, urban environment activities (periodic clean-ups and monitoring work of city functionaries), health care services, skill development, loans for micro-enterprises and mobilisation of the people for implementing their own programmes.

The sustainability of the UBSP is reflected in its components being incorporated in many national and state programmes.

SEWA

A slightly different community approach also focussing on women, is the endeavour of the Self-employed Women Association (SEWA), established in 1972 as a trade union and diversified into a SEWA bank two years later. This bank has successfully catered to the financial requirements of poor self-employed women workers. As in March 1995, SEWA BANK had provided loans of Rs. 100 million to 22,538 women. Housing loans of Rs. 40 million have been given to 5,000 women. SEWA has also

contributed to the development of the habitat environment through accessing drinking water in rural areas to 9000 families and providing toilets to 165 families. The important aspect of SEWA's operation is that it is financially sustainable without any subsidies or grants. The SEWA Bank borrows and lends at the market rate through the financial route. SEWA has contributed to the empowerment of poor women and alleviation of poverty through micro-enterprises that cover a wide range of small economic activities. The SEWA bank has been an inspiration to the World Women's Banking (WWB) and its Chairperson is also the Chairperson of WWB. A number of national and international agencies have shown interest in SEWA activities and some of them also provide support to reach out credit to women in low-income households.

b) *Recycling of Waste : Route of Sustainability: Calcutta Experiment*

Waste management is a critical concern of local governments. Conventional technologies have been found to be energy-inefficient, operationally unreliable and capital-intensive and, in the resource-constraint situation, investment flows have always been considerably lower than the needs. In this context the integrated wetland programme of Calcutta has been found to be cost-efficient, apart from generating employment and contributing to the food resources of the city.

The wetland region, besides treating city sewage, produces about 8000 tonnes of fish per year, i.e., about 20 per cent of the city demand. The garbage dumps produce 150 tonnes of vegetables per day, which again is 30 per cent of the demand of fresh vegetables of the city. The paddy fields using fish pond effluent are producing 16,000 tonnes of winter paddy. The waste-recycling system is also important as a means of employment generation, without compromising the conditions of place of work and entrepreneurial interests of the local villager.

The successful programme is a participatory endeavour of the government of West Bengal, state parastatals and local government, research and training institutions and the local villages, fishermen and other workers.

c) *People's Participatory Approach to Urban Management : Madras Experiment for Clean Surroundings*

The deteriorating urban environment, mainly a result of severe financial, administrative and bureaucratic constraints motivated the development of a people's participatory programme. In the pre-experiment period, the average garbage collection in Madras was 2,500–3,000 mt/per day and the civic agencies spent 10–20 per cent of the budget on solid waste management (Rs. 60–80 per capita/per year), yet the garbage collection efforts were found to be unsatisfactory.

The Exnora strategy is based on the "street beautifier" collection system in which a former rag picker picks up garbage from households, sweeps the street thereafter, and delivers the garbage to a transfer point, where from the local body carries it to a dumping site. Each Civic Exnora, which functions as a grassroot level NGO, comprises 75–100 families and at present 900 operate in the city of Madras. Households contribute towards the salary and operational expenses. The people have to facilitate the 'beautifier' to collect the garbage.

Apart from solid waste management, the Exnora activity has now extended to recycling of perishable organic and inorganic wastes using the vermicomposting technique, sensitising people on identification and control of points at which pollutants enter the waterways and rain harvesting, among others. In each programme, the success has been due to motivation of the people to take a lead in managing their own civic amenities and services as that contributes to its sustainability.

d) *Integrated Infrastructure and Public-Private Partnership Route of Sustainability : Case Study of New Mumbai*

The City and Industrial Development Corporation (CIDCO), a parastatal of the government of Maharashtra has successfully evolved and implemented a strategy of urban development through setting up an effective counter-magnet to the mega-city of Mumbai. As part of the development programme of the Mumbai Metropolitan Region, CIDCO formulated a strategy to develop transport and communication infrastructure in New Mumbai, merge the telecommunication systems of Mumbai and New

Mumbai and provided plots and developed housing and office complexes in New Mumbai at prices that were a small proportion of the prevailing prices in Mumbai.

Some 95,000 housing units were developed by CIDCO for all income categories and the private sector has produced another 40,000 units. Water supply has been ensured through specific projects and 100 per cent underground sewerage system has been laid. Apart from developing a social and physical infrastructure, CIDCO has made the programme financially viable through a market-driven approach, using people's own resources, and generating its own resources by utilising land as a critical resource. It has an effective programme of recovery of its investment. Public private partnership is a special feature of the programme.

6.4. Sustainable, Efficient, Accountable and Transparent Settlements Management

a) *Democratic Decentralisation*

A major contribution of India is in the area of devolution of political, administrative and financial powers from higher levels of the government to the local government. The democratic decentralisation process is a partnership endeavour of the national, state and local governments to pass on effective decision-making responsibility to the political and administrative organisation that is closest to the people, namely, the local government. It also involves the partnership of non-government sector, particularly the research and training institutions and the NGOs, who are an important interface between the people and the government.

This major initiative was taken through the 73rd and 74th Amendments to the Indian Constitution to effectively devolve powers to local governments. Under the constitution reform package, no duly elected local government can be superseded by the state government for more than six months, and State Election Commission (SECs) would be established to ensure fair and free elections. One-third of the total number of elected representatives would be women and specific proportion of positions have been reserved for the weaker sectors of the population. At the same time, State Finance Commissions

have been constituted to devolve effective fiscal powers to the local government and contribute to the strengthening of their financial base.

The democratic decentralisation process is anticipated to make the management of urban societies more accountable, transparent and efficient, as the people will not only participate in the governance but will also be the watch-dogs of the system.

6.5. Best Practices and Policy

The best practices have provided inputs to preparation of projects for replication as well as to formulate policies and strategies to extend the

concepts and approaches demonstrated to have succeeded in specific situations. The HDFC model has encouraged the emergence of several housing finance institutions and HUDCOs success in developing the parastatals as part of its credit down-marketing mechanism has been adopted in many government programmes that seek to extend the outreach of its activities. SPARCs endeavour in Mumbai is extending to other cities and the SEWA Bank concept is in vogue in many NGO-supported credit programme. The UBSP feedback is an important input for programmes on poverty alleviation, community development and access to basic services. Sulabh experiments have been adopted across the country in state and local policies.

CHAPTER 7

DESCRIPTION AND EVALUATION OF LEGISLATION ON HUMAN SETTLEMENTS

7.1. Basic Issue

Legislation in human settlements is recognised as the first requisite for the development of sustainable human settlements. An assessment of the existing provisions in the country suggests that many of them are inhibitive to the development of market-oriented land and housing activities and they also act as constraints to investment from outside the government sector. Some of the legislative statutes have outlived their utility as they were framed in an environment distinctly different from the present situation, almost half of century after independence, particularly when the country is set to achieve rapid growth in the new era of globalisation and economic liberalisation. The inhibitive features have been identified by the key groups and removing them is a priority issue that is taken up in the National Plan of Action.

2. Major Legislations

The National Report examines an illustrative list of legislations that broadly concern specific segments of the land and housing market, urban and regional planning and decentralisation. These selected legislations have to be rationalised to create a legislation-friendly environment for development of sustainable human settlements in an urbanising world, where broad guidelines are required to coordinate activities, many of which have to be undertaken by non-government actors. The legislations must take into account the changing realities over time, in terms of the mix of development activities, role of different actors, the social, cultural and economic

environment and new approaches to planning and development. Thus, for instance, affordability was not given consideration at one time and planning laws provided for high standards of land subdivision, infrastructure services and housing norms that increased the housing cost, taking it beyond the reach of many aspiring home owners. Restrictive land-use and zoning regulations freeze urban limits and contribute to the rising land price situation. The Urban Land (Ceiling and Regulation) Act has neither been effective enough to prevent speculation in land nor has it been able to deliver land at affordable prices to the poor. A major problem has arisen out of the creation of monopoly institutions with exclusive powers to assemble and dispose of land. This system has been found to be inefficient, causing delays and mis-directing the subsidy included in the pricing formula. Ban on creation of new cooperative societies after a cut-off date and restriction on the enrolment of new members have also contributed to inflationary trends in the housing market. Conservative rent control laws suitable at the time when introduced, mainly during the world war period, are no longer relevant in an environment where market forces are expected to play a crucial role. On the same rationale, several other existing legislations have to be modified.

a) Land Acquisition

The basic law relating to land acquisition is the Land Acquisition Act, 1894, amended through the Land Acquisition (Amendment) Act, 1984 (Act No.68 of 1984) to remove many operational ambiguities. A time limit of three years has been now laid down for completion of acquisition proceedings and the definition of

"public purpose" has been clearly stipulated to include provision of village site, extension, planned development, land for town and rural planning, etc. Planned development for public purpose is specifically provided by the Amendment Act, even though the law was already settled by the courts prior to this amendment. In the case of *Union of India versus Friends Housing Society* (1983 1 MCC 262), for example, it was held that the public purpose of planned development of Delhi is neither bad nor vague. Several provisions of the land acquisition legislation still require modification, basically because the role and significance of town planning and development activity in 1894, when the Act was formulated, was altogether different from the current situation.

The payment of compensation to the landowner in the event of acquisition of land for public purpose has been a perennial problem for development authorities, government departments, local bodies and public housing agencies. Courts have increased the compensation based on the market value of land situated in the heart of the city and often the enhanced compensation has to be paid much after the completion of the project, resulting in a financial crisis. The need for a new Land Acquisition Act specifically dealing with urban areas has been recognised as a priority issue for implementing urban development projects.

Another area for reform relates to freezing of land use and land values for a certain period when proposals for development are being worked out. This should form part of the urban land acquisition procedure. The interim land-use controls are operative before a development plan is finalised and statutorily enforceable and these controls help to freeze land use and land values during the intervening period between the draft plan and the final development plan. The speculative transactions of these lands to be compulsorily acquired can be counteracted if section 4(1)a of the Land Acquisition Act is tied up with the publication of the draft plan so that the land acquired, reserved or designated in the draft plan would be deemed to be the land needed for a public purpose within the meaning of the Land Acquisition Act. Secondly, the urban land acquisition legislation should be able to provide for possession of the land once the government or the public authority concerned

has determined the specific land to be acquired and this should not await the clearance of the compensation issue, which should be dealt with, separately. Experience has shown that it is not always possible to acquire all the land required for town planning and urban development programmes in a single operation and provision should be incorporated to undertake a phased programme of acquisition and development, without having to pay a higher rate of compensation influenced by speculative transactions for subsequent phases of acquisition. The formula for compensation must provide for mopping up of the unearned incremental values of urban property accruing to the present owner only, as these increments are not the result of the individual owner's efforts alone, but are due to the cumulative efforts of the entire community. As such, the benefit of increase in land values must be shared with the community.

b) Town Planning Scheme (TPS)

The conventional approach to land acquisition, even for public purpose, has become a time-consuming process leading to unending litigation, which tend to fuel the speculative activities. The total cost becomes prohibitive. At other times, the scale of compensation is unrealistic. The TPS approach is being adopted as an alternative method to mobilise land for urban development activities in a faster and financially affordable manner, without taking recourse to compulsory land acquisition. It is a type of negotiated arrangement between the public agency and the landowner. The TPS alternative has so far been utilised in a few states in the form of plot reconstitution, executed under the Town Planning Schemes of the town planning legislation.

TPS is an area planning technique patterned on the concept of land readjustment. In Maharashtra, which is a pioneer in the field of TPS, it is implemented under the Maharashtra Regional and Town Planning Act, 1966, while in Gujarat, it is implemented under the Gujarat Town Planning and Urban Development Act, 1976. Efforts are being made to rationalise the TPS to expedite their finalisation without delay by simplifying the elaborate and lengthy procedures prescribed under these Acts to make the TPS model as a self-financing mechanism for planning and servicing of urban areas.

Nevertheless, it provides a statutory basis for public participation in the planned development of the country. The TPS seems to be an appropriate approach to enable larger supply of serviced land. Variations are possible, including the retention of a part of the land by the public agency for financing the cost of infrastructure or providing sites to the urban poor. It is necessary to exempt the TPS under the Urban Land (Ceiling and Regulation) Act on individual merits.

The concept of development charge which is being successfully implemented in several states has been incorporated in the Model Regional and Town Planning and Development Law formulated by the Town and Country Planning Organisation. It has been commended to various states for adoption. On the basis of the provisions contained in the model law, a number of states have incorporated the provisions relating to development charge in their State Town Planning Acts. Essentially, the charge is levied on carrying out any development or change of land use for which permission is required. The rationale to levy the charge is that land values and use values of a property appreciate in an urban area not only due to the efforts of the individual owner but also due to the cumulative efforts of the entire community. Habitat I had recommended this levy, which has become an important source of revenue for financing development of basic services like water supply, drainage, electricity, roads, parks, playgrounds, hospitals and schools.

c) Slum Improvement and Upgradation

The existing legislations on slums aim at protecting the tenants of privately owned structures or 'chawls' which are in inhabitable condition. Presumably, their owners are not interested in maintaining them in a habitable condition as this prospect is not profitable due to the rent-control legislation. At the same time, it is recognised that the poor cannot afford to pay the rising market prices of a permanent shelter or buy land at high prices near their work place. The growth of slums is, in fact, the symptom of the inability of the people to protect the land and shelter from market transactions, in which they find themselves out-priced and since public intervention has not been able to regulate urban land resources in such a manner that the

poor can have an equitable access to them. It is increasingly being felt that the slum dwellers should not be denied civic amenities like potable water, street lighting and electricity on the ground that they are in illegal occupation of the land on which the slums have been established. The National Housing Policy has recommended to the State governments to take steps to avoid forcible eviction and relocation of slum dwellers.

The National Law Commission in its 138th Report examined the laws relating to slum and pavement dwellers in the light of the Supreme Court decision in the case of the Mumbai Municipal Corporation and the writ petitions of the slum dwellers. The Apex Court had recommended that the people are not to be evicted without offering them an alternative facility, unless it is virtually impossible to do so. The court, while dealing with Section 314 of the Mumbai Municipal Corporation Act, which authorised the Municipal Commissioner to remove, without notice, certain obstructions, took the view that the procedures should be reasonable. It implied the necessity of a notice before evicting the illegal occupants.

The Slum Areas (Improvement and Clearance) Act, 1956, a Central Act, is in force in Delhi and other Union Territories. Many states have enacted their own Acts to deal with the issue of slum integration with the formal socio-economic environment on the basis of the Delhi model.

d) Rental Housing

As a follow-up of the National Housing Policy which recommended amendments in the existing laws and regulations in consultation with the states for building up an enabling environment for housing activity and guaranteeing access to shelter for the poor, the Central government has brought out a Model Rent Control Legislation to bring about uniformity in rental laws throughout the country. This is essential as housing is a state subject and varying rent control laws distort the rental market. The basic objective of rent control legislation is to protect the tenant against exorbitant rent and arbitrary increases, and also to provide security of tenure. The Acts were incorporated into the legal system as a short-term measure to overcome the problem of temporary shortages of

housing during the Second World War, but they have continued in most states with periodic amendments in response to changing market conditions or to plug certain loopholes. Over these years, the rent control legislation has led to freezing of rents, low return on investment and insurmountable difficulties in obtaining repossession. It has acted as a major disincentive for investment in rental housing stock. The National Commission on Urbanisation (NCU) had recommended reform of the rent control legislation to balance the interest of the landlord and the tenant and also to stimulate investment in rental housing.

The Model Rent Control legislation was tabled in the Parliament and recommended to the States. The Delhi Rent Control Bill, 1995, based on this model, was passed by Parliament and has received the President's assent. It seeks to provide, *inter alia*, the following:

- i) exemption of certain categories of premises and tenancies from the purview of the proposed legislation;
- ii) creation of tenancy compulsorily by written agreement;
- iii) compulsory registration of all written agreements of tenancies, except in certain circumstances;
- iv) limit the inheritability of tenancies;
- v) redefine the concept of rent payable and provide for its determination, enhancement and revision;
- vi) ensure adequate maintenance and repairs of tenanted premises and facilitate further improvements, additions and alterations;
- vii) balance the interests of landlords and tenants in the matter of eviction in specified circumstances;
- viii) provide for limited period tenancy and automatic eviction of tenants upon expiry of such tenancy;
- ix) provide for the fixing and revision of fair rate and recovery of possession in respect of hotels and lodging houses;
- x) provide for a simpler and speedier system of disposal of rent cases through Rent Authorities and Rent Tribunal and by barring the jurisdiction of all courts, except the Supreme Court; and
- xi) enhance the penalties for infringement of the provisions of the legislation by landlords and tenants.

An important landmark provision of the new rent legislation is the setting up of Tribunals, which would exercise the jurisdiction, powers and authority exercisable before the date of its establishment by all courts, except the Supreme Court. It would not be bound by the procedures laid down in the Code of Civil Procedure, 1908, and would be guided by the principles of natural justice, and would regulate its own procedures. It shall consist of a Chairman, who should be either a sitting or former judge of the High Court or a member of the Indian judicial service or secretary in the law department of a state. It is imperative that these Tribunals are set up expeditiously to put an end to the unending judicial proceedings and provide justice to both the tenant and the landlord.

e) Cooperative Housing

Cooperation in India is a state subject and every state/Union territory has its own Cooperative Societies Acts and Rules. The cooperatives are registered under the Act which provides a legal base. The cooperative housing societies are being increasingly recognised as an alternative housing delivery system to large builders in the private sector and the public sector agencies.

The National Housing Policy has assigned to the cooperative group housing societies the responsibility to motivate people to undertake construction of houses by voluntary endeavour, improve the environment of human settlements to enhance the quality of life, and improve the ecology of the place. In this perspective, it has been felt that special legislative provisions be incorporated in the State Cooperative Acts to regulate the working of housing cooperatives in view of their distinctive nature of functioning, as compared to other types of cooperatives, which have also a commercial interest. A draft model chapter has been prepared for incorporation in the state cooperative laws. This provides for a clear definition of housing societies, classification, special characteristics, contractual relations between members and the society, and several other provisions to safeguard the interests of housing cooperatives and their members. The right of the flat-owner in a cooperative society to create a mortgage has been recognised as, hitherto, the right was vested only in the

cooperative and was not available to an individual.

f) Apartment Ownership Housing

The Apartment Ownership Act is enforced in many states in the country. The Central government has formulated a draft Model Ownership Flats Bill based on the recommendations of the Task Force constituted for this purpose and also taking into account the views of the various states and union territories. This model has been commended to the states for adoption. The Bill provides for the transfer of flats on ownership basis, inheritable and transferable rights to apartment-owners and mandatory registration of promoters, builders and estate agents. The Bill also provides for the formation of association of the apartment-owners for the management and maintenance of the common areas, facilities and common services such as staircases, lifts, lawns, street lights. Based on the model, the states of Delhi, Punjab, Gujarat and Karnataka have enacted legislation. Maharashtra had already enacted a similar legislation before the model was formulated while other States are in the process of doing so. This measure is expected to stimulate the construction of housing units in multi-storeyed buildings, particularly in large metropolitan areas.

g) Urban Land (Ceiling and Regulation) Act, 1976

The Urban Land (Ceiling and Regulation) Act, 1976 came into force in, February 1976, the year coinciding with Habitat I Conference. Its main objectives are :

- i) to prevent concentration of urban property in the hands of a few persons and speculation and profiteering therein;
- ii) to bring about socialisation of urban land in urban agglomerations to subserve the common good by ensuring its equitable distribution;
- iii) to discourage the construction of luxury housing leading to conspicuous consumption of scarce building materials and to ensure equitable utilisation of such materials; and
- iv) to secure orderly urbanisation.

This legislation has failed to curb or prevent concentration of urban land or profiteering. It could not also bring out an equitable distribution of land. Major impacts of the Act include :

- i) slow-down in housing development;
- ii) restriction on transfer of land in urban areas, which has reduced the supply of land and caused sharp escalation in land prices;
- iii) large loss to landowners as the amount payable for the excess vacant land taken over by the government is unjustifiably low;
- iv) unnecessary restriction on transfer of land even within the ceiling limit; and
- v) cumbersome procedures causing delays and harassment to the public.

The Central government is considering amendments to this Act in order to facilitate guided development of vacant lands rather than acquisition.

h) Urban and Regional Legislation

The Model Regional and Town Planning and Development Law being adopted in the States and Union Territories is the outcome of several reviews and revisions undertaken on the basis of recommendations of the State Ministers Conference on local self-government and Urban Development held from time to time. It is constantly reviewed by taking note of the working of the State Town Planning Acts, operational difficulties encountered, case law on the subject and developments in the field in India and abroad. A number of States and Union Territories have already enacted comprehensive planning legislation, while others are in the process of doing so. With the enactment of the 74th Constitution Amendment Act, 1992, which is the first step in the devolution of power to the people at the grassroot level, the states are engaged in the task of amending their existing municipal and Town Planning Acts to bring them in conformity with the 74th Constitution Amendment Act and provide modalities for setting up district planning committees and metropolitan planning committees. The Model Law is also being modified on the basis of the feedback received from various states.

The model law covers comprehensive regional, local and metropolitan planning, enforcement of the plans and their implementation. The concept of planning covers plan preparation, approval, enforcement, review and revision. With regard to regional planning, the comprehensive planning legislation must provide an adequate legislative basis so that physical developments in the region conform to a regional

plan. The functions of a regional plan may be advisory, restrictive, developmental and coordinative. A specific chapter on regional development plans is part of the model law. Some of the states like Maharashtra, Tamil Nadu and Madhya Pradesh have specifically provided for the preparation and implementation of regional development plans.

Most of the State Acts provide for the preparation of regional plans including those for metropolitan regions. The regional plan addresses itself to urban-rural interface like the fringe areas of a town where urbanisation is taking place and which may lie outside the municipal limits. It takes an overall view of developments in the region and allocation of investments between rural and urban institutions as a whole. The question of planning controls for regulating buildings in the peripheral areas surrounding major metros and other local bodies is conceived with regard to the future development of the area and its possible incorporation into the metro region at a later date. The District Planning Committees (DPCs) and Metropolitan Planning Committees (MPCs) to be constituted under the 74th Constitution Amendment Act are entrusted with the responsibility of preparation of draft development plans of such areas in which matters like extension of the municipal boundaries necessitated by the urban growth, transition of a particular village panchayat to the level of a Nagar Panchayat, have to be taken into consideration.

With regard to the planning of regions which cut across state boundaries, the participating states agree by passing the requisite resolutions in their respective state legislature, authorising the Parliament to set up a statutory coordinating board for planning and monitoring of the inter-state region. The implementation of the regional plan, of course, would be done by the participating states in their respective areas within the framework of the Plan. The National Capital Region Planning Board Act, 1985, has established the inter-state Statutory Planning Board for NCR in which the states of Delhi, Haryana, Uttar Pradesh and Rajasthan participate.

The 74th Constitution Amendment Act has provided for the constitution of Metropolitan Planning Committees (MPCs) for every metro-

politan area having a population of 1 million and above and are to be multi-urban and multi-district, imparting a democratic character to the planning process. The MPC is to prepare a draft development plan of the metropolitan area by taking into account the plans prepared by the municipalities and the panchayats, matters of common interest, overall objectives and priorities set by the Central government and the state government concerned, keeping in view the nature and extent of the envisaged investments. These are mandatory provisions and with the constitution of the permanent statutory committees, the role and functions of the existing metropolitan planning and development authorities like BMRDA, Bangalore MRDA, MMDA and other special function agencies would need to be reviewed to avoid any possible confusion or conflict in their operational jurisdiction. The integrated approach to planning and development for project areas to provide for the growth of concomitant auxiliary activity in and around such areas is a prerequisite to planned development of the human settlement system.

i) Power to the People

The 73rd and 74th Constitution Amendment Acts, are indeed, a first step in the process of devolution of power to the people at the grassroot level to plan for themselves and participate in the decision-making process. These amendments were preceded by wide-ranging consultations with the elected representatives of the panchayats and municipal bodies and by a number of regional conferences organised all over the country. The 73rd Constitution Amendment Act relates to constitution of panchayats, including their composition, reservation of seats, constitution of the Finance Commission to review the financial position of these rural local bodies and devolution of powers, authority and responsibilities to them. The 74th Constitution Amendment is applicable to municipal areas and contains detailed provisions relating to municipalities, structure and composition, elections, reservation of seats, powers, functions, finances and planning at district and metropolitan level. Action has been taken to set up State Finance Commissions and State Election Commissions. Until now, the inadequate constitutional protection for urban local self-government made the functioning of democracy in municipal govern-

ment an unstable activity. Even though the municipal acts provided for regular elections, the municipal bodies were frequently suspended, superseded and these suspensions continued for indefinite periods, eroding the very basis of local self-government in urban areas.

The 74th Constitution Amendment Act has brought about changes in the municipal organisation and its structure, functions, finances, election procedures, tenure of municipalities, etc. The structure and the composition of municipalities vary widely from one part of the country to the other and there is generally no accepted set of criteria with regard to an urban agglomeration, resulting in discrepancies between one state and another. The 74th Constitutional Amendment has brought about changes in the constitution of municipalities by classifying them as: (a) Nagar Panchayat, (b) Municipal Council for a smaller urban area, and (c) Municipal Corporation for a larger urban area and has also listed the parameters for classifying the urban local bodies into these three urban categories. The composition of the urban local bodies has been made more responsive to the people by providing direct elections from the territorial constituencies in the municipal area. A new part, IX A, has been added to the Constitution which has laid down, for the first time, important provisions relating to spatial planning in the planning system at various levels right from the Nagar Panchayat to metropolitan regions and then integrating the town plan with the district plan and through them with the state and national plans.

A singular feature of this amendment is the new role envisaged for elected local bodies in the planning process. At present, there are many different agencies operating outside the framework of the democratically elected local bodies entrusted with the task of urban planning like City Development Authorities and City Improvement Trusts, which are responsible to the state and not to the people. With this amendment, the municipalities would play a more active role in urban development. Urban planning including town planning, regulation of land use, construction of buildings, and planning for economic and social development are some of the important functions enumerated in the

Twelfth Schedule added to the Constitution by this amendment.

Another provision with regard to district planning is the constitution of a District Planning Committee (DPC) to consolidate the plans prepared by the panchayats and municipalities in the district. This is a mandatory provision to be carried out by the state governments. Like the DPC, Metropolitan Planning Committees (MPCs) are also to be set up for every metropolitan area with a population of 1 million and above, in which 66 per cent of the members must be directly elected. Presently, the metropolitan planning and development authorities have been constituted either under the State Town Planning Act or under a separate Act and their functions also differ. The MPCs would be more responsive to the people and would lend a democratic character to the planning process.

j) Housing and Urban Finance

The legal provisions are one of the constraining factors to the flow of institutional finance. They affect funds flow in two major ways: raise the transaction cost and affect the recovery process. The existing system of registration of deeds and documents, where a large number of documents are required to prove title, confers only presumptive title on land and is also time-consuming and cost-prohibitive, especially for the poor. The alternative system, the "Torren's System" may be introduced, under which the registration is done by a state official whose certificate is the conclusive proof of ownership. The system deals with registration of the whole title of the property and is not limited to any one transaction. The certificate also provides for disclosure of any encumbrances affecting the land. This is a critical requirement for institutional finance. In the case of slum settlements and tribal property, there is an urgent need for proper cadastral survey and appropriate legislation must be introduced to make it mandatory

To reduce the registration cost and also the time, there is need to rationalise the Land Acquisition Act, 1894, Transfer of Property Act, 1882, Indian Stamp Act, 1899, and Registration Act, 1908, which seem to have outlived their utility. In a dynamic and rapidly expanding financial scenario, the reforms in this area are

critical if the housing sector has to become an effective participant in the mainstream of financial flows, nationally and worldwide.

In the area of fiscal intervention, initiatives are necessary to eliminate the disparity in the treatment of savings mobilised by housing finance institutions and other financial institutions

in terms of the Tax Deduction at Source (TDS) provisions. Special incentives are desirable to facilitate down-marketing of credit, promote urban renewal and asset upgradation programmes and introduce new and innovative credit instruments that have been found to be effective in other countries.

CHAPTER 8

PRIORITY ISSUES

8.1. Perspective

a) Introduction

Three major macro-economic and policy developments are first examined to provide a perspective in which the priority issues are subsequently brought out. These include the recent initiatives towards economic reforms, the enabling strategy in the human settlements sector, and the policy initiatives to make human settlements sustainable and affordable.

b) Economic Reforms

i) Impact Areas : Land, Housing, Urban Services and Social Sector

The economic reforms have enhanced the urgency to develop a working environment in which all actors are enabled or facilitated to perform their roles effectively to contribute to the development of sustainable human settlements. Economic reforms are expected to impel economic activities, which is likely to increase the demand for land, housing and related urban services like potable water, sanitation, electricity and transport. In the absence of these services, the likelihood of economic activities being adversely affected and shifting to other locations is very strong and some evidences are already coming up in the mega-cities.

The economic reforms require immediacy also in the area of human resource development. This is particularly important if the poor and vulnerable segments of the population have to benefit from the process of economic liberalisation. Issues like development of social safety nets, access to housing and basic services through non-market interventions and protection of specific segments of the vulnerable group require reorientation of public policy and of

officials at all the levels of the system and induction of new actors with appropriate skills to undertake and implement programmes, particularly the NGOs and CBOs.

ii) Concerns of Key Actors

The business community and human settlements managers, while expecting economic reforms to stimulate investment in economic activities and accelerate the rate of growth, are concerned at the anticipated increase in costs, particularly of land and housing. Their fear arises from a situation in which economic reforms have been initiated without the preparatory work for effective growth of human settlements and urban services. A basic prerequisite for a successful programme of economic reforms, which has not been addressed adequately so far, is reforms in the land market. Consequently, land prices have spiralled, pushing out large sections of the people from the market and compelling investors to seek alternatives to mega- and metro-cities. This situation, with appropriate initiatives, can be transformed into an opportunity in small- and medium-sized towns, where land and housing costs are still not high. This strategy has been recommended by the National Commission on Urbanisation and also Agenda 21 and the GSS.

The NGOs and CBOs are concerned about the impact of economic reforms on housing for the poor due to the rising prices of housing solutions and reorientation in the role of government. They fear that the enabling activities of government may not be adequate to address the needs of the poor and the disadvantaged. They are also of the view that an exclusive market solution to land, housing, basic services and finance is unlikely to work when a large majority of the people cannot enter the market.

This majority includes the people living and working in the informal settlements, areas with poor connectivity and a large part of the rural hinterland. In such a situation, the market solution has to be modified and the priority issue, in the context of economic reforms, is to see how access to land, housing, basic services, finance and income-generating opportunities for such people can be stimulated and facilitated, and identify the actors who should take up these tasks with the appropriate facilitating inputs from the government.

c) Enabling Environment

It is in this context that a working environment has to be created to remove existing impediments to flow of investments, technology, materials and human resources and maintain the cost of housing solutions at levels that are within the affordable capacity of common households. In effect, the working environment has to be such that all potential actors in the government and non-government sectors would contribute to the development process. The basic objective of the enabling approach to human settlement development, endorsed in the National Housing Policy (NHP), is to enable people to acquire a housing unit of adequate size, with access to basic services like potable water and sanitation along with social services, and at a price that can be paid from accumulated savings and normal income flows with enough margin for maintenance. An enabling environment is also one in which the most vulnerable groups in society can acquire all development inputs and services based on principles of equity and socio-economic justice. The object of the enabling approach is, therefore, to facilitate people to have adequate and affordable shelter which can be maintained in sustainable human settlements in a rapidly urbanising world.

d) Sustainability and Affordability

The third development in identifying priority issues is to assess the extent they would contribute to sustainability and affordability in housing programmes.

Sustainability of human settlements requires development and management of housing and related infrastructure and services in a manner that makes the total human settlements package of solutions fit into the absorbing capacity of the

end-users, the households. Sustainability has to also keep in perspective the environment-friendly utilisation of natural resources and ensure inter-generational equity.

The traditional approach to make housing solution affordable is focussed on reducing costs, through subsidised land and capital, and, in some cases, building materials and operational overheads of public sector housing delivery systems. This approach has not been effective. It is now recognised that financial affordability has two aspects, cost reduction and income upgradation. The development of integrated human settlements, encompassing shelter and work place complexes, as envisaged in the NHP and GSS is high on the priority agenda, especially for reaching sustainable housing solutions to the lower income segments of the housing market. The vision of affordability must, however, go beyond the financial and economic issues to cover the basic needs of the vulnerable groups in the country.

8.2. Priority Issues

a) Land

The key issue is how to augment the supply of developed land and extend its availability to all segments of the market in an equitable and sustainable manner. The existing inequity in access to land of different segments of the housing market has to be removed. Policies must free the restrictions on land supply and make supply responsive to demand. In most parts of the country, land is in limited supply and the land market does not function efficiently due to the monopolistic control vested in public agencies, large holdings in the possession of institutional landowners, large corporate and industrial enterprises, major religious and charitable trusts and government departments. Legislations like the Urban Land Ceiling Act have not been effective in developing an efficient land market. High land values are typical of this situation.

The following priority issues have emerged in the consultations of the three Key Groups and the National Human Settlements Forum :

1) The government and its agencies must cease to monopolise or pre-empt land assembly, development and disposal. Land development should be a joint activity of the public

sector and the private sector, including the co-operative sector.

2) The promotion of optimal utilisation of land and releasing vacant land into the land market are essential.

3) Development of an automated cadastral and land-titling system throughout the country is necessary so that the land market can function effectively.

4) The eviction and removal of encroachments on urban land should be undertaken judiciously and not without providing a viable alternative. In this context, it has to be recognised that there are situations where land not fit for habitation was made habitable by the poor who had no other place to live. It is the moral responsibility of the society to take that process to its logical conclusion by providing basic amenities and services, subject to environmental considerations and the location being safe and not prone to natural disasters.

5) The Urban Land (Ceiling and Regulation) Act distorts the development of an efficient open land market and must be suitably modified, so that, instead of remaining a constraint to land supply, it facilitates the supply of land through the open market, with due regard to the interests of the poor.

b) Housing Development, Renewal, Upgradation and Retrofitting

The priority concern is to make the housing market efficient and socially just. Left to itself, the market cannot be expected to cover the entire housing sector. The poor build their own houses on encroached land, using self-acquired building materials (60 per cent biomass) and their own labour inputs. These types of activities are prominent in the slum settlements in urban areas and in rural and tribal areas. As such, market-driven housing activity may not cover more than 40 per cent of the housing sector and an exclusively market-driven approach to shelter may not be appropriate. The development of an efficient housing market would require interventions on both the demand and supply sides. Restrictive practices on the supply side and economic constraints on the demand side, particularly for the poor, have to be removed. In their case, income-generation programmes must form a part of the sustainable human settlements programme, an aspect recently recognised by

the Government of India through an innovative initiative to merge poverty alleviation and housing programmes for the poor. This has to be carried forward through recognising mixed land-use patterns and introducing regulations to enable the informal sector economic activities to develop, keeping in view public interest and environmental considerations.

There are four aspects of housing development that have to be part of the National Plan of Action — development of new housing stock, renewal of dilapidated housing stock, upgradation of substandard housing stock (particularly slum settlements and rural housing stock), and retrofitting and strengthening of existing housing stock to minimise the impact of natural disasters, particularly earthquakes, cyclones and floods.

The immediate task is to assess and understand the magnitude of the housing market and the present scope of the delivery system. The thrust has to be on an institutional mechanism to cater to low-income groups, the rural household, and other disadvantaged sections, and provide them with more equitable access.

Accordingly, the priority issues are:

1) Strengthening the delivery system, including support services, outside the Government sector, which would include private builders, cooperatives, NGOs and the self-help sector.

2) The public sector delivery system has to be reoriented to enable it to play the role of a development catalyst and to facilitate other actors to play their key roles at the decentralised level.

3) The public sector should play a catalytic role in transferring skills, technology and affordable building materials, finance and basic amenities to the uncovered segments of the society.

4) Upgradation, renovation and renewal of old, dilapidated and *kutcha* (temporary, non-permanent) housing stock in rural areas, and slum settlements and inner cities in urban areas is an issue and represents the backlog of housing activity that forms a part of the priority agenda.

5) Retrofitting and strengthening of the existing housing stock to make the houses resistant to natural disasters and incorporating these features in the new housing stock.

6) Home-ownership should be developed through an affordable home loan programme

that can be normally serviced from monthly household income, supply of land, materials, appropriate technology, and finance, as also by legal and regulatory provisions. Fiscal incentives can stimulate home ownership activity at the national, state and local levels.

7) The development of rental housing by providing specialised financial instruments and fiscal incentives, provision of land and modification of rental laws to provide an adequate degree of security to the owner so that the investment flows in rental housing activity are stimulated.

8) The demand for housing will increase sharply in the post-economic reform period, partly due to new investors and partly because of the increasing aspirations in a rising income situation. The country must be prepared to meet these growing needs in the existing framework, and if changes are needed, these should be introduced.

c) Urban Infrastructure and Services

Sustainability in human settlements programme cannot be attained without simultaneous, and preferably preceding, development of urban services. In this context, the priority issues are:

1) The minimum services that should be included are potable water, sewerage and sanitation, electricity, transport, schools, health, *aanganwadis* (child-care centres) and public distribution system. Once these basic services are available, people would be stimulated to undertake housing development.

2) The sustainability of the human settlements in the urban areas is very dependent on the proper management of solid wastes collection and disposal. There is need to strengthen the system and upgrade the practices from, say, open dumping to sanitary landfill and composting.

3) Poor sanitation facilities in slum and squatter settlements where a few toilets provide service to a large number of people, is another concern of city managers and the people. Provision of adequate sanitation facilities in these settlements and improved facilities for community toilets is essential.

4) Access to safe drinking water, especially in the intermediate towns, is a critical need and the gap between the minimum water consump-

tion requirement and actual supply has to be bridged.

5) The Public transportation system must be strengthened, including in the intermediate towns. In the mega-cities, the level of pollution arising from automotive transport modes must be controlled and the problems of traffic congestion and long travel time between home and work place requires special intervention.

6) In the matter of urban services, apart from planning for the new demand likely to emerge with growing urbanisation, the backlog demand is a priority issue. Investment in upgradation and renewal of urban infrastructure has been negligible mainly because of the weak financial position of the local governments that managed the assets and the disinclination of financial institutions in the country and abroad to finance renewal activities, specially when the market for new asset creation, a "lower risk" venture, was substantial. It is in this context that the investment needs for these activities must be estimated, sources of funds identified and a set of financial and fiscal incentives provided to stimulate and sustain investments in urban renewal activities. The possibility of establishing a specialised urban financial institution for urban renewal programmes has to be examined.

7) In terms of phasing out the mobilisation of the large investment necessary for sustainable urban infrastructure and services, it is necessary to first identify the types of activities that can be taken up on commercial terms through the private sector and then formulate policy initiatives that are conducive to create the appropriate environment, particularly in the areas of finance, taxation, legal provisions and technology. It is recognised that certain urban services cannot be developed through the private sector on purely commercial terms. These areas have to be identified and the responsibilities shared between the public sector, having access to subsidised funds, and the private sector, to be stimulated with a set of incentives built into the system for profit generating urban services. An effective public-private partnership should be developed in respect of each major urban service as well as at all the stages of the activities from planning to resource mobilisation, construction, management and maintenance, as also the recovery of the investment through an efficient pricing policy.

8) The specific needs of the vulnerable groups must be particularly taken up as part of an integrated programme and pricing of the services must keep in view their levels of affordability.

d) Environmental Issues

1) The increasing urban population and its concentration in metro and class I cities, the rising phenomenon of urban poverty, air and water pollution, and the rapidly deteriorating urban infrastructure such as transport, electricity, sanitation, health and housing, necessitate a broad-based strategy incorporating multiple policy instruments to maintain the urban environment.

2) Citizen participation in environmental protection measures must be institutionalised and conceived in the context of the decentralisation programme under the 73rd and 74th Constitutional Amendment Acts. The Metropolitan Environment Improvement Programmes in Madras and Mumbai, for example, must be extended to other metro-cities. The special needs of other Class I and Class II towns, particularly those on the verge of rapid industrialisation, must be given high priority.

3) Conserving the vestiges of wetlands, mangroves and other unique habitats in Indian cities and upcoming towns is crucial.

4) Considering the enormous strain on the available natural resources of water in the country, it is necessary to protect the existing water resources from pollution so that the quality parameters of the natural resources are maintained for the coming generations.

e) Housing Norms

1) In the context of providing adequate as well as affordable housing solutions, some consensus has to be reached on housing norms or the minimum housing to be ensured for all the people. The norm may be specified in terms of a minimum plot size or covered living space. Apart from this, a minimum housing norm must include the basic services of potable water and sanitation.

2) The NHP had proposed a minimum size of plot of 85 sq m, with a provision for built-up accommodation of not less than 20 sq m in rural areas, and with adequate provision of services, except for those on the periphery of large cities.

In urban areas, the size of plot should not be less than 25 sq m with a provision for additional built-up accommodation and services on individual or shared basis in a neighbourhood adequately served with community facilities.

3) The housing norms will be used as a base to work out the action plan, including the assessment of the resource requirements, materials, finance and human, and the type of interventions and inputs to be provided by the key actors. The time schedule of the action plan can then be prepared.

f) Local Government

With the process of democratic decentralisation having been given a constitutional basis, the priority issue is how the capacity of the local government system can be strengthened, especially with respect to resource mobilisation and the professional capacity of city managers. In this context, the priority issues are:

1) Developing the professional capacity of local governments, in particular, for resource mobilisation, planning, implementation, maintenance and monitoring. With non-government actors expected to play a more prominent role than in the past, local governments have to undergo an attitudinal change in their approach and work environment and areas for productive participatory activities and partnership with the private sector and NGOs have to be identified and strengthened.

2) While State Finance Commissions have been set up, effective devolution of state-level mobilised resources to the local government has to be ensured, to augment the revenues of local governments through tax measures, user charges, tariff structures, etc. In principle, local taxes should increase faster than national and state taxes because increasing urbanisation, industrialisation and economic activities have to be largely supported by local-level infrastructure and services. Property tax and octroi are the main revenue sources for local bodies and these have to be made more buoyant. Housing values are appreciating significantly but are not reflected in the growth of property tax revenue. Similarly, increased urban activities are not reflected in increased octroi revenue. While it may be desirable to eliminate octroi for facilitating movement of goods across the country to form an effective common market, it would have to

be replaced by an alternative local revenue source that would capture the growth of economic activities at the state and city level.

3) The possibility of local governments having an access to some of the buoyant Central taxes needs consideration.

4) Local governments have to also create an enabling environment for other actors to actively participate in the creation and maintenance of housing and urban basic services. These activities must be also identified.

5) Effective autonomy to local government from the state government has to be ensured. The activities of state parastatals need an immediate second look and the local level activities must gradually devolve to the local government, except where economies of scale would make such devolution an unviable activity.

6) At the same time, effective coordination at the city level is necessary, not only among the various departments of the city government but also with those in the higher tiers of the government and with actors outside the government.

g) Rural Housing

Traditional housing is almost wholly self-built, with largely self-acquired biomass materials. A major impact of urbanisation has been the flow of information on new technology, housing designs and options and the need to upgrade the structure, strengthen it, especially the roof and the wall, has been well recognised in the NHP and in many of the rural housing programmes. This would reduce the annual maintenance inputs, especially human inputs, and provide better protection against natural calamities than in the past. Rural housing is also qualitatively different from urban housing, in that the housing activity in rural areas is not so much based on the cash economy and depends much more on land rights and access to resources. Rural housing has also emerged as a major component of rural development programmes and, as such, is considered to be an integral part of rural development planning. Keeping in view the varied range of geoclimatic conditions and housing typologies in rural areas, the tasks are stupendous in developing and managing rural housing programmes. One set of materials, plan or construction technique cannot be applicable across the country, and hence rural housing requires grassroots

level feedback on housing needs, together with basic amenities like approach roads, internal roads, drainage, water supply, sanitation and work place. In a sense, rural housing in India is a "micro-habitat" development activity.

A comprehensive connotation of activities to be included under "rural housing" is equally necessary as the habitat in the rural context, is the base for the totality of rural livelihood programme. The rural habitat is the focal point of convergence of all development activity and this reality must be recognised. The habitat must have access to fuel, fodder, water, toilet facilities, land and forest products, including biomass for providing building materials, and space for income-generating activities.

The significance of giving high priority to rural housing development lies in the fact that it could strengthen the economic activity base in the rural areas. Good housing would ensure a better quality of life, providing services usually associated with urban housing and lifestyle. Living costs, however, will be considerably less and living conditions more environment-friendly and conducive to attain a better quality of life. This would increase redeployment of rural savings within the rural sector and make the credit-deposit ratio more favourable. It is in this perspective that the plan outlay for rural housing in India is larger than those for urban housing and programmes are underway to promote and support NGO/CBO activities in rural housing.

The priority issues, in the context of a rural housing development programme, include:

1) Land is a critical requirement, particularly to meet the housing needs of the vulnerable groups, such as the rural landless, marginal farmers, scheduled tribes, scheduled castes, and women. The land site must be suitably located with respect to farm lands, other economic activities and basic amenities.

2) Access to new materials and technology through a rural network of building centres.

3) To facilitate the transfer of technology from the "lab-to-land", specific credit instrument is another priority requirement, together with an easily accessible and affordable credit delivery and servicing institutional mechanism.

4) Local building materials and technologies suitable to different geoclimatic regions must be promoted and indiscriminate commercial exploitation of these materials which is already

making their accessibility to rural households increasingly difficult, must be contained through legislative and administrative interventions.

5) The sustainability of rural housing is dependent not only on new and appropriate technology, materials, credit and settlement-related basic services but also on the linkages between housing and income-generation programmes. These linkages must be facilitated through integrated human settlements programmes.

6) An equally important issue is the protection against unnecessary displacement of rural settlements due to development projects, and where this may be unavoidable, viable alternative rehabilitation programme must be taken up well before displacement.

7) Experience in rural housing activities through the formal housing delivery system is limited, and this is a priority issue to be taken up in the national plan of action. In this context, ways and means to stimulate other actors, including the cooperatives and the NGOs to work in rural housing, is a priority issue.

8) In terms of creating an enabling environment for rural housing, proper cadastral survey and documentation of land holdings is a basic issue; equally important in the rural context is security of land tenure to the rural households, particularly marginal farmers, landless workers, and other disadvantaged groups.

9) The self-help housing activity can be strengthened, both for new construction, additions and upgradation, through the enactment and effective implementation of laws for conferment of homestead rights, provision of house sites with basic infrastructure, and access to credit.

10) A suitable institutional infrastructure, including strengthening of existing organisations at the state, district and local level, is necessary, with specific responsibilities for implementation, supervision and monitoring of rural housing schemes, and with the full participation of the beneficiaries, voluntary agencies and village panchayats.

11) The Government of India through the Ministry of Rural Areas and Employment, has targeted the people living below the poverty line as the most vulnerable group whose housing needs have to be taken up as a national challenge. In this context, it has adopted the strategy enshrined in the NHP, providing a range

of options to the rural households in the country. The most extensive programme is the Indira Awas Yojana (IAY), under which 2.6 million houses have already been constructed since its inception in the Seventh Plan. The programme requires some restructuring to take into account state- and location-specific needs.

h) Rural-Urban Continuum

1) In the search for balanced socio-economic development, strengthening the rural-urban continuum is a priority issue identified by the key actors. The terms of trade between rural and urban areas must not be discriminatory against either of them and close linkages should be developed to transfer the benefits of growth in a location to its surrounding areas by developing close linkages at the regional level.

2) Issues like resources and basic services are critical in the development of a judicious rural-urban continuum. In this context, regional planning has assumed special significance because it enables the adoption of a regional approach to develop a large area, bringing in economies of scale in operation and promoting the urban-rural integration process. This would have a larger multiplier effect in the region than a specific town-level plan. The priority issues are the role of different actors in formulating and implementing the programme, the type of support services that might be necessary to strengthen the rural-urban continuum and the regional approach to the growth of the area.

i) Urban and Rural Planning and Management

1) The sharp shift in the pattern of urbanisation and recognition of the critical role of the informal sector in urban productivity and efficiency calls for a restructuring of conventional urban planning methodology. While the concept of the master plan is endorsed, it must change to accommodate new elements in the urban economy. City master plans have to be developed more in the regional contexts with networking among satellite towns rather than in city-specific situations. In the rural context, rural housing is intrinsically part of community development and village planning.

2) The present system of top-down planning must be replaced by a system of consensus planning, in which all the actors are directly involved in the planning process. A total partnership

approach, involving all the key actors, must start from the stage of assessment of development requirements and continue through the preparation of the plan, until its finalisation.

3) An institutional mechanism is necessary to facilitate the participatory approach of all actors at all stages of the planning exercise. The role specification of different actors and social sector providers, including NGOs, should form an integral part of this mechanism.

j) Role of Actors

New actors from outside the government sector are expected to play lead roles in the delivery system to reach housing and related services on a sustainable basis to different segments of the population. Many actors have to play dual roles of both a facilitator and a provider. The priority issues in this context are:

1) Determining the facilitator role of the government, particularly with respect to specific activities, facilitating mechanisms and instruments, such as legislation, subsidy, dissemination of technology, provision of land.

2) All the actors require facilitating inputs from the government to access the capital market and other sources of finance, nationally and internationally.

3) Government's role as a provider has to be firmed up in terms of activities like land, technology, finance, etc. and the segment of the housing market to be catered to in its role as a provider.

4) A crucial issue relates to the financing of government activities and the pricing of the products. Issues of computing the subsidy, making it transparent and delivering it effectively are important.

5) Within the government sector, the local authorities, particularly, parastatals and local governments, have to play a critical role as housing is a localised activity and their role in planning, managing programmes and developing participatory processes with other actors form part of the priority agenda.

6) The private sector is a prime agent of construction activity and its role in the process of consolidation of land and production and supply of materials and technology has to be determined. The provider's role, presently covering the higher segments of the housing

market, has to be extended to cater to the lower segments of the housing market. The mechanisms for this type of activity have to be determined and suitably developed, including, for example, some formulae on the mix of different category housing units and their pricing so that the housing for the poor is provided at affordable prices, and the activity is viable.

7) In this context, priority issues also include the type of incentives that may be required to stimulate the private sector to enter into the lower segments of the housing market, and to promote their activities to manufacture and supply building materials, especially low-cost building materials that go into low income housing programmes.

8) The private sector's role as a facilitator may include technology support, access to finance, designs, skills, etc.

9) It is necessary to ensure that the small developers are able to effectively participate as they can play an important role in small and medium towns. A small developer-friendly environment has to be created.

10) The priority for NGOs/CBOs is to equip them to play a key role in the housing sector, more as a facilitator than as a provider. This may include access to finance and other inputs and capacity-building programmes. The latter is of critical importance as the majority of the NGOs in housing are new entrants, and skills to effectively interface with the other actors must be developed in substantial measure. The priority issue is to identify areas of capacity-building inputs required by the NGOs/CBOs and the institutional mechanism to transfer these inputs.

11) The issue of interface between the government machinery and others has been highlighted by both the NGOs/CBOs and the business community this interface must be developed and strengthened.

k) Housing and Urban Finance

The Indian housing finance system is growing rapidly. While the network is developing and a wide range of resource strategies and credit instruments are being marketed, the coverage in terms of housing cost is limited, and in terms of the housing market, it is marginal for households in low-income deciles, rural areas, informal sector, tribal areas, etc. Enabling all

segments of the housing market to access institutional finance is a priority issue. Areas for intervention and development include :

1) Facilitating housing finance institutions to reach out to uncovered markets by reducing risks and improving loan-absorbing capacity of the uncovered segments .

2) Reducing transaction costs, not only to the housing finance institutions but also to the clientele.

3) Cost-efficient mobilisation of resources by increasing the share in the high saving rate of the Indian economy, including the savings of households whose savings still do not adequately flow into the organised sector, namely, the informal sector households and the rural and urban poor. Innovative need-based saving instruments, collection and servicing mechanisms and fiscal incentives must be identified for this purpose.

4) Strengthening the legal system for mortgage and foreclosure to reduce risks and increase liquidity of the financial institutions and rationalising legislations like the Transfer of Property Act, Indian Stamp Act and the Registration Act.

5) Introducing new credit instruments, like a "composite "credit, including "crisis" or "consumption" credit , for households who have mixed credit requirements. The priority issue is how to integrate these credit needs into a single credit instrument and equally important, how to deliver and service it through a single window.

6) Development of a specialised financial system for the urban and rural poor and promoting grass-root level housing finance delivery mechanisms through the participation of NGOs and CBOs. In this context, the possibility of a Shelter Fund based on a small percentage of total construction cost, or a small cess on property tax, or some similar mechanism, has to be explored.

7) The development of specific credit instruments for rental housing, such as, rental-linked home loan programme, bridge finance for extension activity in existing housing stock for rental end-use and bulk loan for massive rental construction activity by private builders.

8) Formulation of specific credit instruments for financing housing and urban renewal programmes, upgradation and retrofitting of

housing stock and incorporating earthquake-resistant technology in new housing stock and urban infrastructure assets.

9) Rationalising the system of fiscal incentives for both rental and home ownership programmes. Fiscal incentives for renewal and upgradation activities, have to be considered at all levels of the government.

10) Development of support services to reduce risks of financial intermediation and enhance the liquidity of the system, through the development of mortgage insurance and a secondary mortgage market .

11) Innovative strategies and new sources of funds for financing housing and urban infrastructure projects. Tax-free bonds, infrastructure and shelter funds financed through contributions which entail tax reliefs, allocations from the national and state governments, bulk funds placed by governments with financial institutions for providing housing and urban services to low-income sectors, are illustrative of the type of new initiatives that are required.

12) Rationalising the system of municipal finances, both on the revenue and expenditure side and generating surpluses. Local taxes have to be made as buoyant as Central and State taxes.

1) Fiscal Incentives

Fiscal incentives are recognised as an important stimulant to promote investment activity and also attract savings of the people. While the incentives on direct taxes like the income tax are accessible only to income tax assesseees, those linked to indirect taxes like excise duties on building materials are accessible to a wider range of people, including in the vulnerable groups. In this context, the priority issues are:

1) Extension of income tax-related fiscal incentive available to home ownership activities, to rental housing and housing upgradation.

2) Examining the most effective instruments to provide the benefit of fiscal incentive to low-income households, possibly through low-cost materials.

3) Fiscal incentives to promote R&D and production and marketing of new and innovative materials and components, which are energy-efficient, use recycled inputs and wastes and are environment-friendly.

4) Fiscal incentives to stimulate household savings into the housing sector and housing finance institutions, in particular.

5) Specific fiscal incentives to promote investment in specific urban infrastructure such as water supply and sanitation.

m) Legal Issues

Several legislations have been identified as major constraints to the development of housing activities and the absence of certain legislations have also slowed down the pace of investment. The priority issue is to withdraw or modify the inhibitive aspects and to create a legislation-friendly environment.

1) The inhibitive legislations relate to land and housing, including urban land ceiling, rent control, city and regional planning and development control regulations. These have had a restrictive effect on the supply of land for housing activities, increased the housing construction period and curtailed the growth of the rental housing market, a basic requirement in a rapidly-growing urban situation.

2) The provisions of the stamp act and registration of property law must be rationalised as they increase considerably the final cost of housing solutions.

3) The absence of legislation on speedy mortgage foreclosure has been a major constraint in the expansion and down-marketing of institutional finance for housing.

4) The lack of provision of mortgage insurance has affected the process of reaching credit to the lower segment of the housing market.

n) Technology Transfer and Affordable Solutions

1) As part of the concern to facilitate development of affordable housing solutions, especially for the middle- and low-income deciles, technology transfer has become a priority concern. India has developed a basket of low-cost solutions in materials and building technology, but their transfer to the field has been much slower than is desirable. The BMTPC has been established for this purpose and the issue is how this actor may interface with field-level organisations.

2) In the area of affordable solutions for low-income households, the current thinking is to also improve the income levels so that the gap

between housing cost and the income of the people can be bridged. The technical implications of this strategy have to be examined so that the process of upgradation of income is simultaneous with the upgradation of housing.

3) Another related issue is how new technology can strengthen traditional technology or improve traditional forms in a less environmentally-degrading manner.

o) Women's Access to Housing

1) Women are the key actors in the settlement sector, from the development stage to its maintenance and utilisation. Interventions are needed for gender-sensitive housing and to ensure that women play their full role in the preparation of housing design and in its implementation and monitoring.

2) Home ownership, besides being a major step in the empowerment of women, provides security and the priority issue is to ensure that women would be able to enjoy full property rights.

3) To accord to women a decisive role in planning human settlements, adequate representation of women in local level processes has to be inducted to approve housing plans, allocate land for housing the poor, and in the approvals of credit for medium- and low-income housing programmes.

4) Adequate representation to women must be ensured in all capacity-building activities of both the government and non-government actors.

5) A minimum allocation of housing credit in all housing finance institutions may be kept for women-headed households and the mechanism to attain this goal must be developed.

6) A part of the women group that requires special attention is the single working woman, who leaves the security and comfort of her home in an urban or rural area in search of work and education, and also women in distress. Adequate working hostels, special condominium schemes and allocation of land and credit facilities for such activities must form part of all development plans, particularly in the larger cities. In addition, the needs of the poor working women with children has to be addressed.

7) There is a large information gap in assessing the conditions of women (as also children) with reference to the types of housing

available to them. It is imperative to design a base-line study to generate adequately reliable data on the situation and needs of women and children in the urban and rural areas. Further, to plan and develop gender-specific and child-specific shelter/settlements, it is necessary to identify indicators which reveal their situation for understanding and advocating their shelter specificities.

8) The need of each family to possess desirable shelter is universal. It is the place where women and children pass most of their time. Each shelter must be designed in a total setting which meets their basic requirements of sanitation, community entertainment, health facilities, education, means of communication and intercultural interaction. Participation of women and children in this endeavour to develop appropriate housing must be facilitated at all levels of the government.

p) Children's Access to Housing

1) A home represents security to the child, a place where there is warmth and affection, a place to eat, laugh, play and cry; an environment that provides opportunities to grow and develop. Development programme must cover all poor and disadvantaged children, irrespective of gender, caste, class and ethnicity and take special consideration of location-, sector-, age-specific needs and the disability factor. More specifically, the programme must include a safe and secure shelter, with access to potable water, privacy for bathing and defecation, support systems to protect children, especially the girl child from abuse, and care of children of working parents.

2) Children must be also protected against forced eviction, displacement and ecological disasters, and have access to food security, free primary education, quality health care and protection from labour abuse and economic exploitation, both of employers and parents.

3) A child-centred habitat policy must seek to promote participatory activity of children in habitat development and management. The National Plan of Action on Children (1992) has identified a number of specific activities that would improve the status of children, and these have to be put into action, covering, in particular, children in difficult circumstances, such as

physically handicapped; mentally handicapped; drug addicts, victims of natural and man-made disasters, refugee children, street children, slum and migrant children, orphans and destitutes; children suffering from AIDS, children of parents with AIDS and AIDS orphans, children of prostitutes and child prostitutes and juvenile delinquents and child labour.

4) Specific activities must be targeted to improve the health and status of children and enable them to have easy access to development inputs and social services essential for developing their full potential.

5) Reducing the mortality rate, universalising primary education and proper access to water and sanitation are some of the other priority issues for creating a healthy environment for children.

q) Urban Poverty

The most demanding of urban challenges, unquestionably, is the challenge of reducing exploitation and misery and alleviating poverty, as poverty is found to be the most critical contributory factor responsible for people living in sub-human conditions. Alleviating poverty is not only necessary from the point of view of the urban poor but is critical in the context of maintaining a healthy urban environment. The poor and the non-poor have closer linkages and inter-dependency in the urban environment than in the rural environment.

While there has been some decline in the level of poverty, both urban and rural, the levels are considerably high to cause concern and in numerical terms, the magnitudes of urban and rural poor are large enough to endanger the sustainability of the urban and rural environment. This concern is reflected in the new initiatives of the government on the eradication of urban and rural poverty. Poverty-eradication programmes are on the priority agenda and of special concern to NGOs/CBOs and human settlements managers. Even the business community can no longer remain silent spectators to the malaise of urban poverty, the growth of slum and squatter settlements and non-provision of urban basic services to these settlements. The urban environment is now accepted to be an integrated one and the phenomenon of "city within a city", a city of the poor and a city of

the non-poor, can no longer continue if human settlements and urban environment have to become sustainable.

Several priority issues have emerged from these recent developments, such as:

1) The specific development inputs that may be accessed by the urban poor to make them sustainable in their own shelter and income-generation programmes have to be determined. If the dependency syndrome has to be effectively tackled, capacity-building inputs might possibly be a more desirable strategy than merely providing access to some subsidised inputs like credit, skills, land, shelter.

2) In this context, the responsibilities of key actors in the business community and the government in the process of alleviation of urban poverty have to be firmed up.

3) In terms of credit, a composite credit instrument and a flexible credit assessment norm and loan repayment schedule may be more effective than the subsidised packages being provided.

4) The Government of India has introduced a number of poverty-alleviation programmes, seeking to provide the poor with access to various development inputs like skills, credit and sometimes employment, as well as access to shelter and basic services. The coverage is, however, limited, and the activities were undertaken through different schemes and departments without much coordination. The priority issue to consider is whether the responsibility to alleviate poverty must be of the government alone, or whether the other actors should also play a more direct role. The NGOs and CBOs are an important interface between the poor and the government, but should their role be merely of an interface, or should they also mobilise resources to combat the problem of poverty. The private sector, too, has to participate in the poverty-alleviation programmes, going beyond its present charity-oriented approach to direct intervention in promoting and strengthening self-employment activities through a network of micro-enterprises, closely linked, forward and backwards, to their large-scale industrial and trade operations.

5) Training and academic institutions must also participate in the programme by providing capacity-building inputs to all actors and these have to be identified and taken up in a plan of

action. A related issue is the motivation and involvement of the actors in the national programme of poverty alleviation.

r) Eviction, Displacement and Housing Rights

1) The NGOs consider this as a priority issue. The issue is not only to provide adequate shelter to all but to ensure that the shelter remains with the household. The urban poor largely find a housing solution for themselves on vacant public or private land and this is the only shelter they can afford. The issue is to ensure that they are not evicted from this shelter, without a viable alternative.

2) Moreover, if special development considerations require eviction, the same has to be preceded by a properly conceived rehabilitation programme in consultation with the people and the eviction activity should commence only after effective implementation is ensured.

s) Monitoring and Evaluation System

As many activities in the human settlements sector are likely to be undertaken outside the government system, monitoring and evaluation becomes more important now than earlier.

1) The government must undertake the responsibility of becoming the apex monitoring agency. If this role is accepted for the government, the level at which this responsibility will be entrusted is equally important and the choice has to be made among the Central, state and city level governments.

2) Another priority issue in this context is the identification of instruments through which the monitoring and evaluation activities are to be institutionalised.

t) Institutional Development

An efficient delivery system is required to formulate and implement the various programmes that have been identified as priority concerns in the human settlements sector in India. The institutional mechanism must also facilitate the proper inter-play of the key actors and, through them, provide the desired level of access to housing and financial services to their constituencies.

1) The institutional mechanism for formal housing and financial intermediation is well established in the government, private and cooperative sectors. In the case of the urban

and rural poor, basically the informal sector, the development of an institutional system development is a priority issues. A separate institutional infrastructure may have to be established to provide them access to basic services and finance. This institution may have to combine both financial and development activities and cover housing and income-generation programmes.

2) An institutional mechanism is also required for rural housing programmes.

3) In the case of the formal housing development activity, a major gap in the existing institutional mechanism relates to activities of housing and urban renewal, upgradation and retrofitting. Looking at the magnitude of the renewal and upgradation programmes and the urgency of retrofitting issues in the existing and future housing programmes, a priority issue is to develop the institutional mechanism to provide professional inputs for these activities.

4) All the key actors must be stimulated and supported to look after all the activities, and in particular, of upgradation. The public sector institutions alone cannot take up this mammoth

responsibility because the task of renewal and upgradation is more onerous than of building new housing units. Each activity has to be location-specific and since people already stay in these settlements, the effectiveness of the activity would be largely dependent on their participation, involvement and commitment. These activities have, thus, to be of a participatory nature and both the government and the organised private sector would have to provide enabling inputs and, in some cases, also total solutions to these problems.

u) Capacity Building

Institutional development, effective decentralisation through local governments and induction of new actors in the housing and related services delivery system, would require major capacity-building inputs. In this context, the priority issues are:

1) Assessment of capacity-building inputs of the different actors and development of specific training capsules.

2) Development of decentralised training institutions and networks.



Andrews Ganj Project (HUDCO), New Delhi.
Integrated urban design with well balanced environment of built form with open space linkages.

PART III

NATIONAL PLAN OF ACTION



The upgradation of skills needed for male and female construction workers on appropriate technologies.

NATIONAL PLAN OF ACTION

9.1. The Perspective

The current state of human settlements in India reveals a mixed scenario. There has been increased coverage of its population, around 900 million, in terms of basic amenities and the quality of its housing stock in urban and rural areas has also improved. Yet, the tasks set by Habitat II of adequate shelter and sustainable human settlements remain a challenging endeavour. To meet these challenges, the country has developed an institutional framework for the effective decentralisation of activities and is encouraging new actors to play a more significant role in the development and management of human settlements activities than in the past, promoting also, in the process, a participatory approach. The effect of economic reforms is now evident in major sectors of activities and their viability has become a key consideration. While more of market-oriented interventions will emerge, the country realises that certain basic services such as education, health, water supply and sanitation cannot be denied to any person and, in that perspective, a wholly market approach might not be realistic for some time to come. The concerns of the poor and others in the vulnerable group remain high in the national priority.

The National Plan of Action (NPA) has been formulated in the perspective of a changing economic environment. It is based on priority issues identified by the key actors in the human settlements sector and presented in Part II (Chapter 8) of this Report. The primary concern of the key actors in India, including the human settlements managers, the private sector, and NGOs and CBOs, is to ensure that all segments of the housing market have adequate and timely

access to development inputs in the future, which they all consider essential for building and sustaining human settlements activities in a rapidly urbanising world. The concerns cover both urban and rural housing. The key actors have adopted a strategy to assess first the magnitude of the tasks ahead in the area of human settlements, covering the shelter unit, related infrastructure essential for congenial living, and livelihood programmes, and then examine strategies and roles of actors for ensuring that all segments of the population would be able to satisfy their housing and related needs.

9.2. Objectives and Dimensions

a) Objectives

The two critical objectives of the NPA are:

- 1) Enabling people access to adequate and affordable shelter and social infrastructure and services, with focus on the needs of special interest groups identified in the National Housing Policy (NHP), Global Shelter Strategy (GSS), Agenda 21 and declarations in recent international fora like the Child Summit, Social Summit and World Women's Conference. These are:
 - the houseless and the inadequately housed;
 - households below the poverty line;
 - rural landless labour including artisans;
 - households dishoused by development projects and victims of natural calamities;
 - scheduled castes, scheduled tribes and freed bonded labour;
 - widows, single women and women-headed households including construction workers below the poverty line;
 - children;
 - the physically handicapped.

2) Developing sustainable settlements in a urbanising world, covering both urban and rural areas.

The NPA covers a 25-year period (1997–2021), with the first phase covering five years, 1996–97 to 2000–01, and the second phase, the period beyond 2001 AD.

b) Quantitative Dimensions

The NPA is based on estimates of backlog demand of housing and basic services, as in 1996–97, and future demand from new households. The Eighth Plan has projected the upgradation and new construction requirement at 12.22 million units in rural areas and 9.55 million units in urban areas, apart from the backlog at the beginning of the plan. These estimates have been used as a base for projecting the scenario thereafter.

1) Housing

The backlog of new housing stock, as of 1997, is estimated at 5.6 million units, marginally higher than 5.2 million in 1991. The backlog of upgradation, renovation and extension of existing housing stock has a larger dimension: 17.7 million units in 1991, 25.8 million units in 1995 and 27.4 million units in 1997 (Table 6). Projections of the new housing activity are presented for the next 25 years in Table 12, as also the backlog activity that form a part of the NPA.

In terms of a programme to provide access to each household to an adequate shelter, it is estimated that 140.1 million additional units will be required during 1996–97 to 2020–21, averaging, 5.60 million units per annum. In a shorter-time perspective, 1996–97 to 2000–01, the new housing requirement is 17.1 million units or 3.42 million units per annum. In either case, the target is achievable, considering that the housing stock increased by 3.4 million units per year during 1981–91, when the housing delivery system and a human settlements development environment was not as developed or conducive as it is likely to be over the next 25 years. The problem of clearing the backlog of upgradation and renewal of the existing housing stock is considerably more intractable.

An investment of Rs. 6580 billion is required to finance the new housing over the next 25 years and Rs. 803.2 billion in the first five years,

the annual investment flow that will be required being Rs. 263 billion and Rs. 161 billion, respectively.

An investment of Rs. 217 billion is required to clear the 1995 backlog of new units and another Rs. 411.3 billion to take up the backlog of upgradation and extension work.

2) Physical Infrastructure

The backlog in the urban infrastructure sector is large, mainly because attempts made in the past to upgrade, renovate and modernise the existing infrastructure assets have been inadequate. Table 9 (Chapter 2, Part II) presented some estimates as illustrative of the investment required to clear the backlog of a few infrastructure components, such as water supply, toilet, solid wastes disposal and roads. Water supply, for example, would need an investment of Rs. 332 billion to Rs. 498 billion (low and high estimates at 1995 prices), if the groundwater system is developed, and between Rs. 407 billion and Rs. 582 billion, if the surface system is developed. These estimates are based on per capita investment requirement adopted from HUDCO data base for the year 1980, indexed to 1995 prices. Using more recent HUDCO data for 55 major projects countrywide, the investment requirement is estimated to be even higher, at Rs. 1,454 billion. The total investment required for water supply to meet the backlog and future demand up to 2021 is estimated to range from a low of Rs. 703 billion to a high of Rs. 3,075 billion, depending on the choice of the water supply system and assumption on per capita investment cost. The 1997 backlog would account for 47 per cent of the total investment anticipated during the next 25 years.

3) Social Infrastructure and Services

These services must be integrated into the housing and physical infrastructure development programme to ensure the sustainability of the human settlements. Some critical services are health, education, child care, creche, ICDS centres and PDS outlets. The first stage in the preparatory work would be to estimate, as is being done for housing and physical infrastructure assets, the demand for these services linked to the projected growth of population and housing stock.

Table 12 : Housing Investment in India : 2001, 2011 and 2021

	1997-2001			2001-11			2011-21		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
I. Housing Need (million numbers)									
1. Population	1022.1	703.2	318.9	1164.3	738.5	425.8	1545.4	927.2	618.2
2. Housing demand	191.2	130.0	61.2	223.5	140.5	83.0	314.2	185.4	128.8
3. Housing stock	174.1	122.3	51.8	191.2	130.0	61.2	223.5	140.5	83.0
4. New housing	17.1	7.7	9.4	32.3	10.5	21.8	90.7	44.9	45.8
5. Inadequate housing	11.4	8.7	2.7	—	—	—	—	—	—
6. Upgradation	16.0	11.2	4.8	—	—	—	—	—	—
II. Investment Requirement (Rs. billion at 1995 prices)									
1. New housing	803.2	181.9	621.3	1688.8	248.0	1440.8	4087.7	1060.6	3027.1
2. Inadequate	166.5	104.4	62.1	—	—	—	—	—	—
3. Upgradation housing	244.8	134.4	110.4	—	—	—	—	—	—

Source : SDS estimates

- Notes : 1. The population projections for 2001 and 2011 are as given in the Eighth Five Year Plan and those for 2021 are SDS estimates based on past trends in population growth rates. Urbanisation rate is 31.2, 36.0 and 40.0 per cent during these three periods.
2. Housing demand represents the number of households, estimated on the basis of household size.
3. Investment estimate at 1995 prices are based on NSSO 44th Round data on cost of construction, adjusted for 1995 prices.
4. Inadequate housing covers the congestion demand and upgradation includes also replacement. These estimates are of estimated backlog as in 1995-96 and the activity would be taken up in the next 5-10 years.
5. Per unit cost at 1995 prices for new housing is Rs. 23,621 in rural areas and Rs. 66,094 in urban areas. Inadequate and upgradation housing estimates are based on cost at 50 per cent in rural areas and 35 per cent in urban areas (Rs. 12,000 and Rs. 23,000).

9.3. Strategies and Policies

The magnitude of the tasks ahead and their multifaceted features would require both long-term policies and strategies as well as short-term action plan. The former are elucidated with a 25 years perspective.

a) Adequate and Affordable Shelter for All

1) Introduction

As a member of the United Nations, India has not only adopted the goal of "adequate and affordable shelter for all" and "sustainable human settlements development in an urbanising world", but also subscribes to the following nine principles adopted by the international community in formulating the Global Plan of Action to

determine her priorities and to lay down her strategies in the NPA:

- i) equality;
- ii) eradication of poverty;
- iii) sustainable development;
- iv) liveability;
- v) family;
- vi) government responsibility and civic management;
- vii) partnerships;
- viii) solidarity; and
- ix) cooperation and assistance.

Adequate shelter, in the Indian context, would include adequate living space with provision for incremental development and proper access to physical and social infrastructure and services including energy, fuel, potable water, wastes disposal and sanitation services, and

education, health and recreational facilities. It must have adequate privacy and security, as also lighting and ventilation. The location of the shelter must be suitable with reference to work place, markets, communication services and social and cultural amenities. The National Habitat Agenda seeks to ensure that all women and men in the country have adequate shelter, dignified employment, a healthy and safe environment and access to basic services.

The endeavour of the government and the people of India would be to maintain the cost of such an adequate shelter at an affordable level. People should normally be able to finance their shelter activity themselves through their accumulated savings and a home-loan serviced through the normal flow of household income. This strategy of financing would ensure the sustainability of the human settlements development activity. The critical tasks of all the actors is to ensure that access to adequate and affordable shelter is available to all, including people living in poverty, the vulnerable and the disadvantaged, either through the market or through well-targeted and transparent subsidies.

2) *Building an Enabling Environment*

The NHP provides for an enabling environment, where housing would be constructed by the people themselves and (NHP): "The crucial role of government at different levels is not to seek to build houses itself but to make appropriate investment and create conditions where all women and men, especially the poor, may gain and secure adequate housing, and to remove impediments to housing activity."

The enabling approach of the government in the development of adequate and affordable shelter for all would basically seek to :

- Provide the people access to all facilities and support like land, finance, materials, and technology at reasonable costs to improve their housing conditions according to their self-perceived needs and priorities.
- All categories of housing will be covered, such as ownership, rental, upgradation and renewal.
- Access will be provided to basic services such as potable water, sanitation and electricity at the level of the housing unit and health, education and transportation at the level of the settlement.

- Legal and planning constraints to housing will be eliminated for developing an efficient and equitable system for the delivery of housing inputs.
- Efforts would be made to stimulate, promote and sustain the direct participation of the maximum number of actors and increase the flow of investment and the tempo of work.
- The enabling environment-creating strategies would seek to integrate, in the case of the low-income households, a programme of improving housing and income conditions. An objective of the NHP is "to undertake, within the overall context of policies for poverty alleviation and employment, steps for improving the housing situation of the poorest sections and vulnerable groups" and, in this endeavour direct initiative and financial support of the State is as important as integrating housing, income and poverty-alleviation programmes. This strategy forms a major component of the recently introduced Prime Minister's Integrated Urban Poverty Eradication Programme.
- Apart from the removal of legal constraints, fiscal incentives, development of the housing finance system, R & D in low-cost materials and technology, capacity building of all actors and institutional development will form a part of the enabling environment-creating plan of action.

3) *National and State Shelter Policies and Action Plans*

The NHP provides the framework under which state governments would prepare State action plans, strategies and policies. At the national level, the Central government, through the NHP and other interventions, would integrate shelter and human settlements development policies and programmes with macro-economic and social development and environmental policies and provide the lead to State governments to take up similar initiatives at the state level. This integration of policies would facilitate the flow of institutional finance, building materials, technology and skills required for managing the large housing and related infrastructure activities to be taken up in the country. Housing is, however, a State subject. NHP has, therefore, clearly stated : " Governments of States and Union Territories would have to play

the primary role in formulating action plans and programmes suited to local needs and conditions in consultation with local bodies and citizen groups." The Government of India will encourage them to formulate State Action Plans through a broad-based participatory and consultative mechanism involving all actors at all levels for specifying the short-term and long-term goals for public programmes and activities of the non-government sector. National level estimates on housing and related infrastructure activities to be taken up in the next 25 years from 1996-97 provides the background in which state governments and local actors will prepare their state-level action plans, including some estimates of work to be done and related input requirements. The NHP has identified 5 broad items to be included in State Action Plans, which would specifically assess the housing demand and supply position. These include:

i) Number, type (economic category) and standards of housing units to be constructed or upgraded by public and private sector and units for the rental market;

ii) Resource flow from the private, cooperative and public sectors, and the number and type of units to be constructed by each sector on ownership or rental basis;

iii) Separate projections for rural and urban housing needs, including the resources for each sector;

iv) Assessment of shelter needs of totally shelterless, plot-owners who desire to construct a house, people who can afford to acquire a built-up unit, people in need of repairs and renovation/expansion, and people need for additional amenities; and

v) Desired product mix and resources required from the state budget, institutional finance and local contribution to provide adequate shelter for all.

The State Action Plans are necessary to determine the type and extent of participatory efforts of the major actors and enabling support from the state government in legal, fiscal and regulatory framework. With decentralisation of activities, state governments would encourage, support and facilitate local governments to also prepare their strategies and action plans to implement them for attaining the state human settlements and shelter development objectives.

The State Action Plans will seek to develop and strengthen the state-level housing delivery system, providing facilitating support to the private builders, housing cooperatives, local governments, NGOs and the self-help sector to take up housing development, upgradation and renewal activities. Public agencies will focus on direct interventions for the poor and disadvantaged groups and access all the people to basic shelter-related services, with thrust on potable water, sewerage and sanitation. For the poor, housing and income-generation activities will be integrated through the Central and State sector programmes on housing, urban basic services and poverty alleviation.

4) Access to an Efficient Land Market

Land is a strategic pre-requisite and accounts for a significant part of the cost of a housing solution. The task is to enable the land market to function more efficiently. The NPA would include:

- Removal of the supply-side constraints, such as, the existing legal and regulatory framework, slow pace of release of serviced land by public agencies and lack of infrastructure.
- Regulatory and fiscal interventions, including an efficient system of land-use planning and development controls, will seek to bring large tracts of vacant but habitable land into the land market and also develop some of the presently uninhabitable land. The initiatives may include progressive tax on vacant land and incentive mechanisms to stimulate both statutory and voluntary supply of land and contribute to efficiency and equitable land-use patterns.
- The participation of licenced private developers will be encouraged in land development, construction and infrastructure provision, with adequate safeguards to protect the consumers and increased supply of developed land for lower income groups. These strategies also contribute to dismantle the monopolistic control on land supply.
- To safeguard the interests of the vulnerable group in a market-driven land market, adequate provisions will be made, such as, providing in all city planning and land development programmes, specific proportion of residential land in development layouts for the EWS, LIG and MIG households.

- An automated cadastral survey and land titling system will be developed to enable the land market to function efficiently and to facilitate the extension of institutional financial intermediation. By the very nature of the activity, this has to be led by the government. However, in financing and implementation, other actors may be encouraged, such as, financial institutions, public and private sector land developers and housing agencies. Fiscal incentives may be considered for stimulating this activity. Apart from this, an efficient information system on land registration is essential for efficient land management. This should also cover an inventory of publicly-held land and their present and anticipated land-use plan for the next 5–10 years.

5) *Developing Housing Activities*

The thrust of government policy and strategies has been on developing new housing stock. Upgradation, renewal and retrofitting of existing housing stock in urban and rural areas, as also rental housing are high priority components of the NPA. The home ownership programme has to be substantially accelerated. The housing development NPA consists of:

- Encouragement by the Government of India to state governments to develop an enabling environment through legal, fiscal and financial initiatives.
- The housing delivery system would be strengthened and extended through the setting up of new institutions, mainly in the private sector and in partnership with NGOs. These may include specialised institutions for upgradation, rental and rural housing, as well as for the housing of the poor and other vulnerable groups. The institutions may take up activities in land development, construction, financial intermediation, technology development, etc.
- At the same time, the activities of many public sector agencies would be restructured so that they become effective facilitators of the housing development process and take up the provider's role in specific situations, where housing solutions are unlikely to be provided by other actors.
- Strategies to promote rental housing would include improved access to land and finance, modifications in the rent control laws and
- fiscal incentives at different levels of the government to stimulate investment by all actors in rental housing.
- Rural housing activities will focus on the provision of suitably located land sites to the rural landless and the upgradation and strengthening of housing structures through innovative and locally upgraded building materials and technology, improving the access to housing services and amenities and linking up with income-generation programmes.
- The adequacy of a rural house would require, apart from a strong and durable dwelling unit, access to fuel, fodder, water, toilet, land and forest products, and space for income generation activities.
- Institutional development to build an effective rural housing delivery system will cover technology transfer, provision of necessary inputs, capacity building of the self-help sector and credit.
- The conferment of homestead rights and safeguards against unnecessary displacement or dehousing due to development projects and where unavoidable, ensuring viable rehabilitation.
- The preservation of the customary and traditional (*nistar*) rights of access to biomass resources for rural households.
- A participatory strategy will be implemented for the development of rural housing, about 5 million units per annum. The strategy envisages community action with state support leading to a self-sustaining people's movement. Participatory decision-making will be promoted through *gram sabha* (village council) and *mohalla samitti* (ward or neighbourhood committee) of the poor. The support package will comprise land, finance, natural resources and technology. The *mohalla samitti* of the poor will be consulted in the land allocation process to ensure also that the land is near village habitation.
- The financial strategy for rural housing includes a mix of grant, self-contribution and an incentive-linked institutional loan, the amount of which is related to the loan recovery performance.
- Sanitation will be provided on a village basis with grants to the landless and loans to the others for constructing twin leach pit latrines

and the loans would be recovered through the mandis (periodic market centres).

- In the case of urban housing programmes, special attention will be given to slum settlements and informal housing. The eviction and removal of encroachments on urban land would be a limited activity and not undertaken without viable alternatives. The strategies recommended in the NHP to "avoid forcible relocation or dishousing of slum dwellers, encourage *in situ* upgradation, slum renovation and progressive housing development with conferment of occupancy rights wherever feasible" will be taken up in the NPA. The activities will cover access to basic urban services, institutional finance and development of capacity of the NGOs, CBOs and the people. Night shelters and basic sanitary facilities to pavement dwellers and the homeless would also be taken up in the NPA particularly for the mega- and large-cities.

6) Access to Basic Infrastructure and Services

The lack of adequate basic services, a key component of shelter, exacts a heavy toll on human health, productivity and the quality of life particularly for the urban and rural poor. The NHP has included the provision of infrastructure facilities as one of its major objectives, particularly "increase the access of poorer households to basic services" by expanding "provision of water supply, sanitation and other basic services in slum and other settlements occupied by the poor" and further, "ensure proper maintenance of amenities through community involvement and decent-ralised institutional arrangements." The NHP goal is to attain 100 per cent coverage for potable water supply and 75 per cent for basic sanitation, including the total elimination of manual scavenging, apart from stimulating large investments in public transport and traffic network "to subserve the needs of the poorer sections for cheaper and speedier access to work places and to integrate transport, land use and shelter." Apart from shelter-linked amenities, a number of services essential to develop congenial and sustainable human settlements would be developed including waste management, health, energy, education, social welfare, policing and public safety. The NPA will be the instrument to achieve these objectives.

Local and state authorities have the primary responsibility for delivery of the services governed by appropriate regulations, legislations and standards. Their capacity to manage, operate and maintain these services must often be supported by the national governments. Other actors, including the private sector, communities, NGOs and CBOs would be encouraged and supported to participate in the provision and maintenance of the services.

In this context, actions will be taken by governments at appropriate levels, in collaboration with all stakeholders to safeguard the health, safety, welfare and improved living environment of all people and providing adequate and affordable basic infrastructure and services like safe drinking water, sanitation, waste management, public transport, communication facilities, social services like basic health care, primary education, creche, ICDS, PDS outlets, as well as energy, roads, parks and open spaces. The local communities would be involved in setting priorities and standards for the services and the government, especially the local government, would advise and facilitate them in these activities. At the same time, the local government would support the efforts of academic and professional groups in analysing the need for infrastructure and services at the local level, facilitate the mobilisation of funds from all stakeholders for increased investment and establish support mechanisms to enable the poor and the disadvantaged to have adequate access. This would include, among other things, contractual agreements with community groups, where feasible, for the construction, operation and maintenance of infrastructure and services.

7) Mobilising Housing and Urban Finance

The relative decline in plan outlay for urban housing and infrastructure and the need to develop an institutional finance system requires strategies and policies to ensure that the financial requirements of all types of housing activities and basic urban services are adequately met and all the presently uncovered and inadequately covered segments of the market are given access. As at present, housing finance institutions serve the conventional market and do not respond adequately to the needs of large segments of the population, in particular, the poor and the women. The present coverage of institutional

finance is estimated to be around 22 per cent of the requirement of investment in housing. Recognising the low coverage, an objective of the NHP is "to promote easy access to finance for different housing activities and to evolve an elastic and widespread resource mobilisation strategy to tap household savings in the formal and informal sector. Steps would also be taken for the removal of constraints to the flow of finance into the housing sector, especially larger lending to the poor and the informal sector."

In this perspective, the activities in the NPA include:

- Re-orientation of the activities of existing financial institutions and, if need be, to set up new specialised housing and urban financial institutions that would exclusively cater to the financial requirements of the poor and other disadvantaged sections of the population.
- The present arrangements and practices relating to lending norms, collateral and repayment schedule would be reviewed.
- The activities of existing housing and urban finance institutions have to be strengthened by government at appropriate levels through adjustment of monetary and fiscal policies to promote competition in resource mobilisation and to facilitate extending more credit to uncovered population groups, particularly the poor and women, and to maintain, at the same time, the solvency and viability of the credit system. Legal statutes require modification to establish property rights, enforce foreclosure laws, support competitive mortgage markets and develop secondary markets, securitisation and mortgage insurance. Equally important, is to reduce legal transaction cost under the legislations relating to transfer of property, stamp duty and registration.
- It is equally important to decentralise lending operations of both the public and the private sector financial institutions to provide greater physical access to credit, especially in rural regions and for informal urban housing. The governments at the appropriate levels would have to provide facilitating inputs through fiscal and financial policies to accelerate the process of down-marketing credit to uncovered and inadequately covered segments of

the market and make these interventions a viable activity.

- New housing and urban finance mechanisms and institutions would be created to expand coverage of institutional finance. The thrust will be on rental housing, informal housing, urban infrastructure, renewal and upgradation. Special fiscal incentives and channelling funds under some of the public programmes through the financial institutions will be considered.
- Governments at all levels would also harness the potential of non-traditional financing arrangements by encouraging communities to form housing and multi-purpose community development cooperatives, removing legal and administrative obstacles for expansion of savings and credit cooperatives and integrating informal housing finance with formal housing finance mechanisms. Governments would support and facilitate the partnerships between cooperatives and community groups with public financing institutions as an effective means to mobilise local capital and apply it to local entrepreneurial and community activity for housing and infrastructure development. Fiscal incentives would be provided to the private sector and properly targeted subsidies would be given to community groups to develop these mechanisms. To facilitate and ensure access to housing to those not served by existing finance mechanisms, governments would review and rationalise existing policies of direct interventions as well as the system of subsidies to ensure their viability, equity and transparency. The NHP has recognised that "capital and interest subsidies for the urban and rural poor be targeted carefully, and that improvements be made in the housing finance procedures and shelter delivery systems in order to bring down the cost of shelter for the poor to affordable levels." In the case of the poor, the composite credit instrument will be explored as a part of the new credit policy.
- The critical concerns in providing access to the poor and the disadvantaged are the reduction of risks and transaction costs of the institutions and also the transaction cost to the borrower. While fiscal incentives can, to an extent, reduce risks, the reduction of the

transaction costs would also reduce risks. Decentralised lending mechanisms, utilising community-based organisations, would be encouraged for this purpose, particularly involving the participation of community leaders and women. Computation of the repayment instalment may have to be modified to give additional coverage on capital rather than interest account and this will reduce effective interest cost. Financial institutions would have to be compensated for any 'loss' and this may be provided through a fiscal incentive. Mortgage insurance and easier foreclosure methods are other measures to be introduced.

- New strategies and instruments of resource mobilisation for housing and urban infrastructure development will be introduced, including tax-free bond, urban development bond, municipal bond and donation and grant-based shelter and infrastructure fund. A Shelter Fund and an Urban Renewal Fund, for example, may be developed through the transfer of a small per cent of total construction cost *in lieu* of a fiscal rebate, or through a small cess on property tax or some similar mechanism. Life insurance and provident funds would be increasingly channelised into housing activities directly to the policyholders/members and through the housing finance system as housing provides one of the best securities against old age and unforeseen tragedies. Housing sector institutions would also be facilitated to have better access to the capital markets.
- Fiscal incentives would be increasingly utilised to stimulate the flow of household savings to finance housing and urban infrastructure development activities.
- Work on municipal reforms has been initiated, particularly on issues like local taxes, grants, expenditure norms and revenue-sharing. Rationalisation of municipal finance will be an important part of the urban financing strategy.

8) *Improving Construction, Maintenance and Rehabilitation*

To accelerate the base of housing development activity and provide adequate and affordable shelter for all, the construction technology has to be improved not only for new construction but also for the maintenance and rehabili-

tation of existing housing and infrastructure assets. The latter has become a critical issue in the older towns, where much of the investment and development activity in the past was concentrated on new assets creation. Improving construction technology and method would also reduce the cost of production and improve the quality and durability of the physical assets, including the capacity to withstand natural disasters. To facilitate, promote and develop these activities, governments at appropriate levels would provide fiscal and financial incentives to develop these activities outside the government sector, including the private sector and the NGOs and CBOs. Governments would also facilitate and promote the use of community contracts and where it exists, the informal sector, for construction, maintenance and rehabilitation of housing and local services, especially in low income settlements, with emphasis on enhancing the participation of local communities. The regulatory and inspection system would be simplified and made more transparent so that regulatory and administrative bottlenecks do not slow down the pace of development, maintenance and rehabilitation activity.

9) *Vulnerable Groups*

The vulnerable groups include the poorest groups and also some of the aged, street children, migrants, refugees, people from disadvantaged communities, people affected or displaced by natural and human-caused disasters, women-headed households, the disabled and some indigenous people. The vulnerability in their case has arisen from the inability to compete on an equal basis for resources and opportunities. The thrust of the development activities would be to improve and assure access by the different actors to these people to shelter, infrastructure services, finance and safety nets. For removal of barriers and eradication of discrimination in the provision of access, governments and local authorities would review and revise legal and regulatory frameworks that act as barriers at various levels, improve enforcement of existing laws and regulations that seek to prevent discrimination and barriers and work in partnership with other actors to raise awareness and thereby eliminate social exclusions, prejudice and discrimination in housing activities and access to basic services. The governments and local authorities should

provide, where appropriate, targeted and transparent subsidy, social services and safety nets, in partnership with the other actors so that all of them work in harmony to provide adequate and affordable housing and related services for vulnerable persons. Their partnership with NGOs and CBOs would be particularly necessary for the effective development and implementation of these programmes.

Women form an important part of the vulnerable groups and specific interventions would be taken up to ensure that they are able to play their full role in housing design, development and management, including the mobilisation and use of resources. Towards this end, security of ownership to women is a critical activity, together with adequate access to credit for housing and income programmes, possibly with some specific proportion of all such credit being kept for women-headed households. Women would be directly involved in local level processes to approve housing plans, allocate land and credit and participate in all capacity-building activities. Children, who constitute 40 per cent of the urban poor, are an important part of the vulnerable group, and their special requirements in terms of shelter, protection, and development has to be fully incorporated in the NPA.

b) Sustainable Human Settlements Development in an Urbanising World

1) Introduction

The sustainability of human settlements cannot be attained unless they are made economically buoyant, socially vibrant and environmentally sound, with full respect for cultural heritage and diversity. The quest for adequate shelter for all within the framework of sustainable settlements raises additional challenges. There is a possibility of conflict in the strategies to attain the two goals of Habitat II in the sense that the large housing programme will require substantial utilisation of resources that might affect the sustainability of the settlements and the environment. Recognising this possibility, India seeks to provide a proper balance between the two goals and has taken the path to promote and adopt building materials and technologies that are environment-friendly, utilise industrial and agricultural wastes and are energy-efficient. These new strategies will require new attitudes

and professional capacity, particularly at the level of the local government and this process has already been initiated. Capacity-building of the major actors is an important part of the NPA.

2) Sustainable Land Use

While balanced development would be promoted by specific urban policies, legal, financial, cultural and other measures, it is equally important to formulate innovative methods of urban planning and design for urban development, renewal and maintenance. The governments at appropriate levels, with the support of other actors at the national, regional and international level, would strengthen the city-level capacity by establishing national and city legislation to guide the implementation of public policies for land utilisation, urban expansion, urban renewal and housing. An appropriate mix of land use will be maintained, keeping in view the requirements of housing, economic activities, community services, open spaces, all of which will be developed in an integrated manner. In specific situations, governments at appropriate level, would directly intervene in the interest of the vulnerable groups.

3) Sustainable Urban Services

The sustainability of the human settlements would depend considerably upon the development and maintenance of viable urban services particularly drinking water, sanitation, wastes disposal, transport and communication. These services also affect the economic activities and thereby the resource-base of the cities and towns. In this context, the governments at all levels, in partnership with the private sector, NGOs, CBOs and community groups, would develop and maintain need-based urban services catering to all segments of the population. Pollution and environmental considerations will be kept in perspective.

The government would, in consultation with other actors, provide guidelines and training for the environmental impact assessment of city-specific economic activities, consumption patterns and urban services and develop cost-efficient delivery systems for the basic urban services. The NGOs and the CBOs could play a direct role in the development of sustainable waste management systems and delivery of potable water to low-income settlements and the

informal sector. The private sector would be encouraged to take up these activities on a contractual basis on behalf of the local government as well as undertake, in specific cases, wholesale and retail distribution of potable water. Governments at all levels would provide appropriate fiscal and financial incentives to stimulate and sustain non-government actors to participate in these activities.

4) *Poverty Eradication, Employment Generation and the Informal Sector*

The fundamental issue of poverty is inequities and exclusions which cannot be solved by the market alone. Transparent subsidies, prioritised with public participation and capacity building of the poor have to also be a part of a total approach to poverty reduction. Key elements of a poverty eradication strategy would, thus, include policies geared to more equitable distribution of income and wealth, provision of social protection for those who cannot support themselves, human resource development, improved infrastructural facilities, employment generation and comprehensive provision for the basic needs of all.

Specific strategies should be introduced to not only eradicate poverty through appropriate income-generation programmes but also to bring the urban and rural poor into the mainstream of economic and development activities. They would be provided access to low-cost building materials, skills for housing and income generation programmes and credit. Special strategies would be developed to facilitate and encourage development of activities in the informal sector by mixed land-use planning, provision of infrastructure, financial support, and fiscal incentives to the private sector and NGOs and CBOs to work in this area. The private sector, by developing forward and backward linkages to their industry and trade, would strengthen self-employment and micro-enterprise activities and fiscal incentives might be an effective stimulant. The multiplier effect of investment in the informal sector in terms of both economic and social benefits is much higher than in the rest of the economy.

Integration of housing and income generation activities would be an important strategy and would cover, apart from the normal social and physical infrastructure inputs, the economic infrastructure inputs. To promote these

activities, governments at appropriate levels would promote cost-efficient and labour-intensive methods of provision of infrastructure and services and rehabilitation of settlements, as also promote contracting and procurement practices which involve the local private sector, including small business, the informal sector and the community, and facilitate access to credit for the poor through innovative banking mechanisms. In all these activities, the interests of women and children, a major part of the poverty group, will be protected and promoted so that planning and management of human settlements is linked to poverty eradication programmes and has the necessary gender- and child-sensitive components that are enshrined in the NHP.

5) *Rural Settlements*

The quality of rural settlements has to be improved as the gravity of the urban and rural settlements and environment are inter-dependent. Major problems in the rural settlements are insufficient infrastructure and services and lack of environmental-friendly technologies.

Governments at all levels would promote and facilitate the development of sustainable rural settlements through a regional planning, development and management framework. In this endeavour, the private sector and the NGOs and CBOs would be activated and supported to develop sustainable rural settlements and make them centres of economic momentum so that they could deflect potential migrants to metro- and mega-cities and also contribute to regional and economic development. Governments at all appropriate levels would establish procedures for full participation of the rural population in the setting of priorities for balanced and ecologically viable regional development and establish a transparent system for the allocation of resources to rural areas based on economic potential and support the process of developing the urban-rural continuum. An integrated approach is required to safeguard a balanced urban-rural development.

c) *Capacity Building and Institutional Development*

1) *Introduction*

Capacity building and institutional development is critical to making human settlements sustainable and viable. It is also an important

requirement to make effective the process of decentralisation and empower all the key actors at the local level to play an effective role in human settlements planning, development and management.

2) Local Governance

While the central and state governments can do a number of things to enable local communities to solve problems, the success is dependent largely on the capacity of the local government and actors at the community level. The local authorities, the private sector, the NGOs, CBOs and the people are on the front lines in achieving the goals of the NPA and Habitat II. An efficient, accountable, transparent and participatory management at the local level is a *sine qua non* for sustainable human settlements development. In this context, follow-up action on the 73rd and 74th Constitutional amendments forms a major part of the NPA. The State Election Commission will facilitate the setting up of democratic institutions, in which one-third of the members will be women. A number of local level committees will form part of the decentralised system of planning and administration.

The priority activities relate to resource mobilisation and strengthening the financial capacity of the local government. This would be done through a wide range of devolutionary activities of state revenue to local governments through the State Finance Commission, rationalisation of tax measures and user charges in the domain of the local government, and devolution of more resources from the national exchequer through the National and State Finance Commission awards down to the local government. It will be an object of the fiscal reform programme to make local government taxes as buoyant as national and state taxes.

The degradation of urban infrastructure and services is attributable mainly to the weak financial base of local governments. In such a situation, many of the services have been provided by state parastatals. Economies of scale, lack of expertise at the local level and service-specific requirements have also made it necessary for state parastatals to operate in some of the services, notably water supply and electricity, where supply sources may cross city/town boundaries. With the decentralisation process

already initiated, an attempt will be made to equip the local governments to take up many of the services. Land development and planning is one such activity.

A major development activity at the local government level will be capacity building, particularly in terms of human resource development. This activity will be undertaken mainly by research and training institutions in the government and non-government sector and cover asset planning, development and maintenance, as also resource mobilisation, forging partnerships with the private sector and NGOs, and monitoring and evaluation. Capacity building in local government would have to cover the elected political leadership as well as the permanent executive manpower.

3) People's Participation

Sustainable human settlements development requires full cooperation and participation of the people including all men, women and the youth. A participatory mechanism and community-based action planning is essential for identifying problems, determining priorities and goals, fixing service standards, mobilising resources, implementing projects and assessing their impact. Governments at appropriate levels, including local authorities, would develop the institutional and legal frameworks to facilitate the direct participation of all citizens in the planning, implementation and monitoring of human settlement strategies and programmes, as well as to undertake civic education programmes and capacity-building activities to equip the people to effectively participate at the local level. In effect, community participation must be institutionalised at the neighbourhood/community level, and public hearing could be an effective enabling instrument. These activities have already been initiated as part of the action plan to make effective the 73rd and 74th Constitutional Amendment Acts. This work plan at the local level will also promote equity, incorporate gender and children considerations and involve vulnerable groups so that the people's own perceptions and their best interests are adequately reflected in local-level programmes.

4) Metropolitan Planning and Management

While human settlements development across the country encounter several common

challenges, the managers of metropolitan areas and mega-cities face unique problems due to the size and complexity of the tasks and responsibilities. Some special characteristics of metropolitan areas that need special skills are the increasing global competitiveness, the ethnically and culturally diverse population; large concentrations of urban poverty, extensive infrastructure networks and transport and communication systems, the strategic role of these areas in national, regional and international production and consumption cycle, economic development, trade and finance, and their potential for severe environmental degradation. Very often, the management tasks are complicated by the multiplicity of local authorities within a single metropolis. Governments at all appropriate levels would, therefore, monitor and assess the effectiveness and efficiency of metropolitan structures and administrative systems and incorporate the results into public policy in dealing with macro-economic, social and environmental issues. They would create a legislative framework and adopt organisational structure to ensure coordination, efficient service delivery and rational development within the metro region. These tasks would require a core professional group and development of its capacity is essential for the planning and development of infrastructure, management of large emergencies, coordinating service delivery and financial resource mobilisation. It is also necessary to promote policy dialogue and interaction among the major activity areas like transport, communication, wastes management, energy conservation, income generation, poverty eradication, social welfare and environment management, as well as among all the key actors at the local level.

Consensus planning must replace the existing conventional planning process so that planning develops into an effective participatory process. It should also encompass regional requirements and promote rural-urban continuum, and for this purpose, financial support and capacity-building inputs would be provided.

5) Institutional Development

The institutional system for delivery of new housing stock for the higher and middle income households seems to be well established through a wide range of public sector housing boards and development authorities, cooperative

societies and private builders. The inadequately covered or uncovered part of the housing market relates to rental housing upgradation and renewal activities, and housing of low-income households and people in informal settlements. Strategies would be introduced to strengthen the housing delivery system for these types of housing activities. The institutional development programme would be mainly undertaken through the organised private sector and NGOs/CBOs, with the government sector agencies coming on the scene only if other actors are not likely to fill the existing institutional gap. In the initial period before the institutional system is adequately developed, the public sector might have to continue to play a leading role. In this context, community-based organisations, including housing support centres, should form part of the institutional system. The new institutions that may be established would take up rental housing, rural housing, upgradation and urban renewal of housing and infrastructure.

Apart from the institutional development programme for delivery of housing solutions, there are shortages and weaknesses in the institutional system for the flow of financial and technical inputs for housing programmes in some of the sub-sectors of the housing and infrastructure markets. These include, in particular, the urban and rural poor, people living in settlements and areas with poor connectivity, and people who are not in a position to meet the conventional eligibility conditions of the existing formal sector financial institutions. These require new institutional developments, mainly outside the government channel. A third area for institutional development concerns income generation programmes for the poor. This will be basically at the city level and the local government will play the lead role.

The strategies for institutional development would include a mixed package of fiscal incentives, financial support, legislative provisions and capacity-building inputs.

9.4. Activities: Next Five Years

The NPA has two components, a short-term plan of 5 years (1997 to 2001), roughly coinciding with the Ninth Five Year Plan, which would cover the period 1997-98-2001-02 and a

long-term plan covering the next 20 years (2001 to 2021). Major activities to be undertaken are presented.

a) *Enabling Environment*

This is a critical responsibility of the Central, State and local Governments. Specific interventions are required to modify a number of legal statutes, planning norms and codes specified earlier in the Report. In some cases, new legislations are also required. The fiscal environment has to be suitably strengthened through rationalisation of tax rates, tax base and incentives at all the levels of the government so that investment in housing and basic infrastructure is stimulated and effective participation of actors is promoted not only in the mega- and metro-cities but also in small and medium towns and rural areas.

b) *Housing Development*

The thrust would be on meeting the existing housing shortage so that the number of housing stock in the country is broadly similar to the number of households. Apart from this minimum housing gap to be bridged, the short-term plan would gradually cover the upgradation of housing stock in both the urban and rural areas enhancing its durability, providing better amenities and services and reducing congestion in existing housing stock. Rental housing is another activity, including in particular for women and other vulnerable groups identified elsewhere in the Report. For this purpose, land would be made available, together with appropriate access to finance and other inputs so that activities are stimulated, largely outside the government sector. The rental housing programme would be promoted not only in the mega- and metro-cities but also in small and medium towns and rural areas.

The housing development agenda will require the strengthening of the capacities of all the major actors identified earlier in the Report, such as, the private sector developers, the cooperative sector, NGOs/CBOs and the government parastatals. Each of these actors will be encouraged to take up all types of housing activities such as ownership housing, upgradation and rental housing programmes in both urban and rural areas.

c) *Housing-related Services*

This has been a predominantly government activity, mainly through state parastatals and local government, and the focus has been on new assets creation. Enabling inputs would be provided to encourage and support the participation of non-government actors, particularly the private developers, the cooperative sector and NGOs. Their interventions would be promoted for new asset creation, upgradation of assets, and maintenance and management of assets, which would include also the recovery of investments through appropriate pricing policies and users charges. It would be the endeavour of the government to reduce the gap between the demand and availability of basic services but this activity would have a long-term perspective, going beyond the next five years. The appropriate enabling environment for these activities would, nevertheless, be developed during this period, coinciding with the Ninth Plan.

d) *Finance*

Finance is an important catalytic agent and the short-term NPA would aim to provide access to finance to all uncovered and poorly covered activities like rental, upgradation and rural housing and related infrastructure assets. Activities will be particularly directed towards meeting the needs of specific segments of the population like low-income households, households identified as vulnerable groups and living in informal settlements.

Rural housing finance is a critical area for which a specialised institutional mechanism would be developed, which would take into account the specificities of the rural situation, periodic income flows and non-conventional assets holdings. The rural habitat has a different connotation as compared to the urban habitat and a composite credit instrument that would meet the shelter and income generation credit needs would be particularly taken up on the financial agenda. Another major activity would be to provide access to the informal settlements in urban areas and their credit requirements would also require a composite credit instrument. The critical issues for down-marketing credit are reduction in the transaction cost of the financial institutions and of the people avail-

ing of the institutional credit, flexible norms on collateral and repayment schedule. Interventions on the fiscal and legal provisions would be a part of the short-term habitat agenda to create the suitable environment for down-marketing credit.

e) Technology

Appropriate technology enables reducing the cost and increasing the durability of housing solutions. A lot of initiatives have been taken in recent years in developing these technologies and the work programme will be continued. New initiatives will be taken up to provide financial and fiscal support to use the technology. This would also require capacity-building inputs, particularly at the level of the local governments, NGOs and the private sector are expected to play a major role in this process.

f) Local Government

The 73rd and 74th Constitutional Amendment Acts have created the suitable institutional framework for the devolution of political, administrative, financial and fiscal powers. These would be effectively translated into action during the next 5 years, and capacity-building inputs to the key stakeholders in the new emerging system would be given special attention. Apart from this, initiatives will be taken to restructure the finances of the local governments, covering both income and expenditure.

g) Poverty and Informal Sector

While poverty has definitely declined in recent years, in numerical terms the problem requires priority interventions. Poverty has both economic and non-economic dimensions and the people in the informal settlements in urban areas and specific categories in the rural areas particularly marginal farmers, landless farmers and others in the most vulnerable groups, constitute the major poverty groups. The existence of the poor and informal settlements is now recognised in official policies and planning codes and other regulatory policies would be suitably modified to enable them to have better access to credit and other development inputs in an integrated manner. This will facilitate the poor to get out from the "dependency syndrome" to a "self-development situation". For this purpose, new institutional mechanisms, credit

instruments, capacity-building programmes, technical know-how dissemination systems, will be taken up and specific programmes like the Prime Minister's Integrated Urban Poverty Eradication Programme, Indira Awas Yojana, Jawahar Rozgar Yojana, will be extended.

h) Women and Children

The critical role of women in habitat planning and management will be recognised in all official programmes and specific interventions will be made to ensure full access to housing and basic services and employment opportunities. This would include, among other needs, access to land, finance and capacity-building inputs. Social service programmes will be integrated with the human settlement programme and specific responsibilities will be passed on to local governments for implementation. The National Policy on Women will guide the sectoral activities and, among others, the National Resource Centre for Women will be established and a Commissioner for Women's Rights will be appointed.

Children's issues will be taken up as an integral part of housing and social programmes and the activities in the National Policy on Children and the National Plan for Children will be taken up for implementation. A National Children's Board will be also constituted.

i) Monitoring and Evaluation

With increasing participation of actors outside the government sector in all aspects of human settlements development and management, including basic physical, social and economic infrastructure and services, a strong monitoring and evaluation system will be developed, using city indicators, and an institutional mechanism would be developed that utilises the local government and professional NGOs, with national focal points in the government as well as outside the government system.

j) State Shelter Policies and Action Plans

The formulation of these policies and action plans is a mandatory requirement of the National Housing Policy. These would be developed for each of the 25 States and 7 Union Territories. Over the longer time period, beyond 2001 A.D., housing action plans would be developed gradually for each of the 466 districts in

the country. The Action Plans would not only relate to the housing structure but also the basic settlement-related physical, economic and social services and amenities.

9.5. Monitoring System for Implementation and Follow-up of NPA and GPA

Effective implementation of the NPA would require a continuing system of monitoring of the activities and their impact assessment on the goals of adequate shelter for all and sustainable human settlements development.

The UNCHS has recommended a list of 46 key housing and urban indicators for facilitating national governments (as also state and local governments) to develop a strong monitoring system. In addition, some extensive indicators have been recommended for monitoring activities to be taken up in the future. These indicators are suggestive and governments and key actors may take them as models for the replication and adoption to local requirements of monitoring and evaluation. In addition to the key indicators already included in the national report, special consideration will be given to also develop, in the context of the quality of human settlements, indicators that particularly bring out the quality of housing solutions and life of the poor and the most vulnerable, particularly women and children. Specific indicator modules would be developed for this purpose.

These indicators would be provided to the UNCHS on a regular basis to assess the progress of the Global Plan of Action and to facilitate the development of international cooperation and assistance.

9.6. Commitments

Commitments have been made by the key actors in the reports of their key groups, based on deliberations during the Habitat II preparatory process. The National Plan of Action is based on their commitments.

In this perspective, as a member of the United Nations, the governments at all levels in India and all other actors outside the government, including the private sector, NGOs, CBOs, the communities, cooperatives, academicians and

researchers and the media, dedicate their resources and abilities to implement the Habitat agenda, globally and within the country, through support and participation in effective need-based planning and management of shelter and human settlements and the adoption and promotion of strategies for implementation of the NPA that promote capacity building, enablement, cooperation and sustainability. Towards this end, the key actors in the human settlements sector make commitments to implement the Habitat Agenda and Global Plan of Action and also the National Plan of Action.

a) *Habitat Agenda and Global Plan of Action*

The government at all levels and key actors outside the government are committed to implement the Global Habitat Agenda through the National Plan of Action and other policies and programmes to be developed and implemented in a participatory manner. This commitment seeks to specifically :

- 1) Attain the goal of "adequate shelter for all" by improving the living and working conditions of the people on an equitable and sustainable basis, so that everyone will have adequate shelter and basic services and amenities which are safe, healthy, secure, accessible and affordable;

- 2) Develop sustainable human settlements by making efficient use of resources within the carrying capacity of ecosystems and providing all people with equal opportunity for a healthy, safe and productive life in harmony with nature and cultural heritage and values;

- 3) Implement the strategy of enabling all actors to play an effective role in human settlements and shelter development;

- 4) Strengthening existing financial mechanism and, where appropriate, developing new mechanisms for financing the implementation of the Habitat Agenda;

- 5) Enhancing international cooperation and partnerships to assist the implementation of the National and Global Plan of Action so that the goals of the Habitat Agenda can be attained;

- 6) Developing interlinkages between the commitments of the key actors for coordinated follow-up and effective participatory process;

The commitment to the Habitat Agenda and the Global Plan of Action is reflected in the commitment through the various components

of the National Plan of Action drawn by the key actors in the country through a preparatory process. These commitments include:-

b) National Plan of Action

1) Governments at all levels are responsible for the creation of conditions for meeting the adequate housing needs of all segments of the population, and for promotion of the development of sustainable human settlements. Their responsibilities include, *inter alia*, facilitating access to housing-related inputs and human settlements-related basic services at costs that can be afforded by the people, through comprehensive integrated local action plans at city and settlements level.

2) In the case of certain specific segments of the population whose requirements of adequate and affordable shelter cannot be met through only an enabling role of the government, and whose requirements also cannot be met through direct interventions of other actors, the government would directly intervene as a provider. Subsidy and other support activities will be properly targeted and made transparent;

3) The private sector and the cooperative sector would increasingly participate in the process of development of housing for the low income households, and, to facilitate this process of participation, the government would provide suitable fiscal and financial incentives, as also access to land. The private sector would also participate in the development of serviced land;

4) Institutional development activities will be based on the principle of participatory efforts of all the actors and existing monopolistic role of any actor in land, housing and urban services critical for congenial human settlements, will be dismantled;

5) The National government will establish, review and enhance the regulatory, legal and fiscal frameworks to ensure equitable access by all people to resources and opportunities for shelter and income development, with minimum subsidy and without distorting market efficiency;

6) In the case of the poor, the vulnerable and the disadvantage integrated programme of improving shelter, income conditions and social services will be initiated, promoted and integrated into a national plan of action to be translated into action plans at the city/settlement level. The NGOs and CBOs will directly be

involved in these activities and the private sector will provide support to the development of sustainable programmes. The private sector role in accessing these people to technology, materials, skills and finance will be important and the governments at appropriate levels would provide suitable stimulants for activating the flow of these inputs;

7) All the key actors are committed to provide specific support to the poor, the disadvantaged and the vulnerable groups, including women and children, so as to satisfy their needs of adequate shelter and basic services through direct interventions, when these are unlikely to be met by normal market-driven strategies and programmes. This would be a major initiative towards attaining the goal of adequate and affordable shelter for all;

8) The key actors are committed to ensure that the process of development of sustainable human settlements in an urbanising world has minimal negative impacts on the natural environment, and they are committed to protecting the fragile ecosystem, erosion-prone areas and shorelines. They are also committed to increasing the energy efficiency of human settlements through use of improved housing designs and materials, and increased recourse to non-conventional and renewal sources of energy and safeguarding the right of rural households to biomass and other forest-based building materials.;

9) The key actors particularly the governments at all levels, are committed to the balanced development of rural and urban settlements, removal of discriminatory policies, promotion of regional integration of planning and management of land resources, equitable allocation of public resources, and specific transfer of technology from urban to rural areas so as to develop sustainable settlements in both urban and rural areas and maintain cross-migration at a relatively manageable proportion. The private sector and the NGOs and CBOs are also committed to these activities, in which the lead role would be of the government;

10) The key actors are committed to the development of rural centres of economic momentum and intermediate cities of small and medium size so that the process of the concentration of urban population in the larger cities is contained;

11) The key actors are committed to the eradication of urban and rural poverty, which is a basic requirement for the sustainability of human settlements. This would be done through specific protection of the rights to the poor to land, housing, shelter-related services and income generating opportunities, protecting them against all types of exclusions and facilitating them access to all the requisite development inputs, technical assistance, finance and legal, fiscal and regulatory support;

12) The key actors are committed to implement effectively the on-going programmes of effective decentralisation and empowerment of local governments and to make them an efficient, accountable and transparent system of management of human settlements and urban and rural societies. They are further committed to participate in strengthening the capacity of local governments, both financial and human resources, so that the focal point of development activities is shifted down from the national and state government to the local government;

13) The key actors recognise the important role that the community, NGOs and CBOs play in development of sustainable human settlements and are committed to provide all support and collaboration to ensure an effective partnership between the government, the private sector, the NGOs, CBOs and the people. This commitment would also contribute to the process of developing an enabling environment and a participatory effort to meet the challenges of human settlements and urbanisation;

14) The key actors are committed to participate in the capacity-building programmes of all

the participants in human settlement development activity so that an effective participatory approach can be stimulated and ensured at the national, state, local and community level;

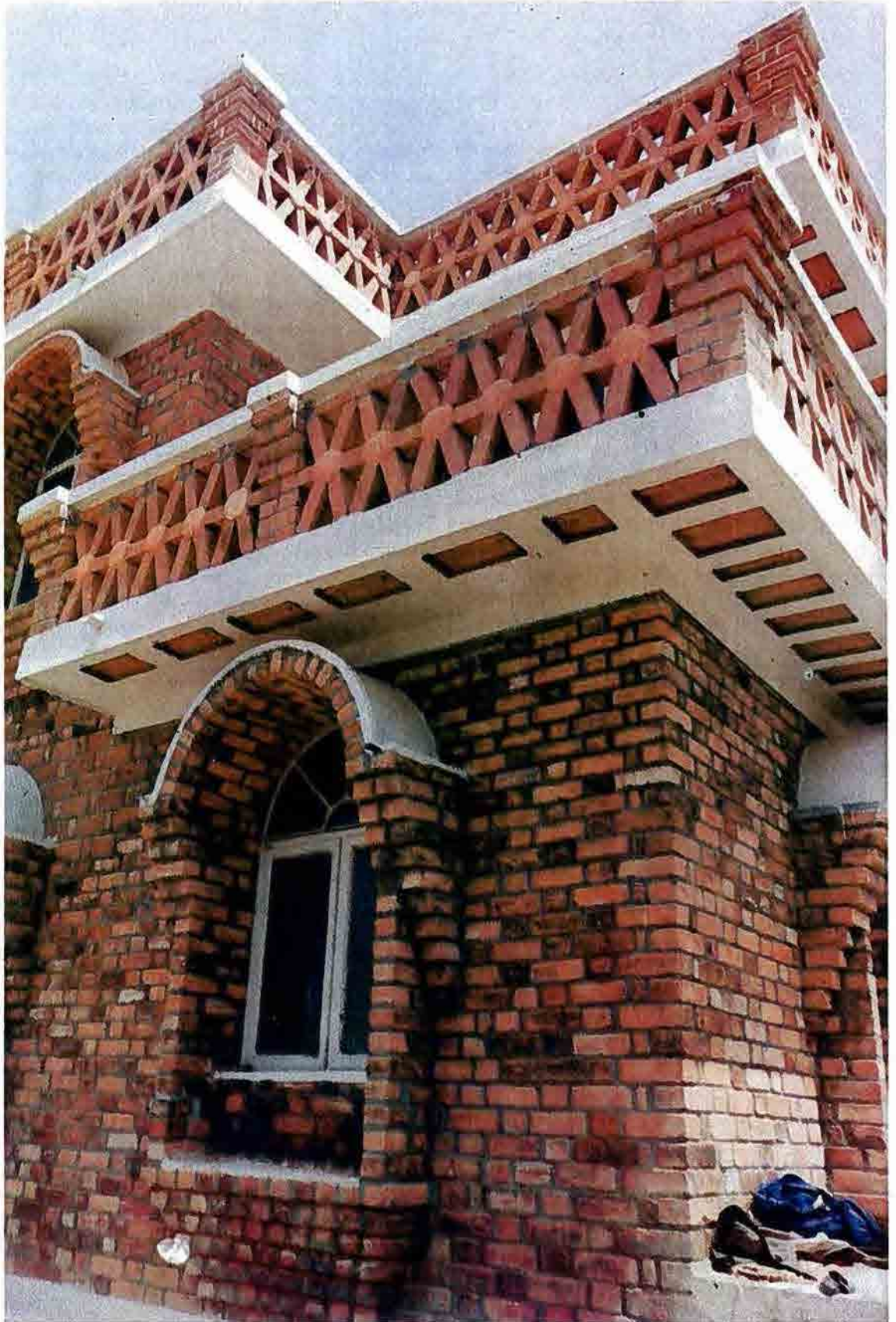
15) The key actors are committed to develop and strengthen the management system and linkages among themselves based on the principle of public-private-people participation at all stages of activity from assessment of needs, to formation of programmes, and their implementation, monitoring and evaluation. An effective consensus planning agenda will be jointly formulated and implemented, along with regular monitoring of the activities and their impact assessment evaluation. Towards this goal, the key actors are committed to develop a comprehensive housing and urban indicators programme, including social services indicators;

16) The key actors are committed to international cooperation that would cover technical and financial cooperation within the country and across countries. The key actors welcome international assistance and cooperation and are also committed to provide the same to other members of the United Nations; and

17) The Central government reaffirms to promote and strive to ensure the realisation of the rights set out in the relevant international instruments and documents, such as the Universal Declaration of Human Rights, the Covenant on Economic, Social and Cultural Rights, and the Declaration on the Right to Development, including those relating to education, food, shelter, employment, health and information, particularly in order to assist people living in poverty.

PART IV

**INTERNATIONAL COOPERATION
AND ASSISTANCE**



Private house constructed with Laurie Baker technology.
Using rat trap wall, brick arch lintel, brick corbelling, brick *jalli* and filler slab roofing in Bangalore.

INTERNATIONAL COOPERATION AND ASSISTANCE

10.1. Introduction

The Habitat II goal of adequate shelter for all in sustainable human settlements is an international responsibility. A healthy, safe, more equitable and sustainable human settlements would contribute directly to achieving world peace, harmony, justice and stability. Innovative frameworks for facilitating international cooperation are essential to promote and sustain an effective partnership to attain national and international goals. This is imperative in the context of the process of structural adjustment and globalisation of economic and development activities. Promoting and supporting the efforts of national government to cope with these impacts on human settlements within the framework of enabling strategies should become the collective responsibility of the international community, including multilateral and bilateral assistance agencies. The shift from official development assistance and aid to trade clearly points to the need for increasing participation of the private sector and NGOs in the development of international cooperation, which in the past, was mainly a government-to-government activity.

Innovative framework for international cooperation in human settlements development and management must be developed to ensure timely, appropriate and responsive technical and financial cooperation. These frameworks must include all the actors in decision-making, policy formulation, resource mobilisation and their utilisation as well as meet the requirements for cooperation between and amongst multilateral and bilateral assistance agencies and the

South-South, North-South and South-North transfers of best practices, planning and management tools and instruments such as the application of the shelter and urban indicators, human resource development and institutional capacity-building.

In this perspective, India realises the vital need for international cooperation, bilateral and multilateral programmes and regional initiatives in dealing with Habitat II goal. India is committed to develop and strengthen the process of international cooperation and partnership and the process would cover not only cooperation among governments and international agencies but also among the other major actors in the human settlements and shelter sectors such as the private sector, cooperatives, NGOs, CBOs and the community. Among the governments, the cooperation should go beyond the national government to the regional, state and local governments.

India looks forward to learn from the experiences of other countries. At the same time, its own experiences in human settlements, shelter development, urbanisation and rural development might be useful to many countries seeking to find solutions to problems which India has already, or largely, overcome or has been tackling for a considerable time. These include the problems of poverty alleviation and unemployment, degraded settlements and provision of basic urban services, operations in a resource constraint situation and inefficient markets, expanding informal sector, slum and squatter settlements, rising cost of construction, and inaccessible and unaffordable housing solutions. These are concerns common to developing countries as well as to countries with economies in

transition and some of them are now surfacing in the developed world also.

10.2. Priorities

The priority areas for North-South and South-South cooperation and assistance include:

- a) settlement and urbanisation policies and strategies;
- b) resource mobilisation for human settlements and urban development;
- c) management of urban infrastructure;
- d) management of mega-cities;
- e) management of urban informal sector;
- f) fiscal and legal framework;
- g) community participation in housing and urban development;
- h) capacity building;
- i) management information system;
- j) technology upgradation;
- k) decentralisation and local governance;
- l) down-marketing of credit; and
- m) social development planning and management.

10.3. Responsibility of International Community

There is a clear need for specific action by the international community to develop new forms of cooperation, investment and technology flows, and capacity building efforts in order to effectively contribute to sustainable human settlements. This need has emerged as a priority requirement to compensate the slow-down of official development assistance from the North to the South. The international community, including multilateral and bilateral agencies, will have to develop the appropriate enabling environment at the international level, which would also stimulate the national-level enabling approach to human settlements development.

The enabling environment-creating efforts of the international community must seek to cut down restrictive trade barriers and practices to movement of goods and services, including manpower and products of the South and ensure that the benefits of global economic growth are equitably distributed among countries to contribute to the improvement of the quality of

life in human settlements and make them sustainable centres of cultural, social and economic interaction. The enabling inputs from the international community must seek to diversify and broaden the economic base of countries in the South, as this is essential to the development of sustainable settlements. Special efforts must be made to mobilise international financial resources for shelter and income programmes of the poor and other interest groups identified in Agenda 21. The international community should take into account the special needs of the developing countries in improving their national capacities, and must directly intervene to raise the priority of sustainable human settlements development activities in the international development agenda and then promote assistance for the vulnerable groups on soft terms. This approach is in line with the concept of common but differentiated responsibilities which was affirmed in Agenda 21. The international community must, therefore, aim to attain its target of 0.7 per cent of GNP for Overseas Development Assistance (ODA). There is also an urgent need for new and additional financial resources from the international community, including multi-lateral and bilateral assistance agencies, to provide financial and technical assistance for shelter-related activities in developing countries. These resources should be available commensurate with the needs and priorities of developing countries without any conditionalities.

The international community must establish linkages with the informal sector activities and credit mechanisms so that this growing segment of the economy in many of the countries in the South gets access to the global pool of resources. In this endeavour, the participatory efforts of NGOs, CBOs, and the community must be developed.

An important responsibility of the international community is to facilitate, promote and transfer technology to support the implementation of national plans of action. Global networking among key actors, institutional mechanisms for North-South and South-South cooperation and data bank on national requirements and capabilities to provide assistance in sustainable human settlements development activities are some of the critical activities that must form part of their priority agenda. A global human

settlements information network must be established for this purpose.

It is in this context that the international community must promote the establishment of an open, equitable, cooperative and mutually beneficial international economic environment which would promote enterprise development, productive investment, technology transfer and expanded access to all the countries including in the South, to open and dynamic markets for sustainable human settlements development. At the same time, restrictive trade barriers and practices to movement of goods and services, including manpower and products of the South, must be cut down and the benefits of global economic growth must be equitably distributed among all countries. The international community should also, in particular, strengthen the capacity of countries to improve their infrastructure and services as this would, among other benefits, enable smooth international trade in goods and services. This has been a weak area in developing countries and inadequate infrastructure would deteriorate the urban environment in a rapidly urbanising world. Mobilisation of national and international resources for shelter provision and sustainable human settlements development will, through international cooperation, bring about higher degree of sustainability in international financial markets, reduction in risks and lower real interest rates. At the same time, the international community must also provide soft loans and grants to enable all countries to specifically address the need of vulnerable groups in urban and rural areas. The international community must also establish, support and sustain the linkages of informal credit mechanisms to the global pool of resources and increase the access by a larger segment of the population to housing finance through participatory processes involving communities, NGOs, credit unions and global financial institutions. There must also be specific strategies and programmes to ensure substantial, well-directed public and private investments in construction of shelter, basic infrastructure and services, especially for low-income settlements and this activity may be supported through technical and financial assistance.

At the institutional level, international agencies particularly the UN agencies, development banks and bilateral and multilateral agencies,

must establish cooperative mechanisms to integrate human settlements development in their high priority programmes and operations, promote and strengthen partnerships of local authorities and national, regional and international groups of NGOs, develop activities to strengthen the capacity of these actors and support public-private partnerships in shelter delivery, service provision and other human settlements development activity.

10.4. India and International Cooperation: Technical Assistance Areas for India

India, with a broad-based agenda of housing the millions in urban and rural areas, looks forward to international cooperation and assistance in the field of :

a) *Data Base and Information Technology*

Geographical information system, cadastral survey, aerial photography, and survey and mapping of fast-growing, spontaneous settlements and areas with poor connectivity.

b) *Management of Mega-cities*

India would benefit from inputs in the area of resource mobilisation, pricing of urban services and development and management of mega settlements for maintaining a congenial environment. This would also include the upgradation and renewal of urban infrastructure assets which were planned and developed 50-100 years ago, especially in inner city areas. Urban transportation, water supply, solid wastes disposal, linked with sustainable technology for waste recycling, sanitation and land management are priority areas. Other concerns are integration of urban informal sector into the mainstream of human settlement and economic development programmes, development of efficient land and housing markets, and innovative planning practices to integrate the new developments in the urban scenario and link them with socio-economic developments, and rural industrialisation.

c) *Public-Private Partnership*

In the management and development of land, housing and urban services, India looks for expertise to develop public-private sector collaborative activities in infrastructure services,

rationalisation of tariff structures and investment recovery programmes. A special concern of India is to ensure that the lower income deciles are not pushed out of the market and India looks forward to inputs in this direction, including the active promotion of NGOs/CBOs to attain this goal.

d) Financial Intermediation

Resource mobilisation from multilateral and bilateral agencies on soft terms, techniques to reduce risks and transaction costs, strategies to down-market housing and urban finance, preparation of self-generating financial programmes, development of capital markets and formulation of investment-stimulating fiscal instruments are priority areas for technical cooperation and assistance.

e) Technology Development and Upgradation

Transfer of high-tech expertise and know-how in water supply, solid wastes, urban transport (MRTS), ecology and environment-sound and energy-saving building materials, and construction technology are priority areas. Equally important are upgradation, renewal and retrofitting activities, particularly in inner city areas of old towns.

f) Capacity Building

International training networking for major actors in the areas of human settlements, urban infrastructure, resource mobilisation, regional planning and research and development is a major requirement.

g) Social Planning and Development

Integration of social concerns into an integrated human settlement programme is non recognised and will have to be translated into action, particularly at the level of the local government. Non-government actors will play a crucial role and all the activities have to be properly coordinated. Technical cooperation, particularly sharing of experiences, is an important development need.

10.5. India and International Cooperation: Indian Expertise to International Community

Indian expertise in the human settlements and urban development sector is now recognised in

many parts of the world. The India National Report and the Best Practices exhibition have brought out a select inventory of areas and activities wherein successful Indian initiatives and programmes might be useful in a wide range of situations worldwide. The geoclimatic range, socio- and cultural ethos, economic activities, human settlements patterns, housing typology and level of urbanisation and its processes in India have brought out policies, programmes, and other initiatives that fit development needs of other countries.

An illustrative list of avenues for collaboration and cooperation includes :

a) Formulation of Human Settlements and Shelter Policies and Action Plan

This would include need-assessed plans which would adopt a human settlements approach, including the shelter and related physical, economic and social services and amenities.

b) Housing Finance Intermediation

The development of institutional infrastructure would also include assessing market segments, reaching credit to low income deciles and "non-viable" groups in terms of conventional norms, public-private partnership, NGO/CBO-based delivery system and innovative resource mobilisation strategies.

c) Development and Transfer of Low Cost Solutions

Building materials and technologies that use local resources and skills would be developed for use in housing and related activities. The technology inputs would make the solutions ecologically-appropriate, environmentally-sustainable and energy-saving.

d) Legal and Fiscal Instruments

Major support would be in areas of planning standards, development control rules, building codes, democratic decentralisation, land acquisition, rent control, fiscal incentives, etc.

e) Monitoring and Evaluation

This would cover human settlement and urban programmes, including poverty alleviation and socio-economic development activities. The India Urban Indicators Programme recommended by the UNCHS has covered 11 cities and Indian inputs have been used to develop

this programme in six Asian countries. India has one of the oldest and largest census systems in the World and its five decades of planning has contributed to the building up of a strong information system through the Central Statistical Organisation (CSO) and the National Sample Survey Organisation (NSSO).

f) South-South Cooperation

This is important. India can provide advisory and catalytic inputs in several areas, such as, development processes, urbanisation, rural industrialisation, poverty alleviation, sustainability in human settlements programmes, financial instruments, appropriate building materials and technologies, housing delivery systems at grassroot level and public sector targeting to reach those segments of the market likely to be sidelined by market forces. Countries in transition may find Indian expertise equally relevant, having at one time developed a planned development process, which built the foundation on which India is now opening up its markets in the critical areas of land, housing and urban infrastructure. At the same time, India looks forward to enrich herself from the experiences of other countries who have adopted this path to sustainable growth at an earlier point of time.

10.6. Capacity Building

India is committed to participate in the capacity-building programme in the human settlements and shelter sector. This is a critical input to make human settlements development sustainable and will contribute to the growth of a participatory approach.

Capacity-building is required for all the actors in the shelter and human settlements sector. In the government sector, the thrust of the programmes should be on bringing about an attitudinal change from the role of a provider and regulator of activities and programmes to that of a facilitator. Special inputs are required to assess the conducive environment-creating requirements and formulate appropriate interventions in areas of land assembling, housing and infrastructure development and maintenance, financial intermediation and legal and fiscal system. Investment planning, resource mobilisation, cost recovery, integrated urban,

rural and regional planning and monitoring and evaluation, including the development and utilisation of housing and urban indicators are some specific areas that require capacity building inputs. At the level of the local government, specific training is required to assess people's needs, formulate need-based projects in consultation with the people and stimulate and sustain the participatory approach at all levels. Apart from the government officials, elected officials to public positions also require periodic training inputs mainly to familiarise them with people's problem, current status of policies and programmes and to take enlightened policy decisions with full understanding of the administrative and financial implications.

Capacity building inputs are particularly important for the actors outside the government, who had, in the past, played a marginal role and who are expected to play key roles in the future. The private sector would have to be trained to work in harmony with the government and the NGOs and CBOs and take up responsibility to raise market-sourced resources, formulate projects in partnership with the governments and the NGOs and the people. The private sector has to be familiarised with the problems of the poor and others among the vulnerable groups and equipped to take up responsibilities to intervene on their behalf. The NGOs and the CBOs have to be trained on financial and managerial aspects of human settlements, infrastructure development and income generation activities, as well as to assess people's need and incorporate them in projects and action plans in close collaboration and partnership with the government and the private sector. They also need to be equipped to undertake monitoring and impact assessment activities to safeguard the interests of their constituency. All the actors require training inputs to operate in an internationally competitive environment, requiring international cooperation and participation.

India welcomes cooperation. It is strengthening its own professional work in the identified priority areas and building up capacity of all its key stakeholders in the sector, such as city managers, elected representatives of local governments, researchers, NGOs, CBOs, private sector managers, financial analysts, policy makers and administrators.

Indian research and training institutions have developed specialised capacity-building modules for all key actors. These cover a wide range of activities that would facilitate reaching out affordable housing solutions and related development inputs to all segments of the population. India is in a position to undertake capacity-building programmes for the international community. These can be organised in India as well as in other countries, together with the training of local trainers.

10.7. Sources of Indian Assistance

India is already participating in technical cooperation projects in shelter and related socio-economic activities and can provide technical assistance through a number of programmes of the government of India. In particular, the Indian

Technical and Economic Cooperation (ITEC) programme provides through bilateral arrangements grants to cover training, studies, fellowship for project formulation, consultancy assistance for prototype demonstration projects, etc. as part of India's development assistance to developing countries. Indian support may be available through funding from international organisations like the UNDP, UNCHS, UMP, UNICEF, WHO, World Bank, ADB, ESCAP, CITYNET and international NGOs. Regional cooperation through SAARC initiatives within the seven SAARC countries is another source. Some Indian institutions and organisations provide direct technical assistance either from their own resources or their tie ups with funding organisations. Special programmes can be negotiated through multilateral and bilateral arrangements.

ANNEXURES



Integrated house-cum-work area for handloom weavers.
Weavers family dyeing and drying yarns in clustoral open space outside the house in Kancheepuram.

ANNEXURE 1

MEMBERS OF HABITAT II PREPARATORY PROCESS COMMITTEES

1.1. NATIONAL STEERING COMMITTEE

1. Secretary, Department of Urban Employment and Poverty Alleviation, Government of India—Chairperson
2. Secretary, Department of Rural Employment and Poverty Alleviation, Government of India
3. Secretary, Ministry of Environment and Forest, Government of India
4. Secretary, Department of Women and Child Development, Government of India
5. Adviser (Housing and Urban Development), Planning Commission, Government of India
6. Chairman, National Housing Bank
7. Chairman and Managing Director, Housing and Urban Development Corporation
8. Mr. D. M. Sukhtankar, Member, Mumbai
9. Mrs. Rajyalakshmi Rao, Member, FLO-FICCI & Member, LAI, Mumbai
10. Prof. K. P. Bhattacharya, Executive Director, Centre for Human Settlement International, Calcutta
11. Dr. Bindeshwari Pathak, Founder, Sulabh International Social Service Organisation, Patna
12. Ms. Sheila Patel, Director, Society for Promotion of Area Resource Centres, Mumbai
13. Chairman, All India Council of Mayors (Chairman of Key Group A)
14. Director, Regional Centre for Urban and Environmental Studies, All India, Institute of Local Self Government, Mumbai (Convenor of Key Group A)
15. Dr. Ashok Khosla, President, Development Alternatives, Delhi (Chairman of Key Group B)
16. Mr. Minar Pimple, Director, Youth for Unity and Voluntary Action, Mumbai, (Convenor of Key Group B)
17. Mr. Deepak Parekh, Chairman, Housing Development Finance Corporation, Mumbai (Chairman of Key Group C)
18. Mr. Niranjan Hiranandani, Secretary, Maharashtra Chamber of Housing Federation (Convenor of Key Group C)
19. Mr. A.P. Sinha, Joint Secretary (Housing, Employment and Poverty Alleviation), Department of Urban Employment and Poverty Alleviation, Government of India—Convenor

1.2. KEY GROUPS

A: Human Settlements Managers

1. Chairman, All India Council of Mayors—Chairperson
2. Mayor, Solapur Municipal Corporation

3. Municipal Commissioner, Hyderabad
4. Municipal Commissioner, Guwahati
5. Vice Chairman, Delhi Development Authority
6. Chief Executive Officer, Calcutta Metropolitan Development Authority
7. Vice Chairman, Lucknow Development Authority
8. Chief Executive Officer, Lucknow Cantonment Board
9. Adviser to Administrator, Union Territory of Chandigarh
10. Chairman and Managing Director, Madras Water Supply and Sewerage Board
11. Mr. D M Sukthankar, Member, Maharashtra State Planning Board
12. Director, Regional Centre for Urban & Environmental Studies, All India Institute of Local Self-Government, Mumbai—Convenor

B: Non-Government and Community-based Organisations

1. Dr. Ashok Khosla, President, Development Alternatives, Delhi—Chairperson
2. Dr. Vinay D. Lall, Director, Society for Development Studies (SDS), Delhi
3. Dr. Bindeshwari Pathak, Founder, Sulabh International, Social Service Organisation, Patna
4. Mr. Ossie Fernandez, Housing Rights Foundation, Madras
5. Mr. N.R. Bheda, Human Settlement Environment and Youth Centre, Madras
6. Ms. Anita Reddy, Association for Voluntary Action and Services (AVAS), Bangalore
7. Mr. Alyosius Fernandes, MYRADA, Bangalore
8. Dr. Sudhendu Mukherjee, Calcutta
9. Mr. Arun Deb, Unnayan, Calcutta
10. Ms. Sheela Patel, Director, Society for Promotion of Area Resource Centres (SPARC), Mumbai
11. Mr. Adolf Tragler, Slum Rehabilitation Society, Mumbai
12. Mr. Minar Pimple, Hon. Director, Youth for Unity and Voluntary Action (YUVA), Mumbai—Convenor

C: The Business Community

1. Mr. Deepak Parekh, Chairman, Housing Development Finance Corporation, Mumbai—Chairperson
2. Mr. Susheel Ansal, Chairman, Ansal Group, Delhi
3. Mr. Ramesh Chandra, Chairman, UNITECH, Delhi
4. Mr. Krishna Agarwal, Partner, Krishna Colonisers, Lucknow
5. Mr. Amul Karnad, Chairman, Alacrity Foundation Pvt. Ltd., Madras
6. Mr. Narayan Murthy, Premier Housing and Industrial Enterprise, Madras
7. Mr. Hashmukh Shah, Chairman, Hashmukh Shah Reality Company, Ahmedabad
8. Mr. Kumar P. Gera, Managing Director, Gera Group, Pune
9. Mr. Harsh Neotia, Executive Director, Gujarat Ambuja Cement Limited, Calcutta
10. Mr. G.L. Raheja, Chairman, K. Raheja Group of Companies, Mumbai
11. Mr. Niranjana Hiranandani, Secretary, Maharashtra Chamber of Housing Federation, Mumbai—Convenor

1.3. ADVISORY COMMITTEE FOR NATIONAL REPORT

1. Mr. L.M. Menezes, Director, Centre for Urban Poverty Alleviation, Madras—Chairperson
2. Mr. A.P. Sinha, Joint Secretary (HEPA), Department of Urban Employment and Poverty Alleviation, Government of India
3. Adviser (HUD), Planning Commission

4. Mr. K.K. Bhatnagar, Chairman and Managing Director, Housing and Urban Development Corporation
5. Director, National Building Organisation, Government of India
6. Mr. Nasser Munjee, Executive Director, Housing Development Finance Corporation, Mumbai
7. Ms. Sheila Patel, Director, Society for Promotion of Area Resource Centres (SPARC), Mumbai
8. Dr. Rakesh Mohan, Economic Advisor, Ministry of Industry, Government of India
9. Dr. P.S.A. Sundaram, Delhi
10. Dr. Kulwant Singh, Executive Director, Human Settlement Management Institute, New Delhi—Convenor

ANNEXURE 2

CITY INDICATORS PROGRAMME : Technical Note

The city-based indicators presented in the Report have been developed as a part of UNCHS programme for Habitat II. The Indicators provide a monitoring package to facilitate assessment of current housing and urban situations. The development of performance indicators helps producing a factual description and analysis of the quantity, quality, availability, accessibility, and affordability of shelter, and diagnosing urban and human settlements conditions (UNCHS, Indicators Newsletter, Vol II).

The first phase of the programme included 46 key indicators utilising basic information on households, housing situation, urban infrastructure, housing situation, environment management and local governments. In the context of recent thrust on decentralised administration in India, monitoring indicators are high priority requirements. City Indicators have been developed in 11 cities, including three mega-cities, three metro-cities and five intermediate and small towns. These cities also represent major routes to urbanisation in India.

There are eight modules dealing with demographic and socio-economic distribution of households, level of social and infrastructure services, environment management, the spatio-economic aspects of housing, the land-use pattern of the city and financial health of local bodies.

A major problem in developing the indicators is the availability of information at the city level. The demographic features of the households and the access to urban basic services at the city/town level can be developed from Census data. But these are available mostly at 10-year intervals. Some vital statistics are available more frequently than from the Census. The

National Sample Survey Organisation (NSSO) of the Government of India provides survey data on important socio-economic aspects but they are at the state level and mostly on quinquennial basis. The State Bureau of Economics and Statistics publishes relevant data but these are at the district and state level. The major sources of city/town data are official ledgers of the local bodies, annual reports of city parastatals, City Master Plans and annual budgets of municipal bodies. Information is collected regularly on all aspects of city management but rarely culled out in data form. Therefore, developing city indicators requires access to information. The smaller towns, due to comparatively limited volume of work, are often better placed in terms organisation of information.

Data on households below poverty line and informal employment are not, however, directly available from local bodies in intermediate and smaller towns. The Census sources provide data at 10-year intervals. Households below the poverty line are sometimes estimated from time-to-time survey by local bodies for poverty alleviation programmes. For others, it is estimated from the number of applicants received in response to call for assistance under these programmes. In larger cities, Town and Country Planning Organisation and research organisations bring out the poverty situations but at irregular intervals for the indicator purpose.

The development of indicators such as land-use pattern and income distribution is most problematic. Actual land-use data on the basis of which Master Plans are prepared, are not published. Moreover, land-use surveys are undertaken only when Master Plans are formulated, which are again not available at less than one

decade's interval. Land occupied by informal settlements is also not recognised in the Master Plans. The data on this aspect can be obtained from the Slum Improvement Board. The local government officials of Public Works Department and Town Planning Office provide rough estimates.

Similarly, income distribution data are extremely inadequate and are not available in smaller cities. In larger cities, income data are available at irregular frequency, depending upon the nature of projects undertaken by different organisations, including the state/city governments where household income is a parameter. In small towns, the only way to obtain information is through quick survey of households in income-stratified areas, identified with the help

of city managers and local researchers.

House price is another data-deficient area. The market price of units delivered by city/state parastatals, are relatively easy to determine. The difficulty arises for those segments of the housing markets which do not enter into the formal market or where transactions are very few. The city estate dealers and private developers are the only source of such information.

Transport data, specially regarding modal split at the intermediate and small town level, are weak or not available. They are generated for the indicator purpose by Public Works Department or Transport Department through spot survey at nodal city points. Data for larger cities are available from competent organisations. However, the time interval is irregular.

ANNEXURE 3

INFRASTRUCTURE INVESTMENT REQUIREMENT FOR HUMAN SETTLEMENT, 1997-98 + 24 YEARS

METHODOLOGY

A2.1. Estimation of Demand

a) Backlog, 1997

i) Water Supply

Estimated on the basis of Census data on population served by piped drinking water, 1981 and 1991, and Census 1981 data on the ratio of population with access to piped water to those with access to safe drinking water.

ii) Toilet Facility

Estimated on the basis of Census 1981 and 1991 data on people's access to toilet facility.

iii) Solid Waste Disposal

Estimated on the basis of estimates made in the Study "Delivery and Financing of Urban Services", 1989, Operations Research Group. It is estimated that 22.5 per cent of the urban population does not have access to solid waste disposal facility. In the Class IV cities, 40 per cent of the population does not have access to the service and the same is assumed to be the case in rural areas.

iv) Roads

The existing road length in urban areas is estimated at 0.83 metres per capita which is higher than the standard norm of 0.80 metres per capita. It is assumed that there is no backlog in the provision of roads in urban areas. Only

3.5 per cent of the villages were connected by all-weather roads by the end of the Seventh Plan period, as given in Compendium of Transport Statistics, 1993, Planning Commission. On this basis it is estimated that 96.5 per cent of the rural population is not serviced by road network.

b) Incremental demand

The incremental demand for the period 1997-2002, 2002-11 and 2011-21 have been estimated on the basis of population projections for the years 2001, 2011 and 2021, based on past trends in population growth, projections in the Eighth Five Year Plan document and projections made by Expert Committee on Population Projections.

A2.2. Capital Cost

Capital cost estimates are based on the per capita investment cost norms for various services in urban areas, at 1980 prices, as given in "Analysis of Projected Urban Infrastructure Investment Costs in India," 1989, Rakesh Mohan and Shankar N. Acharya. The authors are of the view that "infrastructure costs are not systematically different for large and small cities. Differences in costs are more related to differences in physical factors such as geography, terrain and climate and especially to the different level of service standards used." The urban and rural investment cost have been assumed to be same. Estimate III for Water Supply is based on

HUDCO Financed Schemes during 1991-92, indexed to 1995 prices.

The 1980 prices have been indexed to 1995 on the basis of Wholesale Price Index (WPI). The price rise was 16.7 per cent during 1980-81 (Base 1960-61 = 100) and the WPI (Base 1981-82 = 100) moved to 288.1 in May 1995.

A2.3. Operations and Maintenance Cost and Depreciation

Operations and Maintenance Cost and Depreciation have been estimated on the basis of Project estimates for 40 local bodies in the Study on "Delivery and Financing of Urban Services", 1989, Operations Research Group.

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