This report is a compilation of papers written by architects, engineers and planners from Africa, Asia and Latin America, involved in housing and urban development with a focus on the urban poor. The papers present projects for change and improvements within the frame of an inter-national training programme offered by Housing Development and Management (HDM) Lund University, carried out in conjunction with the third session of the World Urban Forum (WUF3).

In the year 2007 half of the world’s population is expected to live in urban areas. Urban areas are acknowledged as centres of economic, social and cultural development, but at the same time urbanization in much of the world leads to a precarious existence for the poor. Many urban poor live in slums with unacceptable shelter conditions, insufficient water and sanitation, poor social infrastructure and hazardous environments.

The papers included in this report takes the built environment as a starting point for discussions and proposals of how decent shelter and sustainable urban development can contribute to poverty alleviation, as a means to improve living conditions for the urban poor. The authors of the papers are involved in housing as government officials, in municipalities, in private practice and consultancy, at universities and in Non-Governmental Organisations. Common to these writers is their strong commitment to address the living conditions of the urban poor, be it related to urban planning, access to urban land, improvements of sanitation or the need for new policies.
Shelter for the Urban Poor

Proposals for Improvements –
Inspired by World Urban Forum III
HDM edited this report. The opinions expressed in the papers are those of the authors and do not necessarily reflect the views of HDM.
Shelter for the Urban Poor

Proposals for Improvements –
Inspired by World Urban Forum III

Edited by

Karin Grundström and Annette Wong Jere
Foreword

The Setting: HDM/USDD/WUF3

This report is a compilation of papers written by architects, engineers and planners from Africa, Asia and Latin America, involved in housing and urban development with a focus on the urban poor. The papers present projects for change and improvements within the frame of an inter-national training programme offered by Housing Development and Management (HDM) Lund University, carried out in conjunction with the third session of the World Urban Forum (WUF3).

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The World Urban Forum was established to be a forum for different actors to raise issues about the challenges of urban development onto the international agenda. It is a biennial event organized by UN-Habitat and hosted by different countries. The third session of the World Urban Forum in 2006 was hosted by Canada and held in Vancouver.

In conjunction with WUF3, HDM offered an advanced international training programme Urban Shelter Design and Development (USDD) for experienced professionals. The aim of the training programme was to support pro-poor housing and urban development and to contribute to institutional strengthening and capacity building. WUF3 provided an opportunity to exchange and compare experiences and to find examples of good practices within sustainable urban development that could be used to address issues in the participants’ home countries.

The professionals who participated were involved in housing as government officials, in municipalities, in private practice and consultancy, at universities and in Non-Governmental Organisations. Common to these writers is their strong commitment to address the living conditions of the urban poor, be it related to urban planning, access to urban land, improvement of sanitation or the need for new policies.

Many institutions and individuals made the USDD/WUF3 experience possible. HDM acknowledges especially the Swedish International Cooperation Agency (Sida), for their financial support to this activity. We thank the Division for Urban Development for their continuous dialogue and contributions to the programme content. We also thank all the participants for their commitment and work in preparing this report and in the continued effort to improve living conditions for the urban poor.
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Shelter for the Urban Poor –
for Sustainable Development

Living conditions for the urban poor must be improved to reach the goal of sustainable urban development. This report takes the built environment as a starting point for discussions and proposals of how decent shelter and sustainable urban development can contribute to poverty alleviation, as a means to improve living conditions for the urban poor. The authors of the papers gathered in this report see the problem from different perspectives, depending on their work and position, from policy makers at national level to urban planners and fieldworkers. The aim of the report is to show the strong commitment of these authors, who are architects, planners and engineers, and identify ways of how to improve the shelter situation in different parts of the world.

Shelter, house or home are some of the words in the report that describe and express the importance of a place of one’s own in the city. A home brings self-respect and security and can form the basis for health and well-being and the chance of a better life. The urban poor often live in difficult economic, social and environmental conditions which have material, physical, social and political consequences. An attempt to cover the material aspect of poverty is the five indicators for Shelter Deprivation used to estimate the number of poor in slums over the world. The concept of Shelter includes both the physical structure and the surroundings through the five indicators: lack of durable housing, lack of sufficient living area, lack of access to improved water and sanitation and lack of secure tenure.¹

The world is urbanizing and from 2007, it is estimated that half the world’s population live in urban areas. On the one hand, urban areas are centres of growth and development, giving its residents chances for improved quality of life with access to jobs, social and technical infrastructure. Urban areas are also centres for innovation, cultural and democratic development. On the other hand, many of the world’s cities face huge challenges with threats to the environment with poor air quality and deficiencies in water and sanitation. Many cities also experience increasing socio-economic segregation, insecurity and a growing number of slum dwellers.

Sustainable urban development is a concept based on a positive view of cities, where urbanization is seen as a means towards growth and democracy, where cities offer a chance to limit environmental damage and impacts. The concept of sustainability was originally used by environmentalists, but later expanded to include economic and socio-cultural sustainability. One of the best known definitions is found in the Brundtland Report from 1987 “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their

¹ UN-Habitat has developed an operational definition of slums with measurable indicators at household level, known also as shelter deprivations. For more information www.unhabitat.org
own needs.” Sustainable Urban Development can be understood as when economic growth occurs in cities, and, at the same time, a good life quality is created for the urban population: access to clean water, sanitation, housing, schools and health care for the current and future generations. All of these require a framework of governance that is transparent and concerned with meeting the needs of the people. ²

In the existing global situation shelter for the urban poor is an issue that can not be neglected in discussions of sustainable urban development.

Challenges to Sustainable Urban Development

Commitments are required from countries in both the North and the South to meet the challenges of urbanization and to improve living conditions for the urban poor.³ As the world becomes more urban, a great challenge is how to plan and manage urban development. Cities in both the north and south have expanded through urban sprawl, spreading over large areas of land. Urban sprawl leads to increased transportation with a negative effect on the environment, longer travel distances for the citizens and high costs for technical and social infrastructure. Many cities spread physically across competing political jurisdictions, raising issues of how to govern multi-nuclear cities. Rapid urban growth often leads to increased exploitation of land, with higher prices, which leads to a question of how land can be made available for low-income housing.

The proportion of people living in slums in the world is expected to increase dramatically in the coming years if nothing drastic is done. In the least developed countries, it is estimated that 80% of the urban population already lives in slums. Goal 7 Target 11 Cities without Slums in the Millennium Development Goals aims to improve significantly the lives of at least 100 million slum dwellers. To significantly reduce the proportion of slums in the world, simultaneous upgrading of existing neighbourhoods and planning of new housing areas for people moving into the city for the first time is required.

The urban poor are more vulnerable to environmental risks and natural disasters because their precarious dwellings are often on land subject to flooding, landslides or ground pollution. Emergency preparedness and disaster management that reach neighbourhoods occupied by the urban poor is a challenge facing many cities. Access to safe drinking water is unevenly distributed around the world and large disparities exist between urban and rural populations, consumption levels in different parts of the world and the quantity and quality of water. The lack of sanitation has a

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² State of the World’s Cities 2006/7 (available through Earthscan, ISBN-10: 1-84407-378-5) provides more information on Urban Sustainability and the challenges facing urban development. See also Environment and Urbanization (journal available through Sage) 2006 issues focus on ecological urbanization. More information can be found at http://www.iied.org/

³ More Urban-Less Poor (available through Earthscan ISBN-10: 1-84407-381-5) provides information on global urbanization and poverty. The book is the background document to Sida’s Urban Policy launched in 2006. More information can be found at www.sida.se
large impact on the health conditions of the urban poor, but still, more than a quarter of the world's urban population lacks adequate sanitation. Using more renewable energy is an important step to reach sustainable urban development. A challenge facing cities is how to reduce the use of fossil fuels that produce greenhouse gases and reduce air quality. Cities all over the world find it difficult to finance expensive technical infrastructure such as water, sanitation and public transport solely on the basis of income from taxes and service charges. A current trend in many cities is to seek new financing opportunities through different types of private public partnerships to meet people's needs for technical infrastructure and other services. Larger infrastructure projects require access to financial markets, which is a problem for less developed countries that often meet with restrictions. At an individual level, one financial challenge is to reach the urban poor, where micro-finance and community owned finance has been one incentive.

Many cities face a growing socio-economic segregation, where residents feel unsafe in public spaces, due to poverty or issues related to their social position such as gender, age, race or ethnicity. A great challenge for sustainable development is to reverse this trend, and create more faith in the authorities' capacity to address the issue.

Human Settlements Policy

The challenges faced by the world today are the result of global urbanization. Shelter and urban development have been on the international agenda for over 30 years. Different terms were used to focus on the relevant issues – habitat, shelter, human settlements, sustainable urban development – and different policies followed to meet the changing situation.4 The first United Nations Conference on Human Settlements (Habitat I) took place in Vancouver 1976. Urbanization was at that time a phenomenon that started to be recognized, even though two thirds of the world's three billion people lived in rural areas. The Habitat I conference was the first event to recognize human settlements as a category of analysis and of policy intervention. In 1978 the United Centre of Human Settlements (UNCHS) was formed to ensure that the shelter dimension was reflected in UN programmes and projects. UNCHS later became United Nations Settlement Programme UN-HABITAT, which is the current United Nations agency for human settlements.5

The Global Strategy for Shelter to the year 2000 (GSS) was adopted in 1988. The aim was an enabling strategy for housing, where the role of governments changed from provider to facilitator. Many governments would not meet the need for shelter because of increased urbanization and lack of financial resources. At this time, many poor countries adopted Structural Adjustments Programmes (SAPs) that reduced the role of the state, with cut

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4 See reference 2.
5 UN-HABITAT is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. For more information on current work and policies see www.unhabitat.org
backs in public health care, education, social services and housing, which led to increased urban poverty in many parts of the world. The role of government decreased and more responsibility was given to the private sector and the individual. Development aid concentrated on low-cost, self-help housing.

The UN Conference on Environment and Development in Rio de Janeiro, 1992 put Sustainability on the international agenda. The concept Sustainable Urban Development made a break through in 2002 at the World Summit on Sustainable Development (WSSD) in Johannesburg, by expanding Sustainability to cover cities/urban areas and to include environmental, economic and social sustainability in both analysis and practice. Attention to issues of sustainability resulted in projects for improved infrastructure: access to safe drinking water, adequate sanitation and waste disposal. Programmes such as Sustainable Cities Programme and Localizing Agenda 21 were established during this period.

The Second United Nations Conference (Habitat II) took place in Istanbul in 1996. Since Habitat I the world’s population had doubled from 3 to 6 billion, of which 45% lived in urban areas. The 1990s considered cities as engines of growth and centres for democratic and cultural development, but at the same time as places where people were forced to live in extreme poverty and environmentally unacceptable conditions. Participation and partnership were the guiding principles for the goals established in the Habitat Agenda: Adequate Shelter for All and Sustainable Human Settlements in an Urbanizing World. The Habitat Agenda and the Istanbul Declaration on Human Settlements was signed by 171 countries. The Habitat Agenda was a guide to address problems arising from rapid urbanization and the declining quality of life in cities, but did not set priorities or goals.

The Millennium Development Goals (MDGs) were set in 2000 to alleviate poverty with measurable indicators and time frames to put pressure on governments to implement improvements by 2015. The MDGs include goals for poverty reduction, education, gender equality, health and environmental sustainability. The MDGs were adopted at a time when almost one third of the urban population lived in slums. Goal 7, target 11, known as the Cities without Slums target, aims to improve living conditions for slum-dwellers and underlines the importance of international efforts for slum-upgrading.

Despite these Declarations and Agendas, UN-HABITAT’s statistics show that urban poverty increases and slums spread. Today, when half the world’s population lives in cities and a third of all urban dwellers live in slums, there is an urgent need for more awareness and more will to improve the situation.

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6 For more info see [www.un.org/milleniumgoals](http://www.un.org/milleniumgoals)
World Urban Forum

The World Urban Forum (WUF) was established by the United Nations to draw international attention to issues of urban development: rapid urbanization and its effect on people, cities, economy and policies. The aim of the Forum is to strengthen the co-ordination of international support to the implementation of the Habitat Agenda. The biennial World Urban Forum is organized by UN-HABITAT as a global, non-legislative event where different actors involved in human settlements development can meet and interact to discuss urban issues. The first session of WUF was held in Nairobi in 2002 and included themes on the role of local authorities and other Habitat Agenda partners, cities without slums, global campaign for secure tenure and the global campaign on urban governance. The second session was held in Barcelona in 2004 with thematic dialogues on the urban poor, urban resources, urban sustainability, urban services and urban disasters and reconstruction.

WUF3 in Vancouver:
Sustainable Cities – Turning Ideas into Action

Canada hosted the third session of the World Urban Forum in Vancouver (WUF3) 2006 with the main theme of Sustainable Cities – Turning Ideas into Action. Through this theme, WUF3 aimed to increase the understanding for sustainable urban development in both rich and poor countries, and to emphasize the need to implement ideas that can lead to sustainable urban development.

The challenges facing a development of Sustainable Cities were discussed during one week in Vancouver; in plenary sessions and dialogues, roundtables, special sessions and over 160 networking events. The Forum sub-themes of Urban Growth and the Environment, Social Inclusion and Cohesion, and Partnership and Finance initiated many thought provoking debates and discussions. Together with training events, cinema, cultural events and the exhibition hall – showing examples of projects that provided successful solutions – WUF3 became a platform where a range of professionals, experts, and private participants shared experiences and exchanged views on sustainable cities. Close to 10,000 participants from over 100 countries attended the Forum. Participants came from governments, local authorities, Non-Governmental Organizations, professional institutions, research institutes and the private sector.

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7 Information on the World Urban Forum can be found at UN-Habitats homepage, see reference 5.

8 The Canadian website for WUF3 can be found at www.wuf3-fum3.ca. WUF3 marked the 30th anniversary of Habitat I, the first United Nations Conference on Human Settlements.
Urban Shelter Design and Development – USDD

In conjunction with WUF3, twenty-eight professionals from Africa, Asia and Latin America, were invited to take part in Urban Shelter Design and Development (USDD) an international training programme offered by Housing Development and Management (HDM).

HDM is a department in Architecture and Built Environment, Lund University, Sweden. HDM undertakes training and research in housing and urban development. Focus areas include planning, design, and management, where the aim is to analyze and assess how to improve the processes leading to good housing and sustainable development, especially for the poor.9

For many years HDM has successfully offered international postgraduate training for planners, architects, engineers and other professionals as part of the International Training Programme (ITP) sponsored by the Swedish International Cooperation Agency (Sida).10 The aim of the ITP is to contribute to institutional strengthening and capacity development in the cooperating countries and to support processes of change and development in the participants’ organizations and professions.11

The professionals who attended USDD were alumni of HDM’s international courses between 1991 and 2006, with extensive experience on housing and urban development in their home countries. The participants came from twenty-three different countries and represented organizations and institutions in the housing sector such as: municipalities, local authorities, universities, NGOs and the private sector.

Programme Content and Structure

The overall aim of the training programme was to support the initiation of projects for change and improvement in order to implement concrete activities that support the urban poor to improve their living conditions. The USDD programme was focused on an individual project for change and improvement. It was a process that began with identifying a problem and analysing it before meeting in Vancouver, collecting relevant ideas and experiences at WUF3 and then applying the proposed solutions in the participant’s organization. WUF3 provided a broad frame of reference of the challenges of sustainable, urban development and gave the participants a chance to explore ideas, thoughts and experiences on the continuing urbanization in the world.

9 More information about HDM and its activities can be found at www.hdm.lth.se
10 The Swedish International Cooperation Agency (Sida) is a government agency responsible for Sweden’s development cooperation, see www.sida.se
11 Long-term knowledge and competence development constitutes a major feature in all development cooperation. Sida offers, as part of its bilateral development assistance, Advanced International Training Programmes in areas of strategic importance to economic and social development.
The projects presented in this report start with a short description of the shelter situation – demographic issues, socio-economic factors and housing conditions – in each country. From this description, an issue of how to improve the situation of the urban poor was identified. The selected problems relate both to the situation in each country but also to the role of the participants’ organization. The projects were elaborated from the participants’ professional experience and from best practices, projects and insights gained at WUF3. Based on the assessment of what new information and experience could be of use, action plans of how to implement the projects were elaborated. The action plans were, in collaboration with colleagues, then developed with the aim to implement proposed changes and improvements in the coming year and over a period of five years.

**Shelter for the Urban Poor – Projects for Improvements**

Concerns about urban development are raised and analysed in the proposals for change presented in this report, starting from the built environment. For architects, engineers and planners, issues of sustainability are addressed through physical planning, land issues, housing design, slum upgrading, post disaster and resettlement projects; where the urban poor are often the most vulnerable group. On the basis of Shelter Deprivation and Sustainable Urban Development issues discussed in environmental sustainability include sanitation, access to clean water and waste disposal. Many papers raise issues of social sustainability, especially the importance of involving the actors: whether the residents or organizations and authorities, all must cooperate and coordinate to achieve improvements. Economic sustainability is raised in projects to improve infrastructure and systems to finance house construction, in situations where the importance of broad partnerships is emphasized. The role of good governance is raised in several papers, as is the importance of implementing pro-poor policies.

The papers are divided in three sections according to their main topic. The first group discusses the approaches of urban planners and architects; the second group focuses on the three pillars of sustainability; and the third group on issues of governance and policy. Many papers also discuss the linkages between these subjects and describe the importance of an integrated approach to the problems presented.

**Projects in Urban Planning and Upgrading**

How can architects and planners address the growing problems related to urban housing shortage and slums? One issue raised in the papers below, is the need for new urban housing areas; functional urban planning and a strategy to deal with urban land. Another important issue is how to improve the existing situation for urban poor groups already settled in urban areas; either by upgrading areas or sometimes by resettling people from hazardous sites.
Urban Planning is essential to tackle the problem with rapid urban growth. In an example from India, Rajesh Goel stresses the need for strategic planning to meet the demand of 4,000 new urban centres by 2050. An analysis of strategic planning scenarios is made at four levels: metro towns, small- and medium towns, urbanization of rural areas and the creation of new towns. From the Vietnamese experience Nguyen Thi Hien discusses the need to transform the existing central planning system to meet the challenges facing Vietnam in the transition to a market oriented economy and proposes to further develop the City Development Strategy in the country.

Urbanization caused by rural-urban migration and growth of the existing urban population leads to an increased demand for land for the development of housing. Increasing land prices are found in many cities, but the problem is worse in some places due to limitations affected by topography, land conditions and forms of ownership. One difficult issue is how land can be accessed for development of housing for urban poor groups. In an example from Nepal Bhubaneswari Parajuli reviews the difficult situation of the urban poor to access land and underlines the need for combined efforts of stakeholders to reach the goal of housing for all. The paper looks at specific programmes and concludes that land pooling has been the most pragmatic approach to acquire land. Another example of this problem is discussed in the paper from El Salvador where Raquel Caballo proposes an approach to generate land for the urban poor that includes land management through comprehensive plans and incentives to involve private developers in social housing through higher densities in new housing areas.

Upgrading and improving existing housing areas through programmes and projects is one way – for professionals in the built environment in many countries of the South – to restrain the persistent formation of slums. Sandra Drummond analyses an existing programme of slum-upgrading in the Metropolitan Area of Guatemala and suggests improvements through participatory processes and improved programme management. In North Africa upgrading projects have existed for thirty years and countries like Tunisia and Morocco have been quite successful. In an example from Egypt, Mohamed Asar analyzes the upgrading process of illegal settlements around Cairo and discusses the role of land-titling in the process. An alternative pro-poor housing scheme, influenced by a Pakistani experience is put forward. Sub Saharan Africa has the highest proportion of slum dwellers in the world, partly attributed to the declining economies coupled with the prevalence of HIV and conflicts in some countries. In the Kibera Slum Upgrading Programme in Kenya Marion Rono stresses the need to address the problem of lack of communication and participation and proposes a framework of building partnership, community involvement and savings groups in order to improve the programme. In another example of a programme for sustainable development of Mavoko Municipality in Kenya Thiyagarajan Acharya stresses the need for appropriate building materials as a way to improve the housing conditions for the urban poor and proposes a way forward by combining appropriate materials and training of skilled labour. Slum upgrading in Tanzania is discussed by Michael Ole-Mungaya who presents important
Introduction

issues of slum upgrading and touches on successful regularization programmes through experiences of WUF3 that could be of value in Dar es Salaam.

Resettlement of poor urban groups is an ongoing phenomenon in many urban areas. In three examples from Asia the issue is discussed in relation to risky sites of different character. Alma Valenciano describes the need to resettle poor families living along the railway lines of Metro Manila in the Philippines and proposes a framework based on environmental protection, social development, economic development and culture and heritage to design areas where resettled people will want to stay. The occurrence of natural disasters could also mean that people need to resettle. Wiryono Raharjo discusses the challenges faced by actors involved in the rehabilitation and reconstruction in post-disaster housing in Yogyakarta and proposes capacity building as part of improving the existing Indonesian strategy. The effects of the tsunami are still felt in several countries such as Sri Lanka. Nilanthi Ratnayake describes resettlement problems and the importance of coordination during reconstruction. She proposes a plan to strengthen an existing agency to find shelter solutions for the tsunami victims faster.

Projects in Environment, Society and Financing

The three pillars of sustainability; environmental, social and economic sustainability is mentioned throughout the discussions of many papers in this report. The papers below focus on issues more evidently related to the environment, the economic difficulties faced by urban poor groups and the concern for social stability in cities – all starting out from the built environment.

Sanitation hygiene and health are interconnected and sanitation is one of the key issues to improve the conditions of urban slum dwellers. Globally, UN-HABITAT estimates that 2.6 billion people lack adequate sanitation. The lack of sanitation facilities is a dehumanizing, but not often acknowledged consequence of poverty. In the Asian context Md. Sazzad Hossain identifies the poor access to urban infrastructure as one of the main constraints to develop sustainable shelter for the slum-dwellers of Dhaka, Bangladesh and proposes a community based programme as one possible approach to scale up interventions. In Malawi Africa, Ivy Luhanga, analyses existing sanitation systems to assess possible options for a housing project in Lilongwe, Malawi. The paper draws on experiences through WUF3 and offers recommendations to address the problem relating to policy, institutional arrangements and finance.

Challenges to finance infrastructure for sustainable urban development are named in many papers. Solutions for the urban poor are difficult for municipalities with little revenue, Private-Public-Partnerships is one way to finance both the construction of new systems and their operation. However, PPPs can be difficult to create and the poor are the worst affected. In an example from Zambia, Towera Kazunga focuses on ways to mobilize resources for service provision and proposes public-private partnerships as a possible way to improve the existing situation drawing on experiences from successful projects presented at WUF3. Another challenge is to finance housing for urban poor groups. Particularly affected are countries like Tanzania where there is no formal housing finance mechanism. Margaret
Ezekiel discusses housing provision in the absence of a housing finance institution and highlights alternatives for housing finance in Tanzania. In many countries there is an imbalance in the housing market, with a lack of housing for low-income groups. Nuha Salah discusses the housing market in Jordan and describes the current mis-match between housing supply and housing demand.

Social issues that affect urban life have become more common in discussions of a sustainable society. Increased urban segregation and violence especially affect vulnerable groups; vulnerable because of poverty that might also be related to oppression due to race, ethnicity and gender. Part of urban segregation is the decline of old inner city cores, an issue raised in three papers where cultural heritage is discussed as an aspect of poverty alleviation linked to housing. Zelalem Berhane emphasizes the need to acknowledge the value of the mixed urban pattern and mix of social groups in the core of Addis Ababa, Ethiopia and suggests that cultural heritage should be incorporated in the strategic plan of Addis. Allan Birabi stresses the right of Kampala’s slum dwellers to decent shelter, presents a critical perspective of the shelter crises and discusses a framework of issues that could generate realistic proposals in Uganda through integration of heritage conservation and improvement of housing conditions. Tenants have few possibilities to stay in an urban centre when gentrification takes place. Indira Alvarez discusses the housing situation in the historical centre of Comayagua, Honduras and underlines the importance of giving tenants a stronger position in inner city revitalization programmes.

Projects in Governance and Policy

The concept of good urban governance includes participatory decision-making in cities and devolution of power from central to local governments. A key factor in this process, raised in the papers below, is housing policy. Pro-poor housing policy reforms are necessary to tackle basic shelter deprivation; lack of safe drinking water and sanitation, over-crowded housing, security of tenure and durable construction of housing. Such policy reforms have in some countries come a long way to enable governments, local authorities and urban poor groups to improve poor people’s access to decent housing and infrastructure in cities. The papers below focus on the need for policy, both the policy as a steering document and also its implementation. Paul Makasa analyses the case of the 1996 Zambian Housing Policy and criticizes both the lack of implementation and the policy’s lack of correct strategies and legal tools to achieve its goals and stresses the need for a new policy. Rapid urbanization in Bangladesh is a great challenge that requires official policies and documents to guide sustainable development. Md. Mahabub Hassan describes the current conditions of the urban poor in Bangladesh and proposes a national human settlements policy as a way forward to tackle the complex situation. The political situation in Palestine has created a complex situation that makes it difficult for local authorities to implement their housing policy. Allaaeldin Almasri describes the current high population density and land shortage linked to the political situation in the Gaza and proposes an integrated approach that requires both partici-
patory processes and involvement of stakeholders at all levels. The under-
lying principles for a policy are raised by Esthela Espinoza. She analyses the 
existing housing policy of Ecuador and the increasing number of illegal 
settlements, and proposes that a new housing policy be developed on the 
basis of the existing housing delivery system.

The roles and responsibilities of different actors in the housing sector 
have a large impact on the shelter situation of the urban poor. Tsion Lemma 
Mamaru discusses the possibility for the government to transform from its 
role as a provider of housing to a position of facilitator, highlighting lacking 
components in the current housing development approach in Addis Ababa, 
Ethiopia. The private sector is often influential in housing construction, but is 
often blamed for all negative urban development. Silvia Soonets identified 
the lack of voice of the private consultants at WUF3, and put forward some 
key issues of risks and responses to the ongoing shelter crises in Caracas, 
Venezuela. She called the attention to more active engagement of urban 
planners, designers and architects to raise their voices and increase their 
influence, looking forward for more input in the next World Urban Forum.

Voices on the USDD Experience

The USDD programme combined education in urban development with 
WUF3 in order to couple increased knowledge with practical work linked to 
long term change and improvement.

The chance to participate in the programme was highly valued and 
participants saw the experience as a contribution to their work that gave 
them inspiration to continue. One participant writes:

Aside from providing me new knowledge on innovative housing 
policies, issues and models for sustainable housing develop-
ment, the USDD course has been instrumental in my decision to 
stay with the government rather than join a private consulting 
firm. Through the course, I realized that I have a more catalytic 
role in a government-owned corporation engaged in low-income 
housing, as an architect-planner and manager. I can be an agent 
of change in my organization, and in the communities I work 
with. I could firmly say that my life is in order, being able to 
answer the questions: “How many lives did I help improve? 
What ideas did I trigger? What innovations did I introduce? What 
values did I inculcate?"

WUF3 gave the participants an opportunity for active learning; to involve 
themselves in current debates and to listen to the latest international 
experiences in strategies and methods to improve housing conditions, how 
to address sustainable urban development and develop pro-poor policies. 
They participated in training activities and networking events over a week 
and heard the most prominent figures in the world debate. The exhibition 
offered experiences and best practices, which also provided ideas and 
examples for the individual work. All these activities at WUF3 also con-
tributed to a broad coverage of each issue.
The WUF being a global event provided all the participants with adequate choices for each participant to choose sessions which are directly relevant to their own areas of interest and thereby learning the global perspective on the same. This sort of wider coverage and option for a global knowledge sharing at such level is definitely not possible to be created in a short structured programme.

Group photo from Vancouver (Photo: Johnny Åstrand)

Photo: Old town, Vancouver (Photo: Karin Grundström)
Networking

A Forum is also a meeting place for people to chat, gossip, meet professional acquaintances, listen and comment on plenary sessions, squeeze into packed rooms for networking activities and meet new contacts. WUF3 gave many a chance to network and lobby to promote their own ideas on urban development, both with colleagues and compatriots and with new contacts for future work. The Forum also offered a chance to meet Government officers and other officials.
It was a genius idea of Lund to organize the follow-up course together with WUF3; we had a unique chance to attend a very big world event. The participants had a wider chance to learn and share, meet, listen and expand network with so many urban experts, including very top ones, from all over the world, so the effect was multiplied; The participants saw how the housing issues are integrated in overall urban development process.

A further positive result was to strengthen the current alumni network. Most of the participants had contact with each other from courses in Lund or internationally and several of the participants come from organizations that regularly send candidates to ITP programmes. This also strengthens alumni’s opportunities to exert positive influence and to continue a professional dialogue on changes and improvements.

Participation in this network is especially valuable, by giving alumni a sense of belonging to a group of colleagues in the world who are all committed to improving living conditions for the urban poor.

Influencing and Implementing Ideas

The main aim of USDD was to initiate projects for change and improvement, depending on the individual participant’s work and position, and ability to influence and initiate new ideas. The course gave participants a chance to reflect and write about their own work, and to compare their work with what others around the world are doing. To influence could also include networking, starting or developing a lobby group, which USDD supported through the contacts with institutions, NGOs and CBOs both in the participant’s home country and internationally. Awareness can be created by implementing ideas in the built environment, in design and in influencing changes in the home organization. One participant describes how the course was an opportunity to reflection and change through new ideas.

The USDD gave a chance to each course participant to deeply think about what is to be done in his/her country in general and in a concrete case of his/her professional activities in particular. For myself, the course gave me a confidence that urban planning and development can be implemented at very grassroots level. After the course, I’ve helped a poor urban community upgrade their public spaces, based on a strong partnership between the local authority, a private contractor and active participation of the residents. The case has proved that good partnership between these major development stakeholders can lead to improvement of living conditions with better quality, reduced cost, innovative as well as trust and cooperation.

Another participant describes ways to influence and implement new ideas at different levels in daily work by developing an existing lobby activity and by initiating change in his own organization.
I was part of two consultative meetings that were aimed at voicing people’s concerns and lobbying for better results in the development of the housing sector. In December 2006, I participated at HAFOTA’s consultative meeting on Regularization of Land: Implication for the Community. Another consultative meeting was held in July 2007 with the aim of evaluating a draft copy of the Housing Policy that is yet to be in progress. /…/I have been using the knowledge received in my daily building economics consultancy work. I advice my superiors on matters that are mostly related to housing finance. In addition to that, I have already started sharing the experience with my superiors and lobbying for it to be used to uplift the level of our professional conduct.

Initiating change can also be done by developing a theoretical concept that could be useful in the work of the organization and also used as a starting point to develop housing schemes, as described by one participant.

I have learned a new framework which I could use in my practice as a professional engaged in providing housing for low-income families in my country. The “pillars of sustainability” should be the backbone of planning and implementation of housing programs and projects of our organization.

Apart from their normal professional jobs, many are also – on a voluntary basis – active in networks and organizations working for better housing and living conditions for the urban poor. One manages an NGO in her free time; another works with school children on weekends to teach them sustainable urban development; a third lobbies for more effective urban policy. These activities are not described in any detail in the papers, but are worth mentioning since they also form part of the contribution to long-term changes.

Ways Forward

Time is never enough. This was true also for USDD at WUF3. Participants suggested more time for discussions, time to develop their papers and time to interact with each other. Partly this was due to the over-whelming amount of information available during the five day Forum.

The disadvantages of holding a programme in conjunction with World Urban Forum is that the follow up programme gets overwhelmed by the enormity of the global mega event like World Urban Forum.

Even if USDD was a short event, a follow up course leads to continued capacity building, which was appreciated by the participants. A short follow-up also provides an opportunity to be efficient and concentrated, depending on the group dynamics and the level of knowledge in the group.

The follow up courses for HDM alumni are definitely useful as they add much incremental value. Since in the first course, the participants, mostly from the developing countries are generally
Shelter for the Urban Poor

on their first such international exposure and accordingly, it takes considerable time for them to get accustomed to the new environment and teaching methods etc. So the follow up courses enable the participants to be much more receptive and the programme can deliver more in lesser time. The follow up programme also enable the participants to evaluate their understandings of the initial course and monitor the extent of learning that they have been able to actually transfer to the field for their respective countries.

Despite the short time, the general impression was very positive.

The integration of both the programmes in this course was undertaken in a very effective manner and the advantages of holding the follow up programmes in conjunction with global events are definitely way much more than the little disadvantages. I would definitely suggest holding such programmes as it exposes the participants to these global forums, possibly for the first time in their life.

USDD provided the opportunity to network with HDM alumni, learn new approaches, make new contacts with donors and development agencies, and for many it was a very special experience.

Karin Grundström

Photo: Globe Foundation of Canada
Papers

Projects in Urban Planning and Upgrading
Towards Guided Urban Development in India

Policy and Strategic Imperatives

*Rajesh Goel*

Engineer, Chief of Corporate Planning at Housing and Urban Development Corporation (HUDCO), India, the premier techno-financing institution of the government of India, to facilitate sustainable development of Housing and Urban Development for the under privileged. Coordinates the institutional restructuring and strengthening and quality assurance initiatives. Coordinator of the Interim Secretariat of Asia-Pacific Ministers Conference on Housing and Urban Development.

The projected urbanization in India requires creating additional urban space for approximately 785 million people. With the current stress on existing urban facilities, more than 4,000 new urban centres must be created by 2050. Unless we guide and orient these developments today, urban centres will arise in a haphazard manner and stretch the available resource to make even the present urban centres more unsustainable.

The primary challenges include sustaining the infrastructure and quality of life in mega cities, re-densifying the smaller towns to make them viable, arrest rural-urban migration and move towards ‘Planned Urbanization of Rural Areas’, in an effective and sustainable manner.

The paper analyses strategic planning scenarios for sustaining the urbanization in India towards strengthening the polycentric development at four levels: (a) Sustainable development of large & metro towns; (b) Focus on small & medium towns to strengthen and diversify as future growth engines: (c) In-situ urbanization of rural areas and (d) Creation of new towns.
India

Like the rest of the world, India is witnessing increasing urbanization trends. While the growth of urbanization has been comparatively slower, but with its robust economic growth and globalising world, India will soon witness unprecedented growth in urban population. The urbanization levels, presently about 28.5%, are likely to stabilize at 70–75% by the end of the century. This urban growth would mean creating additional urban space for approximately 785 million people. With the existing urban areas already under stress for urban facilities, there would be a need to create more than 4,000 new urban centres to accommodate the increase in urban population by 2050. The challenge today before the policy planners is to either have a guided urban development in the 21st century or to face the perils of unplanned growth that has been the bane of Indian cities, bursting at their seams for basic infrastructure facilities.

India is the seventh-largest country in area, and the second most populous country in the world. The Census 2001 estimated the Indian population at 1029 million, second only to China, with a population density of 324 persons per square kilometre. The population growth rate of India in 2004 was 1.44% with fertility rate and mortality rate of 22.8 births and 8.38 deaths/1,000 population respectively. Total fertility rate for India is 2.85 children born/woman and is expected to decline even further to the replacement level before the second half of this century. Although growth rates are falling, the annual addition to the population continues to rise. Each year India adds more people to the world’s population than any other country. With life expectancy at birth experiencing significant increase for both males and females from 46 and 44 years, respectively in 1965 to 63.25 and 64.77 years in 2004, India’s population is expected to grow and stabilise by the year 2050. The UN estimates India’s population is expected to reach an all time high of 1531.14 million by the year 2050. India faces the challenge of meeting the rapidly increasing development, shelter and urbanization needs of the population.
The distribution of the urban population is also a matter of concern for any future urban planning exercise. As is evident over 60% of the urban population is concentrated in just 423 cities, wherein also the major component is shared by 35 million plus cities.

<table>
<thead>
<tr>
<th>Category</th>
<th>Population Range</th>
<th>No. of Towns</th>
<th>Population</th>
<th>%</th>
<th>Average Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>Above 100,000</td>
<td>423</td>
<td>172,044,019</td>
<td>60.3</td>
<td>406,723</td>
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<tr>
<td>Class II</td>
<td>50,000 to 99,999</td>
<td>498</td>
<td>34,431,050</td>
<td>12.1</td>
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<td>Class III</td>
<td>20,000 to 49,999</td>
<td>1386</td>
<td>41,974,176</td>
<td>14.7</td>
<td>30,285</td>
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<td>Class IV</td>
<td>10,000 to 19,999</td>
<td>1560</td>
<td>22,603,791</td>
<td>7.9</td>
<td>14,490</td>
</tr>
<tr>
<td>Class V</td>
<td>5,000 to 9,999</td>
<td>1057</td>
<td>7,983,120</td>
<td>2.8</td>
<td>7,553</td>
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<td>Class VI</td>
<td>Less than 5,000</td>
<td>227</td>
<td>801,095</td>
<td>0.3</td>
<td>3,529</td>
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<tr>
<td>Others</td>
<td></td>
<td></td>
<td>5,517,703</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5151</td>
<td>285,354,954</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Further, more than 40% of India’s population is illiterate. The health status of India’s population is equally dismissal. Child mortality rate is still very high and life style diseases are posing a big epidemiological challenge for the country in addition to the communicable diseases. The economic development of the country is needed to address these developments needs of India’s population which is going to concentrate in urban centres putting a large demand for infrastructure and basic services.

India is the fourth largest economy (USD 3 trillion GDP) in terms of Purchasing Power Parity after USA, China and Japan. The macro-economic indicators are at present the best in the history of independent India with high growth, foreign exchange reserves, and foreign investment and robust increase in exports and low inflation and interest rates. India is the second fastest growing economy of the world at present with the GDP growth reaching 8.5%. India is the sixth largest foreign exchange holder in the world.

While a quarter of Indians still live below the poverty line, a large middle class (more than 300 million strong) has now emerged along with the growth of a promising IT industry. The Indian economy depends much on
agriculture, which now contributes to less than 25% of the GDP. Other important industries are mining, petroleum, diamond polishing, films, textiles, information technology services, and handicrafts. Most of India’s industrial regions are centred on major urban centres. Thus these urban centres are expected to be the engines of growth and experience high level of urbanization with massive requirements for shelter and urban services.

Access to Shelter and Urban Services

The housing situation in India today is highly dynamic due to the decline in the household size coupled with increase in income. India’s total population of 1028.61 million (Census of India 2001) consists of 191.96 million households residing in 187.16 million housing units. The average number of persons per house in urban areas has declined continuously from 6.06 in 1951 to 5.50 in 2001.

Table 2.1: Decennial Growth Rate of Population, Households and Housing Stock: 1971 to 2001

<table>
<thead>
<tr>
<th>Type</th>
<th>Decennial Growth Rate (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>46.6</td>
</tr>
<tr>
<td>Households</td>
<td>52.4</td>
</tr>
<tr>
<td>Housing Stock</td>
<td>50.3</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>19.9</td>
</tr>
<tr>
<td>Households</td>
<td>19.9</td>
</tr>
<tr>
<td>Housing Stock</td>
<td>19.9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>25.2</td>
</tr>
<tr>
<td>Households</td>
<td>26.3</td>
</tr>
<tr>
<td>Housing Stock</td>
<td>26.0</td>
</tr>
</tbody>
</table>

*Source – Census of India*

The growth rates of housing stock and household formation in the past two decades have more or less followed the same declining trend of population growth in urban areas. The growth rate of housing stock increased during the decade 1981–1991 but declined during the last decade i.e. 1991–2001. In the decade 1991–2001, the urban households have increased by 31.8 percent whereas the residential housing stock has increased by 32 percent. The growth rate in the housing stock is higher than the growth rate of households. This has resulted in the reduction of the housing shortage as well as the ratio of households to housing stock.

As per the Tenth Plan (2002 to 2007), the total number of houses that would be required cumulatively during the plan period is estimated at 22.44 million dwelling units. It is estimated that the investment required from public sector institutions would be of the order of Rs 4150 billions. This will have to supplement the contribution from private players to tackle the growing demand for housing finance during the Plan period.

Access to safe drinking water in the urban areas has significantly improved from about 74 percent in 1981 to about 91 percent in 2001. In the case of the rural areas, the change is even more drastic. In 1981, only 26.3
percent households had access to safe drinking water, which increased to 80.5 percent in 2001. Though the progress is noteworthy, the uncovered gap calls for attention on priority basis because safe drinking water is a vital necessity for human life whether in urban or rural areas. The gap between the urban and rural households having access to safe drinking water has decreased over the decades. About 57 percent of the urban households had accessibility to toilet facilities in 1981, which increased to 73.7 percent by 2001. But, in rural areas, the number of households with toilet facilities has increased from about 8.8 percent in 1991 to 21.9 percent by 2001. Availability of electrical connection in the urban areas has increased from about 62 percent in 1981 to 88 percent by 2001. In rural areas only 14 percent of households had an electrical connection in 1981, increasing to 43 percent by 2001. A considerable increase is observed in the percentage of the dwelling units with electricity facility in rural areas but much more is required to be achieved in the future.

**Housing and Habitat Policy of India**

India enunciated The National Housing and Habitat Policy (NHHP) in 1998, which envisages eradication of houselessness, improvement in housing conditions of the inadequately housed people and providing a minimum level of basic services and amenities to all. The Policy recognized the role of various agencies like Central and State Governments, Co-operative Sectors, Communities and Non-Governmental Organizations, Private Sector etc. at different levels. The NHHP stressed on a major shift in Government’s role from being a provider to a facilitator. The new Housing Policy is under consideration of the Government of India (GoI). The central theme of the policy is to enable strong public-private partnerships for tackling housing and infrastructure related problems. The Government is providing fiscal concessions, supporting legal and regulatory reforms and is engaged in creating a healthy environment for housing. The Private and Co-operative Sectors are expected to come forward in partnership to tackle the problem of housing shortage in a collective endeavour.

**Critical Challenges for Sustainable Urbanization**

With the growing urbanization the increase in urban population is expected to be of the order of 785 Million till the urban growth stabilizes. This would necessitate creation of nearly 4,000 new urban settlements of population ranging from 1 to 5 lacs. The challenge is to plan for these new centres today in a planned manner before it is too late. Although a small percentage of just 3.5% area is required to cater to the urban requirements, it is pertinent that we guide the urban process in a planned manner and locate these new urban centres in locations which are sustainable with effective connectivity network for roads with local availability of water resources and other utilities, etc.
Here it must also be noted that India has been an agrarian economy with over 26 percent of the population being economically active in agriculture compared to the Developed Countries which have an average of about three percent. The employment potential for agriculture, with the growing industrialization is likely to follow the trend towards that of the developed countries and is likely to decrease progressively and consequently the agriculture sector shall be able to provide only limited jobs. Hence, the need is to take initiatives for generation of non-farm jobs in rural areas to contain rural-urban migration and for sustainable development of rural areas.

Unless we guide and orient these developments today for the rest of the century, urban centres, which are bound to come up, shall be in a haphazard manner and stretch the available resource to make even the present urban centres more unsustainable. The existing larger urban centres have already grown too large to be sustainable and are feeling the stress on their resources. They are in no position to take further influx. Strategies are required to be made to decongest them and make a country wide plan as against a city or a regional plan, to be able to cater to the urbanization challenges.

The primary challenges include sustaining the infrastructure and quality of life in mega cities, re-densifying the smaller towns to make them viable, arrest rural-urban migration and move towards ‘Planned Urbanization of Rural Areas’, in an effective and sustainable manner, which ensures appropriate urban facilities along with employment opportunities with synergic participation of all stakeholders and effective Public-Private-Peoples-Participation, and above all plan and create new towns.

This calls for a long term planning to deal with the urbanization process in a holistic manner for the entire country for the next 50 years or more wherein the population is projected to stabilise and the urbanization is likely to reach the optimal level keeping with the growing economy and the global scenario.

The World Urban Forum Experience

The World Urban Forum at Vancouver was a major learning experience for the participants. The realization of the harsh realities of growing urbanization made everyone wake up to the fact that WE all need to act together and fast. The urbanization process is irreversible at least for the next say 50 years, and we better plan for the same in a comprehensive manner, or else the tide of urbanization will wipe out whatever limited quality of life and the basic facilities we have in our starved cities, crying for better infrastructure in our developing countries.

And plan we must, not for the poor, but with the poor as a partner in development. The WUF was a clear demonstration of the fact that the poor communities are not ready to be taken for granted any longer and they have to be included in all facets of the planning and implementation process.

And planning just cannot be short term to solve the current problems, but it has to be on a much larger term in a holistic manner. The role of planners is evolving rapidly and most of the notions of traditional planning by a select
group of planners are no longer valid. The faster the planners adapt to the imperatives, the future of our cities would be less bleak.

Partnership as a mantra was re-emphasized beyond doubt, be it in planning, financing or implementation. The notion of poor as an entity for whom we plan and dole out some favors is outdated, the poor rightly demand to be included in all the processes affecting them, and is was amply demonstrated that they have the willingness and the capacity to contribute significantly and any initiative devoid of their active participation is most unlikely to succeed.

Learning from the past to plan for the future was an interesting feature detailed at the WUF. The concept of development timelines can be an effective tool for sustainable future planning.

The Urban Settlement Situation

During the last century number of towns and cities has multiplied by two and half fold while the urban population has increased more than 10 times. Today, we have the second largest urban system in the world. Unplanned and uncontrolled urban growth has outpaced the planning efforts in urban areas.

The million plus cities have also grown substantially in terms of number, size and area. The 2001 Census shows there are 35 million plus cities which account for about one third of India’s urban population. The urbanization scenario shows that the percentage of urban population, which was about 20% in 1971, may increase to 41 to 45% by 2021. In absolute terms it may increase to about 550 million by 2021. On the other hand urban decadal population growth has gone down from 46% during 1971–1981 to about 31% during the last decade 1991–2001. Similarly, there were 5 metropolitan cities 1951 and may be up to 75 by 2021.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population (in Million)</th>
<th>Urban Population (in Million)</th>
<th>% of Total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>318.65</td>
<td>44.15</td>
<td>13.85%</td>
</tr>
<tr>
<td>1951</td>
<td>361.08</td>
<td>62.44</td>
<td>17.29%</td>
</tr>
<tr>
<td>1961</td>
<td>439.22</td>
<td>78.93</td>
<td>17.97%</td>
</tr>
<tr>
<td>1971</td>
<td>548.36</td>
<td>109.11</td>
<td>19.90%</td>
</tr>
<tr>
<td>1981</td>
<td>683.61</td>
<td>159.41</td>
<td>23.32%</td>
</tr>
<tr>
<td>1991</td>
<td>846.85</td>
<td>217.61</td>
<td>25.70%</td>
</tr>
<tr>
<td>2001</td>
<td>1027.02</td>
<td>285.35</td>
<td>27.78%</td>
</tr>
</tbody>
</table>

The decadal urban growth rate has declined, but there is a steady increase in urbanization level and absolute urban population. Major concentration of urban growth is mainly in large and metropolitan cities. An interesting feature of urban growth in Indian situation is almost equal increase of urban population by natural growth and by migration each accounting for about 40% while the rest of the urban growth may be attributed to re-classification of rural areas into urban centres. Most of the natural increase in large and
metro cities confines within the same cities whereas migration streams flow from villages to towns and towns to large cities. In India the urbanization process is unidirectional because there is hardly any migration from large cities towards rural areas. It, therefore, clearly indicates that the present trends, if not reversed intentionally, would continue, leading to a massive increase in the size of large and mega cities.

India has had a relatively slow but stable rate of growth in its urban population since 1921, during which the level of urbanization has increased slowly from 11.2 percent to about 27.8 percent in 2001. Although the total urban population increased more than 11 fold between 1901 and 2001, from about 26 million to 285 million, the number of settlements increased by just 140 per cent to 5151 from 1830. The increase in the number of towns has also been steady across the decades. Thus most of the growth has been due to the enlargement of existing towns at every level and not significantly due to the addition of new towns.

Urban Planning in India

In India, the Central Government lays downs policies and guidelines for urban planning and development for the country. Urban planning projects and schemes are taken up either in the state sector or in the central sector. The constituent states and Union Territories are required to enact their own Urban and Regional Planning and Development Acts. These Acts are by and large based on Model Regional Planning and Development Law prepared by TCPO. Urban planning and development activities are undertaken at three levels: Central, State and Local Levels.

At the central level, Ministries of Urban Development, Housing and Urban Poverty Alleviation, Planning Commission of the Government of India are the main agencies dealing with the subject of urban planning and development. Central Town and Country Planning Organization (TCPO), Housing and Urban Development Corporation (HUDCO), Central Public Health Engineering and Environment Organization (CPHEEO) are the important nodal organizations which provide technical assistance and advice in urban development planning and related issues. The central agencies formulate model planning and development legislation, guidelines and develop and disseminate innovative approach and techniques for improving efficacy of urban planning and development systems.

At state level, urban planning is governed by respective State Town Planning Acts and other development Acts. State Town & Country Planning Departments in one form or the other have been established almost in all the States and Union Territories of the country. Although role and function of Town Planning Departments may vary from state to state and by and large preparation of Master Plans/Development Plans, Regional Plans, Town Planning Schemes, Zonal Plans, Development Scheme, Area Schemes, implementation of central and state sector schemes, development control and planning permissions are their major functions. State level policy and strategy planning are also worked out to prepare and implement development plans and improvement schemes.
At local level, the planning administration field offices of the State Town Planning Departments have been established either at District or administrative division level. In most of the towns and cities urban local bodies in the form of Municipal Corporation or Municipal Council or Nagar Panchayat have been constituted. In some of the large and metropolitan areas Planning and Development Authorities have also been constituted to look after the planning and development of the respective towns.

Projections for Urbanization in India

The urban population in India has been projected in the paper including population growth in various categories of towns till the year 2051. The projections were made for the aggregate urban population and town category wise population. Though the segregated urban population projections seem to be optimistic and reflect the higher side of the projected urban population. As given in the table the maximum urban population of India expected is 1350.4 millions in the year 2051. However the aggregate population projections seem to project floor level urban population and according to this scenario India’s urban population could be around 909 millions by the year 2051. The average of above two projections leads to an assessment that India’s urban population could be approximately 1100 million by the year 2051. These projections seem to be realistic in that India’s urban population could be 75% of the total population of India in the year 2051; according to UN Projection it would be 1620 million and three fourths of that would mean an urban population of 1200 million.

The projections show that India needs to accommodate approximately 815 million people in urban centres by the year 2051. Such a massive increase in urban population makes it imminent that the urban services and capacity of the urban centres are increased exponentially.

Detailed projections have been made by the World Bank. World Bank has estimated that by 2030, 41.4 percent of India’s population will be living in urban areas, which would mean an additional population of 300 million people will be added to India’s cities and towns. The projections made in this paper have been quite close to the urban population projected by for the year 2030. The validation of data thus seems to be quite appropriate.
**Urban Population of India (in millions)**

<table>
<thead>
<tr>
<th>Year</th>
<th>All Classes</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>25.60</td>
<td>6.70</td>
<td>2.90</td>
<td>4.00</td>
<td>5.30</td>
<td>5.10</td>
<td>1.60</td>
<td>25.60</td>
</tr>
<tr>
<td>1911</td>
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<td>7.00</td>
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<td>5.10</td>
<td>4.90</td>
<td>1.70</td>
<td>25.60</td>
</tr>
<tr>
<td>1921</td>
<td>27.70</td>
<td>8.20</td>
<td>2.90</td>
<td>4.40</td>
<td>5.10</td>
<td>5.20</td>
<td>1.90</td>
<td>27.70</td>
</tr>
<tr>
<td>1931</td>
<td>33.00</td>
<td>10.30</td>
<td>3.80</td>
<td>5.50</td>
<td>6.00</td>
<td>5.70</td>
<td>1.70</td>
<td>33.00</td>
</tr>
<tr>
<td>1941</td>
<td>43.60</td>
<td>16.60</td>
<td>5.00</td>
<td>7.10</td>
<td>6.90</td>
<td>6.60</td>
<td>1.40</td>
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<td>1951</td>
<td>61.60</td>
<td>27.50</td>
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<td>77.60</td>
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<td>13.20</td>
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<td>5.30</td>
<td>0.60</td>
<td>77.60</td>
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<tr>
<td>1971</td>
<td>107.00</td>
<td>61.20</td>
<td>11.70</td>
<td>17.10</td>
<td>11.70</td>
<td>4.80</td>
<td>0.50</td>
<td>107.00</td>
</tr>
<tr>
<td>1981</td>
<td>156.40</td>
<td>94.50</td>
<td>18.20</td>
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<td>14.90</td>
<td>5.60</td>
<td>0.80</td>
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</tr>
<tr>
<td>1991</td>
<td>213.30</td>
<td>139.10</td>
<td>23.40</td>
<td>28.10</td>
<td>16.60</td>
<td>5.50</td>
<td>0.60</td>
<td>213.30</td>
</tr>
<tr>
<td>2001</td>
<td>285.35</td>
<td>172.00</td>
<td>34.43</td>
<td>41.97</td>
<td>22.60</td>
<td>3.15</td>
<td>0.80</td>
<td>274.95</td>
</tr>
</tbody>
</table>

**Projected Urban Population of India (in millions)**

<table>
<thead>
<tr>
<th>All Classes</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>Total</th>
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<tbody>
<tr>
<td>2011</td>
<td>320.92</td>
<td>251.92</td>
<td>36.90</td>
<td>46.00</td>
<td>22.58</td>
<td>4.69</td>
<td>0.52</td>
</tr>
<tr>
<td>2021</td>
<td>416.41</td>
<td>362.28</td>
<td>48.17</td>
<td>58.87</td>
<td>26.33</td>
<td>4.60</td>
<td>0.46</td>
</tr>
<tr>
<td>2031</td>
<td>540.33</td>
<td>520.98</td>
<td>62.89</td>
<td>75.33</td>
<td>30.70</td>
<td>4.50</td>
<td>0.41</td>
</tr>
<tr>
<td>2041</td>
<td>701.12</td>
<td>749.20</td>
<td>82.10</td>
<td>96.40</td>
<td>35.79</td>
<td>4.41</td>
<td>0.36</td>
</tr>
<tr>
<td>2051</td>
<td>909.76</td>
<td>1077.40</td>
<td>123.36</td>
<td>41.73</td>
<td>4.32</td>
<td>0.32</td>
<td>1354.32</td>
</tr>
</tbody>
</table>

**Projected Growth of Urban Centres India**

An attempt to project total number of urban centres till the year 2051 was done on the basis of linear growth models. The projection shows that by the year 2051, India would have more than 8,000 urban centres in the country, which means about 3,000 new urban centres will be established in India. Such a huge demand of urban centres have implications in terms of policy framework, financing, land management, resources and other socio-economic development of the country and requires comprehensive urbanization & urban development policies and strategies.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Urban Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>1811</td>
</tr>
<tr>
<td>1911</td>
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<tr>
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<td>1941</td>
<td>2190</td>
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<tr>
<td>1951</td>
<td>2795</td>
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<tr>
<td>1961</td>
<td>2270</td>
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<tr>
<td>1971</td>
<td>2476</td>
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<tr>
<td>1981</td>
<td>3245</td>
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<tr>
<td>1991</td>
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<tr>
<td>2001</td>
<td>5151</td>
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<tr>
<td>2011</td>
<td>5419</td>
</tr>
<tr>
<td>2021</td>
<td>6108</td>
</tr>
<tr>
<td>2031</td>
<td>6798</td>
</tr>
<tr>
<td>2041</td>
<td>7488</td>
</tr>
<tr>
<td>2051</td>
<td>8177</td>
</tr>
</tbody>
</table>
Strategic Scenarios for Urbanization in India

The strategic planning scenarios for urbanization in India should aim towards strengthening the polycentric development at four levels:

1. Sustainable development of mega and large cities
2. Focus on small & medium towns to strengthen and diversify as future growth engines
3. In-situ urbanization of rural areas and
4. Creation of new towns.

Sustaining Mega and Large Cities in India

The sustainability of mega and large cities in India is an emerging challenge that needs attention from policy makers. Large cities in India are now more complex, and their sustainability is increasingly questioned. They often have very large budgets, sometimes bigger than the budgets of many state governments. For example, Greater Mumbai Municipal Corporation budget is larger than that of 9 state government budgets while Delhi’s Municipal Corporation is larger than 4 state government budgets in India.

Being linked to the national or global economy, large cities usually experience high and stable demographic growth. There has been a concentration of investment in the large cities, particularly in recent decades.

The World Bank projected that by year 2030, there will be 70 cities, compared to 35 today, with more than a million in population, which will expectedly house close to half of the urban population. The million plus cities in India could reach a mark of 100 million plus, by the year 2051. Such a massive growth of million plus makes the settlement hierarchy top heavy and it poses major planning, policy and development challenges for India, as more than 80% of Indian urban population is to be concentrated in these top tier urban centres.

The local infrastructure conditions becomes central and spatial planning can be used to provide specific preconditions for business location and support creation of urban clusters, including cross-border urban clusters, and development of attractive living environments for the population. To strengthen a balanced settlement structure a variety of cities and regions must be enabled to complement and to co-operate on each their level.
Further in this paper, the class 1 towns in India have been projected in India on exponential growth model, which show that India may have approximately 968 class 1 cities in India by the year 2051.

**Projection Class 1 Cities**

<table>
<thead>
<tr>
<th>Year</th>
<th>Class 1 Towns</th>
<th>Year</th>
<th>Class 1 Towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>24</td>
<td>1981</td>
<td>218</td>
</tr>
<tr>
<td>1911</td>
<td>23</td>
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<td>300</td>
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<tr>
<td>1921</td>
<td>29</td>
<td>2001</td>
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<tr>
<td>1931</td>
<td>35</td>
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<td>478</td>
</tr>
<tr>
<td>1941</td>
<td>49</td>
<td>2021</td>
<td>584</td>
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<tr>
<td>1951</td>
<td>76</td>
<td>2031</td>
<td>701</td>
</tr>
<tr>
<td>1961</td>
<td>102</td>
<td>2041</td>
<td>829</td>
</tr>
<tr>
<td>1971</td>
<td>148</td>
<td>2051</td>
<td>968</td>
</tr>
</tbody>
</table>

Such an urbanization scenario in India shows that the sustainability of these towns is going to be the biggest threat for the country. “Large Cities Led Urbanization Scenario in India" seems to be the most probable scenario if India continues the “As-is Growth Situation". The policy makers would be faced with question of sustainability of these large cities to prevent them from collapse or develop alternative urbanization scenarios which are discussed subsequently in the paper.

The huge challenge facing Indian mega cities is to adopt new ways of planning and management. The patterns of urbanization and direct relationship of cities to global economic processes has made cities very important considerations in locating businesses. City level planning as it is currently practiced consists largely of land use planning and building development control. This well established master planning approach has to be replaced by more strategic approach which best addresses the demands raised by firms and residents of the city. The multiple roles of large cities need to be recognized and planned for. The city land use plan, which is unilaterally drawn up by a statutory directive, is not the right method to address the changing contexts of large cities. The requirement is for dynamic short term aims, as part of a more consistent longer term strategic vision.

Further the large cities should be planed with the regional context in mind especially the nearby towns and rural areas that are dependent on it although some cities will be much more connected with their markets abroad. This would help develop a regional plan for urbanization and economic development which would then be integrated at the state level.

**Concentrating on Small and Medium Towns**

In India change in the settlement hierarchy is primarily due to the towns in lower categories entering the next higher category as a consequence of the natural growth of population. Unfortunately, however, there has not been a corresponding increase in the number of urban centres, especially at the lower levels, through transformation of rural settlements. The absence of a
Towards Guided Urban Development in India

process of graduation of large sized villages into towns, through the growth of industrial and tertiary activities, is the major problem in India’s urbanization (Kundu 1994).

The small and medium towns exhibit low and fluctuating growth, which can be attributed to their poor and uncertain economic base and failure to attract private investment from in or outside the country. Instability in their economic base is also reflected in the high fluctuation/variation in their demographic growth. People in small and medium towns in India, particularly those with less than 50,000 people, have low per capita income due to lack of employment opportunities in the organized sector, low incidence of secondary activities and poverty induced growth of tertiary employment. Many such towns are not able to generate funds to provide civic services to all sections of the population and stabilise their economic base.

The larger cities are financially stronger and can take up public works and social infrastructure projects on their own which is not so for smaller towns. With the decline in central or state assistance in recent years, it is not surprising that most of these smaller towns do not make any investment for improving infrastructure and basic services. This has compounded their problems of inadequacy of basic amenities. (Kundu 1994).

**Projected Population of Small and Medium Towns**

<table>
<thead>
<tr>
<th>Year</th>
<th>Type of City</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>2.90</td>
<td>4.00</td>
<td>5.30</td>
<td></td>
</tr>
<tr>
<td>1911</td>
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<tr>
<td>1921</td>
<td>2.90</td>
<td>4.40</td>
<td>5.10</td>
<td></td>
</tr>
<tr>
<td>1931</td>
<td>3.80</td>
<td>5.50</td>
<td>6.00</td>
<td></td>
</tr>
<tr>
<td>1941</td>
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<td>6.90</td>
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<tr>
<td>1951</td>
<td>6.10</td>
<td>9.70</td>
<td>8.40</td>
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<td>1961</td>
<td>8.70</td>
<td>13.20</td>
<td>9.90</td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>11.70</td>
<td>17.10</td>
<td>11.70</td>
<td></td>
</tr>
</tbody>
</table>

Further to compound the problem of small and medium towns, economic liberalization, development in India has adversely affected the growth of the medium and small towns in the country. Their economic base appears to have become weaker over time. Most of them have failed in upgrading or even maintaining basic services as a result of the private sector shying away on grounds of low profitability, and the decline in public investment. This has often led to a high disparity in economic opportunities, population density, quality of life etc. across size class of settlements. Further the local bodies in smaller towns have a low revenue generating capacity. As a consequence, the disparity in the level of services and economic infrastructure across size class of urban centres is likely to increase. This, in turn, would adversely affect the level of basic services in these towns and their capacity to absorb future growth of the population. The projected population of the small and medium towns (Category I, II, III) show that the population of these towns is not going to experience high growth rates and contribution of these towns in
the total urban population of the country would be less than 20% despite the total number of towns in this category could be approximately 70% of the total urban centres in the country. Situation of marginal towns (Category V, VI) is more grim in the context that they are showing decline population trend and their contribution to urban population is very insignificant despite total number of such towns in this category are approximately 25% and are not showing strong declining trends. So concentration on small, medium and marginal towns needs a strong policy concentration and a long term perspective for their development.

Medium Towns led Urbanization Scenario

As discussed above in Business-as-Usual scenario, medium, small and marginal towns are not going to absorb the future urban population. At current level, this category of towns could be more than 90% of the total urban centres in the country by the year 2051 (more than 7000 towns) and their contribution to the total urban population is not expected to be more than 20%.

If future urbanization is guided in India and an urbanization scenario is generated in which medium towns are developed as growth centres, a sustainable urban system could be ensured in the country. These urban centres could be developed as medium sized cities with a population capacity of 2–3 lakhs per city. In such a scenario, these cities could absorb 145 cores urban population (= 8177×0.9×200000). This would mean that total future urban population of the country could be accommodated in these centres.

Policy and Development Imperatives for Medium Cities as Growth Centres

A comprehensive strategy for development of medium sized towns as growth centres could be considered on priority basis. In India, the potential contribution of small towns to local economic development has not been sufficiently recognized in rural development strategies and programmes. There is scope for a more balanced approach, which duly recognizes the existing and potential economic and social role of these towns and attaches greater importance to these locations as entry points for policy, investment, and enterprise development interventions. Priority should be given to carefully targeted interventions with potential to address key policy, regulatory, institutional, infrastructural, and firm-specific constraints to local enterprise development. A more useful approach would be to place greater emphasis upon activities that sell to outside markets and enjoy favourable growth prospects, add value to locally available raw materials, generate significant employment, and/or provide critical production goods and services to other local activities. An approach that targets strategic sub-sectors, rather than specific enterprises or activities, is likely to yield high returns (Haggblade et al, 2002). This would account for market trends, vertical market linkages along supply chains, constraints and opportunities, the policy environment, and the entire range of supportive institutions. It can
therefore lead to the identification of systemic policy and investment interventions that can potentially benefit large numbers of players facing similar constraints and opportunities.

**In-situ Urbanization of Rural Areas**

Development of all small and marginal towns into medium towns may not be completely feasible, because of geography, policy and economic viability. In such a scenario, the in-situ urbanization of rural areas could work out as an urban development scenario in the country. Various models of in-situ urbanization have been successfully tested across the world. Further in-situ urbanization could be a very cost effective solution to the urbanization problem in the country as land and infrastructure in medium and large sized cities are very high.

In initial phase, 100 clusters of villages could be identified in the country and they could be developed under PURA Scheme for in-situ urbanization. The PURA concept which focuses on multiple connectivity of rural and enhancement of infrastructure facilities to urban level could develop the economic status of these areas and attract industries and development. Such PURA cluster could absorb 30 million urban population in next two decades.

Rural and remote areas have to be better integrated and promoted respectively. The whole economic structure of those areas needs to be further developed. This requires strategies and actions on economic development and on adapting infrastructure to specific rural settlement conditions. Economic and job alternatives inside agriculture (alternative farming, use of further growing raw materials, maintenance of landscapes) and outside (tourism, health care, handicraft, culture & arts, new economy knowledge and information based activities) should be promoted making use also of valuable natural or cultural landscapes. Also complementarities between urban and surrounding rural areas should be considered, looking at rural and urban areas common development regions.

**Creation of New Towns**

There have been various models to create and establish new towns. Industrial towns, capital towns, counter-magnet towns and various satellite towns have been promoted in India. Creation of new towns will continue in India, though their growth rate is highly unpredictable. However two categories of new towns, namely fringe towns and Special Economic Zone (SEZ) based towns, are expected to get a big boost in India. In view of the high population growth in large and metro cities, the new fringe towns and SEZ towns could experience high growth rates. There is potential of creating one fringe town with every large, mega or metro city and SEZ could be established near all million plus town in the country. By 2051 a policy framework to encourage SEZ near million plus cities could result into more than 150 mega SEZ towns and other class-1 SEZ which could largely absorb the urban population. SEZ are growth engines that can boost manufacturing, augment exports and generate employment. The private sector is actively
associated with the development of SEZs. The SEZs require special fiscal and regulatory regime to impart a hassle free operational regime including state of the art infrastructure and support services. More than 25 Special Economic Zones have already been approved which shows high demand and growth rates for SEZ towns.

The proposal, therefore, is to recommend to the central government to undertake a detailed exercise to scientifically develop the emerging scenarios for future urbanization with the help of latest tools, incorporating the timelines of the developments in other countries and regions as a guide, to be able to comprehend the growth of urban population and its impact thereon the existing cities. This would result in crystallizing the need for focussed approach for dealing with the growing urbanization in a more balanced and sustainable approach.

India constituted a National Commission on Urbanization in the late 1980s, and there is a felt need for another commission to look into the issue with a rather long term approach which would enable the policy makers to tune their policies to be able to deal with the urban growth. The experience of other countries also needs to be considered.

The outcome of such an exercise would also enlighten us on the future need of resources and the capacities that would be required to be developed at various levels to effectively deal with the issues. Possibly that would enable India to guide its urban growth and plan for a sustainable growth of cities in the country.
City Development Strategy in Vietnam

Plan to Include Low-income Housing

Nguyen Thi Hien
Architect, MSc Public Econ and Management, Université Libre de Bruxelles (2007). A leading practitioner of City Development Strategies, helped establish and managed the Vietnam Urban Forum. She specializes in community consultations with a wide range of stakeholders for local government strategic planning and evaluation of public service provision. Conducts urban poverty research with focus on housing and infrastructure and community spaces for the urban poor. She is President of an NGO, Centre for Support to Local Development.

Since the Reform in 1986, Vietnam has become one of the fastest growing economies and the most rapidly urbanizing country in the world. While the market economy helped improve the country’s economic situation, it also widened the income gap between the rich and the poor and created other social inequality. The low-income people who account for about 50% of the total urban population, especially the poor migrants, are facing with constraints in housing and infrastructure.

This paper looks on the existing shelter situation of low-income people in urban areas of Vietnam and some of the causes of the problems. It suggests that strategic planning is to be applied to improve housing for the poor. It also introduces a Vietnamese NGO working to support to local development activities which include housing development.
Vietnam had an area of approximately 330,000 km², and a population of 80 million in 2004. The country GDP per head was USD 600 in 2005, and the poverty rate was 29%¹ in 2004. Vietnam has been recently one of the fastest growing economies in the world, growing at the average rate of the GDP of 6.7%/year in the period of 2001–2005. Since the Reform in 1986, the country's economy has shifted from central management to market economy with socialist orientation². While market economy helped improve economic situation, it also widened the income gap between the rich and the poor and created other social inequality. Vietnam has about 700 cities and towns. The country recently became also one of the most rapidly urbanizing countries in the world. It is expected to have an urbanization rate of 45% in 2020 compared to 25% in 2005. Rural-urban migration has increased since urban centres became sources of employment. Low-income people accounted for approximately 50% of the total urban residents.

It is worth to note that in Vietnam, there is no private land ownership as, according to the country’s constitution, the land belongs to the people as a whole. Individuals and organizations can obtain only “land use certificates” for short or long term use. Also Vietnam is one of only three countries in the world that still have household registration system³, in which only officially registered households can have a full rights in finding jobs, buying houses, accessing basic services, etc. in their living place. To take migrants into account in socio-economic development planning is not a common practice at local levels.

Access to Shelter and Services⁴

Lack of finance is the main obstacle for the low-income to access housing⁵. Also the migrants, without household registration certificate, in many places, can not legally buy a home or register their owned property.

In 2001, total country housing area was 739 million m², from which, urban housing area was 185 million m². The country’s average housing area per head was 10.35 m².

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¹ According to WB poverty standard of USD 1/day
² This term is somehow controversial as socialist economy relies on state sector while the market economy relies on market where private sector is dominant.
³ The three countries are Vietnam, China and North Korea.
⁴ A lot of data in this section is approximately 5 years old and taken from ADB housing finance project documents. Later information is not available.
⁵ In Vietnam, the poverty line set by the government from 2005 for urban area is approximately USD 16/month, much lower than international standard of USD 1/day. It is understood that the country needs a low official poverty rate because it has no resources to subsidize a big number of the poor people. Many people with income level not much above national poverty line, who are actually poor, are called in our country “low-income”
Demand on residential land for low-income households is huge. As estimated by the Asian Development Bank, in 2001 there were 2,034 thousand low-income households (30% of which are in need of residential land) required 3,660 ha of residential land (based on standard of 60 m² per household), but in 2010, there will be 3,156 thousand households requiring 6,732 ha of land. The need from 2000 to 2010 for upgrading current low-income housing space is 57 million m², equivalent to USD 2,900 million, for replacing current low-income housing space is 8 million m², equivalent to USD 1,000 million, and for creating average annual new housing space is 5.6 million m², equivalent to USD 800 million per year.

In Hanoi, during the 1998–2000 period, the newly-built housing area was approximately 450,000 m²/year, equivalent to 2.35 times more than 1991–1997 period. In Ho Chi Minh City, during the period of 1996–2000, the housing area increased by 2.5 million m² per year in average.

Many state servants live in rented state-owned housing built in 1960–1980. They pay very low rent which is not enough for maintenance, which is one reason these houses have deteriorated. The state is now developing housing projects for rent, the price of which is relatively close to the market price.

There is also a large and active unofficial housing rental market which is out of management of state. A part of these houses are rented to low-income people, at the price of USD 20–100/month. Private houses for rent are often of minimum facilities, low quality, poor sanitation and environment, and located in suburban, in small alleyways or slum areas.

Only 30% of private houses in Hanoi had land use right in 1999. The process of granting land use certificate was very slow in urban areas. One of the reasons of delay was the complicated history of the land/house use, where land/houses have been sold from one to others many times without registration, and original shape/area has been distorted. Many land plots were simply for a long time illegally occupied. Beside, cumbersome land registration procedures added to the delay. The migrants, having no household registration, had difficulties in obtaining the land use right.

Annual average household savings for housing and fixed assets in 1999 contributed from 8–11% of household income, while it is necessary to have up to 25% for low-income households to be able to purchase a house.

Low-income housing, even at subsidized rents or purchase prices, is unaffordable to many poor. Many people said they do not want to rent houses because they are afraid of being unable to pay the monthly rent. Others felt they could not afford to purchase a ready-built apartment, even on preferential terms. A low-income housing project built in Hai Phong had smallest apartments of 31 m², sold at subsidized prices of VND 40 million. However, these prices were still far out of reach of many poor people, as at a minimum salary of VND 210,000/month in 2000, VND 40 million represented 15 years and 8 months of work.

In 2001, average subsidized selling price of low-income apartment was approximately USD 160/m². Construction cost in urban areas for low-income

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housing projects was approximately USD 120/m² including all infrastructure services, land rental, land use tax, loan interest and other expenses.

Land price in Hanoi is skyrocketing. Average land price of housing projects with infrastructure built is USD 1,000–1,500/m². Land in smaller urban centres is much cheaper, about USD 200/m²\(^7\). Vietnam was considered in a recent survey of 56 countries to have the least transparent housing market, which is largely informal, as there is no transparent information on future planning and housing projects. Those who master the information have power to influence the housing price. Housing prices in big cities of Vietnam do not reflect the market demand and housing investment is considered to have a bubble character, because many people buy houses rather for speculation than for the real need. Evidence shows that in many newly developed housing areas, there is no lighting in the evening in most windows.

Northern part of Vietnam faces with chilly winter. Northern people use more solid materials for housing such as concrete, bricks, ceramic roof tiles, wood doors and windows. Meanwhile, the southern part enjoys warm climate. Low-income households can use un-durable materials for housing such as corrugated iron roof, thin hollow brick walls, plastered boards..., which would make housing construction cost much lower.

In low-income areas, low quality housing is often associated with inadequate infrastructure. Many poor households could not afford the fee of installing a water meter and pipeline, as well as electricity to their houses. Besides, the migrants were not eligible for the connection. They have to buy water and electricity privately at a higher price or illegally plug their pipe/wire to the line. In some places, having in-house toilet was criteria to be considered better-off, because many poor still use public or even bucket toilets which are in very bad hygienic conditions. Many low-income experience flooding every year in their neighborhood. In low-income areas, pushcarts can hardly go through narrow alleys for waste collection, and some people choose to leave the waste in public places. Community spaces have been shrinking. In many places, there are practically no open spaces left as all of them have been illegally occupied or misused. The health care stations at community level are often of very poor facilities. Many poor choose self-treatment rather than going there. The poor do not afford to pay for their children’s school uniform, for learning materials, for extra classes that are in fashion in Vietnam. The unregistered migrants suffer of these problems more than the registered ones.

**Housing Policy**

Before 1992, the civil servants received houses from the state through their employer. Many people had to stand in the queue for housing for more than 20 years. Only about 30% of civil servants have received their house in this way. Houses used to be built of low quality, lacking of basic facilities and relevant infrastructure.
Since the reform time in 1986, the urbanization process has accelerated. Big cities of Vietnam, as a source of employment, became a destination for rural-urban migration, resulting in population density increase and the shortage of housing. In addition, the Housing Ordinance promulgated in 1991 recognized the housing ownership, and the Government Decision issued in 1992 eliminated the housing subsidy for civil servants. People, encouraged by having housing ownership, and having lost opportunity to be subsidized in housing, started to mobilize all their resources to obtain or improve their living place. The country’s housing industry had come to a booming stage that had never been seen before.

During the period 1991–2001 the housing area in Vietnam increased from 629 million to 739 million m², of which urban areas increase by 50 million m². Almost 75% of housing built during the period from 1995 to 2001 were self-helped.

Because of the state’s weak land management, people expanded their private area into public space for more living space, resulting in disappearance of lakes, ponds, green trees and narrowing roads. Beside the increased housing density, the capacity of the infrastructure was overloaded. The phenomenon was more rampant in low-income areas where state control on construction discipline was often loose. Many low-income housing areas became spontaneous settlements; some of them became slums.

A Draft of National Housing Strategy was developed with an objective to ensure that poorer urban residents have access to suitable housing. The Draft was made in 1998 and, unfortunately, today is still a draft. Not waiting for the national policy, big cities such as Hanoi, Ho Chi Minh City and Hai Phong city have developed their own housing programmes.

Government nowadays has a policy to publicise detailed planning for people to have their long term housing plan, accelerate the granting of land use certificates and, at the same time, encourage housing developers to invest in well planned new urban areas. Hundreds of housing projects have been developed in Hanoi, Ho Chi Minh City and other urban centres. The way to implement a housing project in Hanoi, for example, is that the local government organizes tender or auction for land use right for the housing developers. The winner should later reserve 20% of land or 30% of floor area to accommodate low-income households at preferential prices. Other government housing initiatives for low-income people are to provide low cost housing, housing for rent, social housing, housing credit programmes, infrastructure upgrading in low-income areas, etc.

In this way, Vietnam housing model is changing from supply driven model to demand driven model. Housing development and construction companies are moving from a centrally planned to a business model and public-private partnership. However, there are many things that need to improve to successfully complete the transition process and help the poor have their housing.

Actors in Shelter Delivery and their Roles

Central Government is responsible for making national housing policy and construction standards (Housing Law, National Housing Programme,
Planning Standard, and Building Code), approving very big housing projects. Local Governments are responsible for making local housing policy, spatial planning, issuing building ownership and land use right certificates (BOLUCs), construction permits, supervising construction regulations, approving smaller housing projects.

Banks and Housing Funds take care of financing housing projects. Housing developers provide housing on commercial basis, while the contractors supply housing products. Housing NGOs work on helping the poor have their voice heard, managing housing micro credit, providing capacity building etc. There are few international NGOs (VeT, Action Aid, ENDA ...) and many local social organizations such as Women Union, Fatherland Front, Association of Veterans, etc.

Reform the Central Planning Model

In order to achieve commitment to Millennium Development Goal on slums elimination and sustainable urban development, our government needs to successfully implement the country’s housing development policy and programmes. As housing is the most essential for people’s life and money spent on it contributes a big share in any country’s economy, it is important to have good planning for housing. The Soviet Union central planning and management model that existed for decades in Vietnam has proved that it is no longer suitable for meeting the challenges of the country’s transition to market oriented economy. This is the time for the government to speed up the planning reform, so the housing strategies could well respond to the low-income people need and they could have a chance to have affordable housing.

Existing planning system is the problem that should be reformed in order to achieve pledged Millennium Development Goals and better respond to the low-income people needs so they can have affordable housing.

In Vietnam, institutions in charge of shelter provision are, at central level, Ministry of Planning and Investment, Ministry of Construction and Ministry of Finance. Vertically, there are also provincial, municipal and ward levels; each of them has the same departments/personnel in charge of planning, construction and finance. Planning and investment institutions are in charge of collecting socio-economic data, forecast trend of development, and draft socio-economic strategies. Construction institutions are responsible for spatial planning, provision of physical infrastructure, regulations on housing construction, and development of housing strategies, policies and programmes. Finance institutions have responsibility to allocate state financial resources for housing programmes and projects.

The coordination of institutions in charge is not adequate to make suitable planning to respond to the need. The Ministry of Planning and Investment, for planning purpose, collects socio-economic data, beside statistical surveys, horizontally, from other ministries and, vertically, from provincial level, which, in its turn, collects data from its departments and district level. It is worth to note that the data in Vietnam are not always consistent as different agencies sometimes use different criteria to develop data and the
accuracy of data collection could not properly be checked. Vertical and horizontal communications of government agencies are not prompt to update each other with rapid socio-economic changes. The process of making housing strategies in the Ministry of Construction is often blamed not to have sufficient consultations with other ministries. The outcomes are the physical master plans are not always consistent with the socio-economic plans. Beside, complex and long process of planning approval, in many cases, makes the physical planning obsolete compared with actual situation, and the chance to adjust the plans is low.

There are also problems in delegation. Recent devolution process has given provincial level more power to allocate resources for their own needs. Not waiting for going long way through central government, provinces take initiative to plan and invest in projects that suit their strategies. Evidence of this is that in many cities of Vietnam, urban boundaries and spatial planning standard has gone far beyond national design standards or master plan approved by the central government. However, planning power stops at provincial level. Cities at district level are put in passive position as being financially dependent on provincial level. Nam Dinh City, which has a population of 250,000 people, for example, has to submit majority of tax collected in its territory to province, while its operation costs are subsidised and controlled by this level. Districts and lower levels, having very limited power to allocate budget for their own needs, are considered rather beneficiaries of housing programmes and are not consulted sufficiently by higher levels in planning programmes intended to their locality. Despite efforts in recent public administration reform including decentralisation and devolution, central management system has not gone away in Vietnam. Central government still keeps the power to decide local strategies. Higher levels do not want to share power to lower levels and, in their turn, lower government levels still rely on higher ones.

Ministry of Construction, when making housing strategy, pays more attention to the technical issues than study social factors. Besides, the migrants are not included in the housing planning process. Existing planning method is also to make plan without people participation. The poor are considered by majority of government officials not capable to make contribution and therefore are not consulted in urban planning/upgrading initiatives intended to them.

Housing development policy and programmes certainly affect primarily the low-income and the poor people.

The existing planning problem contributes to a number of unsuitable housing projects that do not benefit the low-income and waste public funds, because they do not meet the people’s needs. Houses built for low-income people are often in places that is not convenient for them to make a living. They are not suitable for their way of life, for example multi-storey blocks are not convenient for people doing community services to communicate with clients, or to carry tools/stuff to carry up and down daily. It happens that the poor resettled into apartments, sold their newly subsidized property and went away to create another slums. The processes of granting land use right, of making detailed planning are so slow that the poor are not confident in
planning to build their house. Many people constructed houses on the land from which they will be evicted for future development.

Besides, the government focuses more on developing new urban areas for the middle and higher income groups rather than upgrading existing ones. The housing gap between the rich and the poor, therefore, is increasing. In addition, the migrants are not taken into consideration in planning process, which leads to overcrowded urban living areas with overloaded infrastructure. There are also many industrial zones built without housing for workers.

The existing planning system also encourages the local authorities to behave in passive way. As they are not sufficiently consulted and have no power to influence programmes/projects intended to their localities, they would not take initiative to improve the project implementation to better satisfy the local people’s needs.

The problem was the appeared long time ago when the government saw that the only way to develop is to follow Soviet Union’s socialist central planning system. It has become chronic in our country as people got used to that. Since the country’s economy shifted from centrally managed into market economy with socialist orientation in 1986, in parallel with high economic growth, social issues have become day after day more emerging, and the need for change has appeared.

A City Development Strategy

At the WUF3, voices were announced that the planning trend for 21st century should change from structural planning to strategic planning. There was a debate that planning should not be done by only experts for people but should be done together with people to ensure not only consultations but also everyone’s true engagement.

At the WUF3, the role of local government was strongly promoted. The cities were considered engine of economic growth more than the nations. Local governance is likely to become the issue for discussions in the future.

City Development Strategy (CDS) is the new planning concept promoted by the Cities Alliance to developing countries. CDS is both a process and a product owned by a city. CDS encourages participation and cooperation, defines role and responsibilities of stakeholders (government, businesses, residents, social organisation etc.). By this way, programmes and projects will have wide public support and therefore have more chance to be successful.

CDS has objectives to improve quality of urban management, promote local economic growth and reduce poverty. As a tool of management, CDS focuses on:

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8 This term came from politicians and is not understood by many citizens.
9 Information in this section was taken from WB CDS toolkit and from the author’s own CDS experience
- Process: CDS is an iterative & never ending process of a multi-sectoral management cycle where monitoring and evaluations feed once again into planning.
- Top executives: CDS is to be facilitated by top-level staff members and line executives.
- Actions: CDS focuses on what needs to be done and must be action and result-oriented.
- The benefit of its constituents: CDS pays attention to issues that affect the people’s quality of life and therefore should know people’s expectations. City, when doing CDS, should consider its position in the global and national urban context of rapid urbanisation, globalization and regional integration, sustainable development concept, grassroots democracy, decentralization and government reform.

Four major steps of CDS are:

**Stage 1: Where are we now?**

This step is to analyse, using SWOT exercise, city’s existing situation of both the external and internal, positive and negative factors affecting the city as whole involving all stakeholders.

Indicators for assessing existing situation can be taken from the World Bank concept on livability, which are:

1. Livability (including basic urban services, environment, safety, poverty, housing, amenities),
2. Competitiveness (including economic productivity, human resources, technology & market accessibility),
3. Good Governance (including service delivery, autonomy, strategic planning & coordination, transparency), and
4. Bankability (including financial management, inter-government financial relations, creditworthiness).

**Stage 2: Where would we like to go?**

This step is to define development goals and objectives, by creating a vision for the city. The vision is a forecast of country/region/city, a collective picture of the future direction that the city wishes to reach 10 – 20 years ahead, the basis for all the city’s objectives, strategies, programmes and projects.

The techniques for stage 1 and 2 are public forum, workshops, multi-disciplinary research … to ensure people’s participation and shared vision.

Experience has shown that sometimes it is better that Stage 2 is developed before Stage 1 in order to focus assessment of current situation based on the concrete vision rather than wasting time to discuss too many issues.

**Stage 3: What issues do we need to address?**

This step is to develop strategies that achieve goals and objectives. City will identify priority issues and opportunities, list possible strategies, evaluate strategies using SWOT, and formulate integrated strategies.
Techniques for this stage include workshops, simulation models, project strategy teams, financial analysis, public meetings, sectoral technical working groups …

Stage 4: What must be done to get there?

This step is to translate chosen strategies into a list of integrated programmes and projects, through programme/project prioritization, development of capital investment programme and action plans.

City will have to develop monitoring, evaluation and feedback mechanisms, milestones and indicators. It is important to note that CDS process is re-iterative, where output feeds back into entire process and can lead to revision of CDS programmes, then the cycle starts all over again.

The CDS product is a City Development Strategic Plan highlighting the results of the CDS planning process. As part of the CDS process, it has to be continuously reviewed as well as updated. The sections include:

1. Baseline profile (targets and strategies…)
2. The vision statement (quantification of the vision)
3. Information on demographic, environment, social, economic
4. Identification of issues and opportunities
5. Projects and programmes
6. Institutional action plan.

By involving all stakeholders in defining a common vision, the projects/programmes have a wider support of the public and therefore a more chance for success. A city with a clear long-view vision is able to develop itself sustainably with the advantages of generating realizable goals, having clear performance indicators, attracting investors more easily because of stability, using all resources efficiently.

Central government, looking at CDS process and product of a city, will believe in city’s capacity to develop sustainably, with less support from higher levels. The city, having clear vision and strategies, can attract more resources from central government, donors, businesses, lending institutions and even its residents in order to realize its housing programmes and projects. Based on constraints faced by and needs of the urban poor, the government, both at central and local levels, can make joint efforts in:

- Making transparent information on city future detailed planning for people to make their long term housing plans,
- Consulting with the poor when planning programmes/projects intended to them,
- Paying attention to sufficient community spaces right at design stage,
- Providing land use certificate to ensure people confidence in their housing investment,
- Abandoning the household registration system to grant full rights to the migrants in access to housing and infrastructure,
- Facilitating development of active labour market for the poor to have a chance to generate more income to build/purchase their home,
- Providing tax incentive for low-income housing projects,
Providing serviced land plots in suburban for the poor to incrementally build their house,

Providing low-income and poor residents with favourable housing loans,

Accelerating administration reform to simplify housing construction permit procedures,

Encouraging private companies to invest in basic housing to make them more affordable for the poor,

Giving more power to local government in making decisions and allocating resource for housing projects

Provide management and planning capacity to local government staff and to poor communities.

International donors can contribute by introducing best international low-income housing practices, providing pilot housing loans and technical assistance. Housing and micro credit NGOs would be capable in providing technical assistance to the poor communities in implementation of government and donors’ policy, facilitate good local Development, support community capacity building, as well as managing housing micro finance. Private sector can play important role in delivering housing and infrastructure products at reasonable price, in shorter time, based on its dynamic nature. Even the poorest residents can find themselves capable of contributing finance, labor force, experience, as well as in contributing in policy making process.

CDS Experience

Good experience was learned from the Philippines, China, Indonesia, Malaysia, etc. Vietnam has implemented CDS in 6 cities (Hai Phong, Ho Chi Minh City, Nam Dinh, Dong Hoi, Can Tho and Ha Long), the good practices of which will be replicated in a number of other places. Interesting lessons were learned from CDS exercises in Vietnam. Successful stories include the government official awareness in new way of planning and active participation as well as appreciation of the approach by businesses and grassroots people. The unsuccessful stories include low involvement of the top leaders, the hesitance of government staff to change way of thinking, the hesitance of higher level to share decision making power to the city, etc.

SLD – a local NGO Working on Low-income Housing

Centre for Support to Local Development (SLD) was established to contribute to the Government of Vietnam’s drive towards sound and efficient management of local and municipal services that falls within the overall public administration reform, decentralization and grassroots democratization process. SLD is one of the very few Vietnamese entities that are specifically orientated towards good local development.
SLD’s mission is to provide workable methods and solutions across the spectrum of housing delivery across the entire project framework cycle. This runs from strategy formation and development, organizational structuring and operational methods. Its guiding ethos is that the participation and engagement of civil society is a core feature of its work.

SLD believes in community driven approach because reform that directly involves the people will be the one that is the most inclusive and sustainable. We, however, acknowledge that community driven approaches are just one part of the more effective delivery of public services. At the city, province and district levels the public require well functioning and effective local administrations.

SLD’s focus is on sound socio-economic development planning including housing planning at each geographic and vertical level covering realistic strategies, sound planning, and good governance combined with, where appropriate community involvement and development.

SLD partners have been extensively engaged (internationally and in Vietnam) in:

- Local government strategic planning,
- Spatial and land use planning,
- Environmental management
- Public management & public service provision for water supply, wastewater treatment and solid waste disposal
- Migration, rural-urban linkages and resettlement,
- Housing.

Despite listed strengths, SLD has weaknesses of being newly established while facing with the declining donor’s funding for Vietnam and competition of other NGOs that exist for longer time. However, having strong housing and construction technical background and experience, and practical experience in doing CDS for a secondary city of Vietnam, SLD believes that it can actively promote the approach and participate in CDS in other cities, to contribute to low-income housing sector in Vietnam.
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Access to Land in Nepal

Low Income Housing Development

**Bhubaneswari Parajuli**

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Rapid and haphazard urbanization has led to urban housing demands, with ever increasing housing deficits in Nepal. The study reviews and analyzes the housing situation in terms of supply and demand, housing process, socio-economic conditions, the role of stakeholders, financing mechanisms, land ownership pattern and initiatives taken in the past. It finds that land is the most critical aspect of housing because financing of land is more difficult than building a house, making it difficult for low income people to access.

The paper explores the possibility of addressing accessibility of land by low income people for housing in Nepal. This calls for a combined effort of all the stakeholders at various levels from policy makers to the community and individual. The paper offers recommendations for policy level interventions, development of financial mechanisms, specific housing programs for the poor and effective implementation of land management schemes mainly the land pooling which has emerged as the most pragmatic approach of urban land management in Nepal. The study concludes that the goal *Housing for all* can be achieved only by addressing land accessibility issues.
Nepal

Nepal is located along the Himalayas and has an area of 147,181 km². Administratively Nepal is divided into 75 districts, within 14 zones and five development regions. The districts are further divided into Village Development Committees (VDC) and municipalities. Currently, there are 3,915 VDCs and 58 municipalities. Each VDC is composed of nine wards. A municipality may have nine or more wards; the most at present is 35.

Nepal is characterized by diverse physiographic, climatic and socio-cultural conditions. Geographically the country is broadly divided into three regions: high mountains, hills and the plains (Terai) which run parallel from east to the west with the highest mountains along the northern border and the Terai to the south. Kathmandu is the capital and in the central region.

The population of the country in 2001 was estimated to be 22.7 million (Census 2001) with 50.04% female. The projected population for 2006 is 25.9 million. National population density is 154.48.

The population distribution by sex and age shows that the largest group is 5–9 years old (14.12%). 54.15% of population is 15–59 years of age, 39.5% below 15 years and 6.5% is 60 years and above (Census 2001).

The sex ratio (number of males per hundred females) is estimated to be 99.8 in the country. The sex ratio for working age population (15–59) is lower compared to that for both younger (0–14) and older (60 and above) ages (Census 2001). It is higher in the urban areas than in rural areas.

Of the total population over 5 years, 37% have migrated from VDC, municipality or another country to their current residence. Migration rate for females is 50% while that for males is only 22%. The most obvious explanation is that females migrate to their husbands’ residence (NLSS 2003/04).

Migration is higher in urban areas than rural areas (46% versus 35%) and increases with level of household consumption. Among rural areas, Terai has a higher share of migrants than hills and mountains.

Urbanization is rapid. Natural disasters causing loss of property and houses, environmental degradation and low socio-economic development including recent Maoist insurgency have attracted huge numbers to urban centres, particularly in Kathmandu Valley, for better income opportunities, education, health, safety and other services. Lots of agricultural land is converted for housing every year.

According to the 2001 census, 14.2% of the population live in municipalities and in the next 10 years, this is expected to increase to 24% (NPC 2003). Though urbanization is relatively new in Nepal and the percent of total population living in cities is still small compared to other countries, the rate of urbanization is very high. According to census data, between 1991 and 2001, the municipal population increased by 94% or 6.8% per annum which is quite alarming. However, part of this increase is due to the classification of 15 additional settlements as municipalities during this period. If the urban growth is assumed less by 2–3%, the urban growth rate is still much higher than the national population growth rate of 2.3% per annum.
Table 1 Urban Migration

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Description</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Percentage of migrant population</td>
<td>36.6</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>21.6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>50.1</td>
</tr>
<tr>
<td>2</td>
<td>Percentage of migrants from rural areas (VDC)</td>
<td>81.5</td>
</tr>
<tr>
<td>3</td>
<td>Percentage of migrants from urban areas (municipality)</td>
<td>5.8</td>
</tr>
<tr>
<td>4</td>
<td>Percentage of migrants from other countries</td>
<td>12.7</td>
</tr>
<tr>
<td>5</td>
<td>Reasons for Migration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family reason</td>
<td>75.2</td>
</tr>
<tr>
<td></td>
<td>Easier life style</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>Looking for job</td>
<td>6.8</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of children away from home</td>
<td>4.8</td>
</tr>
<tr>
<td>7</td>
<td>Reasons for being away from home</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For study</td>
<td>36.3</td>
</tr>
<tr>
<td></td>
<td>For Work</td>
<td>18.7</td>
</tr>
</tbody>
</table>

Source: NLSS 2003/04

The age specific fertility rates (ASFR) and total fertility rates (TFR) are estimated at 2.4 and 3.6 respectively. The number of children born per 15–49 year old women decreased from 2.6 in 1995/96 to 2.4 in 2003/04 while total fertility rate declined from 5.1 to 3.6 during the same period (NLSS 2003/04). The 2001 census estimates of overall TFR range from 3.7 to 3.9 per women. Life expectancy at birth is estimated to be 60.4 years (National Population Census 2001). Infant mortality rate (per 1000 live birth) is 64.4 in the country.

Household composition by age and sex is given in Table 2. In Nepal, 19.6% households are headed by females, with little difference between rural and urban areas.

The per capita GNP is USD 300. In nominal terms, the bottom 80% of the population earns 47% of total income and while the richest 20% earns 53% of total income. The poorest quintile earns just 5%. The Tenth National Plan published by the National Planning Commission gives the population below poverty line at 30.8%.

A breakdown of household expenditure shows that on average 59% of household income is spent on food nationally. Housing is 9%, education 3% and the rest is accounted for other non-food items. Urban household spend less than 40% on food, especially in Kathmandu where the share is just 29%. On the other hand, not surprisingly, urban household tend to spend more on house rental and education relative to their rural counterparts.

Table 2 Household Composition by Age and Sex

<table>
<thead>
<tr>
<th>Female Household Head</th>
<th>Age of Household Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census 2001 NLSS II</td>
<td>&lt; =</td>
</tr>
<tr>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

Source: NLSS 2003/04
Access to Shelter and Basic Services

In 1991, Nepal had a population of 18.5 million and an estimated housing stock of 3 million dwelling units: 2.7 million in rural areas and 0.3 million in urban areas (National Housing Survey 1991). According to the census 2001, there were 4.2 million housing units for 22.7 million population. The ratio of the housing stock and the population has not changed significantly since 1991.

The NHS estimated the housing need of 144,880 units and supply of 122,135 units, resulting in the housing deficit of 22,745 units every year. In addition, 0.76% in urban areas and 2.4% in rural areas are damaged by natural calamities. About 7% of the families are estimated to be homeless (NPC 1987). Yearly increase in number of dwelling units is just 4.0%.

The shelter model developed by UNCHS for Nepal shows a need of 2.5 million units during 1992–2006. Of the total, 434,000 units are required in urban areas (17%) and the rural needs 2.1 million units (83%).

There is an upgrading need of 73,200 units during the 15 year planning period of which 60,000 units are in urban areas. People renting housing generally compromise with spaces, physical condition of the building and other facilities to bring down the cost. The building conditions of squatter settlements are poor with lack of habitable spaces inside the building and open spaces and other amenities outside the building.

The housing demand in the valley includes not only the ever increasing population but also those who live in squatter settlements and stay in insufficient housing spaces in the core area and in rental housing.

Housing Standards

There are no minimum standards on housing either in terms of floor area or construction materials. Land can be divided into parcels that are small enough to be affordable. However, minimum of 20 ft frontage and 748 ft² of land area is being practiced in urban areas.

Urban and rural occupancy rates were 6.0 and 6.1 respectively in 2001. A dwelling size is measured by number of rooms and its surface area. In 1991, the average size of the dwelling unit was found to be 867.5 ft² and the area occupied per person was 134.7 ft² and 158.2 ft² in urban and rural areas respectively (NHS 1991). The average size of the dwelling unit declined to 604 ft² in 1995/96 and 531 ft² in 2003/04 (NLSS 2003/04). Average number of rooms per household is 3.7 in the country. Urban households have one more room than rural households on average (4.5 verses 3.5). Households from the richest consumption quintile have two more rooms on average relative to those households from the poorest quintile indicating greater degree of crowding in poorer households.

Tenure of Households

Household occupants are broadly categorized into owners, renters and squatters. About 86.1% of households reside in their own housing units, 6.7% are renters and 7.21% squatters (NHS 1991).

The proportion of renters has increased from 6.7% to 8.9% in the decade (Census 2001). In urban areas, a significant percentage of households are in
rental accommodation (24%) and the proportion is 33% in the Kathmandu valley urban areas alone (NLSS 2003/04).

Squatter settlements are increasing in both rural and urban areas. The squatter settlements in Kathmandu is increasing at the rate of 12–13% representing 2.9% of the total population of Kathmandu at present. In Kathmandu about 60% of squatting is on public land like sides of the roads or highway, river bank etc and remaining 40% in public buildings such as temple sites and rest houses which are sheds constructed by the ancestors for performing social and religious functions (Rabenau 1990).

Housing Finance and Affordability

Since housing is the individual’s responsibility, it is predominantly owner-financed type, which means families acquire land directly, organize and manage the housing construction and finances the whole process in the absence of institutional finance. Regular government employees can borrow from the Employee’s Provident Fund, although it covers only a small fraction of the total construction cost.

People get financial support from friends and relatives as there is a culture of helping a person who is building a house with a loan with no interest or with very nominal interest rate. Moreover, commercial banks and financial institutions also have started providing loans for housing. After the establishment of the first Nepal Housing Development Finance Company in 1992, followed by other financial institutions, both government and private commercial banks also provide wider range of housing loans on various schemes for individual as well as for developers with long term repayment period. People generally keep land on mortgage to get loan. Few banks provide loans for all income groups offering individual loans of NRs 3,000,000 to 5,000,000 with pay back period of five years, on the condition that the borrowers’ income should be three times that of the monthly repayments.

It is difficult to say the cost of a housing unit as there is no systematic documentation system. The cost of an individual housing unit varies widely from NRs 600/ft² to 2000/ft² as it depends on various factors. However, the records in planned housing area give some idea in this regard. The cost of dwelling units which includes flat, duplex or individual house in the planned housing of the valley varies depending on the total plinth area, style and material used including infrastructure and other facilities within the complex. Almost all the private sector developed housing prices range from NRs 6,000,000 to as high as NRs 52,000,000. The booking rate and individual unit clearly indicate the market demand of planned housing units.

The house Price to Income Ratio for Kathmandu is 10.6, i.e., housing price is ten times the annual income of household in average (KMC 2000).

Land

Land is privately owned in Nepal. Unregistered land belongs to the government. Land not used for agriculture, or marginal land, such as along the river banks, was used by the government, but with the increasing commercial value of such land and due the lack of proper documentation most of them have already registered, but few such lands still remain.
As per Land Acquisition Act Government can acquire land for development purposes by giving compensation to the land owners. But due to high price of the land and limitation of financial resource with lengthy and complex acquisition process it is not desirable unless it is absolutely essential. It is avoided even in the donor supported development projects as land is the government responsibility. Considering the area of land required in developing housing, land acquisition for housing is not possible.

Land pattern is very irregular in shape and size. Most of the land does not have adequate access to basic infrastructure facilities. In many instances, chunk of land is blocked due to the lack of vehicular access. Land recording and mapping system is not very good. Land use is not effective. In the absence of a consolidated land information system as a whole, getting information on the availability of the land for housing is difficult. This all has led to speculation benefiting to the land brokers.

Housing Construction

Construction of a house also falls in the domain of owner builder as housing as a whole is the responsibility of an individual. More than 90% of the houses are built by this process. This process normally takes years and even decades and housing itself is a stepwise never ending process. The owner builder’s effort in housing production is characterized by a high degree of informality. After registering the plot and obtaining building permit from the municipality, the owner builder makes own decisions supported by advise from friends, neighbours and occasionally from professionals. S/he deals with the building material suppliers and small contractors on personal basis. S/he manages to do as much as to keep the cost down by organizing most activities himself. In addition, the owner builder has to provide most of the infrastructure before the government infrastructure reaches there much later.

Building Materials

The most common building materials for wall are bricks, stones and tree branches and for roofing C.G.I. sheet, R.C.C., tiles/slates, and straw/thatch. 48% of the housing units are walled by mud-bonded bricks/stones. Other materials include wood and tree branches (19%), cement bonded bricks/ stones and concrete (18%) and others (16%). The quality of the dwelling unit is very much related to household consumption. Richer households are more likely to have either cement/concrete or bricks/stones walls.

Basic Infrastructure

Access to basic infrastructure services in Nepal is not satisfactory. Overall, 37% of the households have electricity in their dwellings. The difference is great between urban and rural: 87% urban versus 27% rural. The gap between the poorest and the richest is also great: 78% of the rich and 10% of the poor. Only 6% of households in the country have telephones, but the distribution is highly pro-urban and pro-rich. Statistics indicate that 22% of the urban population still do not have access to drinking water. Both the
quality and quantity of the supplied water is a problem. Similarly only 12% of
the households have access to sanitary (sewerage system – liquid wastes
connected to underground drains) concentrating 54% in the urban areas.
Access to garbage disposal (solid waste collected by public and private
collector) facility is worse than the sanitary system. Only 8% of the house-
holds have garbage collection or disposal facility. The proportion of house-
holds with a proper toilet is 39%. Distribution across the urban–rural and
rich–poor is highly skewed, similar to the other amenities.

In the core area of Kathmandu, 64% have temporary access to a vehicle
and 26% have poor sanitary conditions (Joshi and Regmi 1988) where as
about 30–35% of the houses built outside the compact settlement during the
last two decades do not have any road access for emergency vehicles
(MOPE 1999).

The shelter supported infrastructure like road, electricity, water supply,
telecommunication and sewerage are provided by the government. The
capital cost is borne by the government and the operational cost on partial
cost recovery basis. The cost recovery ratio varies widely from 10% to 100%.
There is almost 100% cost recovery in electricity and telecommunication,
50% in water supply and very little in waste management and road.

Housing Policy

The National Housing Policy was approved by the Government of Nepal in
1996 by special directive. The policy followed the Global Strategy for Shelter
adopted by the United Nation in 1990. It emphasizes the role of the govern-
ment as an enabler and facilitator and encourages the private sector, both
formal and informal, in the production of adequate dwelling units. It also
recognizes that housing is a process rather than a product and recommends
a holistic approach for overall development of the housing sector.

There are three broad strategies of the housing policy of Nepal.

The first one is to increase the shelter production and upgrading through
a) increasing the supply of affordable and suitable land, b) increasing the
delivery of infrastructure, and c) improving the use of building materials and
construction technology.

The second emphasizes mobilization of effective allocation of financial
resources in the sector by a) experimenting both formal and community
based land and housing credit mechanisms b) increasing cost recovery of
public infrastructure in land and infrastructure, and c) increasing the
financial self efficiency of the sector.

The third strategy is to improve the organizational set up by a) clarifying
the roles of the public and private sector in implementation of housing
strategies b) providing an institutional and management context for policy
making, implementation, training research and evaluation of the sector, and
c) improving the data base for decision making and monitoring.

The National Shelter policy has spelled out a number of housing pro-
grammes under the heading of action packages, associated action packages
and other related actions. Action packages are intended to be a guide and
reference for Government in its efforts to carry out specific programmes and
projects to meet shelter objectives and policies. Some of the action packages include:

- Government sponsored land development for low income families
- Promotion of public private partnership for residential land development
- Legal and regulatory reforms to improve the legal framework for land and housing market
- Promotion of housing finance mechanisms
- Promotion of less costly, efficient environment friendly building materials and technology
- Home improvement programmes for upgrading environment and health
- Shelter sector planning and coordination to provide apex institutional coordination
- Human resource development and communication for the shelter sector.

Associated actions programmes are related to the human settlements and include:

- Extend land development programmes
- Introduce appropriate planning and environmental regulations
- Improve cost recovery for delivery and maintenance of infrastructures
- Introduce improved land cadastral and land registration procedures
- Incorporate urban infrastructure upgrading programmes into housing strategies
- Initiate programmes for the conservation and preservation of historic privately owned buildings
- Develop data base and policies for housing as a separate sector in macro economic planning.

The policy has clearly stated the role of the government as an enabler or facilitator rather than a provider and the government will facilitate the promotion of mobilization of financial resources in this sector. Hence there are no financing or funding schemes for social housing except recognizing few small packages for ultra poor of the population.

**Poverty Alleviation**

Poverty alleviation was considered in an integrated approach and addressed by cross subsidy in certain schemes, increasing affordable land supply, improving building construction technology and materials.

**Gender Issues**

The policy stated that participation of women is encouraged in shelter production, design and maintenance, by alleviating their constraints.
Access to Land in Nepal

Actors in Shelter Delivery and their Roles

State/Central Government

It was only in the seventh plan (1985–1990) that housing and urban development got focused in the national development context. Ministry of Physical Development and Works MPPW established in 1988, Department of Urban Development and Buildings Construction (DUDBC) with 26 divisional offices. Town Development Executive Committees (TDEC) are the governmental institutions responsible for the overall urban development and housing of the country. National Shelter Policy 1996 and other legislation were formulated and approved by the central government.

The role of central government in shelter delivery is a facilitator as defined in the National Shelter Policy of 1996. The government has initiated a number of land development schemes. The government and public enterprises have built staff quarter for their employees. But as the rate of planned developments of land, housing construction and provision of different amenities is lower than the pace of urbanization it does not have significant impact in the housing situation of the country.

Local Government

Municipalities, the Local Government also has the similar role like the central government in shelter delivery. It is more focused on providing service utilities for shelter and regulatory works such as compliance of building code, by-laws, issuing building permit etc within its jurisdiction.

Municipality and Town Development Executive Committee (TDEC) are the main institutions involved in issuing building permits and enforcing the building by-laws. TDEC approves the plans and the Municipality verifies the implications of new construction to neighbours mainly with respect to property boundary demarcations and access. They notify the neighbours about the new constructions and when neighbours do not file any complaints within a specified time, a building permit is granted.

NGOs

There are very few NGOs in shelter sector and they are concentrated on building safety, health and sanitation rather than delivering shelter as a structure.

Private Sector/Housing Producers

The involvement of private sector in housing can be categorized into two types. One group is basically a land developer, who consolidates a sizable area of land purchased from the various private land holders, develops road and sells plots for housing. The development of housing plot is limited to the road development only. Since they do not follow any standards for road width and turning radius despite of high land price, this does not have been able to create a very positive impact in housing development. This is yet to be regularized. The other group of private sector is emerging professionally and commercially in producing housing in the capital. There are about 5–8
such entrepreneurial housing companies in housing sector who have established housing as an industry. More than 2000 dwelling units have already been delivered and more are in the process.

Community Organizations
There are no community organizations like self-help housing group as in other countries.

Research Institutions
The research aspect has always been very weak in all sectors in Nepal. There are few public or private shelter related institutions. However, there is no significant work noticed so far.

Design
There were several studies conducted to address the planning needs of the Kathmandu valley in the past. Unfortunately most of those studies were put on the bookshelves as merely academic exercise. The oldest physical plan dates back to 1969 Kathmandu Valley Physical Development Plan. Then after Land Use Plan 1976, Kathmandu Valley Urban Policy Study 1986, Kathmandu Valley Urban Development Plans and Programs (KVUDPP) with most recent City Development Strategy and Development Plans of 2020 of Kathmandu Valley, popularly known as Kathmandu 2020 were prepared. The main thrust of these plans was to control urban sprawl, develop compact settlements and protect agricultural land. A land use zoning had also been focused targeting limiting population density in the city core up to 350 ppha and in urban fringes 150 ppha. Implementation of land use plans and physical development plans as recommended by the various studies has been very weak because of the weak institutional capacities and political commitment.

Problem: Land for Housing
Housing is one of the basic needs of Nepalese people as in other parts of the world. The demand and supply data of housing stock reveals that there is housing deficit every year both in quantitative and qualitative terms. One of the reasons for not meeting this ever increasing demand of housing is the availability of land particularly in urban areas. Land is the most important aspect of housing but most difficult to access in many respects in Nepal.

Government does not have enough land of its own to provide social housing schemes. Land is privately owned in Nepal and very expensive in urban areas. The government can acquire the land for development purposes including the housing through Acquisition Act 1977 by giving compensation to the land owners. However, due to the lack of financial resources and high compensation often associated with the complexity and slow process, land acquisition is not desirable unless it is absolutely essential. Moreover, land being the government's responsibility housing
component is always excluded even in donor supported infrastructure development projects. So the role of the government is a facilitator-enabler rather than a provider in housing sector as stated in the National Sector Policy 1996. Furthermore, housing does not fall in the priority sector as health and education. Hence housing including the land is the sole responsibility of an individual.

Land is the basic need for housing development. But access to land has been influenced by many factors. The high cost of land and the need of single stage investment have made land inaccessible for majority of the people where they have to spend 59% of their income in food alone and house price to income ratio is 10.6. A number of finance institutions have established and provide loan to build houses where land is kept as mortgage. But there is no finance institution that provides loan for land without keeping mortgage. There are also few NGOs in housing sector, but they too are focused mostly on upgrading and not in land or shelter delivery. Lack of proper and scientific record keeping and mapping system as a whole, getting information on availability of land for housing is extremely difficult.

Considering the rapid and haphazard urbanization eventually leading to housing demand, various urban development plans and programs were initiated including land development schemes in the past by the public and private sector. Those efforts have definitely increased the serviced plots for housing. However, the serviced land is still inadequate compared to the demand and they have also not been able to increase the access to land by economically weaker section of the population. Access to land by low income people in terms of finance and information has emerged as a critical problem in housing in Nepal.

Housing is not only a basic need. It has emotional, psychological and sentimental values as it gives security for the future. Every Nepali dreams of building a house in his/her life time. However, this dream has not come true for most, particularly in urban areas. The increasing housing deficit of 22,745 units per annum, a considerable percentage of rental housing (35% in Kathmandu) and growing squatter settlements show that housing is a critical issue in Nepal, apart from the damages caused by the natural disasters. Land is vital for housing and lack of accessibility to land is the basic problem behind this shelter issue for the majority of the people in urban areas. The problem is more acute in Kathmandu Valley.

There are no government social housing schemes. The government does not have sufficient land to launch social housing schemes as most of the land in Nepal is under the private ownership of individual landowners. In addition, lack of financial resource and the rising land price in urban areas associated with cumbersome legal requirements for land acquisition makes land acquisition time consuming and costly. For the same reason housing is not covered even in donor supported infrastructure development projects as housing requires quite a large amount of land and the government has to provide the land. Furthermore, land acquisition is also prone to public resistance as it involves displacement which generally generates controversy because one group of people is displaced to make room for the other. Government has not been able to have any financial support program even
for the economically weaker section of the population. Housing is solely the responsibility of an individual.

The rapid and haphazard increase in urbanization has greatly influenced the housing accessibility for the poor and urban development at large. The rapid urbanization growth rate in urban centres including the capital city has hiked the price of the urban land. People are bound to go to outskirts and in a small piece of land in the search of cheaper land. This has resulted in the fragmentation of land without proper access. In such cases people have to develop their own access. Formation of groups for such activities is difficult. In many instances, a chunk of land is blocked behind. Lack of tax on vacant land has encouraged the speculation and brokers and developers often take the benefit of this situation. Purchasing of even a small piece of land in outskirts is not possible for most of the people below poverty level. Land fragmentation has further resulted in sprawl development with low density eventually exerting immense pressure on the sustainable urban development and poses challenge to urban development. Water shortage, air and water pollution, solid waste management problems are major problems associated with urbanization, affecting housing in qualitative terms.

Land is the most critical aspect of housing, because financing land is even more important than building a house in the whole housing process. Firstly it is quite expensive particularly in urban areas and it is a scarce resource. For low income people in a country where GNP capita is just USD 300 per annum and housing price is ten times the annual income of household in average (KMC 2000), purchasing of land for housing is next to impossible in urban areas. Secondly, it requires a single stage investment in contrast to the house which can be built in phase wise. A huge initial financial investment is necessary for housing development. It is obvious that purchasing land at the prevailing market price is very difficult to low income people. In addition to this, people get financial support from friends and relatives. It is not usual in the case of land. Moreover, commercial banks and financial institutions provide loans for houses where land can also be kept on mortgage. There is no financial institution that provides loan for purchasing the land with out keeping any mortgage. Thirdly, there is a development in low cost technologies which give options while building a house to cut down the cost and the research in this field looks promising. So once the situation improves, it is still a life long process for most of the people.

Lack of information on the availability of the land for housing is another aspect of inaccessibility to land. Except in the city core, low population density and sprawl urban development clearly indicate there is still plenty of land for housing in urban areas. However, purchasing land is extremely difficult for individual as well as for the developers. Land record system is not scientific. Nor is land use effective. More than 25% of landowners are estimated to be absentee. Land pattern is very irregular in shape and size. There remains no sizable land for housing development under single ownership due fragmentation. This all have eventually encouraged the speculation and brokers have maximized the benefits. In the absence of consolidated land information system, getting information on the availability of the land for housing is a difficult task.
Realizing the housing needs and demand the National Shelter Policy has emphasized on the production housing units with focused on land development tools. It has also recognized the need of special programme of housing particularly for economically weaker section. However, no such programmes have been implemented for this group so far, because the policy has not addressed the mechanism of delivering of housing for this group. Just stating the role of the government as a facilitator is not enough. Providing housing for economically weaker sections of the population is the responsibility of the state.

In response to the rapid urbanization in the capital in the few decades and subsequently increasing demands of services plots/land for housing, new shelters, infrastructure provisions and social and emergency services, formal private sector as well as the government have initiated developing land for housing to facilitate planned urban land development. However, land developed by the formal private sector is limited only in the development of road and it is still inadequate in scope and size to influence the land market. Government has implemented different land development schemes namely Site and Service (SS), Guided Land Development (GLD) and Land Pooling (LP). Land pooling is the latest model initiated in 1988. Since then about 12 such projects in Kathmandu Valley have been completed covering about 300 ha of land mostly by the central government. A total of 6,800 housing plots have been produced and about 10,000 land owners have benefited from it. Land pooling has been regarded as the most pragmatic approach of land management in socio-economic context of Nepal.

Land pooling is a technique for managing and financing land development whereby a group of neighbouring land owners having fragmented parcels of land often without access to any infrastructures in an urban fringe are combined in a partnership for the unified planning, servicing and subdivision of their land contributing between 20 to 35% of land to cover the project cost and infrastructure development costs.

This technique has a number of advantages over the other conventional planning measures. It does not displace the original landowners and require huge investments for land acquisition. It is acceptable to the landowners as it is a participatory process and they get serviced plots with high land value. It is being a self financing scheme; the project can be implemented without governmental budget. It is also a great relief for the government because it does not have to spend its scarce resource in providing infrastructures. The land pooling projects were also found to be viable to the donors. The financial rate of return of land pooling was the highest out of the three project components: Kathmandu Core Area Upgrading (2.85%), Storm Water Drainage (0.49%), and Nayabajar Land Pooling Project (15.48%) in ADB funded Kathmandu Urban Development Project.

Despite of all the benefits to various stakeholders, land pooling is not free from weakness. It primarily benefits the landowners and not the people seeking land plots for housing. Nor it ensures access to land plot to the low income people. Other weakness is delay in implementation. The major causes are related to financial, management and technical aspects which include lack of seed money to begin the project, land owners opposition in
the initial stage due to lack of conceptual clarity, lack of awareness at various level, inadequate skill and capability of the staff, incomplete land records and information system and cadastral mapping.

Moreover, there is much less land developed than the demand. In the proposed Development Plan 2020 of the Kathmandu Valley, a minimum average gross residential density of 300 persons per ha and net residential density of 600 persons per ha has been identified as desirable densities for the valley. Based on this figure, the total land required to be developed for the projected increased population would be 6,053 ha in 2021. Looking at the land developed by the private sector for residential purposes, 1,038 ha between 1981 and 1991, and the government’s development of 185 ha in the last two decades (Halcrow Fox and Associates 1991), the amount of land to be developed in the valley each year to fulfil the housing demands in 2021, i.e., 300 ha of land for residential purpose alone, is many fold greater.

Nonetheless, almost all the formal private sector developed housing estates cater to upper middle class and or higher income group with prices from NRs 6,000,000 to NRs 52,000,000. The house price to income ratio for Kathmandu is 10.6, i.e., housing price is ten times the annual income of household in average (KMC 2000). About one fourth in the capital have household incomes under NRs 600 cannot afford this private housing. There is market demand of planned housing units in the valley but only among upper middle and high income households.

Accessibility to land in urban areas is the underlying issue for housing problem in Nepal. Access to land has been influenced by various factors.

### Combining Efforts of the Stakeholders

Housing is a basic need, and every individual and every nation aims to fulfil it, yet it is a growing problem in developing countries. Inaccessibility to land has been the root cause of this problem for most of the people in urban areas as land is prerequisite for housing development. Access to land has been even more difficult for low income people for various reasons. The situation is going to be more critical in future if this trend continues. So in order to solve the ever increasing demand of housing, inaccessibility to land needs to be resolved. There is a need to develop a mechanism so that land is made available for housing to low income people too.

Making land available to the economically weaker section of the population is not a simple task. The situation is a result of many complex issues often interlinked with each other. Hence it requires the combined efforts of all the stakeholders at various level from policy makers to the community and individual level. It requires some policy level interventions, effective implementation of land management schemes mainly the land pooling, development of financial mechanism and specific programs.

The following are some of the suggestions to overcome the inaccessibility of land for most people in urban areas, especially the poor.

- Review the existing shelter policy to incorporate important factors such as financing mechanism to access land, which has not addressed properly. The existing policy dates back to 1996 and much has changed.
Encourage group housing by organizing local community and forming a group to execute group housing project/self-help housing project. (WUF III). The total land required per household/family is lowered as people share common spaces. This will eventually reduce the initial investment for land making access to land to more people.

Initiation of land donation campaigns, as there are many landlords and other institutions willing to donate land for social service. They are honoured by naming the village after their name. Establishment of land banking and land information system with every detail of the land.

Allocation of the unregistered land (Parti Jagga) to the poor for housing. The government is the owner of all un-registered land.

Establishment of microfinance and cooperatives for purchasing land for housing development. Develop mechanism for providing loan to individuals to buy land on group guarantee and on governments guarantee.

Awareness training about the importance of individual as well as group saving and sharing the international experience that even a small saving can contribute to buy land in urban area (WUF III).

Effective land development methods like land pooling, the most pragmatic approach to manage urban land for urban development. There is need to extend these tools widely. Though it has gone through many changes over the years since its first introduction, it still has some deficiencies.

The following measures are recommended to resolve the present issues.

- Policy interventions to provide infrastructure at subsidized price in land pooling areas rather than free of cost in unplanned neighbourhoods.
- Imposition of tax on vacant land to discourage the speculation
- Creation of a central revolving fund for seed money for land pooling
- Wide education campaign about the benefits of land pooling, highlighting the consequences of unplanned development, dissemination of information through media, audio visual tools, experience sharing programmes with site visits for all stakeholders including landowners, local representatives, political workers.
- Provide extensive trainings to the staffs of local authority as well as private sector to enhance their capability of implementing land pooling and engaging them in land pooling projects executed by the government.
- Encourage, support and involve local government and the private sector to expand land pooling throughout the country.
- Creation of forum to organize experience sharing on regular basis.
- Making Land Pooling projects accessible to the low income people by
  - Allocation of any non-registered land (government land) within the project area for low income people.
  - Allocate land for low income people in every land pooling project equivalent to the cost required to develop infrastructure services and compensate the landowners by government subsidy for infrastructure works as it provides these facilities in other areas of the city.
- Introduction of land pooling concept in other type of urban development such as in the upgrading of the existing settlements, renewal and
regeneration of core area, development of central business districts and construction of urban roads.

The goal Housing for all can only be achieved by addressing accessibility to land to majority of the people.

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Urban Land for the Poor in El Salvador
An Approach to Generate Land

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Rural migration to the main cities is a difficult issue for municipalities. Migrants settle in urban risk areas, national lands or invade private land. There are housing programmes for qualified families with low incomes, affected by natural disasters such earthquakes or land slides, or meeting basic requirements. If a family does not meet two requirements: access to a registered plot of land and an income of two minimum wages, the municipality or other institution must provide a legalized plot. Municipalities commonly do not have enough resources to provide or finance a legalized plot, urban infrastructure and a house to these migrants.

The main problem presented in the paper is the access to urban land for the urban poor in the region of Cuscatlán-San Vicente. The challenge is how to generate this urban land, and how municipalities could manage and be part of the generation of this land, through applying the proposals of the Comprehensive Plan for this region.

The proposal seems logical and reasonable, but implementing those goals is the big challenge that municipalities have in their hands – not only to provide decent houses to the urban poor, but most of all to organize the regional territory.
El Salvador

El Salvador has an area of 20,749 km² and a population of 7,010,000. Politically, the country is divided into 14 departments and 262 municipalities, making it difficult to manage. However, in 2003–2004, the Vice-ministry of Housing and Urban Development formulated the National Plan for Territorial Development, which proposed a new for the national and regional structure, changing the present political and geographic structure based on the economic relationships among municipalities, hydrographic basins, and others. In addition, it drafted a Land Development Law backing the proposed land development policy. This new structure is not established, but the Vice-ministry of Housing is making the regional plans based on the new division.

The Social Investment Fund for Local Development is to formulate nine Regional Plans, and recently finished the plan for Cuscatlán-San Vicente. This region is located in the centre part of the country, composed of 27 municipalities (within 3 departments: San Vicente, Cuscatlán and La Paz) and the cities include: 3 consolidated cities (Cojutepeque, San Vicente and San Rafael Cedros); 5 middle cities (San Sebastian, Santo Domingo, Apastepeque, Santa Cruz Michapa and El Carmen); and 19 basic urban centres. The vision of the plan is up to year 2025.

The Region Cuscatlán San Vicente had a population of 301,756 in 2004: 50.1% males and 49.9% females, of this total, 25.7% are under 10 years old. The average density for the region is 254 inh/km², and the densest municipalities are El Carmen (2,033 inh/km²), Cojutepeque (1,781 inh/km²), Santo Domingo (495 inh/km²) and San Rafael Cedros (495 inh/km²). From the demographic point of view, the main population is in Cojutepeque (55,979 inh) and San Vicente (53,510 inh). Municipalities such as Santa Clara, San Esteban Catarina and San Ildelfonso have about 57 inh/km².

The municipalities that are most populated and have the best economic level are more attractive for people to live in, and grow through internal migration and not because the natural birth growth. It is estimated that fertility would decrease more by the year 2025, although local demographic growth would be up to 3% in the Region due to internal migration. The national rural-urban migration is about 140,000 persons/year, so it is expected that attractive municipalities capture more population. National life expectancy for men is 67.6 and for women 73.7 years old. Mortality is about 6/1,000 and will remain the same to 2025.

From the total population, 62% is the labour force and 38% economically inactive. On average, 90.5% labour force works for the private sector, and the rest (9.5%) works for the public sector. Persons in the private sector work either for enterprises, or own business or even within the informal economy. El Salvador used to develop its economy based on a primary sector; however, since the last 20 years there is a third sector, services. More people are getting jobs in the services sector than in agriculture or industry (Table 1).
Table 1 Value Added by Economic Sector (%)

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sector I, Agriculture</td>
<td>10.0</td>
<td>9.7</td>
<td>8.7</td>
</tr>
<tr>
<td>2. Sector II, Industry</td>
<td>24.1</td>
<td>24.2</td>
<td>24.3</td>
</tr>
<tr>
<td>3. Sector III, Commerce &amp; Services</td>
<td>65.9</td>
<td>66.1</td>
<td>67.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Ministerio de Economía, Encuestas de Hogares de Propósitos Múltiples, DIGESTYC.

In the Region Cuscatlán – San Vicente the agriculture is predominant. Sugar cane is the product more developed in San Vicente Department; cereal grains are in Cuscatlán Department.

The GDP/capita indicator is not real, since more than 70% of the national wealth is divided among few (Table 2).

Table 2 GNP per capita – Normal Prices (Millions of dollars – Thousand inhabitants)

<table>
<thead>
<tr>
<th>Year</th>
<th>GNP</th>
<th>Annual Var %</th>
<th>Population 1/</th>
<th>Annual Var %</th>
<th>GNP/capita USD</th>
<th>Annual Var. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>13,134.1</td>
<td>5.4</td>
<td>6,276.0</td>
<td>2.0</td>
<td>2,092.7</td>
<td>3.3</td>
</tr>
<tr>
<td>2001</td>
<td>13,812.7</td>
<td>5.2</td>
<td>6,396.9</td>
<td>1.9</td>
<td>2,159.3</td>
<td>3.2</td>
</tr>
<tr>
<td>2002 (p)</td>
<td>14,311.9</td>
<td>3.6</td>
<td>6,517.8</td>
<td>1.9</td>
<td>2,195.8</td>
<td>1.7</td>
</tr>
<tr>
<td>2003 (p)</td>
<td>14,940.3</td>
<td>4.4</td>
<td>6,638.2</td>
<td>1.8</td>
<td>2,250.7</td>
<td>2.5</td>
</tr>
<tr>
<td>2004 (p)</td>
<td>15,823.9</td>
<td>5.9</td>
<td>6,757.4</td>
<td>1.8</td>
<td>2,341.7</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Source: Quarterly Magazine Banco Central de Reserva and TURPLAN calculations.
1/ Population Projections from Encuestas de Hogares de Propósitos Múltiples, DIGESTYC.
(p) Preliminary quantity.

Analyzing Table 2, population grew yearly with an average of 1.9 percentage. The GDP normal prices grew as well, but not enough to get an improvement in the total population. In nominal terms, GDP grew however in real terms decrease, due to the destruction of public and private infrastructure because of 2001 earthquakes. The change of national currency from Colones to US Dollars influenced in the GDP decrease too.

Based on 2004 figures from DIGESTYC and FISDL, the Cuscatlán and San Vicente Region have a monthly income of USD 18,756,310.00; and the municipalities with more income are: Cojutepeque (USD 4,428,520), San Vicente (USD 4,417,560) and San Rafael Cedros (USD 1,213,370). External income (remittances) was about USD 12,715,462. San Vicente Department participated with 59%, Cuscatlán Department 38.67% and La Paz Department with 2.4%. This external income contributes in a considerable way with home sustainability. However, it is believed that most of this income is invested in consumption and showy.

The UNDP in its Human Development Report for El Salvador, 2003, shown 62% of population is poor, and many social groups do not have access to the minimum wage. By 2005, UNDP locates El Salvador in the 103 places worldly. Cuscatlán and San Vicente Departments are classifying with a high poverty level due to lack of income and basic human requirements; so it is not casual to register a high level of migrants in those Departments.
Access to Shelter and Urban Services

Based on the Multipurpose Housing Survey, the housing need in 2004 was about 1,626,036; the median family is 4.2 persons. The same year, the housing stock was 1,593,528 houses: 63% urban and 37% rural. From this stock 1,081,216 (66%) are in good condition and 512,312 (32%) have some kind of deficiency. If to this deficiency is added the new housing demand, the number rises to 545,000 units, plus 32,000 units from the natural population growth. Almost 50% of the new housing demand belongs to families with less than 2 minimum wage income that work in the informal sector1. The minimum wage is USD 144.00 per month.

The Cuscatlán – San Vicente Region requires 15,147 new houses by 2025 (Table 3).

<table>
<thead>
<tr>
<th>Departments</th>
<th>Population 2005</th>
<th>Population 2025</th>
<th>Population Growth</th>
<th>Housing 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuscatlán</td>
<td>143,896</td>
<td>179,758</td>
<td>35,862</td>
<td>7,635</td>
</tr>
<tr>
<td>San Vicente</td>
<td>150,445</td>
<td>184,863</td>
<td>34,418</td>
<td>7,025</td>
</tr>
<tr>
<td>La Paz</td>
<td>10,284</td>
<td>12,585</td>
<td>2,301</td>
<td>487</td>
</tr>
<tr>
<td>Total</td>
<td>306,630</td>
<td>379,231</td>
<td>72,581</td>
<td>15,147</td>
</tr>
</tbody>
</table>

Source: Cuscatlán-San Vicente Regional Plan, TURPLAN.

The indicator used to measure the access to an appropriate house is the housing deficit. This deficit is divided into quantitative housing deficit (families that do not have any access to a house); and qualitative housing deficit (housing with unsecured roof and walls materials; or soil floor; or lack of these infrastructure: water, sanitation, electricity).

Up to 69% of the urban houses have access to water. The provider is ANDA, a national institution dedicated to the extraction, distribution and management of water resources. Rural water services are through wells managed by a communal association, private wells or natural springs. A general factor with the water administration is the intermittence in the service and the bad and old condition of the water infrastructure; it makes ANDA to provide a poor service. ANDA extracts and distributes underground water, which is not contaminated and has the best quality. The coverage for water service in San Vicente city is 72.8% and 84.2% in Cojutepeque City.

Related with sanitation drainage, only 6 cities of the Region have access to it, and its waste is empty out to near river cities without any previous treatment, making this the most source of contamination for rivers and winter canals; the rest of dwellers use latrine or septic tank. Only three cities in the Region have rain drainage, the others drain it directly onto the streets.

Collection and final disposal of solid waste is almost done by the municipalities, and serves to the 91% of the regional urban population. By 2001, two municipalities granted the garbage administration to a private company. The generation of solid waste in the region is about 69 tons per day. Just two

municipalities separate organic and inorganic waste for final disposal; the others deposit all waste on a dumpsite. There is no sanitary landfill.

The region has electricity service coverage of 83% and the communication coverage is 34%, the deficit is mostly in the rural areas. The main network in the region is the Pan-American Highway crossing the region in a longitudinal way, and other 2 highways connecting the region in the opposite way. Connections to the cities are done through these 3 highways.

**Housing Policy and Actors in Shelter Delivery**

El Salvador, through The Vice-Ministry of Housing and Urban Development has developed the National Housing Policy, focusing in creating a sustainable source for saving-investment-grow-job, reducing poverty, eradicating housing deficit, implementing a national programme for housing savings, and designing financial tools to attend the housing supply and demand, developing new low-cost technology in housing construction, eliminating illegal conditions in housing plots, relocating families who lives in risk areas and improving efficiency in housing related sectors entities.

Main actors in the housing sector are: Vice-Ministry of Housing and Urban Development VMVDU, the National Found for Popular Housing (FONAVIPO), Social Housing Found (FSV) in the national sector; NGOs and international cooperation such FUNDASAL, European Union, Spanish Cooperation, GTZ, Japan, USAID and others.

The FSV gives solution to the formal housing demand, subsidizing the mortgage interest rate (in a higher proportion for low income families); moreover, the FSV attends up to 90% from the annually new housing demand in the formal sector within the range of 4 minimum wages. FONAVIPO, plus other NGOs, takes care of the informal demand that does not fulfil the conditions to access for a mortgage loan. FONAVIPO used to attend families with an income up to 2 minimum wages; however, since October 2001 attends families up to 4 minimum wages income. In order to get a house, the FSV requires the family a 2-year saving before gives the house in and takes care of the mortgage.

FONAVIPO helps persons who own plots and intend, first, to build their houses themselves in a provisional way, due to their irregular income based on the informal economy. So, in order to get a credit for improving the house, FONAVIPO requires owners that the plot must be legally feasible. VMVDU buys and subdivides land for giving to low-income families; although, generally subdivisions do not have any infrastructure or services (access to water, sanitation, electric energy, sewages, etc).

After the 2001 earthquakes, international cooperation for either housing or infrastructure construction became important. FUNDASAL has become the most important national NGO, due to external financial aid, first, from World Bank (50% contribution) and now from KFW (75% contribution), and the mutual work methodology among beneficiaries and construction materials research. After the earthquakes, other NGOs received housing financial aid from international cooperation.

The distribution of the housing construction based on the financing source on the period of 1996–2000 was: Banks 10%; FSV 30%; FONAVIPO
Lack of Urban Land for the Poor

In El Salvador rural migration to the main cities is a common but difficult problem for municipalities; since they take care of solving migrants’ needs. In the case of Cuscatlán – San Vicente Region, cities as Cojutepeque, San Vicente and San Rafael Cedros are the cities which more receive rural migrants due to have higher city investments, economical resources, basic infrastructure, cities attractions, etc. These migrants usually settle their houses in risk urban areas, national lands or even invading private land.

In the country exists housing programmes directed to provide a decent house to low income families or/and families affected by a natural incident, such earthquake, land flow or others. This help is provided by both National and International institutions, and in order to be chosen as beneficiary, the family must get at least 2 minimum wages or have a plot properly registered and legalized; or in the case the family does not have any land nor 2 minimum wages, the municipality or other institution, must provide of the legalized plot. Municipalities commonly do not have enough resources for buying land in order to provide or finance a legalized plot, urban infrastructure and a proper house to these migrants.

To generate urban land is very expensive task for municipalities; and private developers focus it toward the formal sector, which has the capacity to buy and invest. So, generating urban land for migrants or families with little economical resource must be a duty for the local or national sector.

Rural migration, into consolidated cities, has become the primary cause of city growth, and not because the ordinary population growth. These migrants usually settle their houses at risk urban areas, national lands, illegal subdivisions or even invading private properties. They leave their homelands without own sources, and usually get jobs in the informal sector, having no constant and limited income (less than 2 minimum wages), no social security access, and few or no benefits at all.

In the country, it is a common phenomenon the illegal land subdivision sold as “urban land”. These subdivisions do not have basic infrastructure (access to water, sewage, electric energy, rain drainage), nor urban public services and facilities (school, healthcare, green and social areas). Usually illegal plots have problems in topographic survey or legal issues; besides, developers do not accomplish environmental studies and do not get any kind of permissions in VMVDU, Ministry of Environment MARN, or Ministry of Agriculture MAG. These plots could not have a legal process, since they cannot fulfill any infrastructure, or minimum urban and municipal requirements, or any governmental approvals.

In a short term, buyers solve their housing problem by getting affordable land and building a pseudo house on it. In a long term, buyers will face many difficulties to overcome to become the legal owner of the plot. In other words, legal insecurity over the land directly affects buyers not only in land
ownership but also to become a beneficiary for a house credit or donation. The lack of infrastructure seems to be not a problem to the buyer, since they get plots at an affordable price; but this is a middle-long term burden to the municipality, due to accumulative effects on the municipal finance.

Most of the legal land promotions within the cities are basically dedicated to the formal sector within the segment of over 4 minimum wages, due to attention of the FSV and banks. However the demand for urban land is taken care by the FSV and banks (total of 40%).

On the other hand, the region never had a plan, or urban planning for each urban centre. Municipalities from the Region do not have the experience or resources to manage the urban development of their cities; so municipalities send the subdivision projects to VMVDU, MARN, and MAG for approval. Directions where the city should develop used to be not certainly established, so land promoters took advantage of this situation, in order to create their own illegal settlements. Municipalities have little control over the land and its environmental resources, which need to be preserved.

Generally, in the last 30 years the urban development is made by private promotions mainly in the housing sector; as a consequence, developers get a land to do the subdivision without taking care of the future expansion of the city and its infrastructure. This single land plan does not take care of the global connection (road networks), location for urban public services and facilities, identification of communal needs, and others. Planning costs increase with the single land plan; since it has to be calculated and paid as many developing plans are done in an area. For example, if an area of 10 ha has 10 owners, and each owner wants to develop their land with a housing project, each one must pay all the costs related to their own housing project, so planning costs will be paid 10 times.

Few land subdivision projects are accomplished to generate urban land for low-income and informal sector families, mostly municipalities take care of it. Moreover, recent Local plans, in their regulations, do not include this kind of promotions, which would serve not only to the municipality to alleviate slum problems, but also would rise up low-income families’ conditions, consequently their standard of living. For these families, access to this kind of promotions means have access to urban infrastructure, public facilities, and especially legal tenure of the land.

Natural disasters happened in the country, such as earthquakes of 2001, land floods in 1998 and 2005 and others, had affected thousand of families, and destroyed properties, national and local infrastructure, etc. Urban Poor’s families located at risk areas, slums and other sites were the most affected persons, for settling in the most vulnerable sites.

After those natural disasters, national and international cooperation reacts to the chaos left by phenomenon, putting immediate resources to solve short-term problems, as well as long-term investment for reconstruction of the area affected or in the country. Therefore, housing and infrastructure reconstruction programmes for affected people are always set up. In most cases, in order to be selected as a beneficiary of a house, the international cooperation request the family to fulfil a series of requirements among, to being affected by the phenomenon, to be a low-income family
Raquel Carballo

(2 minimum salary the most), being owner of a legalized plot and not to settle in a risk area, and other ones.

It is smart to ask for legalized plot, since the goal of the cooperation is that the selected families would be the final beneficiaries, and not the owner of the plot, who sometimes is not the beneficiary. Further, the concept of sustainability is sought by the cooperation in order to rise up the families’ standard of living. This is the reason to build not only the house, but to provide sanitation, topographic protection, access to water and electricity.

Working for one of those international programmes, I found that it is common to find urban poor families who need decent housing, but with no land, or with legal problems over the properties. Rural families have less difficulties in land tenure, and are more likely to be chosen. Many people living in slums or risk urban areas were not chosen, due to lack of land; few municipalities had the access or resources to offer urban land for this purpose. Municipalities usually buy land for housing out of the urban sector because prices are more accessible; but with no facilities, no infrastructure, and with topographic problems.

At this time, the Regional and Local Plan for Cuscatlán-San Vicente is finished, so now regional municipalities have a tool to plan their region and cities; however, they are not capable to do it, due to lack of experience, personnel, resources, etc. The Local plans need to be promoted in order to apply the Local proposal for a better cities’ development, but also to empower the local institution and administrations. This last statement is crucial to get a sustainable local empowerment process and proposal development.

Land Management through a Comprehensive Plan

The main problem presented in this paper is access to urban land for urban poor. The challenge is how to generate this urban land, and how municipalities could manage and participate in generation of this land. It was said, in the previous point, that the municipalities of the region Cuscatlán-San Vicente have now their regional and local plan to manage the proper use of the land, monitoring actions over the land and natural resources, etc. However, the municipalities are not capable to implement the proposals of the plan at this time. So the proposal for change and improvement for this situation would be divided into two parts:

1. Inclusion of a proposal to generate urban land for urban poor in the Local Plan and its regulation;
2. Promoting the accomplishment of the Plan proposals to empower the municipalities in the regional and local planning management.

Social Housing through Increased Density

First, it is necessary to explain how the urban development is handled in the Local (Comprehensive) Plan, and clarify that it will not be presented in the regional plan, due to of higher level of intervention. Cities were analyzed and planning under the present urban land and its future expansion based on the
increase of population up to year 2025, land uses needs, environmental protection, etc. In each city was established:

- the classification of land into urban land, future urban land, rural land and protected land – assisted with maps;
- zoning suggesting the housing, institutional, commercial, services and industrial zones, as well as forest-farmer, tourist and protected zoning – assisted with maps.

The future urban land is divided into different sub-divisions, in which is planned the public infrastructure such as main roads, green areas, water, drainage, electric and communication systems, public lighting as well as social services as health and educational land, landfills, others. Up to this point is the scope of the Local Plan; nevertheless, there is a need to go further to this detail and develop a detailed plan which can be promoted by either the municipality, or owners, or both in coordinated actions.

The detailed plan for each area must define the plot subdivision, fulfil infrastructure and social standards, urban recommendations, etc. Up to here the plan has the same perspective as any other master plan; however, the Local Plan has introduced an innovative approach in developing phase. It suggests that the owners of land within the sub-division area get together for planning and developing the future urban land, share the planning and developing expenses based on each owner’s contribution analysis; as a result the city could be achieved a sustainable urban development, because it is planned as a whole area and not as a single land, as doing in the present. So, the sub-division area is guaranteed to have the basic infrastructure and social services, and get a better price for their construction, besides, the city would have a functional and logical urban structure.

For housing zoning, the design allows densities in the following range:

- D-1: 400 inhabitant/hectare (about 80 houses/ha)
- D-2: 300 inhabitant/hectare (about 60 houses/ha)
- D-3: 200 inhabitant/hectare (about 40 houses/ha)
- D-4: 100 inhabitant/hectare (about 20 houses/ha).

Generally, a sub-division area has at least 10 hectares, and based on the density range, a sub-division plan could have a population of 4,000 or 800 houses (in D-1) down to 1,000 inhabitants or 200 houses (in D-4).

In 1997, the master plan for the City of Santa Ana introduced the same innovative approach in planning. The regulation included a section to generate urban land for social and progressive land projects. This section is not included in the regulation of any local plan done in the last few years, and I consider it is a good way for the municipality to help urban poor families to get land within the city and with services and infrastructure. The section encourages the introduction of progressive urban land in promotions of at the most 100 houses, and at least 1 km away from each other. These promotions must provide water supply for at least every 20 houses, latrines as sanitation, and later on, complete the rest of the basic infrastructure. The minimum plot is 100 m² and 6 m front. If developers are allowed to introduce this kind of promotion in their sub-division plan, they can increase the number of plots they are promoting by half. For example: if the allowed density in the sub-division area is 800 houses/ha and developers agree to
introduce the progressive land promotion in 100 houses or plots (maximum), they will be allowed to introduce half the number of the promotion in their density, in other words 50 more plots. At the end, developers would have 850 plots to sell, earning 50 more plots from the than they would be allowed to develop in the sub-division plan. This kind of promotions should also be located at least 1 km away one from another, to avoid as much this kind of concentrations in one single area.

Since municipalities are the institutions taking care of urban poor's needs, they must buy the land with their own resources, or donations, or any other figure. However, they are investing and getting land within the city for urban poor, and not away from city, including services and infrastructure, rising up people's quality of life. So in a way, municipalities are doing a better business for families since they are integrated into the society and city; and also, municipalities do not deal with the provision of infrastructure and services for these settlements.

Empowering the Municipalities

The proposal of the Regional and Local Plan appointed the empowerment of the institutions in charge of the management of the region, specially the municipalities, or even the creation of new institutions. Proposal such as the creation of a Planning Regional Office, the Municipal Association and the Promotion Group, are the primary projects to start with.

To create these institutions, it is necessary that not only the municipalities promote their creation, but also the resources and expertise of both VMVDU and FISDL are crucial to achieve this goal. The Municipal Association of the 27 municipalities is the first thing to do to have the legal base in order to create the Planning Regional Office, since the municipalities would transfer to the Regional Office their rights of planning their territories. The VMVDU must train the personnel in charge of the office for the management of the Comprehensive Plan, the future urban land and sub-divisions areas. So they would be capable to promote and propose the generation of the urban land for urban poor. FISDL should also promote and direct resources in the creation of those institutions, since it is a governmental office intended to promote the local development.

References

Vice-ministerio de Vivienda y Desarrollo
Slum Upgrading in Guatemala

Proposal to Create a City without Slums

Sandra Drummond
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A high percentage of the population of the Metropolitan Area of Guatemala lives in slums located in excluded areas, characterized by insecurity of land tenure, high physical risk, lack of or inadequate provision of housing, community and public urban services.

This paper addresses the problem that public interventions have not been able to promote an integrated response to the improvements of these areas in the MAG. A proposal is put forward that aims to help overcome this problem and promote the implementation of an inclusive and participatory approach for a long-term slum up-grading process in the metropolis.
Guatemala

Guatemala\(^1\) is located in the north of Central America, bordering the North Pacific Ocean, between El Salvador and Mexico, and bordering the Atlantic Ocean, between Honduras and Belize. It has an area of 108,889 km\(^2\). It is divided in 8 regions, 22 departments and in 332 municipalities.

The country continues to present a very slow dynamic of urban growth, in comparison with the rest of Latin America, where the majority of countries are characterized by a high and accelerated urbanization. In 2002 the urban population was only 46%. Nevertheless at regional and municipal level the urban dynamics are different. The Metropolitan Region, where the country capital is located presents a high urban primacy, in 2002 concentrated 42% of the country’s urban population; it also concentrates the State administration, most of the public institutions, industry and commerce; and high percentage of the public investment in economic and social infrastructure has been directed in this region.

In 2002 was reported that the country had 11,237,196 inhabitants, of which 41% were indigenous\(^2\). The average annual growth rate per 100 inhabitants was 2.5. And it is estimated that for the year 2015 the population will be over sixteen million (ECLAC, 2004). The number of persons per household has decreased for the urban areas from 5 in 1981 to 4.7 in 2002.

Guatemala is characterized by its high socio-economic inequities. In 2004 the richest quintile of the population concentrated 61.8% of the national income, versus only 2.8% for the poorest quintile. The percentage of the total population below poverty line was 60.2%; in the urban areas poverty affected 45.3% of the population, 38% in the Metropolitan Region and 68% in the rural areas (CEPAL, 2004). Nevertheless it is believed that the official figures underestimated urban poverty.

In terms of education, in 2002 the illiteracy reached 29% of the total population, 50.7% had approved a year or more of primary, 16.4% had approved a year or more of secondary, and only 3.6% had university studies.

In health, the fertility rate was 4.4, the children infant mortality rate per 1,000 live births was 44 and the child mortality rate was 59. Life expectancy was estimated at 72.5 for women and 65.5 for men between 2000 – 2005 (ECLAC, 2004). In 2005, 70% of the health services were covered by public health, 8.2 by the social security, 8.2% by private services and 13.6% of the population continued with out access to health services (SEGEPLAN 2005).

In terms of economy, in 2003 the growth of the Gross Domestic Product GDP at constant market prices was 2 and the growth of per capita GDP was 0.5. The annual average rate of growth of real gross national disposable income at constant market prices was 3.4 in 2003 (ECLAC 2004). Of the public expenditure, in 2004 was estimated that 52.2% was dedicated to social services that included 7.7% for health and social services, 19.3% for

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1 The source of most of the data presented in this section is the XI National Population and VI Housing Census, 2002.
2 In Guatemala there are 22 ethnic groups of Mayan origin and 2 non Mayan officially recognized.
education, only 0.7% for housing and 1.6% for water and sanitation (PNUD 2005). The percentage of the monthly income that was dedicated to housing (including rent, services, maintenance and repairs), varied from 25% for the poorest households to 20% for households with a monthly income of the equivalent of more than 100 USD (INE 1998).

**Slums of Metropolitan Guatemala**

The existence of slums in Guatemala is a manifestation that started together with the urbanization process, during the second part of the 1940s, when the poorest classes of the population, in search of a housing solution, occupied deteriorated abandoned houses in the city centre, or started to invade urban land. But it was until the end of the 1950s when slums started to spread rapidly through land invasions and illegal land subdivisions. During the following decades, two events had a relevant impact in the establishment of slums: the 1976 earthquake, that cause severe destruction and death in the country and generated a massive migration to the city; and in the 1980s the return to democracy, after more than 30 years of military regimes and internal conflict, was accompanied by economic crisis that lead a significant part of the population to poverty.

To date a high percentage of the population lives in slums, in excluded areas of the Metropolitan Area of Guatemala. These areas are characterized by: insecurity of land tenure; location in areas of high physical risk prone to disasters caused by landslides, floods, earthquakes, environmental pollution; lack or inadequate provision of housing, public urban services as water, sanitation, electricity, streets; communal services and public transport. Within its population there is a high index of school desertion, high index of violence, lack of job opportunities and exclusion to formal financial services.

**Access to Shelter and Urban Services**

The capacity of the construction industry in Guatemala is very flexible and has been able to adjust to the high variations registered in the market. According to the Guatemalan chamber of Construction, the housing production by the formal sector between 1997 and 1998 reported an annual growth rated of 203%, with the construction of 27,240 units, versus 48% with the construction of 5,485 units between 2002 and 2003. The housing inventory of the informal sector is relatively big, in 2000 was estimated that non-authorized houses represented 39% of the total housing stock, of which 75% were houses located in slums (BID, 2000).

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3 There is not an official definition of the physical boundaries of the MAG, generally there are 11 conurbated municipalities of the 16 that form the Metropolitan Region, that are usually considered in the definition of the metropolitan area.

4 There is no official figure on the number of slums and its population. According to a national community based federation (FREPOGUA), at the end of 2004 in the MAG, which concentrates about 80% of the country’s families living in slums, there were 368 precarious settlements with approximately 300,000 families.
In 2002 the housing stock was 2.2 millions, of which 87% was occupied, and was composed by 76.2% formal houses; 1.6% apartments; and the rest 22.2% were temporary houses, one room dwelling and “ranchos”.

Regarding house and land tenure, 80.6% of the households stated that their houses were in property, 11.4% were rented, and the rest were other forms of tenure. Nevertheless within the property categories it is known that there is large percentage that does not have a property title.

The housing deficit was estimated in 1,021,592 units of which 60% was qualitative and 40% quantitative. In the Department of Guatemala, were the metropolitan area is located 45% of the households are affected by this deficit. It was also estimated that the annual growth of the housing deficit was at 0.45% during the period 1995–2002 (CIV 2004). The percentage of overcrowded houses was 22% in the country and 10% in the Department of Guatemala.

In 2002 was reported that 66.3% of the households had access to water supply piped to their houses, 4.3% shared it with other houses, 4% used public standpipes, and 25.4% were supply by private vendors (trucks or drums), rivers and lakes. Only 42% of the households had a toilet connected to a drainage system, 39% had latrines, 5% other type of toilet, and 14.5% did not have a toilet. Only 32% of the households reported having a municipal or private service for waste disposal, 31% burned it, 25% throw it in illegal waste deposits (usually in ravines), 9% buried it, and 3% had other forms of disposal. In electricity 79% of the households had access to this service.

The Housing Sector
Guatemala has a relatively firm legal and regulatory framework, established in: 1) the Housing and Human Settlements Law, created in 1996, that contains the institutional, technical and financial bases that should ensure access to adequate housing to every Guatemalan family; 2) The National Housing and Human Settlement Policy, created through a participatory process, which main objective is to facilitate the access to adequate housing to the poor and vulnerable family groups. Nevertheless, up to date the sector lacks of an adequate institutional framework, to direct, coordinate, regulate and supervise the sector.

The Minister of Communications, Infrastructure and Housing CIV is the rector of the housing sector in Guatemala, were one of its four vice-ministers, without an adequate institutional and operational structure, has been responsible of Housing. The Housing Policy establishes the creation of a Housing Vice-minister, but up to now that has not been done. Nevertheless, the Guatemalan Housing Fund FOGLAVI, a second level financial institution, has been leading the housing sector during the last 8 years, basically through a State Subsidy Programme.

Within other public institutions involved in the sector, it is important to mention the Inter-Institutional Coordinator – CIAAP created, in the CIV at the end of 2004, to attend and coordinate public actions in the slums of Guatemala, with priority to those of the metropolitan area.

It is the responsibility of local governments the formulation and execution of urban and rural development plans, regulations and norms. But due to the
weak technical and managerial capacities, as well as skilled staff, of a high percentage of the municipalities in the country, the level of performance of local governments in Guatemala is very low. It is also within the responsibilities of local governments the provision of basic public services as water, sanitation and public lighting.

Although most of the local governments in the Metropolitan Area of Guatemala MAG have urban regulations codes, the slums areas due to its “illegal status” are not included in these regulatory frameworks and public services provision is very low.

In Guatemala housing finance through the conventional financing system is very low, in 2004 from the total of credits of the bank system, the percentage dedicated to housing reached only 3.5%. For low income families the State utilized a financial scheme of three components: a household contribution, a direct subsidy and loans at market conditions. Nevertheless a low percentage of the subsidies have been accompanied with loans, because the target group of the subsidies, the poor, do not qualify for loans in the commercial banks.

Other Actors in the Housing Sector

- NGOs whose role has been mainly to support processes of housing improvement for the poor, the strengthening of Community Base Organisations and policy advocacy.
- Community Base Organisations, which in the metropolitan area are usually dynamic and have succeeded to organize it in federations and groups in search of solutions to its housing and social needs.
- Private construction and financial institutions, which have a strong influence in the public housing strategies and programmes in the country.
- Actors as universities and research institutions, their role in the housing sector has been very low.

Housing Programme

Most of the housing public budget has been executed since 1998 through the Direct Subsidy Programme managed by FOGUAVI. To date this Programme works through 4 sub-Programmes: 1) Housing Programme for Families Victims of the Internal War (ex-guerrilla members and demobilized families), as part of the Guatemalan Peace Accord commitments, signed in 1996; 2) Decentralization and Development of Popular Housing Programme, which is carried out through local governments; 3) Strengthening of the Popular Housing Demand, which is carried out through the private sector with complementary private credits; 4) Urban Community Upgrading, in the Slums of the Metropolitan Area of Guatemala, through the programme Mejorando mi Barrio.
A Partial Solution to Slum Upgrading in the Metropolitan Area of Guatemala

The recent created slum-upgrading programme Mejorando mi Barrio has not been able to promote an integrated response to the improvement of the slums in the MAG. To date the majority of these areas continue to be in degraded environments with poor social and housing conditions, and located in non-inclusive areas of this Metropolis.

Mejorando mi Barrio a programme, from the Minister of Communications, Infrastructure and Housing and coordinated by the Inter-institutional Coordinator – CIAAP, can be consider the first public massive initiative to address the problem, and significant financial resources from the Housing Subsidy Programme have been assigned to it. Nevertheless, efforts have been concentrated in the improvement of the houses through State subsidies, and little has been done regarding, planning, regularization, infrastructure, basic service provision and improvement of the socio-economic conditions of the people living in these areas. Also, three important issues, in an up-grading process have been poorly address, these are: 1) urban governance, through a leading participation of local governments; 2) a national slum up-grading policy and strategy, to ensure a long term State involvement, guide and regulate the interventions in these areas; and 3) participation, meaning community members actively participating from the onset through the implementation of the interventions.

Limitations for an Integrated Sustainable Slum Up-grading Programme

As stated above, there are various issues that have impaired the effectiveness of the slum-upgrading programme Mejorando mi Barrio. Here we will try to analyze three issues that we considered, should be the base for the improvement of this programme and the establishment of a long term integrated and sustainable slum up-grading programme.

Urban Governance

Although there is consensus on the need for real decentralization of responsibilities and empowerment of local authorities as a fundamental principle in urban governance, in the Metropolitan Area of Guatemala it has been constrained basically by the lack of an official definition of the metropolitan area and of a metropolitan authority. This has been reflected in inadequate or inexistence urban development policies, to meet the challenges of urbanization in this metropolis; and conflicts between central and local governments who have different approaches and willingness to solve a common problem. In the case of Mejorando mi Barrio we have a central government trying to play a leading role, with an inadequate coordination with local governments on issues that by law are its responsibilities, as planning, basic infrastructure, public services provision and construction controls.
It is important to mention that urban governance is also affected by the low management capacity of some local governments of the MAG, and its lack of accountability and transparency.

Policy and Strategy Implementation

Although Guatemala up to now has not a specific policy or strategy for slum upgrading, the basic elements for enabling a long-term slum upgrading process are established in the National Housing and Human Settlement Policy. However, the lack of a long-term legal framework for urban land regularization and neighbourhood improvement and the absence of reliable information on urban poverty, have constraint putting into actions what is established in the National Policy.

Also as a result of the absence of a strategy and action plan for a long-term intervention in the upgrading of these areas, in Mejorando mi Barrio up to now the integrated vision of the Programme has not been applied. In few cases the houses interventions, have been accompanied with the implementation of infrastructure and public services provision.

Another issue that has limited the implementation of the policy is the weak public inter-institutional coordination. This issue has not been overcome yet with the recent creation of CIAAP. In addition to Mejorando mi Barrio there are other slum up-grading actions that have been implemented through different central government and local governments dependencies in a frame of dispersion.

Participatory Processes

Most of the slums upgrading actions that have been implemented in the country, by central or local governments, have been based on a top-down approach, with an inadequate recognition of the realities and dynamics of these communities, and with a low participation of the main actors, the community members, from the planning to project implementation. Also there has not yet been recognition of the important role women are playing in the improvement of their communities.

An important element that have limited the implementation of a participatory approach in these processes is the low capacities of CBOs and the few NGOs involved in community improvement in slum areas in the MAG. In general community organizations lack of capacity to manage its initiatives and get a favourable position to negotiate with governments, have a dependency of external stakeholders that support them with finance, or as intermediaries to execute its plans, and can be politically influenced. Internal conflicts also constraints the strengthening of its organizations. The NGOs, in general, have low technical capacities to influence the ongoing Programme and get involved in the proposal of long-term initiatives, and have a high financial external dependency.

In the case of Mejorando mi Barrio, it has been carried out, with very low participation of main actors. In the case of local governments they have been excluded mainly due to political conflicts. NGOs have participated only as developers. Community members and organizations, have participated mainly in the implementation and not in the planning and design process. As
a result there has been little or lack of support from local governments to the Programme implementation, and in some cases from the communities to the execution of housing improvements in their houses, and more serious, opposition of some community members to the Programme implementation.

**MAG on the way to become a *City without Slums***

This proposal is based on knowledge gained through the discussions, documents and experiences that have been implemented in other countries, presented in different events, mainly about Social Inclusion and Cohesion, during the World Urban Forum III in June 2006 in Vancouver; discussions and experiences shared during that time in specific events of the Urban Shelter – Design and Development Training Programme; and experience gained as a consultant in the subject in my country and participant, through MEJORHA in the implementation of *Mejorando mi Barrio*.

The aim of this proposal is to help overcome the problem of not being able to promote an integrated response to the improvements of the slums that are facing the slum up-grading processes being carried out in the MAG, mainly through *Mejorando mi Barrio*, and to promote the implementation of an inclusive and participatory approach for a long term slum up-grading process in the country, based on the concept that, slum upgrading should be a programmatic response to existing slum communities that focuses on keeping the community intact while improving the quality of housing, infrastructure, services (Painter, 2006) and socioeconomic conditions.

The proposal will be presented in 2 phases, a short term that will be directed specifically to *Mejorando mi Barrio*, and a long term which aims to establish guidelines for the formulation of a policy and long term sustainable plan for slum upgrading in the MAG.

It is important to point out that the implementation of this proposal will depend basically on political will and the support of the different actors involved in these processes, to enable an adequate environment and mechanisms where the slums of the MAG can be transformed into inclusive neighbourhoods.

**Improvement of the Slum Upgrading Programme *Mejorando mi Barrio***

In order to achieve an integrated approach to the up grading of the slums and enable the improvement of the housing and socioeconomic conditions of the communities, the issues that are considered the Programme should adopt are:

**Integrated Approach**

Because an upgrading Programme should not be only a matter of building or improving houses but of expanding the city, the Programme has to ensure an integrated approach where the Programme components: planning, land regularization, housing improvement, infrastructure and basic service provi-
Slum Upgrading in Guatemala

An important and critical issue in a slum up-grading programme is risk and vulnerability. Experts have stated that there are suggestions that upon close analysis, some interventions may be accumulating new disaster risks. That is why it is critical to address how we might balance potentially conflicting goals such as: risk reduction strategies versus affordability concerns; stricter residential building standards for disaster resistance and safety versus flexible standards for incremental housing development by the urban poor; regularization of tenure versus enforcement of construction by-laws on high risk land; central versus decentralized disaster preparedness and mitigation services (McCarney 2006).

In terms of finance, housing micro-finance has proved to be successful in helping the poor sectors of the population to improve their houses. Micro-finance institutions in the country should be motivated to participate in the Programme.

It is important to include a monitoring and evaluation component to follow up the Programme execution, and improve it, based on lessons learned through its implementation.

Inclusive and Participatory Processes

The experience in other countries has proved that an inclusive and participatory process is a key element for the success of a slum-upgrading Programme. As a first step the Programme has to ensure an inclusive approach and a participatory process, where are clearly defined and understood the roles of the different actors in decision-making, coordination and implementation.

In the case of slum dwellers, it will require the recognition, by all the actors involved, that they must play a central role in these processes. A slum upgrading Programme has to start from definition of the slum problematic that reflects the reality, and this can be achieved only if the slum dwellers who are the ones that best know and understand their reality and needs are actively participating from the onset through the implementation of actions.

In the case of local governments, it’s involvement as responsible of planning and the provision of basic services and infrastructure, together with other public institutions. An active participation of the local government will also give the slum dwellers confidence that the municipalities view their community as an integral part of the city (Painter, 2006).

Also the participation in the different stages of the process, from planning, by NGOs who in general are helping advocate the interest of the slum dwellers and involved in the delivery of services and infrastructure, has to be ensured.

As an example, participatory planning and budgeting, that has been adopted in many cities throughout the world, and should be adopted in Guatemala, has proved to be effective in involving communities in decision-making, bringing higher degrees of transparency and accountability in municipal finance systems and allocating a more significant portion of the municipal investment budget for local and community economic
development that is based on priorities determined by community groups (McCarney 2006).

Operational Framework

To ensure an adequate Programme implementation the present legal and regulatory framework needs to be revised to address all the dimensions of a slum upgrading process and the Programme components. The institutional framework and Programme structure should be redesigned in order to assign clear responsibilities to the actors involved. In the case of the CIAAP its role has to be of coordinator, facilitator of the process, and should ensure an adequate inter-institutional coordination, where there is a real commitment to participate and assign resources to the Programme from other public institutions involved in slum improvement.

A Long-term Proposal:
A Sustainable Slum Upgrading Process in the MAG

A long-term sustainable slum upgrading process in the MAG has to be based on the concept that the aim of a slum upgrading policy is to improve the living conditions of the existent slums, plan and design to prevent the formation of new slums.

The elements that need to be developed or created to ensure a sustainable long-term process, are:

- A metropolitan or inter-municipal structure where local and State funds are assigned for slum upgrading.
- A long term legal framework for land regularization
- An information system based on an inventory of the slums and its infrastructure needs, with an active participation of the slum dwellers.
- A Metropolitan Slum up-grading Policy
- A multi-year slum upgrading plan
- A process of strengthening the capacities of local governments, CBOs and NGOs to ensure a real participation of these key actors.
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Going Formal in Egypt: A Way-out for the Urban Poor

Land Titling versus Upgrading in Informal Settlements

Mohamed Said Ahmed Asar
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“Going informal” applies to the urban poor in their search for shelter. Lack of affordable housing is among Egypt’s most critical issues resulting in the formation of more informal settlements each year. Meanwhile, almost no land titles are provided for the settlers, the urban poor, as a result of upgrading projects. About 20% of the existing population, 15.8 million persons, are affected by the problem with about 275,000 compelled to join them each year, if there are no new housing solutions.

This paper attempts to address the issue of informal settlements and the challenge of providing land titles during the upgrading process, while proposing a “going formal” solution to house the urban poor. The paper proposes a new national programme to assist housing the urban poor along with the formation of new types of NGOs.

During the study, the author uses his personal experience with housing issues, upgrading plans and his observations and conclusions of the World Urban Forum III sessions.
Egypt

The Arab Republic of Egypt covers an area of 995,450 km² of land and 6,000 km² of water and has a population of 78.88 million inhabitants (2006 EST.). Ninety-eight percent of the population lives on only 4 percent of the country’s area, in the Nile Valley and Delta. The country is surrounded by the Mediterranean Sea to the north, Sudan to the south, the Red Sea, Gaza and Israel to the east and Libya to the west.

Egypt has 26 governorates, with the Greater Cairo Region (GCR), including 3 of the governorates, which are Cairo, Giza and Kalyoubia. Generally, governorates are divided into a number of sectors, which include cities and units. Villages are normally located in units. A few governorates consist of districts such as Cairo governorate, the country’s metropolitan capital. The GOPP divides Egypt into 7 planning regions.

Cairo Governorate, the main governorate, covers an area of 3,058 km² of land and has a population of 7.83 million inhabitants (est. 2006). It is one of the largest 20 urban agglomerations ranked by population in the world.

The country’s population is estimated 78.88 million (July 2006 est.) with an annual population growth rate of 1.75% (2006 est.) and a total fertility rate is at 2.83 children born/woman. Regarding sex-age structure, 32.6% of the total population are between 0–14 years of age (male 13.17 mi./female 12.54 mi.), 62.9% are between 15–64 years (male 25.10 mi./female 24.51 mi.) and 4.5% are 65 years and over (male 1.51 mi./female 2 mi.) (est. 2006).

Table 1: Life Expectancy and Infant Mortality Rate (est. 2006)

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy</td>
<td>71.29</td>
<td>68.77</td>
<td>73.93</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 life births)</td>
<td>31.33</td>
<td>32.04</td>
<td>30.58</td>
</tr>
</tbody>
</table>

Figure 1: Degree of poverty and non-poverty.

About 42% of all Egyptians live in urban areas, and almost one-quarter of those – or 19.7 million – live in Greater Cairo Region (GCR), which has a daily guest population of 2 million visitors from its surrounding governorates. Inevitably, there is escalating pressure on scarce agricultural land. While in Greater Cairo hundreds of thousands of newly built housing units remain unoccupied for a variety of reasons, poorer urban residents are denied legal access to the housing market. Since the 1970s an increasing number of the urban population lives in dense informal settlements that lack adequate
water supplies, sanitary and waste disposal, and basic social services. The 1993 statistics show that Egypt contains 1172 squatter areas inhabited by more than 11.8 million inhabitants. Today about 20% of the population live below national poverty line and 1% of are below USD 1 per day.

Egypt’s economy is based mainly on agriculture, petroleum, light industries and services. The country is one of the world’s lower middle-income countries according to DAC list of aid recipients. GNP itself rose from USD 22 billion in 1980 to USD 74.8 billion in the year 1997–98 and went down from USD 82.4 billion in the year 2003 to USD 75.1 billion in the year 2004. The per capita share of GNP rose steadily in the 1980s and 1990s and reached USD 1,228 in 1998 in contrast to USD 590 in 1980 and now after some fluctuations it stands at USD 4,400. Indeed, between 1960 and 1995 the purchasing power of the average Egyptian increased from USD 557 to USD 3,829. In 1996, the food-based poverty line per household was USD 547. About 20% of the population live below poverty line with an annual unemployment rate of 10% (2005 est.) which is still rising.

Total annual public expenditure on education is 14.7%, health is 5.2%, social security is 11.4% while defence, security and justice is 13.8%.

The majority of the population’s annual income lies between USD 500 to USD 5,000, 93.4% of the total population.

**Table 2: Percentage of Annual Income Distribution (among families)**

<table>
<thead>
<tr>
<th>Under USD 500</th>
<th>USD 500 – 1000</th>
<th>USD 1000 – 1500</th>
<th>USD 1500 – 2000</th>
<th>USD 2000 – 5000</th>
<th>over USD 5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Households with annual income</td>
<td>2.94</td>
<td>17.28</td>
<td>28.68</td>
<td>21.17</td>
<td>26.36</td>
</tr>
</tbody>
</table>

According to estimates, the majority of annual household expenditure of about 38.84%, in urban areas, is spent on food and beverages, while 13.82% is spent on housing.

**Table 3: Percentage of Annual Household Expenditure among urban and rural sectors**

<table>
<thead>
<tr>
<th>Household Expenditure</th>
<th>Urban %</th>
<th>Rural %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and beverages</td>
<td>38.84</td>
<td>50.86</td>
</tr>
<tr>
<td>Costumes</td>
<td>10.48</td>
<td>9.48</td>
</tr>
<tr>
<td>Housing and utilities</td>
<td>13.82</td>
<td>15.88</td>
</tr>
<tr>
<td>Furniture and house equipment</td>
<td>2.77</td>
<td>1.96</td>
</tr>
<tr>
<td>Medical services</td>
<td>4.55</td>
<td>3.72</td>
</tr>
<tr>
<td>Transportation and communication</td>
<td>7.62</td>
<td>3.09</td>
</tr>
<tr>
<td>Education</td>
<td>5.71</td>
<td>3.39</td>
</tr>
<tr>
<td>Culture, sports and entertainment</td>
<td>5.37</td>
<td>3.02</td>
</tr>
<tr>
<td>Other</td>
<td>10.86</td>
<td>8.61</td>
</tr>
</tbody>
</table>

Monitoring the real estate market, it is obvious that families living in rental units in urban areas could spend more than 25% and even up to 50% of
annual household expenditure on rental costs. Therefore, rental units are mostly offered for lower-middle, middle and upper income classes as these groups could variously manage to overcome rental costs. The low and poor standards cannot afford rental houses which are mainly controlled by the private sector.

**Access to Shelter and Services**

The housing issue is one of the most important aspects of political and social evolution in Egypt. This is due to the fact that it satisfies the basic human need of shelter and thus ensures stability among citizens. The main cause of the housing problem in Egypt is the excess of demand over the supply as a result of the ever increasing population or the migration of citizens from rural areas to the main cities. In the early 1980s the supply was increasing by 1–3%

![Figure 2: Internal migration during the 1980s.](image)

while demand was increasing by 8–10%. In the 1996 census, the total number of housing units was 16.21 million, with the total number of households at 12.7 million.

Nowadays, the real accumulative demand for housing is estimated at 750,000 units per year distributed as follows:

- 480,000 for newly weds.
- 220,000 for replacement of marginalized areas.
- 50,000 for replacement of old buildings that are about to collapse.

Yet the housing supply by the government or private entities only caters for 25% of the demand.

As the operational experience proved that the government was not capable on its own to meet people’s demand for housing, it adapted a new policy that changed the legislative rules to facilitate the entrance of private investors into real estate ventures. During the period 1998–1999, the private sector’s investment grew by 63.2%.

Reaping the fruits of the new policy, the yearly rate of construction increased from 130,000 to 200,000 units in the period 1999–2000. During those past years, 228,000 units were built and distributed:

- 210,000 in main cities;
- 18,000 in urban agricultural communities.

This is in addition to 32,299 units in the new developing cities.

The fourth economic and social development plan for the period 1997–2002 targeted the erection of 1.3 million housing units with a total investment of 95.8 billion L.E. According to the plan, 170,000 units were bound to be built in the years 2000–2001 in which 96% were to be built by the private sector and 4% by the government.

After the 2005 presidential elections, a 500,000 unit project was approved for construction in the next 6 years. However no positive signs are yet to be seen.

Recently, 30 to 35 thousand units are under construction each year by the Ministry of Housing. This targets about 7.3% of the annual need of housing (excluding units for replacement of marginalized areas and of old buildings). Units targeting mainly for the youth groups, newly wedded and a few are designated as emergency shelters. Units are introduced in different prototypes (63, 70 and 100 m²).

Hence, the government is introducing an average of 4.6% of the required units to supply the massive demands in Egypt while the rest are to be built by the private sector, which almost controls the real-estate market where there is no place for the poor to be housed.

In 1996, a new rental decree was launched, which announced a new renting form for the formal stock for rent, making rental period and annual

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**Table 4: Annual Constructed Urban Dwellings 1997–1998**

<table>
<thead>
<tr>
<th>Item</th>
<th>Government Sector</th>
<th>Private Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Constructed urban dwellings 1997–1998</td>
<td>58,534</td>
<td>27,179</td>
<td>85,713</td>
</tr>
</tbody>
</table>

**Table 5: Annual Constructed Urban Dwellings (Private & Public Sectors) 1997–1998**

<table>
<thead>
<tr>
<th>Standard of Housing</th>
<th>Economic</th>
<th>Low</th>
<th>Middle</th>
<th>Upper-middle</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Constructed urban dwellings 1997–1998</td>
<td>36,257</td>
<td>24,191</td>
<td>20,573</td>
<td>4,532</td>
<td>160</td>
<td>85,713</td>
</tr>
<tr>
<td>Percentage of units</td>
<td>42.4</td>
<td>28.2</td>
<td>24</td>
<td>5.2</td>
<td>0.2</td>
<td>100</td>
</tr>
</tbody>
</table>
rental raise upon an agreement between both household and unit owner, which differs from the previous situation of strong regulations. Starting from the year 2000, upon social recognition of the decree, the real estate market introduced the unused formal stock of rent to the middle and upper-income needs of housing, where there was no place for the poor. In contrast, the informal rent market remains huge and flexible, representing the only way in which many families can obtain a house, and also a flourishing business inside the informal settlements.

Lately, a community future vision makes landlords construct units using reinforced concrete for their structure to assist future vertical expansion for formal and semi-informal settlements. Meanwhile on the informal side, reinforced concrete is also used to avoid any governmental tryouts to relocate informal units due to the costly weight of destruction and relocation.

According to the 1996 census, 59.2% of the total number of residential units has access to piped water supply, while 17.8% use different means of water supply (e.g. wells) and 23% has no access to water supply.

In the same census, it was reported that 87.1% of the total number of residential units were with access to the main electricity network, while 12.28% used different means of electrical supply and 10.6% had no access to electricity. Regarding water drainage, 22.1% of all residential units were connected to piped sewerage, while 77.8% used different means of water drainage systems. Actually, drainage is a costly matter where units unconnected to the piped layout either use septic tanks or dispose in the nearest water streams or canals increasing pollution rates.

UNDP Human development reports disclose that in 2002, 96% of the population had sustainable access to improved water sources and 68% had sustainable access to improved sanitation.

Egypt suffers from poor management of household waste disposal in most governorates due to inactive local governance bodies except for places where local NGOs exist, known by Community Development Societies. Individual collectors and governmental bodies function well in high standard urban communities due to valuable elements found in waste disposal which enriches the outcome of recycled substances.

Addressing the health services, the population per hospital beds ratio is 21.7 hospital beds for each 10 thousand inhabitants, while there is a rate of 8.9 doctors for the same number of inhabitants. The population per health unit ratio is indicated as 3.8 health units to each 100 thousand inhabitants. These figures increase in urban areas compared to rural ones.

**Housing Policy and Actors in Shelter Delivery**

In the last five years, the Ministry of Housing, Utilities and Urban Development annually introduced 30 to 35 thousand subsidized units targeting the youth group, which represents the biggest group of the population. One month ago, the Minister of Housing announced a new type of subsidized strategy of cutting of some costs of the yearly subsidized constructed units
and drawing the subsidy towards the massive formal stock of rent, managed by the private sector. The subsidy will target youth groups to enable them to rent existing units in the private market, so as to direct the subsidy to a larger group than before and encourage the private sector to invest in the real estate market. This strategy comes hand in hand with the new mortgage system to ease housing for Egyptian people within the formal stock of rental housing.

Other strategies are implemented by planning new cities and presenting empty plot land subdivisions connected with infrastructure. These subdivisions are to be sold to the private sector. They are to be constructed within a time limit, but which obviously will be unaffordable by the poor. Therefore, low class and poor groups prefer “going informal”, residing in informal settlements or simply originating new ones, which are always the only way-out for the poor. Different upgrading projects are introduced by the state to tackle informal settlements and working hand in hand with NGOs, where legalizing land ownership is always a problem. Some upgrading projects for informal settlements legalize engaged land presenting entitles to informal settlers from the start of the process, and some in the mid-period of the project, while some projects have no authority to decide, which commonly happens!

In Egypt, poor groups prefer to reside in informal settlements, so as to evade taxes. Alongside, some are homeless, but they reside close to sanitation, water supply and electricity, which is always a benefit due to its close distance from formal settlements.

The State mainly introduces the annual subsidized units for the youth in different governorates of Egypt and introduces land plots in new cities to be sold to the private sector and upgrades informal settlements as well.

The Ministry of Housing annually construct an insignificant number of units in conjunction with those introduced by the governorates under previous agreements with such authorities.

**Table 6: Annual Constructed Urban Dwellings (Private and Public Sectors) in Cairo Governorate 2003**

<table>
<thead>
<tr>
<th>Annual Constructed dwellings 2003 (est.)</th>
<th>Total</th>
<th>Local Government Sector</th>
<th>Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low Cost Housing</td>
<td>Economic Housing</td>
</tr>
<tr>
<td>10,271</td>
<td>2,136</td>
<td>1,189</td>
<td>415</td>
</tr>
</tbody>
</table>

Housing standard differs from time to time; low cost, economic, moderate and upper moderate and high standard housing are the most well known. New types were introduced such as houses for the youth and core houses, which will be re-presented in the coming years.

NGOs rarely intervene in the real estate market; they mainly focus on upgrading informal settlements under the umbrella of the state or the local government.

The private sector has dominance on the real estate market. Regarding the community, the wealthy individuals either buy a plot of land to construct
a required house or rent their extra units to low income earners. Real Estate investors market projects of constructed or to-be-built houses seeking certain target groups such as middle or upper-middle or even upper classes. None of the actors in shelter delivery choose to introduce a comprehensive solution targeting the poor.

Research Institutions assist the state with planning new cities, implementing pilot projects, introducing methods of building for the poor, supervising the process of upgrading settlements and introducing new housing policies to the state and local governments.

According to estimates in 2006, the total population density is 78.88 inh/km², while in urban governorates such as Cairo the density reaches 2,538 inh/km². Meanwhile the highest population occurs in Kalyoubia Governorate with 3,885 inh/km².

Table 7: Occupied Housing Units by Number of Rooms and Percentage of Occupants, total Egypt

<table>
<thead>
<tr>
<th>Item</th>
<th>1 room units</th>
<th>2 room units</th>
<th>3 room units</th>
<th>4 room units</th>
<th>5 room units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage occupied housing units</td>
<td>3.6%</td>
<td>12.4%</td>
<td>32.6%</td>
<td>33.2%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Percentage of occupants</td>
<td>2.7%</td>
<td>10.4%</td>
<td>30.9%</td>
<td>33.8%</td>
<td>22.2%</td>
</tr>
</tbody>
</table>

Function, comfort and social inclusion are among the main desires for the private sector; these terms may not always be tackled in state housing.

Formal settlements and semi-formal settlements are erected under guidance of bylaws and building codes during construction. The main bylaw in the housing market is that the height of any building should be 1.5 times the width of the street with a maximum height of 36 m high. This bylaw could change in different governorates according to local regulations.
“Going informal” is a statement cherished by the urban poor groups in most cities of Egypt during their search for an appropriate shelter. Lack of affordable housing for the poor is among Egypt’s most rising critical issues resulting in more informal settlements emerging each year.

In Cairo, informal settlements originate adjacent to existing urban fabrics and normally work as a ‘service provider’ settlement for such areas, where jobs could be available and infrastructure (electricity and water supply) could be tapped from formal ones.

The local government confronts informal settlements with upgrading projects; providing water supply, electricity, appropriate sewer system, housing renewal or replacement hand in hand with NGOs involved mostly without providing land titles to settlers and where the land is mainly owned by the government.

From the start, informal settlers are always ‘trapped in the middle’ of a governmental policy of housing. Thus the poor have no opportunity to live in formal settlements, where apartments are available, so they have no choice but to ‘go informal’ and reside informal settlements for hard survival.

When Government contemplates upgrading projects for informal settlements, experts prefer the involvement of settlers in a participatory process of upgrading their shelters. However local authorities disregard providing land titles to settlers.

As a social result, a feeling of deprivation emerges from the urban poor towards the government due to lack of affordable housing for the poor. Therefore, most of the informal settlers reject any intervention or participation during the process of upgrading their settlements and due to the feeling of “an instant relocation” by the local authorities during the process, especially since the state does not seek a solution to grant land titles in informal settlements. Hence, informal settlements are prepared for instant relocation and demolition. This strategy could be positive when dealing with minor informal areas but fails to work out with major informal settlements.

So, how can we avoid the urban poor from “Going Informal” from the start? How can those responsible/concerned prevent the construction of new informal settlements and lay a strategy for new planned settlements adequate for the poor? Is there a way-out to legalize existing informal settlements acceptable to the government? These questions need to be answered. Two major problems were previously identified at the start of this paper as:
1. The Urban Poor prefer ‘going informal’ from the start due to unaffordable housing.
2. No Land titles are provided for the settlers (The Urban Poor) as a result of upgrading projects.

These two problems placed the Urban Poor in the ‘middle of a trap’ with ‘no way-out’ from such problems.

### Unaffordable Housing for the Urban Poor

Generally, there is almost no affordable and adequate housing for the Urban Poor within the housing schemes delivered by the government and the private sector except for units which could be provided for emergency cases such as post disaster.

About 20% of the existing population equivalent to 15.8 million inhabitants is affected by the problem with an estimated 275 thousand compelled to join the affected group each year if no housing solutions arise.

The Ministry of Housing with assistance of the private sector and the NGOs can aid reversal of the problem. The State has nearly a hold on all the desert land which is approximate to 96% of the country’s area and as well as some green land, in addition to the delivered subsidized and low cost housing schemes. Meanwhile the private sector represented by individuals and investors own the rest of the green land and mainly controls the real estate market in terms of rent and revolving ownership. NGOs have almost no impact on the housing market except for some previous trials. In Egypt, NGOs could be considered successful in social issues, which could be an initiative to draw such organizations in related issues for the Urban Poor namely is housing.

No particular solutions are presented by the actors, influencing solutions to the problem. Therefore the problem keeps persisting and increases each year and yet it is massive and needs different methods to solve it.

### Effects of Upgrading Projects:
### Depriving the Urban Poor of Titled Land

During the process of upgrading informal settlements, a few projects done by NGOs consider the right of land ownership for the settlers a must. However, due to the different rigid aims and policies of the state such as future relocation plans for informal settlements, some projects fail in introducing a participatory approach. There is mistrust between settlers and the State and other interested parties.

Almost 11.8 million inhabitants living in 1,172 squatter areas were affected by the problem in 1993 statistics. Nowadays, no accurate figures could be found to indicate the number of informal settlers living without titled land. From a personal observation, tens of squatters in Egypt face such a problem.

Nevertheless the State, the private sector and the NGOs can influence solutions to such a problem. The State has nearly a hold on all the desert land occupied by informal settlements. Meanwhile, the private sector such as individuals own most of the green land occupied by informal settlements.
The housing market in informal settlements is very limited and is not domi-
neered by certain groups such as the case of Nairobi, Kenya. NGOs have
impact on just the process of upgrading with no powers of intervention in
any ownership matters, dominated mostly by the state.

The problem mainly appears during the upgrading process where the
settlers seek a land title deed to secure their rights and not to fear any future
relocation by the state. In some upgrading projects, land titles are delivered
in the beginning of the process which creates happiness among who live
without complaints. Thus, they refuse to participate in an upgrading process
claiming that the State is to provide facilities and carry out the process inde-
pendently.

The problem directly affects the Ministry of Housing with its huge
amounts of money directed to financing the process of upgrading informal
settlements with even no titles for settlers. Therefore, starting a project for
the Urban Poor aimed to house them in a formal way is bound to save lots of
money instead of endlessly upgrading informal settlements with a known
outcome of ‘No Title of Land’ presented to informal settlers.

A Pro-poor Housing Scheme
To change and improve the existing situation, two timeframes could be
introduced, one as short term plans and another as long term plans.

Short Term Action Plans
The State should first recognize the Urban Poor group as a group that is
annually increasing and needs to be housed with proper housing schemes.
Some statistics are to be produced to identify the exact amount of the Urban
Poor located in each governorate showing its demographical figures. Since,
the 2006 National Statistics of Egypt will be announced in the beginning of
2007, this information is being prepared now.

The Ministry of Housing should study the launch of the so called EPHUP,
The Egyptian Programme of Housing the Urban Poor, using the Egyptian
media as the conduit for sending messages to all Egyptians explaining the
importance of the programme to house 275 thousand inhabitants among the
Urban Poor each year.

New types of NGOs are to be established and to be introduced to the real
estate market. Several other existing NGOs could be easily re-oriented, all
aiming to easing the process of housing the Urban Poor and to gain their
trust and obtain more control on land issues as well. These NGOs are meant
to work as facilitators between the state and the private sector from one side
and the Urban Poor from the other, almost to resemble the FUPROVI1
experience in Costa Rica. These NGOs should be non profitable organiza-
tions which could be later named NPO-HUPs (Non Profitable Organization to
House the Urban Poor) to be established and located in each governorate
and to locally cover the needs of the Urban Poor.

1  FUPROVI is an NGO operating in Costa Rica, introducing and implementing a
capacity building programme for the community.
Given that Urban Poor groups in each governorate are to register in one of the NPO-HUPs; explaining their existing situation, this would ease the process of NPO-HUPs having to track them in regard to location and size of units and priority of need.

A new tax decree is to be planned to support the programme of housing the Urban Poor by levying additional taxes on upper class rented units within the private market which will also be as a subsidy to partially cover land and construction costs.

A new decree is to be studied by the Muslim religious centres of Egypt to direct a percentage of ‘al-Zakat’², which is normally collected by registered centres each year, and could be directed to the programme of housing the Urban Poor.

Certain anomalies should also be checked to guarantee the success of the process such as bureaucracy and corruption.

**Long Term Action Plans**

After one year of a short term plan, and upon establishing NPO-HUPs to facilitate the EPHUP process, an agreement is to be constituted between the State and the NPO-HUPs to determine the role, duties and limits of each party. At least one NPO-HUP is to be established in each governorate to cover the needs.

From the start, NPO-HUPs will monitor the Urban Poor groups; register all identified groups according to their capabilities and needs with the support of the social security bodies in each governorate.

NPO-HUPs are to work as facilitators between the EPHUP, while under control by the state, and the Urban Poor. Such organizations – NPO-HUPs – will financially accept funds from the private sector within the new tax.

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² Al-Zakat: is the third of the Five Pillars of Islam in Islam. Zakât refers to spending a fixed portion of one’s wealth for the poor, needy, zakat collectors, people whose hearts need to be reconciled, slaves, those in debt, in the way of Allah, and the travellers in the society. There is a Zakat on self and Zakat on wealth.
Going Formal in Egypt

decree, taking shares of al-Zakat from all sectors according to the Islamic Sharia\(^3\), gaining land subsidy and proper land schemes from the state.

In addition, NPO-HUPs will cause proper land divisions along with the states' technical assistance, provide land entitles to future settlers, buy proper construction material and offer technical assistance for the project. Motivating the Urban Poor groups to search for their rights and to make sure that they are registered through the NPO-HUP network in the governorate they reside is fundamental. Also updates from time to time about their existing situation, needs and resources would encourage them to be aware that some payments must be made to obtain a new house, and use of personal skills would be needed during the construction stage within a self-help process of construction.

NPO-HUP will introduce new housing projects to house the Urban Poor starting with pilot projects with the aid of the experience from different housing approaches.

While going through different housing approaches such as the Conventional Housing or the Site and Services or even the Incremental development approach, wondering which could assist NPO-HUPs to operate in the Egyptian Housing market.

Therefore, this study has the honour to refer to a successful approach applied in Pakistan named ‘Khadaki Basti 3’ project, delivered by Saiban Consultants\(^4\), which could be a successful model to refer to while implementing housing projects for the Urban Poor in Egypt.

This project started with a different approach adaptable to the Egyptian context, culture and behaviour. The sequence of the approach adapted to the Egyptian context follows:

1 The People: starting with people could bring back the trust between people and organizations such as NPO-HUPs and make them feel that somebody cares! Bringing the Poor groups to their future land could encourage them to start preparing themselves for the process of construction and raise the issue of commitment as well, were there is no place for small investors.

2 The land: demarcating plots of land to each family to start housing themselves with any means strengthens the feeling of ownership and responsibility. The EPHUP is to provide subsidized land for each project for required governorates within its desert surroundings. Thus, the payback to the state presented by the local NPO-HUPs could start outer edge infrastructure execution at once.

3 Housing: constructing units for the Urban Poor with technical assistance is during a participatory approach. A revolving construction process from plot-to-plot is essential to guarantee a homogenous settlement. Technical assistance is needed in this step and which will be provided by NPO-HUPs.

\(^3\) Islamic Exotericism.
\(^4\) Khadaki Basti 3 project was presented in a network during the World Urban Forum III, Vancouver, Canada.
4 Infrastructure: provide the settlement with the proper infrastructure and facilities. Outer edge infrastructure will be executed by the state, while the inland will be carried out by the settlers with NPO-HUPs technical assistance.

5 Land Title Deed: Is the last stage of the process, where the deed not only is an ownership statement but also meant as a sort of reward for the success of the project.

Changes could occur to such a process according to each case. Essential obstacles are to be prevented during the process such as bureaucracy and corruption.

As a conclusion, extensively preparing the Urban Poor in each governorate to contribute in the construction of their own formal house and setting-up their needs (land, assistance, etc) certainly should prevent the start of new informal settlements and discourage the Poor from ‘going informal’.

Land titles are to be provided to new settlers after completing the construction process upon an agreement to assure commitment during the process and secure settlers rights.

**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPHUP</td>
<td>The Egyptian Programme of Housing the Urban Poor</td>
</tr>
<tr>
<td>GCR</td>
<td>Greater Cairo Region</td>
</tr>
<tr>
<td>GOPP</td>
<td>General Organization for Physical Planning</td>
</tr>
<tr>
<td>Mi.</td>
<td>Million</td>
</tr>
<tr>
<td>NPO-HUP</td>
<td>Non Profit Organizations to House the Urban Poor</td>
</tr>
</tbody>
</table>
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CIA

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GTZ


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Need for Partnerships in Kenya

Slum Upgrading Programme, Kibera, Nairobi

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Participation of all stakeholders in slum upgrading projects has greatly contributed to the success of such projects. This paper addresses the issue of participation in the Kenya Slum Upgrading Project (KENSUP) in Kibera, Nairobi, Kenya where participation especially of the community has not been felt. Suggestions as to how this could be done have been made, based on examples from various case studies of the world cited during the World Urban Forum III held in Vancouver, Canada in June 2006.
Kenya

Current National population of Kenya is estimated at thirty million. The population of Nairobi is estimated at 3 Million, 30% of whom live in slums and squatter settlements and occupy only 5% of the total land area. The latest population census conducted in 1999 established the following data regarding total population, number of households and density for both the country and Nairobi.

Table 1: Population

<table>
<thead>
<tr>
<th>Region</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>No. of Households</th>
<th>Land Area (sq km)</th>
<th>Density persons /sq km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>14,205,589</td>
<td>14,481,018</td>
<td>28,686,607</td>
<td>6,371,370</td>
<td>581,677</td>
<td>49</td>
</tr>
<tr>
<td>Nairobi</td>
<td>1,153,828</td>
<td>989,426</td>
<td>2,143,254</td>
<td>649,426</td>
<td>696</td>
<td>3,097</td>
</tr>
</tbody>
</table>


According to the census, the Kenyan population is relatively young with 44% being under 15 years old while 52% is between 15 and 69 years. The proportion of urban population has also been relatively low (10% in 1969, 15% in 1979, 18% in 1989 and 19% in 1999). 41.8% of the urban centres had a population of 20,000 to 99,999 while 25.4% had a population of 2,000 to 4,999 (GOK, 2002).

Fertility rate is estimated at 4.7 children per woman for the rural population and 3.36 for the urban population. Childhood and maternal mortality has been on the increase and life expectancy reduced due to the issue of HIV/AIDS. The health sector is also characterized by the re-emergence of diseases that had previously been under control like measles and tuberculosis; lack of access to and high cost of medical services especially for the poor and the HIV/AIDS epidemic (GOK, 2001).

During the period 1990 to 2000, Kenya experienced a declining economy whose GDP averaged 2.4%. In 2004 it stood at 4.9% and rose to 5.8% in 2005. The improvement of the economy during the last year was attributed to improvements in agricultural sector, trade, communication and transport. (GOK, 2006) Public expenditure has also risen especially in the sectors of health and education. The Government has rehabilitated health centres and also provided free primary school education leading to increased enrolment in primary schools.

Poverty however remains a big challenge with poverty levels being estimated at 50% of the total population, ¾ of whom live in rural areas. Incomes are unequally distributed. The poor have inadequate incomes, lack basic services and land, are unemployed, lack education and live in poor housing conditions. Despite such poverty levels, the urban poor spend more on services as compared to those living in formal housing.
Access to Shelter and Basic Services

In 1999, there were 10.5 million dwelling units\(^1\), 81% being in the rural areas where annual demand (Qualitative) is estimated at 300,000 units. In the urban areas, annual demand is estimated at 150,000 (quantitative demand). Yearly production urban areas is 20,000 to 30,000 (averaging about 15%), giving a shortfall of 120,000 units. The shortfall is mainly met through the mushrooming of slums and informal settlements.

Housing standards in Kenya are governed by the Building Code. It defines habitable space as two habitable rooms with a kitchen and only recognizes conventional building materials. Although habitable space is considered to be at least two rooms, most of the urban population lives in single roomed units. In Nairobi for example the proportion is 67%. Ownership is also more common in the rural areas where most residents own their houses as compared to the urban areas where most residents are tenants. In Nairobi 82% of the residents are tenants.

Densities are also high within slums and informal settlements and in some cases like Kibera go as high as 2,000 households per hectare.

The use of building materials varies from region to region depending on availability and appropriateness. The most commonly used walling material is iron sheets. Other materials are also used as indicated in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Kenya</th>
<th>%</th>
<th>Nairobi</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Sheets</td>
<td>4,042,543</td>
<td>63.45</td>
<td>434,542</td>
<td>66.91</td>
</tr>
<tr>
<td>Tiles</td>
<td>159,755</td>
<td>2.51</td>
<td>78,216</td>
<td>12.04</td>
</tr>
<tr>
<td>Concrete</td>
<td>156,199</td>
<td>2.45</td>
<td>107,477</td>
<td>16.55</td>
</tr>
<tr>
<td>Asbestos</td>
<td>93,635</td>
<td>1.47</td>
<td>21,640</td>
<td>3.33</td>
</tr>
<tr>
<td>Grass</td>
<td>1,521,007</td>
<td>23.87</td>
<td>455</td>
<td>0.07</td>
</tr>
<tr>
<td>Makuti</td>
<td>237,480</td>
<td>3.73</td>
<td>677</td>
<td>0.10</td>
</tr>
<tr>
<td>Tin</td>
<td>29,772</td>
<td>0.47</td>
<td>3,005</td>
<td>0.46</td>
</tr>
<tr>
<td>Other</td>
<td>130,979</td>
<td>2.06</td>
<td>3,414</td>
<td>0.53</td>
</tr>
<tr>
<td>Total</td>
<td>6,371,370</td>
<td>100</td>
<td>649,426</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: GOK, 1999 Housing and Population census.

Data from the census also indicate that 12% of Kenyan households used stone walling whereas for Nairobi it was 41.12%. The most commonly used walling material in Kenya was mud/wood accounting to 46.57%. In Nairobi it accounted for 9.92%. The second most commonly used material in Nairobi was iron sheets – 19.84%.

Basic services in Kenya still remain unequally distributed. Rural areas lack services like water and electricity. Nationally, only 30.6% of the population has access to piped water whose supply has deteriorated over the years due to poor management forcing the Government to move towards privati-

\(^1\) During the census, a dwelling unit was defined as a place of residence occupied by one or more households and with a private entrance.
zation. This has led to the introduction of water boards and companies to manage water supply in place of local authorities.

Pit latrines are the dominant form of human waste disposal method in both the rural and urban areas.

Although wood fuel is a threat to the environment, it is the main source of energy accounting for 70% of the users, followed by petroleum (21%). Electricity is still lacking in most rural areas and accounts for 9% of the users.

The main mode of transport is road. Most roads however were constructed in the 1960s and are in dire need of rehabilitation and maintenance. (GOK 2000). Tele density is low (Only 1.03 telephone lines per 100 people in urban areas and 0.16 lines in rural areas). This has however improved due to the licensing of mobile phone operators.

**Housing Policy**

The goal for the National Housing Policy for Kenya, Sessional No. 43 of July 2004 is to facilitate the provision of housing for all Kenyans. The Government plays the role of facilitator, catalyst and enabler.

The Housing Market is mainly driven by the private sector which provides the bulk of housing not only in the formal market but also in the slums and squatter settlements where most of the residents are tenants.

Kenya experienced a housing boom during 2004/2005 though housing developments were concentrated in the higher income bracket with costs of housing being over 4 Million Kenya shillings. It is estimated that these developments were worth over 15 Billion Shillings (GOK 2006).

The National Housing Corporation which is the Government arm responsible for housing construction has in the recent past constructed very few units, as indicated in the table below. This has not matched housing demand. These units have also targeted middle and high income brackets.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of units</th>
<th>Value (KSh Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2000</td>
<td>120</td>
<td>92</td>
</tr>
<tr>
<td>2001</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2002</td>
<td>173</td>
<td>449</td>
</tr>
<tr>
<td>2003</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2004</td>
<td>360</td>
<td>410</td>
</tr>
<tr>
<td>2005</td>
<td>319 (Under construction)</td>
<td>592</td>
</tr>
</tbody>
</table>


In line with the policy, a set of programmes have been conceptualised some of which are already under implementation. These include the Civil Servants Housing Scheme, the Kenya Slum Upgrading Programme, Rural Housing Improvement Programme and Tenant Purchase schemes. Other programmes proposed include the urban renewal programme, social housing and Site and Service schemes.
A major recommendation of the Housing policy is the need to have a comprehensive Housing Act. The process of formulating the draft bill started in June 2005. The draft has been subjected to stake holders and is in the process of being finalized for submission to the cabinet and Attorney General.

Conventional Housing Finance in Kenya is basically mortgage from mortgage financial institutions and commercial banks. This targets the high income and upper middle brackets. The rest of the population accesses finance through cooperatives and micro finance.

Poverty Alleviation

As a means of addressing the problem of urban poverty, the Government has embarked on a nationwide Slum Upgrading Programme (KENSUP) which aims at improving the livelihoods of 5.4 people living and working in slums and informal settlements of Kenya. Programme implementation has begun in Kibera squatter settlement in Nairobi where the population is estimated at over 500,000. The settlement is also said to be the largest slum in sub Saharan Africa. Majority of the residents are tenants (over 80%) while the rest are structure owners, some residing within the settlement while others live outside the settlement.

The programme adopts the principles of decentralization, sustainability, democratization, empowerment, transparency, accountability, resource mobilization, secure tenure, expansion and up-scaling, partnership, networking and gender. It cuts across various programme components which include preparation of city wide/town development and strategic land use master plans, provision of physical and social infrastructure, environmental and solid waste management, employment/income generation, HIV/AIDS and shelter improvement.

Actors in Shelter Delivery and their Roles

The Housing market in Kenya consists of various actors each with a critical role to play. The Central Government – Ministry of Housing is mainly concerned with policy, housing for Civil servants and slum Upgrading. Local authorities mainly undertake/implement housing projects within their areas of jurisdiction. Other players include NGOs (mainly focus on the low income), private sector (profits driven and in Kenya rarely engage in modest conventional housing meant for the low income).

The institutional setup of the Kenya Slum Upgrading Programme brings on board various stakeholders from inception to implementation. These range from the Settlement Executive Committee (SEC) at the community level comprising of elected representatives, the Settlement Programme Implementation Unit (SPIU), Programme Implementation Unit (PIU) – based at the City Council of Nairobi, Programme Secretariat at the Department of Housing, Joint Project Planning Team (JPPT), Multi Stakeholder Group (MSSG), Inter Agency coordinating Committee (IACC) and the Inter Agency Steering Committee (IASC) at the policy level.
Design

Physical Planning in Kenya is the responsibility of the Department of Physical Planning under the Ministry of Lands. Some planning is also done by local authorities under the delegation of the director of physical planning. Approval of building plans is done by the local authorities.

Lack of Communication Strategy

The institutions under KENSUP were meant to make programme implementation participatory. Through them it was envisaged that partnerships would be built with all stakeholders having a common vision and agreeing on programme implementation. However they have not worked and operated as originally expected. The expectation was that these institutions and stakeholders were to be involved in decision making, planning and implementation of the Programme. To some extent, some of the institutions have been involved and are still operational. However, others like the MSSG and the IASC have not met for a long time and hence their participation therefore is not currently really felt.

As a result of the lack of communication, there has been a lot of misinformation reaching the beneficiary community by stakeholders other than the Government. This could also be attributed to the lack of a definite communication strategy especially between the community and the Government, and not enough information on the Programme from the Government. This has resulted in speculation and mistrust from the community.

The paper seeks to address means through which the institutions will be revitalised and the slum upgrading process made participatory. By this, partnerships will be strengthened and a common vision achieved for all. This can only be done through effective communication amongst the stakeholders. Appropriate communication channels will therefore be suggested to open up communication amongst stakeholders through which participation and partnerships will be built.

Importance of Participatory Processes

The main problem is poor partnerships which is a result of lack of participation by all stakeholders and lack of communication.

All stakeholders are affected especially the slum residents. The link between the residents and the Government is poor and some stakeholders don’t seem to know what the other is doing. There is also a lot of suspicion amongst stakeholders, e.g. between civil society and Government.

The Programme Secretariat is charged with the responsibility of planning for slum upgrading and sometimes undertaking actual implementation. The secretariat works in collaboration with the PIU, SPIU and SEC and is the link between the Government and other stakeholders. The Secretariat is also implementing the Capacity Building and Communication components under
KENSUP which Sida, Kenya is supporting through the Integrated Land and Urban Sector Programme.

The Programme is a process and the problem can thus be said to occur throughout the process of planning and implementation and affects all levels. The problem exists because people are simply not talking to each other. Stakeholders are undertaking initiatives by themselves and not really working together as expected. Taking Kibera as an example, various organizations/stakeholders including the civil society, are still undertaking piecemeal initiatives without even consulting the Government despite knowing that the Government is undertaking the Kenya Slum Upgrading Programme through which initiatives by various actors will be coordinated.

There is also a lot of mis-communication/mis-information on the programme. The Government on the other hand is not communicating on the activities being undertaken.

The institutional setup doesn’t seem to be honoured. The MSSG which should bring together all stakeholders is not active and hardly meets to agree on several issues and hence give direction on the project/programme.

The problem of mis-communication/lack of communication has resulted in mistrust by the community who do not seem to believe in the Government initiative. It has also contributed to lack of participation and poor partnerships within the KENSUP organisational structure.

Addressing Communication and Participation

Based on the experiences presented during the World Urban Forum the following are proposed as ways in which the problem of communication and lack of participation would be addressed within the Kenya Slum Upgrading programme.

Community Involvement

There is no doubt that involving communities in projects from inception is key to the success of any project. In Orangi, Pakistan communities were engaged in the project from inception (identification of problems to implementation/management). In the project, the community identified sanitation as the main problem. They were trained in mapping and other upgrading related issues. The lessons drawn from this project revolve around community involvement – consulting communities for them to decide what is best for them, investing in a relationship between the community and authorities, both local and central. The project demonstrates that communities can undertake projects so long as they are organized, they take the lead and receive technical assistance.

Build Partnerships

Slums cannot be improved through single institution efforts but rather through partnerships between the communities and other key stakeholders.
In Bombay for example, local authorities have partnered with communities in improving slum settlements. Communities have been trained to collect information (mapping of their settlements) and designing for improvement in collaboration with the local authorities. In Mbabane, Swaziland, community involvement has highly contributed to sustainable developments. Community representatives like in India were also trained in mapping of the settlements. They also serve as an effective means of communication to and from the settlement.

Partnerships have also been implemented in areas of security to improve safety within the informal settlements. In Bombay, the community has been instrumental in community policing. With time the policing groups have done much more than policing and have engaged in social welfare. As a result crime rates have greatly reduced.

Slum Dwellers International (SDI) has been instrumental in promoting partnerships. SDI has played a critical role in 14 African countries where it is promoting partnerships to change relationships amongst stakeholders. Governments have partnered with slum dwellers with success. South Africa is a good example where SDI has played a critical role in assisting communities construct houses. Through lobbying by SDI, the Government of South Africa now supports slum dwellers financially. The critical issue is that SDI members take responsibility of their actions and partner with other stakeholders. Savings is a main tool used to mobilize and empower the slum dwellers.

Partnerships have also been promoted in the developed world. Canada for example adapts a participatory approach in funding infrastructure. There is partnership with users, municipalities and the private sector. The benefits of partnerships are that with stakeholder support projects can be up scaled and it is also easier to raise funds. However, participation is not a tradition in the public sector and the process needs patience.

**Encourage Savings**

Community savings have been an accepted means through which communities empower themselves in taking lead in improving their living conditions. Martha Kangue, a domestic worker and member of SDFN, Namibia gave an account of how the slum dwellers have been able to come together, save money, buy land, install infrastructure and construct their own houses. The Government of Namibia is supporting slum dwellers own houses in line with the policy of ownership rather than rental housing.

With the assistance of PRODEL, slum residents in Nicaragua have been able to identify their action plans, plan for projects and participate in overseeing the use of resources. All projects have an element of environmental sustainability and physical planning. The success of the projects was attributed to community savings that bind the people, a stable relationship between the local authorities, physical improvement like housing, mutual trust and the sense of ownership.
Adapting/Encouraging Cooperative Housing

Cooperatives have been found to control on the financial management of the cooperatives, promote mutual help and responsibility, adapt to real demand, utilize local resources and minimize speculation. In countries like Uruguay, Bolivia, Honduras, Brazil and Paraguay, the cooperative models have been adapted as a means of enabling the urban poor to access housing. A basic model is where Governments provide finance and supervision while the beneficiaries provide labour and mismanagement.

Affordability has been a major concern for the residents of Kibera. Based on prior experience, Kibera High-rise Flats were constructed with an aim of benefiting them, but this did not happen. The cooperative system of ownership is planned for beneficiaries in the Kibera project where it is expected that the residents will be able to mobilise finance through the cooperatives, save, access funding and own shares within the cooperatives.

Sensitize Communities

Dissemination of initiatives from other communities is critical for slum dwellers to learn what others are doing. Through exchange visits in India and South Africa, the slum settlement in Bale, Zimbabwe was able to learn and implement some of the lessons learnt. The group is determined to change the perception of crime in Bale and also improve their housing. So far they have been able to build 70 houses.

There is also need for consistent capacity building especially for mid level groups in both the central and local governments who in most cases are said to oppose such projects especially in regard to standards.

Adapting Innovative Finance Mechanisms

Micro finance was seen as the financial solution to the urban poor. Some of the experiences on the impact of micro-finance were drawn from Nicaragua and Guatemala. In Nicaragua, a beneficiary recounted how she had been able to borrow several small loans one after the other. Small loans are convenient as they allow incremental housing construction. However, loans should be accompanied with technical assistance to assist the urban poor improve/develop their houses and to ensure that the loans are used for the purpose they were meant for.

A micro finance supervisor in Nicaragua recounted how the poor borrow small loans of about USD 5,000 for 18 to 24 months. No collateral is required as in the cases of commercial banks. Repayments usually constitute 15 to 20% of the family’s income.

In Guatemala the poor have come together and formed groups in which they guarantee one another for micro finance loans for the purchase of land. The guarantee system ensures that borrowers pay for their loans. A team of technical experts supervise construction and give professional advice. Beneficiaries pay 3% of their loan as the professional fee. The head of the technical Unit, Guatemala reiterated that the main problem of working with the
Marion N Rono

low income is that they have no regular jobs hence no fixed incomes. He also observed that most of the beneficiaries of the loans were women.

Direct Support to Slum Dwellers

As noted by Lindiwe Sisulu, Minister of Housing, South Africa, poverty is a threat to humanity yet Governments are not giving it direct attention as it deserves. Donor funding committed to the urban sector is also limited accounting to only 2 to 12%. Urbanization too is also a big challenge to shelter development. For Africa, there is need to focus on the less privileged and support slum dwellers organizations.

In the Philippines, secure tenure and good governance were being integrated to address the housing plight of the urban poor. The massive relocation plan targeting 8,000 households and the Community Mortgage programme (CMP) are some of the initiatives undertaken by the Government to support slum dwellers.

It is worth noting however that a lot of capital exists locally and if well utilized would make a difference in the shelter situations. This would however require mobilization from the communities concerned and the local market.

Slum Upgrading in the Context of Urban Planning

African cities could be said to host two cities in one. Slums are cities within the city. Analysis from the World’s cities report indicate that countries that have had significant reduction in growth of slums have governments that are committed to slum upgrading, make use of local resources, undertake tenure initiatives and adopt strategies geared at achieving equity. There is no democracy however as to the way our cities are planned. The private good takes priority over the public. Inhabitants of slums in many cases are ignored in the development of City Development Strategies. Pedestrian walk ways/cycling spaces for example are omitted in urban planning in Kenya yet the majority of slum residents like Kibera walk or cycle to and from their places of work.
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UN-HABITAT
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Appropriate Building Technologies and Beneficiary Participation

Thiyagarajan S. Acharya

Architect, Projects Director for Planning Interiors Ltd, a leading design firm in Nairobi, Kenya. He is also an active corporate member of the Architectural Association of Kenya. He has been involved in various aspects of research and development of low cost housing in Kenya including the improvement of a prototype unit dubbed the *Shell of Steel*. The concept was nominated for an award at UIA World Architecture Awards, Berlin in 2002.

Kenya has a huge deficit in housing especially in urban centres. Moreover, 50% of the existing structures in urban areas are in need of repair/rehabilitation. There is a great need to identify Appropriate Building Technologies and materials and to emphasize a commitment to resource and energy-efficient building practices. There is even a greater need on the use of sustainable construction techniques which conserve natural resources and reduce long-term costs for homeowners.

This paper analyses some of the most currently used materials and technologies. The paper further proposes that beneficiaries be facilitated through training to participate in the improvement of their housing conditions.

Mavoko Municipality was identified by the Government of Kenya and UN Habitat as the pilot site for the Sustainable Neighbourhood programme in Kenya. The concept of sustainable neighbourhood housing emphasizes beneficiary participation and identification of housing construction technologies that are culturally acceptable and affordable.
Kenya

Kenya has a geographical area of 582,646 sq. km. The climate varies from the tropical south, west, and central regions to arid and semi-arid in the north and the northeast. The population (2002 est.) is 30 million. Annual growth rate (est 2003) is 1.7%. English literacy is 65.5%. The work force (1.7 million wage earners) proportions are public sector 30% and private sector 70%. The informal sector workers are 3.7 million. GDP (2003) figure is USD 12.7 billion with an annual growth rate (2004) of 4.3% and per capita income of USD 271.

Mavoko Municipality

The study project is situated within the Mavoko municipality in Machakos District, South of the Nairobi – Mombasa Highway. Machakos District has a population slightly below 1 million with 43% below 18 years. The district benefits from its close proximity to Nairobi. Mavoko covers an area of 693 sq km with an estimated population of 65,000. Of these 59.5% are male and 40.5% are women. The age distribution is as follows.

**Mavoko Age Distribution**

<table>
<thead>
<tr>
<th>Age group</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>10–17</td>
<td>1.2</td>
</tr>
<tr>
<td>18–23</td>
<td>14.3</td>
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<tr>
<td>24–29</td>
<td>26.3</td>
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<tr>
<td>30–34</td>
<td>21.6</td>
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<tr>
<td>36–40</td>
<td>12.2</td>
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<tr>
<td>41–46</td>
<td>11.0</td>
</tr>
<tr>
<td>47–52</td>
<td>6.1</td>
</tr>
<tr>
<td>53 +</td>
<td>6.9</td>
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</tbody>
</table>

Rural – urban migration has also resulted into rapid growth of the town surpassing municipal service provision hence accelerated growth of slums (informal settlements), strained services provision capacity and pressure on land for development, housing and infrastructure.

Athi River is the main town in the area hosting the head quarters of the municipal council offices and has grown into an industrial town. Industrial development has created high demand for residential land encouraging inflation, scarcity of land and corruption. This has resulted in 25 informal settlement villages mushrooming on the outskirts of the town. Fertility rate is 3.5 children born/woman (2001 estimate). Life expectancy is low 49 yrs. Infant mortality rate is 115/1,000. On average, there were 3.17 people per household and the range was 1–23.

About three quarters of the residents live on less than KSh 5,000 (USD 67) a month. This amount is not always guaranteed due to the employment and business patterns within the community. 76.8% of households had incomes below KSh 5,000 while 23.2% had income over KSh 5,000.
The town is covered with the establishment of the Export Processing Zone (EPZ) and 40 other industrial entities such as flowers, horticulture, milling, distillers, ceramics, mining, “Jua Kali”, carpentry, tinsmiths, repair works, etc. Hawking is also common.

Most of the residents lack formal education and depend on small businesses and material production for their livelihoods. The residents live on an average monthly income between KSh 3,000 and 5,000. Athi River is the main town in the area hosting the municipal council offices and has grown into an industrial town. The collapse of the Kenya Meat Commission (KMC) caused a labour crisis and upsurge in poverty. Over two thirds of the respondents pay their rent from salaries. These were followed by nearly a third who pay from their business proceeds.

It was apparent from a Leakey bucket analysis that expenditure was more than income. Most of the expenses were on food.

Access to Shelter and Urban Services

As per the 1999 Population & Housing Census, the total housing stock in Kenya stood at 10.5 million dwelling units – 18% of these were in the urban areas. 75% of the households in urban areas live in rental housing, whereas in rural areas 87.3% of households own their houses.

The average urban annual housing demand is estimated at 150,000 units, and supply is about 25,000 units, resulting in a deficit of 125,000 units.

Persons per room vary from a low of 1.06 to a high of 3.94. About 67% of households in urban areas live in single rooms. Nairobi median household size is 2.2. The sizes of the single rooms are 10x10 feet without windows and or specific ventilation. Majority of the residents bathe within the same room that they live due to lack of toilets and bathrooms. The majority of residents have lived in Mavoko for over 5 years, followed by a quarter that have resided for over 10 years. 9% have resided for between 1–2 years.

88% of the community members were tenants. Squatters constituted 6.0%. The average rent for one roomed 10x10ft structure was reported as Khs 500–1,000 per month.

Structure owner/Allocated land and structure owner/Private Land comprised 4.4% and 1.3% respectively. Those that were purely landowners constituted 0.3%. Rent-to-income ratio is 10–20%.

The construction materials for the structures range from grass, mud, carton boxes, sticks, ropes, nylon paper, iron sheets, wood, blocks and bricks. Two thirds of the structures within the informal settlements are constructed out of old pieces of iron sheets. About 18% are made of stone blocks, 8.4% out of carton boxes and 3.1% out of pieces of old wood, 2.8% out of mud while 1.7% out of plastic sheets.

In the majority of the villages clean drinking and cooking water was an issue of great concern. Although about 74% of the respondents have access to piped water system, congestion at the water collection points and the cost of water were the major impediments to accessing water. 16.4% of the community members had access to borehole water while 15.8% of them had to buy water from vendors and 12.1% use river water. Athi River is the
main source of fresh water for domestic use although it is heavily polluted by the numerous industries within the municipality and the dumping of household and human waste in the river by residents from villages.

The municipal sewer lines that run through some of the villages are blocked causing extreme deterioration of the sanitation conditions within these villages and hence a health hazard. These conditions get worse during the rainy season when the sewer overflows to the surrounding shelters.

In the majority of villages, 70% of the households have access to a pit latrine. Where existing pit latrines had filled up or collapsed and the land owners had refused the residents to dig other pit latrines, some of the community members are left with no other option but to use the bush. There is also the 'flying toilet' phenomenon as in Kibera which is more prevalent in the large settlements.

In all the villages, garbage was an eye sore due to the glaring absence of designated garbage disposal sites and collection mechanisms. 65.2% throw their household waste in the open environment while a quarter burns it. Most of the residents seemed to feel that cleaning their compounds and collecting garbage was a job for the municipal council.

Electricity was only present in some of the houses within Old Mlolongo, Bondeni, Sophia and KMC villages. Most of the homes use paraffin lamps, tin lamps, wet and dry cells, batteries and candles for lighting while charcoal, firewood and paraffin stoves are used for cooking.

Road network within the majority of the settlements is notably absent exposing the residents to insecurity due to inaccessibility of vehicles.

Religious centres 80.6%, toilets 72.7%, water points 67.7%, schools 62.6%, health clinic 44.1%, roads 35.8% and garbage sites 10.6%. There is no social hall within the municipality.

Telephone lines are only accessible in some houses within Old Mlolongo and KMC who are within the central commercial areas.

**Primary Health Services**

A very high prevalence of respiratory complaints and gastrointestinal problems signify that improvements in air pollution reduction, drinking water provision, and waste management in slums can lead to more significant and sustainable improvements in health status than just simple treatment.

Over 90% of residents seek treatment in municipal council clinic and/or government hospital. This means that most of the community members have to travel long distances for medical attention. Private clinics are only present within the town centre more specifically in KMC and Old Mlolongo. The district hospital is located in Machakos town approximately 20 kms from Mavoko. About 1% of community members sought medical treatment from local herbalists/witchdoctors who are resident within their villages.

**Existing Housing Policy**

The overall goal is to facilitate the provision of adequate shelter and a healthy living environment at an affordable cost in order to foster sustainable
human settlements. The Government undertakes to facilitate the sector to meet the annual housing demand of 150,000 units.

There is a low level of investment by both the private and public sector. The market is also adversely affected by inaccessibility to land & finance, stringent planning regulations, restrictive building standards, high cost of infrastructure, poor economy and increased poverty.

The common regulatory tools are rent restriction act, landlords & tenants act, building by-laws and housing act. Low interest mortgage schemes for civil servants, services land programme etc. The Government will facilitate both private and public sectors to assist their employees to acquire housing in accordance with the Employers Ordinance Act in recognition of the fact that an adequately housed labour-force generates higher productivity. Upgrading of informal settlements and slums has been accorded high priority.

Financing/Funding Schemes

The Government is keen to develop the secondary mortgage market, increase co-operative housing schemes and provide an enabling environment for the private sector to invest in low cost housing.

Most of the urban population cannot afford to build housing that conform to the proposed Municipal building codes and standards which very often have been unresponsive to new building technologies and affordable building materials. Furthermore, the complicated building by-laws, planning regulations, protracted approval procedures, insecurity of tenure and limited access to credit for the urban poor further compound the housing problem. Therefore, these have led to the increase in the population living in the informal settlement to more than those living in the formal residential areas.

The Need for Appropriate Building Technologies

There is a great need to identify Appropriate Building Technologies (ABT)/materials and to emphasize a commitment to resource and energy-efficient building practices. There is even a greater need on the use of sustainable construction techniques which conserve natural resources and reduce long-term costs for homeowners.

Although some of the settlements are not densely populated, it was evident that there is poor planning in construction of the houses. There is lack of uniformity in shelter construction because they vary as per the landlord’s desire. Most houses in these settlements are built using wood, iron sheets, polythene papers, mud and poles for both roofing and walls. A few houses have been built with masonry stone and clay roofing tiles.

Kenya is a developing country facing increasing poverty, higher costs and greater demand for conservation of natural resources. The use of alternative or revived traditional methods of construction to improve the housing of people in informal settlements in urban areas is becoming more and more important. Performance based building codes should be developed to
accommodate the diversity of construction methods. This will satisfy the
regulators and conservationists while providing improved cost effective
housing. Building materials and construction techniques have environmental
impacts that can be minimized. Low cost appropriate building materials and
technologies will merge sound environmentally responsible practices with
economic and social aspects of a built project as a whole. The use of per-
formance based building codes to assess materials or systems that are
currently non-standard construction practices can be used in any country
taking local considerations into account.

There is a great need to **identify & disseminate** Appropriate Building
Technologies (ABT)/materials and to emphasize a commitment to resource-
and energy-efficient building practices. There is even a greater need on the
use of sustainable construction techniques, which conserve natural resour-
ces and reduce long-term costs for homeowners.

The problem is universal to all informal settlements in Kenya. Since the
ecological footprints of these settlements extend far beyond their bounda-
ries, they affect the entire Nation. The problem is augmented by the top-
down approach in design of new settlements which does not involve the
considerations and input of the end-users (the urban poor) at the grass roots
level. It is important that an inclusive and participatory approach is adopted
in the design of the houses. Self-help housing methodologies need to be
adopted to lower construction costs for both the dwelling units and services
infrastructure development. Most dwellings are landlord owned and mainte-
nance is almost non-existent. The landlords are faced with poor non-durable
houses that have a very short life span and often require re-building after
they collapse.

The tenants live in deplorable conditions with little or no protection
against the elements of nature. Indoor conditions are often unhealthy with
poor ventilation, lack of insulation and lack of security. Temperatures are
unbearably hot or cold depending on the external weather leading to
frequent poor health.

UN Habitat, the Government of Kenya, LGU, Private sector and most
importantly the local inhabitants of the informal settlements can influence
the improvement in the construction techniques and use of appropriate
materials. The ultimate wish for every urban resident is decent housing. This
can be achieved with municipalities in close collaboration with the
inhabitants and assistance from the private sector. A key strategic approach
is to strike a balance between community-based self-help projects and
centrally funded programs implemented by municipalities using contractors.
The application of alternative building technologies and material (ABTs) in
the country by the said authorities and other partners is almost non-existent
with the exception of a few demonstrational initiatives by NGOs where a
greater proportion of these demonstrations have not been replicated or
scaled up. Almost all of the permanent houses in the urban areas are built
using conventional building technologies and materials. Mechanisms to
empower communities and authorities to recognize and promote ABTs have
been largely left to a few NGOs thus limiting the momentum needed for
families to invest in well constructed houses. The influx of large number of
people overwhelms the urban centres and cities in the country leading to the development of slums and other informal settlements where temporary houses are constructed.

The problem is inherent and exists since the beginning of the informal settlements. The principal reason is lack of knowledge and is also driven by poverty. The residents of these informal settlements live in continuous fear of eviction due to lack of security of tenure leading to a lack of commitment to invest in decent housing. A scooping survey by an NGO looked into the validity of the settlement and the land ownership issues. It emerged that the council leases the land out to some individuals. These people then erect the structures for tenants to live for a monthly rental income. The residents though are not sure if this type of ownership is private or municipal council. This being the case, housing conditions in these settlements remain sub-standard as the squatters perceive that there is a threat of eviction. This has led to minimal capital investment in their housing because their land tenure is illegal. The most difficult impediment to reform in the housing sector has been the issue of access and rights to land.

Another crucial and common shortcoming in the housing sector is the inadequacy and limitations of housing finance mechanisms. Conventional housing finance usually works in favour of middle and high-income groups. The poor, low- and even middle-income majority of the population in most urban residents more so in the informal settlements cannot afford a loan even for the least expensive commercially built housing units.

The conventional construction practices are unsustainable, unaffordable, and result in depletion of natural resources. The temporary shelters need to be upgraded with ABT through a participatory approach. Locally produced building materials will support small-scale suppliers thus improving the livelihoods of the residents as well.

**Review of Existing Materials**

This is intended to provide general knowledge and applicable guidelines for use and implementation of ABT. Appropriate technology is technology that is most appropriate to the environment and culture it is intended to support. It is suitable for use in developing nations or underdeveloped rural areas of industrialized nations, which may lack the money and specialized expertise to operate and maintain high technology. In practice, it is often something that might be described as using the simplest and most benign level of technology that can effectively achieve the intended purpose in a particular location.

Low cost and low maintenance requirements are of prime importance. More frequent maintenance can be considered appropriate, if the maintenance can be done with locally available skills, tools, and materials. It is usually “appropriate” to use only technologies that can at least be locally repaired.

Features such as low cost, low usage of fossil fuels and use of locally available resources can give some advantages in terms of sustainability. For
that reason, these technologies are sometimes used to promote sustainability.

The following ABTs are applicable within the context of Mavoko municipality and can be divided into two main categories: walling and roofing materials. Under walling materials the construction technologies analysed are Hollow Concrete Blocks, Walling Panels & Pillars, Stabilized Soil Blocks (SSBs), Rammed Earth Blocks and Hydraform technology. For roofing technology, Micro Concrete Roofing tiles and Ferrocement roofing technology are the two options analysed.

**Hollow Concrete Blocks**

Concrete Block Technology offers a faster and cost effective alternative to conventional walling material. It is based on the principle of densification of a lean concrete mix to make a regular shaped, uniform, high performance masonry unit. Concrete Block Technology can be easily adapted to suit special needs of users by modifying design parameters such as mix proportion, water/cement ratio and type of production system. The saving made by adopting this technology is based on the material saved from the hollow parts.

Features of Concrete Block Technology: cost effective compared to other conventional walling systems, structural performance can be engineered, decentralized local production, offers business opportunities, suitable for walling.

**Concrete Pillars and Panel Walling**

There are three types of concrete pillars currently being produced namely; corner post, T-post and straight post also known as joint. These pillars are fitted with electric conduits, sockets and switches as required by the builder. The pillars are reinforced with y-16 steel for tensile strength. The pillars are designed for various applications namely; corner pillars or corner posts, joint posts for wall extension and T-posts for room sectioning. Each end of the posts is provided with extension of steel wires (Y-16) for the lintel and holding to the trusses. These pillars have grooves where the panels are slotted in before mortar is applied for fixing the panels to the pillars.

These are reinforced concrete panels for walling. The external walling panels are keyed while the internal panels are flat. The affordability of this technology is estimated at 40% less than the conventional quarry stonewalls. This technology doesn’t require plastering as a wall finish neither does it require other activities like surface dressing as in the case of quarry stone. The walls are also thin with the same properties as conventional walling technologies. A lot of demonstration houses have been constructed around Kitengela. The panels have grooves for interlocking with each other thus making the whole construction process faster. The ends of the 1.8 m lengths are slotted into the pillar grooves before application of mortar.

Other related benefits of using pillar and walling panels are costs: 40% less than conventional construction technologies; one bedroom = KSh 583,300; two bedrooms = KSh 699,100 while three bedrooms = KSh 981,060.
They are flexible to design and customer tailored, and they are easy to install and environmentally friendly.

Earth Based Building Technologies

Stabilized Soil Blocks (SSBs)

Stabilized Compressed Soil Block (SSB) Technology offers a cost effective, environmentally sound masonry system. The product, a stabilized Compressed Soil Block, has a wide application in construction for walling. SSBs are manufactured by compacting earth mixed with a stabilizer such as cement or lime under a pressure of 20–40 kg/cm² using a manual soil press. The production of SSB is based on the principle of densification of raw earth mixed with stabilizer (cement or lime) in small quantities ranging from 5–10% by weight of the mix.

The primary raw material for the production of SSB is raw earth or soil. Cement in small quantities and water are other constituents. Coarse sand or stone dust may be added depending on soil quality. Soil is made up of grains of various sizes. The grain size distribution of a soil determines its suitability for the manufacture of SSBs. The equipment used in SSB manufacture defines the shape and size of a block. SSBs can be used for load bearing construction up to 3 storeys. The cost of a block depends upon a variety of factors including quality and price of available soil, amount of stabilization, labour productivity, equipment and overhead costs. The degree of stabilization has the maximum influence on the cost of the product. With procedurally done SSB process, the cost effectiveness is 40% of conventional materials after stabilization.

The unique features of SSB are: low energy and emissions, uniform size, high strength, thermal insulation, versatility and cost effectiveness.

Rammed Earth Blocks Technology

Rammed earth construction is achieved when soil from the site is mixed with proper proportions of clay, sand, water, and cement. The earth is then tamped into reusable forms to fill walls between concrete frames, foundations, and bond-beams. This ties the structure into a frame. For a strong and durable rammed earth wall, the soil should be a well-graded blend of different-sized particles. All the air spaces should be eliminated to increase wall density, which ensures the wall strength. Some of the advantages of rammed earth as a building material are: earth is a local material, contributing to sustainable development; production of the building components demands a lot of semi-skilled manpower; the technology is easily adaptable and transferable; monetary and environmental costs are much lower than that of most other materials and the thermal comfort and internal atmosphere are very positive.

Hydraform Technology

The Hydraform building system replaces the conventional bricks and mortar by using Hydraform blocks. Hydraform system is largely a dry stacked,
interlocking masonry system that enables speedier construction of high quality, aesthetic and affordable housing. The blocks produced are of the highest quality and can be used to build security walls, houses, schools, churches etc. The walls may be left exposed, plastered or finished with cement paint. Its thermal quality can be up to 3 times better than conventional brick masonry.

The blocks are made by Hydraform machines using Cement-Sand, or Soil-Cement (compressed Stabilized Earth Blocks) or Stone Dust-Cement. The block strength is determined by the soil type, quantity of Cement used and other materials used and the extent of curing after manufacture of the block.

Specific training areas to make soil cement blocks with Hydraform technology:

- Raw material Selection
- Guidance in Soil Testing
- Mix design
- Block Production
- How to get Optimum Block production output
- Block testing for strength and essential technical parameters
- Hydraform interlocking Construction technique.

This is a product with high finish design & aesthetics, cost efficient and environment friendly – no burning of bricks required, Hydraform Blocks are interlocking, thereby saving time and money in laying them. Hydraform Blocks are produced on-site where the structure is going to be built; therefore there is no need to transport bricks to site. Hydraform Blocks are made from the local soil and only cement needs to be transported. The Hydraform Blocks are face brick quality and easily laid by a semi-skilled worker, no need to hire a costly mason.

Quarry Stones

Quarry stones are extracted from a number of locations in and around Mavoko municipality. The main quarries supplying the area are in Kinanie and Ngurunga, the latter falling within the Ole Kejuado County Council jurisdiction.

Middlemen, commonly known as 'brokers', largely control quarrying. They buy concessions to quarry the stone from landowners who own land within which the quarry lies. They then extract and cut up the boulders into various market sizes. The cost of quarry stone extraction varies across locations. The main component of cost differentiation is ‘loyalties’ paid by the brokers to the landowner. These are negotiated either on a piece rate basis per truck carried out of the quarry or as a flat rate for a time interval. Stonecutters then move in to cut up the boulders into market sizes using hammers and chisels. Stone cutters are paid on a piece rate basis averaging 7.50 shillings per foot of stone cut.

The stone is then laid out ready for collection by transporters. The price of stone delivered to a construction site within the municipality averages 12–
13 shillings per foot, inclusive of transport charges. Upon delivery to a building site, the developer may employ stoncutters to refine the rough cut stone to smooth finish. Different refinements are available depending of the preferences and budget of the developer.

Masons within the municipality are involved in all stages of quarry stone extraction, finishing and laying. Most masons prefer laying work as they consider stone cutting to be physically demanding. However, good stone dressers can make up to KSh 800/= per day depending on feet dressed and piece rate.

**Mud Bricks**

These bricks are preferred for low cost housing where the developer wants an aesthetically and structurally superior structure than can be provided by mud plastered houses. Mud bricks houses also have a smoother finish than mud plastered houses. They are easier and cheaper to plaster using cement mortar and provide a pleasant and durable finish. Production of mud bricks requires little specialist knowledge.

**Fired Mud Bricks**

Fired mud bricks are an upgrade from plain mud bricks and they provide a more durable finish. After curing for 7 days, the bricks are staked up with airways in between. Some of the air ways are filled with firewood. The bricks and wood are then covered up with grass and soil with a few holes for ventilation. The wood is then lit up and the kiln burns for 24–35 hours after which the covering soil is removed. The bricks are finished to a beautiful red colour. Brick firing is a very specific art, if done improperly; the bricks will be ruined by improper firing and soot.

Considerable amounts of firewood are needed to fire the bricks. Firewood is very expensive in the locality and the fired bricks cost between 7–10 KSh. Consequently, few locals can afford them. With increasingly scarcity of wood in the area, firewood has to be bought from further away and costs more. This puts the fired bricks beyond the reach of most community members.

**Mud Plastered Walling**

This is the cheapest indigenous walling material. It consists of a framework of slender saplings filled with mud plaster. Some residents use sisal poles to for the framework. These poles grow out from the centre of an overgrown sisal plant and retail for about 15 shillings a piece. The poles are locally available in the abandoned sisal plantation that surrounds the settlement.

An improvement to the basic mud plastered wall is the use of spit sisal poles to sandwich the mud wall. This gives a more durable finish as the mud does not easily fall off. However, this costs more due to the cost of the additional poles.
Sisal Pole Walling

This involves building a wall of sisal poles nailed closely together. This type of construction is rare, and is almost exclusive to Kimongo. Owing to the cost of the poles, this type of construction is mainly used to construct grainaries and stores.

Corrugated Iron Sheet Walling

Corrugated iron sheets are popular for the construction of low cost rental housing. This type of construction is rapid and a good carpenter can put up an entire two-roomed house in a day. The iron sheets are nailed to a wooden framework, which constitutes a sizable fraction of the total construction cost. The iron sheet is also used for roofing the same house. Iron sheets are easily available within the township in the Makadara locality. The wooden framework is typically made of 2”×2” planks which costs 12 shillings per foot. Pine and cedar poles are used for the corner poles, each costing 170 shillings for a ten foot long pole.

Assorted Materials

These include odd materials used in the construction of informal housing. Scrap wood is available from used packing cases in factories around the town and from discarded wood at construction. Polythene sheeting is available from flower farms where they were used for greenhouse walling. Slum residents have to pay a small ‘fee’ to the watchman. Cardboard and cartons are also used. Metallic drums (Barrels) are used as walling and roofing materials, though these are becoming costly and scarce as plastic barrels are used more for storage and transportation of industrial chemicals.

Roofing Materials and Technologies

Micro Concrete Roofing Tiles

MCR tiles are a cost-effective and extremely versatile roofing material which can be used on steel and wood under structure to make attractive roofs. It is waterproof hence suited for areas with heavy rainfall. Its aesthetic appeal and ability to soundproof are added advantages. It has been used in cost effective housing and is ideally suited to replace fired clay tiles. The Micro Concrete Roofing Technology in Kenya has been validated by the Kenya Bureau of Standards (KEBS) and has approved standard specifications. Micro Concrete Roofing (MCR) tiles are made from a carefully controlled mix of cement, sand, and water, which is then vibrated to eliminate air spaces while improving its strength.

MCR tiles offer many advantages over other sloping roof materials such as G.I. sheets, slate and asbestos. Micro Concrete Roofing (MCR) tiles besides being ecologically and economically viable solution for roofs are highly cost effective, as durable as concrete, lighter than other roofing tiles and require less understructure, easily installed, can be coloured to
specification, reduce heat gain, quiet noise during rains, can replace other roofing materials such as clay tiles. There is a decline in production of burnt clay tile due to increasing energy costs.

**Ferrocement Roofing Technology**

Ferrocement technology for roofing produces roofing materials commonly called channels. They are produced on specially designed vibrating tables and profiled moulds from optimised proportion of cement, sand and water which provides them with high structural strength. Ferrocement roofing technology offers a viable alternative to conventional flat roofing systems. Ferrocement roofing channels have a uniform segmental profile; they are 2.5 cm thick and 83 cm wide. Maximum length of mechanically produced channels can be up to 6 metres.

The advantages of Ferrocement channels include: fast construction – prefabricated channels enable one to construct a roof in just 3 days; requires no shuttering ensuring 30% cost saving over other roofing technologies, has less dead load on the walls, high strength to weight ratio and elegant profile and uniform size. Ferrocement technology is a highly profitable business for small scale building material producers or construction companies because of its semi-mechanized production system, which assures a higher turnover per annum.

**General Benefits/Costs of Earth Based Building Materials**

Earth material walls provide good soundproofing and thermal mass properties. Because the major material component (soil) is derived from the site, building material costs are lower than conventional techniques. Insulation may not be necessary depending on the climate and site orientation. A well-built wall will survive the test of centuries. However, the method is labour intensive (employment creation) and may require special equipment and craftsmen.

**Opportunities for Small Businesses**

Ecomaterials production and use have the potential of creating small enterprises thus contributing to the economic dynamism of the local building materials market. Stimulation of local economies is a direct contribution to the process of development.

**Proposed Way Forward & Guidelines**

**Limitations of ABTs**

The housing deficit in Kenya can rightly be termed a chronic situation. For example in Nairobi alone, the capital city, over 60% of the population live in dwellings built within the informal sector. The public perception may not
accept earthen buildings in some regions. More familiar technologies like masonry stone technologies are viewed as being superior.

Lending, insurance and code requirements are prohibitive in most instances. The building code, despite the modification in 1995, is one of the major constraining factors for building affordable and progressive housing. The Building Code does not address rammed earth and adobe structures although some local authorities may allow the technique or allow the procedure subject to engineering approval. Apart from the SSBs and Rammed Earth technologies all the other technologies have standards against which they are tested.

High construction costs for conventional methods, poor planning in construction of the houses and lack of uniformity reinforces the need for ABT.

Adobe and rammed earth construction are an insignificant percentage of the residential construction market in Kenya. Experienced labour may be unavailable for these specialized techniques in some areas of the country apart from people trained by NGOs and a few private companies that are beginning to come up.

Training and Skills Development

Availability of skilled labour is an important factor in achieving the main objectives of promoting alternative building materials while making people more employable or helping them to become self-employed. There is a general shortage of skilled builders with know-how on ABT. While it is important to note that the NGOs have been very instrumental in the introduction of these technologies in many areas in the country, the lack of coordination and partnership between the NGOs and the public-private sectors have hindered the scaling up of these technologies. Little emphasis has been made on equipping the trainees especially those in the building sector with the skills necessary for developing and expanding ABTs. This emphasizes the need for large-scale organized efforts to develop technical and entrepreneurial skills in the unemployed sector of the community with the aim to make them active and productive units of society.

The training should focus on enhancing production of ABTs as small-scale business enterprises as it addresses their livelihoods concerns. The scan survey revealed that apart from concrete blocks most of the domestic builders have no skills on the other building technologies. Although the NGOs may have the skills, this precious knowledge ends at the demonstrational stage i.e. there are no entrepreneurs to develop, expand and promote both the production and usage of these ABTs.

These technologies can be considered only as a guide and decision-making on the type of house needed by occupants should be a consultative process prior to construction.
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Regularization of Informal Settlements in Tanzania

Improving Urban Poor Environments in Dar es Salaam

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Under the Structural Adjustment Programmes (SAPs) in 1980s and 1990s, the urban agenda was characterized by the following features. The role of governments was restricted to the efficient functioning of commercial housing markets; the private sector played a prominent role in the development process; and the urban poor were basically treated as a target population or as recipient of aid. In 2002, the Slums/Unplanned Settlements target was incorporated into the International Development agenda.

The purpose of this paper is to identify sustainable interventions, regularization measures and infrastructure improvement of informal settlements that have been undertaken so far by different stakeholders in Dar es Salaam, in Tanzania.
Slum Settlements

Slums are defined as physical and spatial manifestation of increasing urban poverty and intra city inequality\(^1\). These settlements are characterized as either areas of hope “new self built structures” or places of “despair” (declining neighbourhoods, undergoing degeneration). Typical slums in Developing countries are Unplanned Informal Settlements, where access to services is minimal to non-existent and where overcrowding is the norm.

It is said that more than two billion people are living in urban areas of developing countries and the figure will double over next 30 years to come. This increase will push the number of urban dwellers to approximately half of the world’s population. It is estimated that 26% of the global population are urban population from developing countries, with unplanned urban dwellers being over 78% of the urban population. In 2001 the UN Habitat established that there were 924 million slum/unplanned settlements dwellers in the world and that without significant intervention to improve access to water, sanitation, secure tenure and adequate housing this number could grow to 1.5 billion by 2020.

The declaration of the first Habitat Conference in Vancouver, Canada in 1976 attributed full responsibility to governments to prepare spatial strategy plans and adopt human settlements policies focusing on the shelter needs of vulnerable population. Government controlled institutions were given leadership role to plan and execute settlement programmes for national, regional and local development. Recently, there was a dramatic shift in government attributes on providing services and housing to the urban poor. Centralized interventions were perceived to be bureaucratic planning methods that used top-down approaches and public institutions were considered as inefficient structures. The new paradigms shifted the role of governments from “provider” to “facilitator”. This new role should concentrate in removing production and legislative bottlenecks, including the obstacles faced by inhabitants to get access to land, finance and basic services.

Tanzania

The United Republic of Tanzania is in East Africa. It has 26 administrative regions, 21 from mainland (Tanganyika) and 5 from Zanzibar. Tanzania has a tropical climate, with cooler highlands temperature which ranges from 10–20° C (Tanzania National Website). The 2002 census revealed the population of Tanzania to be 34,584,607 and total population growth is 1.83%. According to 2000/2001 household surveys, the household size is about 4.9 (World Fact Book Tanzania, 2006).

The rate of urbanization was estimated at 6%. Population Density – average 39 persons per km\(^2\) at national level, urban areas such as in Dar es Salaam is 1,793/km\(^2\). Per capita Gross Domestic Product (GDP) of Tanzania is USD 251, and that of Gross National Product (GNP) is estimated at USD 246.

\(^1\) According to UN Habitat Definition.
About 2% of the total business/entrepreneurships is practised legally and 98% of the total business is practised extralegally (MKURABITA, 2005).

In Tanzania, about 84% own the houses they live in, (Household Survey, 2000/2001). In year 2000 the housing backlog was estimated at 2 million units. Room occupancy is estimated at 2.4 persons per room (Household Budget Survey, 2000/2001). A formal housing sector provides a set of regulations and standards to be followed by the land tenant. All the standards have to be reached in 3 years time (one among the lease condition is that the leasee must develop the leased plot in three years time). Between 40% and 70% of urban dwellers are residing in informal settlements (Kyessi, S.A, 2006). Also, 14% of owned houses have the owner occupier of the house, 13% owner household sharing the house with tenants, and total units rented is 17%. Housing affordability ratio: a study by WAT indicated that a person saving Tsh 20,000 per month (USD 1 equal to 1,300 Tsh June 2006) will take about 10 years to build 2 rooms of 25 m².

Formal land acquisition is the procedure whereby surveyed plots are acquired through long and short term leases from the government. The plots are not necessarily serviced (with the exception of the sites and services project, and 20,000 plots pilot project). Informal land acquisition is acquiring pieces of land from individuals. The pieces divided by the owner/seller considers few/none of the town planning ethics and codes of conduct.

In many urban areas, many people opt to construct houses rather than renting. Housing construction is taking place whether in planned or unplanned areas. Building materials used may be modern or temporary. The modern material costs contributes to an approximately 60–70% of the total construction costs.

Only about 42% of rural and 85% urban households have access to protected water. 93% of Tanzanian households use toilets. Drainage is lacking in most of the urban areas (except for regional roads and few other roads). Waste disposal (solid) is commonly practised in inner urban areas, and some very few areas far from the city centre. No solid waste collection is done in rural areas. Liquid waste is either by central sewer, or disposed in oxidation ponds, or using septic and soak away pits. In rural/peri-urban areas, pit latrines are mostly used. About 12% households use electricity in Tanzania. Other sources of energy are firewood, kerosene and gas.

Many urban residents use public transport while very few use their own cars. Sources of transport are by air, railways, buses/taxis, and by waterways.

Housing Policy

Tanzanian Settlements Development are guided by the National Human Settlements Development Policy, Town and Country Planning Ordinance Cap 378 and Town Planning Space Standards 1997, Township Ordinance cap 101, Government Notice No. 678 of 4th Dec, 1964, National Land policy, Regional Administration and Local Government Act 1997, National Environmental Policy 1997, the Land Act no.4 of 1999, to mention just a few. The policies have helped the provisional of serviced land (for example 20,000 plots supervised by the Ministry of Lands), planning and building regulations
and standards to be followed, upgrading and/or providing infrastructure services in planned and unplanned areas, to mention just a few.

The main housing market problem is the limited available resources to buy/construct a house. Housing programs available include government, private developers, individuals, and groups. Although Housing approaches and strategies have always been cities without slums, millennium goals, and others as far as Financing/Funding Schemes are concerned there is no formal housing financing institution, the only effort has been in cooperative societies, private banks and individuals finances. The National Poverty Alleviation Strategy 2025 includes providing adequate shelter for all. Gender Issues are cross cutting issues whereby women ownership of land has been considered in the Land Act 1999.

**Actors in Shelter Delivery and their Roles**

The main actors involved are the following. The **State/Central Government** provides policies, solicits funds, makes planning schemes and acts as an enabler. **Local Government** does coordination and monitoring, property taxes, cost recovery and deliver services. **NGOs** work as pressure groups. **Private Sector/Housing Producers** build housing and initiate PPP for infrastructure provision. **Community-based Organizations** identify and prioritize shelter problems, participate in delivery financially and ideally, use and maintain shelter. **Research Institutions** are responsible for training, quality control, research and advice. **Others** include politicians, cooperatives and financial institutions.

**Design**

Physical Planning/layouts of urban areas are prepared and scrutinized by the Area Planning Committee of the specific urban council and being submitted for approved by the Ministry responsible for Lands, Housing and Human Settlements Development. The preparation of these layouts by these urban councils has to abide with the urban master plan specifications and guidelines given. Other urban councils with the Sustainable Cities Programmes have adopted the Strategic Urban Development Planning, which is more flexible, action and participatory oriented.

Social inclusion is minimum; most of the time the housing financier is the decision maker. Gender issues are increasing in the field of housing development and management. Sustainable urban development is achieved when planning, designing and maintaining of the projects/programmes are done based on community’s participation, needs and ownership. Norms and codes are set and being monitored by the government and local governments so as to assist and direct the planning and designing process.

**Regularization Programmes**

Principally, Regularization programme of several Informal Settlements in Dar es Salaam City was done intentionally, to provide licences to the people in
these areas. The Ministry of Lands, Housing and Human Settlements under-
took the programme in collaboration with three Municipalities, Ilala, Kinon-
doni and Temeke in the areas shown below. The Ministry was the solely
funder of the programme.

**Table on Areas for Regularization programme in Dar es Salaam City**

<table>
<thead>
<tr>
<th>Programme phases</th>
<th>Ilala Municipal Council</th>
<th>Kinondoni Municipal Council</th>
<th>Temeke Municipal Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase One from October 2004 to 30th November, 2005</td>
<td>Buguruni, Vingunguti, Kiwalani, Ilala/Mchikichini, Tabata/Relini, Tabata/Kimanga, Kipunguni, Ukonga, Gongo la Mboto, Majumba-sita/Banana/Sitaki shari, Kipawa, Karakata</td>
<td>Manzese, Tandale, Mwananyamala/Mbuyuni, Mwananyamala/Kwa-Kopa, Mwananyamala/Kisiwani, Kinondoni/Shamba, Hannanasif, Mikoroshoni, Malakuwa, Kawe, Mikocheni, Namanga, Makongo/Juu, Kimara, Ubungo/Kibangu, Ubungo/Kisiwani, Mabibo, Mabibo/External, Magomeni/Makuti, Mburahati, Ubungo/Msewe, Kunduchi, Kunduchi/Mtongani, Tegeta/Wazohill, Changanyikeni, Kijitonyama/Ali-Mua, Mbezi/Luis, Mbezi/Temboni, Kibamba</td>
<td>Temeke, Tandika, Yombo/Vituka, Yombo/Dovya, Yombo/Kilakala, Mbagala, Mbagala/Kiburugwa/Nzasa, Mbagala/Kibondemaji, Mbagala/Rangilatu, Shimo la Udongo/Kurasini, Mtoni/Kijichi, Changombe, Keko/Mwanga, Magurumbasi, Machungwa, Kigamboni/Madizini, Tumoyo, Tungi/Mtoni</td>
</tr>
<tr>
<td>Phase Two from the start of this financial to date</td>
<td></td>
<td></td>
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</tbody>
</table>

The process of regularizing the settlements started in 2004 when aerial
photographs were taken and prepared. The maps of specific areas were
subdivided into small units and given to field assistants for the social eco-
nomic surveys. The fieldwork was done with the assistant of wards and
streets (Mitaa) leadership.

The property rights and other information identified, and later licences
were given to the owners in specific ceremonies. The licences were given to
the people to enable them to have tenure rights. These could enable them to
access finance institutions in case one would like to mortgage his/her prop-
erties.

In the programme areas, the programmes did not cater for infrastructure
and services improvements, which are also very important aspects of urban
poor environment improvement as stipulated in Millennium Development
Goal, 7 target 11. The involvement of local urban poor right at the initiation
stage was very low, as these programmes were basically under the Ministe-
rial level and the local Municipalities involvement were at smaller scale
especially giving co-operation in execution of the programme. There was
another Community Infrastructure Upgrading Programme (CIUP) funded by
World Bank under City Council supervision which was going without neces-
sarily cooperating with the programme under the Ministry of Lands. The
CIUP was started to improve infrastructure services to the unplanned settle-
ments of Dar es Salaam city. It focused into 31 mitaa2 levels and it was planned for two phases within the three municipalities of the city.

**Table on Areas (Mitaa) under CIUP in Dar es Salaam City**

<table>
<thead>
<tr>
<th>Programme phases</th>
<th>Ilala Municipal Council</th>
<th>Kinondoni Municipal Council</th>
<th>Temeke Municipal Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Mnyamani, Malapa, Madege, Mambani</td>
<td>Uzuri, Muungano, Mvuleni, Madizini, Mnazi Mmoja, Kilimani</td>
<td>Changombe A, Changombe B, Toroli, Sandali, Mpogo, Mwembeladu</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Mtakuja, Kombo, Miembro, Mambani</td>
<td>Keko Mkwayuni, Keko Kati, Keko Mbuyuni, Kwa Kopa</td>
<td>Muungano, Tambuka Reli, Mtonani, Azimio Kaskazini, Azimio Kusini, Keko Mwanga A, Keko Mwanga B, Magurumbasi A</td>
</tr>
</tbody>
</table>

NB: The Community Infrastructure Upgrading Programmes in Dar es Salaam included roads, drainage systems, street lights, solid waste points, public toilets, pedestrian ways.

Lack of Coordination between Programmes

The SWOT Analysis done in the case study showed the main problem is the two programmes are operating in the city without being integrated and coordinated by the single integrated team spirit of the key stakeholders as they were focusing the same city residents. The improvement of infrastructure and provision of basic services by the CIUP and the regularization process by the Ministry of Lands were not done concurrently although the upgrading layouts of the areas were prepared and approved by the Ministry of Lands with possible options of service and infrastructure improvements.

The sustainability aspects of the programme observed is unreliable as it could be seen after the pilot programme funding from the Ministry ends. The responsible Municipalities would not be in position to take over the programme operations as they are also involved in many other development programmes. The residents were not sensitized to own the programmes execution right from its inception so it will be difficult for them to play the part in monitoring and maintaining it. The human resources contribution in terms of labour from the urban poor in question were not taken in board as they have very important role to play to make the programme sustainable and a successful one.

The financial capacity building for the residents/individual owners as intended by the Ministry was a very good idea, but we have to remember that the respective municipalities are closer to their people than the ministry and they could influence them more. This administrative structure of decentralization by devolution was ignored as the city council and its municipalities have autonomous, accountable and responsible to their people. People’s awareness to recognize the problem was not given its first priority by the ministry so as the first approach was supposed to create the impact and the sense of ownership of the programme to the residents in question.

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2 Mitaa are areas classified at street level of administrative urban structure next to ward level.
Experiences from World Urban Forum III in Vancouver

The five days of the WUF3 conference in Vancouver, Canada gave very good and rich experiences on the regularization processes in many countries around the global. To mention the few, the experiences from India, Pakistan, South Africa, Namibia and other may be of good practices to be adopted in future integrated Regulation and service improvement Programmes in Tanzania urban areas and specifically to Dar es Salaam.

The experiences show that it is impossible to achieve poverty reduction unless cities are productive. The experiences strengthened the assessment of local economy learnt from cities experiences are of paramount importance. We have to bring together the primary stakeholders and enhance competitiveness, retaining and increase job opportunities. Swedish International Development Agency’s experience in Latin America shows that the people themselves have to participate; what is needed is to strengthen their capacity of doing things, increases the commitment of donor agents. It helps to increase the ability of the urban poor and the local government capacity is also raised. Through such programmes more than 50,000 families have improved their housing through Swedish Assistance. We need resources to address the issues; we can create urban poor funding so we need the platform for that. You can address the issue of poverty eradication by creating small economies to the people as small business to raise their incomes. The communities are the ones who built their settlements so the whole process is/can be done through the community participation. The partnership with government influences their governments to create such situations that no eviction is allowed. In many countries, communities are not organized; they have to organize through government assistance. People have possible solutions to their settlements upgrading. Areas can be declared for the urban poor to build housing. They have to be willing and volunteer for demolition because of new areas/land given to them is better. The involvement/participation of the urban poor is of great importance in solving people’s need/problems.

Experiences from different countries such as Namibia reveal people who were living in sharks asked their Municipalities about their need to have land for housing. They created a funding scheme, and the land requested for which where they could develop their housing. Their Municipalities also assisted them to put basic infrastructures as they took hand together and so to say their relationship became closer between communities and the LGAs. Land is given to an organized community of low-income squatters.

In Pakistan more than 50% of the urban population lived in unplanned settlements. People themselves managed to provide for their infrastructure and the LGAs gave them technical advice. The people were assisted through building their capacity by training them to different skills. As the result government with consultation with the network have been able to implement many projects, not only by regularizing but also fighting against eviction.
In Nicaragua, they were able to work as a community and so enable the LGAs to improve their tax collection system after the improvement of people’s well-being. Having the maintenance plan supervised technically, the government set the community together, and the relationship between the community and LGAs were improved. If social related participation increases, and cooperation maximized, you will minimize cost in monitoring the project implementation. There is a need to consolidate transparency among the partners, in particular the community.

Experiences from Moshi Municipality

There are also experiences learned from Moshi Municipality, Tanzania, which are of paramount importance for countries where the main goal was the improvement of people’s well-being through participatory approaches.

In this case we found that indigenous people in the informal settlements organized themselves and play key roles in the services and infrastructure provision projects. People were involved right from the projects initiation stages, their awareness were raised to know what was happening in their areas and what would be their roles in the whole projects. Their ownership role was made clear right from that stage. Technical part was performed by the responsible authorities with regular participation of local residents to build their skills capacity. The upgrading layouts were prepared and approved by the people’s representative in their wards development committees then the urban council to the ministry level.

Surveying work was performed in collaboration with local leaders with agreement with individual residents. Block surveying was performed first in order to give way leaves for the infrastructure provisions. Since individuals were involved right from the beginning they were even able agree to move some of their properties such as fences to give way for access roads, school areas and other public services without compensation. Infrastructure and services provision process have been very smooth and less costly as the contractor given these works were given with conditions of employing the residents so as to improve both their skills and economic capacities. Later in the programme implementation, individual owners will be given licences as security for their tenure for their properties and they could access finances by mortgaging their properties.

A Way Forward

At the Regional level, I will assist, co-ordinate and advise closely, the local authorities responsible in the regularization programmes from the City and Municipal Councils levels. The implementation of the central government policies on housing as stipulated in the millennium development goals have to be ensured in order to achieve sustainable environmental improvements.

Regular follow-ups will be made to the local authorities to make sure that all regularization and infrastructure improvement programmes going on are co-ordinated and harmonized to avoid duplication of tasks within their
respective areas. They should also be participatory right from the earlier stages of the programmes. The primary goal will be to start by awareness raising campaigns to residents on what will be going on in their areas and their roles as key stakeholders.

As the Central Government personnel at the regional level, I have to link the ministry responsible for land development with other agencies and the local authorities on the issues of regularizing informal settlements and improving infrastructure. The regional administration together with the local authorities have the role of creating enabling environment for different stakeholders to work together as a team for the same goal such as one providing titling and the other on infrastructure and service improvements. They should be an integrated team spirit in the city authority which will monitor such programmes, starting from the regularization process by the Ministry of Lands to the Community Infrastructure Improvement process by CIUP.

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UN-HABITAT

UN Habitat and UNEP
Railways and Resettlement in the Philippines

Framework for Design of Housing for Resettled Squatters of Metro Manila

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The Philippine government is currently embarking in a massive relocation programme for families living on the railway tracks, to pave the way for the rehabilitation and modernization of the national railway system. The relocation of families to identified resettlement sites, however, might be undermined by several risks: the relocated families’ abandon of the lots awarded to them, they sell their rights to speculators, and finally they return to their places of origin or find new temporary shelter elsewhere.

The author identified the factors behind the problem and sought to answer the concern on how to ensure that the resettled families stay in the relocation sites, sustain and eventually manage their new community, based on the framework of “the four pillars of sustainable development” – learning gained from the WUF3 experience.
The Philippines

The Philippines is an archipelago of about 7,100 islands and islets in South-east Asia, covering a land area of about 300,000 km². The country spans about 1,850 km from north to south and about 1,125 km from west to east, surrounded by the Pacific Ocean at the north and east, the Celebes Sea to the south, and the South China Sea to the west.

There are three major groupings of Philippine Islands: Luson in the north, Visayas at the central portion and Mindanao in the south.

The country has sixteen regions, with the National Capital Region (NCR) or Metropolitan Manila as the country’s capital. Among the sixteen regions in the Philippines, Metro Manila is second to Southern Tagalog Region in population size. Metro Manila has 12 cities and 5 municipalities.

The people are predominantly of Malay stock, admixed with Chinese, American or Spanish ethnic groups. Pilipino, a language based on Tagalog, (spoken by almost 1/3 of the country’s population) and English are both official languages.

The country’s population density is high, about 255 persons per km². In the national census in year 2000, the Philippines’ population was 76.5 million, projected to be 85.24 million in 2005. The population is expected to reach 93.9 million in year 2010 and 102 million by year 2015.¹

The male and female population are almost evenly distributed: 50.35% are males, while 49.65% are females. Nearly two-fifths or 37% of the population are younger than 15 years of age.

The Philippines has one of the highest rates of urbanization in the world, with an average annual growth rate of 5.14% between 1990 and 1995. By 2000, population growth rate is 2.36%. Heavy migration from rural to urban areas has caused overcrowding in the capital cities, particularly in Metropolitan Manila.

The focal point of urbanization in the country is Metro Manila or NCR. With a population of 9.93 million in 2000 and an estimated population of 10.5 million in 2005, the city accounts to more than 12.32% of the national population, reflecting the greatest concentration of urban population in the country.

The country’s urban population reached 60% of the total in 2002.²

Birth rate is 24.09 per one thousand population and fertility rate of 2.96 children per woman. Roughly, there is an additional three persons per minute. Life expectancy is 67.60 years for males and 73.10 years for females. Death rate is 5.60 per thousand population.

Almost one-third (30%) of Filipino children are underweight, and 36 of every 1,000 babies under one year old die, while 55 of every 1,000 children die before reaching the age of five.³

Average household size is 5.0, with a family having an average of two to three children. Median age is 24 years old. One half of the total population is below 24 years of age.

The economy of the Philippines is based mainly on agriculture, light industries and services. A market economy predominates. Prices have risen more rapidly than purchasing power, and wages are among the lowest in Asia. The gross national product (GNP) in the third quarter of 2005 is Php 1,441.6 billion (USD 27.2 billion), or a GNP per capita of Php 16,912.25 (USD 319.10), which is similar to that of other developing countries.

Compared to other Asean countries, public expenditures as a percentage of GNP are low for the Philippines. The Philippines has the lowest expenditure-to-GNP ratios compared to other Asean countries of Indonesia, Malaysia, and Thailand. There is low public expenditure because of declining revenues and rising interest payments.

Historically, government allocation for housing only accounts for less than 1% of the total government budget.4

Nine out of ten families had gainfully employed family heads. Almost all families (92%) reported to have 18 years old and over family members who are gainfully employed. Children aged 5 to 17 years of age are reported to be working (23% of families). Unemployed (8.1%) and underemployed (21.3%) sector totalled 29.4%.

While official data indicate that only about 20% of the urban population fall below the income poverty line, other surveys show that over 60%-80% of urban households consider themselves poor.5 In the eighties, poverty was declining in the country, from a high of 44.2% poverty incidence in 1985 to 31.8% in 1997. However, poverty increased from 1997 to 2000, with poverty incidence at 34.2%, up by 2.4%. Recent data shows a poverty incidence of 24.7% in 2003. The latest poverty data indicate that 3.966 million families or less than a quarter of the country’s population are living below poverty line6. This was a decrease from 4.138 million in year 2000.

In the 2003 census, average annual income is Php 147,888 (USD 2,790), while expenditure is Php 123,690 (USD 2,334), with average savings of Php 24,198 (USD457). Personal consumption expenditure is Php 8,987.00 (USD 169.57) per month. Latest data show (year 2004) that a family of five needed to have a regular source of income amounting to Php 65,565 (USD 1,237) for the year or Php 5,464 (USD 103) per month to be able to meet essential needs.

Access to Shelter and Urban Services

In the census of year 1990, the total number of housing units was 11.395 million, with the total number of households at 11.407 million. With 15.30 million households in 2000, the estimated number of housing units is 14.03

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4 Housing and Urban Development Coordinating Council (HUDCC) 2005 year-end report.
million, or a housing deficit of 1.3 million. During the period 2000–2005, the housing backlog was 1.872 million housing units.\(^7\)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Backlog</td>
<td>984,466</td>
</tr>
<tr>
<td>Substandard/Upgrading</td>
<td>186,334</td>
</tr>
<tr>
<td>New Households</td>
<td>2,585,272</td>
</tr>
<tr>
<td>Total Housing Need (2005–2010)</td>
<td>3,756,072</td>
</tr>
</tbody>
</table>

The housing and land markets have not kept pace with rapid urban growth. While households increase by 350,000 per year, housing units increase by 200,000 units per year or an average backlog of 150,000 units per year. By 2005, the housing backlog is at 1.171 million housing units. With new household formation, the estimated housing need by year 2010 is 3.76 million housing units\(^8\).

The shortfall is concentrated in low-income housing where the population is least able to match rising costs of land and house construction, and where the market has not been able to provide affordable, conveniently located housing. As a consequence, informal housing areas and squatter settlements have proliferated in urban areas. About 1.4 million households live in inferior quality housing\(^9\).

In the three decade-census (1960–1990) of the National Statistics Office, the ratio of households to occupied units is 1.035, while household population to occupied units ratio is 5.496. In the urban areas, the ratio of households to unit occupancy is the same, but the household population to occupied housing units is higher, at 5.533. Rural areas have a lower ratio of household population to occupied housing units, at 5.462, with almost the same ratio of households to occupied housing units (1.019).

Most housing units in the Philippines are single structures, 89.9% of the total number of occupied housing units. Duplex types are only 3.01%, while multi-family dwellings are 5.8% of the total occupied housing units. Accessorias and row houses account for the remaining 1.29%.

In terms of floor area, 40% of families live in housing units with floor areas ranging from 10 to 49 m\(^2\). It is also significant to note that 20% of the total housing units have floor areas below 10 m\(^2\), while 40% of the total number of housing units have floor areas above 50 m\(^2\). The figures indicate that 20% of the population live in overcrowded spaces, while only 40% of the population had adequate living space, comparable to the UN figure of 9.5 m\(^2\) per person\(^10\).

As to tenure, eighty-three percent (83%) of the total number of households own their housing units, with 48% of these amortizing their units, while 17% either formally rent or occupy for free their dwelling units (8% formally rent, 9% are rent-free occupants). In the urban areas, 76% own their units, while in the rural areas, 90% of households own their housing units. It is significant to note that in the rural areas, 9% of the non-house owners occupy their units for free.

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\(^7\) HUDCC 2005 Report.
\(^8\) HUDCC Housing Situation.
At least 47% of urban households live in informal settlements. Typically, households built on land they occupy illegally, with minimal access to basic services.

For owned or owner-like possession of housing units, only 5.6% were able to acquire ownership through government assistance or financing programme. The highest 60% families in the income strata were the ones that benefited from the housing programme of government11.

In the 2003 census, average annual savings was Php 24,198 (USD 457) or a monthly saving of Php 2,016 (USD 38). This amount can hardly pay rent or amortization for housing.

Average cost of residential dwellings in 2003 census was Php 687,607 (USD 12,974) while average income was Php 147,888 (USD 2,790) or a ratio of 4.6, which is below the UN figure of 9.4 for Asia and Pacific Regions12. This indicates that housing is affordable to average-income families, but with housing subsidies in the prices.

Prices of land even in the fringes of Metro Manila have been rising by almost 25% annually. The increasing cost of land accessible to employment opportunities had been a constraining factor in providing affordable housing packages. The cost of land, coupled with spiralling costs of building materials and construction (average cost per m² for residential building construction is Php 6,820.00 or USD 128.68), have contributed to the housing backlog.

In 2004, 80% of the total number of families have access to safe drinking water. 10% have shared tube or piped water supply, while 8% use shared wells or pumps as main source of water supply. Twenty percent or 1 of every 5 households do not have safe water supply, exposing them to water-borne diseases.

In the same census, 86% of families have sanitary toilets. One in every five households used water-sealed toilets. In the remaining 14% without sanitary toilets, 8.3% have no toilet facilities at all. In the latest report of the Daily Inquirer dated July 9, 2006, diseases traceable to untreated wastewater kill up to 12 Filipinos daily. This figure was cited by the United States Agency for International Development (USAID), which called for local government units to invest in wastewater treatment systems.

Two out of ten families used electricity for fuel and lighting.

Thousands of miles or kilometres of roads – gravel, asphalt and concrete – link the towns on the archipelago’s many islands, expressways, running north and south of Manila. There are now systems of hard-surface roads, bridges, and ferries that connect the islands of Luzon, Samar-Leyte, and Mindanao. Transportation networks, like roll-on, roll-off have been recently developed.

Six out of ten families had access to family planning services. One in every two families were able to visit any health facility, like hospitals, clinics, during the past six months, when their family members got ill. Families in lower-income group depend only in services of government facility.

It is good to note that forty two percent of the families have enrolled in Philhealth, (government’s national health programme) while 3 out of ten poor families have Philhealth membership\textsuperscript{13}.

**Existing Housing Policy**

The key challenges the housing sector faces today are: 1) meeting the rapidly growing housing need; 2) expanding private sector participation in socialized housing financing and construction; 3) strengthening the capacity of housing institutions.

**Housing Target v/s Accomplishment 2001–2004**

<table>
<thead>
<tr>
<th>Housing Package</th>
<th>Target Units</th>
<th>Total Accomplishments 2001–2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialized &lt; Php 225,000 (USD 4,245)</td>
<td>880,000</td>
<td>493,496</td>
</tr>
<tr>
<td>Low Cost Php 225,000–2 Million (USD 4,245–37,735.85)</td>
<td>320,000</td>
<td>389,327</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,200,000</td>
<td>882,823</td>
</tr>
</tbody>
</table>

For the period 2005–2010, the housing sector targets to provide 1,145,668 households with housing packages distributed as follows: socialized housing 780,191 units (68.1%); low-cost housing 365,282 units (31.8%) and medium-cost housing 195 units (0.1%).

The banking system and private sector groups participate minimally in socialized housing, partly because they cannot compete with the subsidized housing loan interest rates of the government housing programmes. With the thrust of the government to shift towards a market-oriented housing finance system, a level playing field for both public and private housing programmes will be ensured.

The National Shelter Programme (NSP) of the Philippines is being implemented through an integrated shelter delivery system, with the Housing and Urban Development Coordinating Council (HUDCC) at the helm. The key housing agencies are: National Housing Authority (NHA) as the production arm, focusing in providing housing to lowest 30% of the population; National Home Mortgage and Finance Corporation (NHMFC) as major government home mortgage institution; Housing and Land Use Regulatory Board (HLURB) as sole regulatory body for housing and land development; and Home Guaranty Corporation (HGC) as provider of long-term guarantees, insurance and other incentives for private developers.

As the production arm of the National Shelter Programme, the National Housing Authority undertakes programmes classified into three categories.

1 Programmes for families within the 30\textsuperscript{th} percentile: Resettlement Programme; Community-Based Housing Programmes (Community Mortgage Programme, Slum Upgrading, Cooperative Housing); and Sites and Services Development.

\textsuperscript{13} NSCB 2005 Report.
2 Programmes for Low-Income earners up to 50th percentile: Completed Housing; Medium-Rise Housing and Public Rental Housing

3 Programmes for families affected by calamities: Emergency Housing Assistance, Temporary Shelter and Evacuation Centres Production.

The housing sector shall adopt a strategic framework anchored on a multi-stakeholder, market-based, and LGU-led reforms and approaches to meet the goals of job generation, shelter security of the different housing market segments and the Millennium Development Goal of improving the lives of slum dwellers. The sector will work towards the decongestion of Metro Manila by developing housing centres/communities outside the metropolis, in line with President Arroyo’s ten-point agenda

Existing government housing finance programmes are too limited to provide long-term funds for housing. The United Home Lending Programme (UHLP) and Community Mortgage Programmes were totally dependent on public sector resources and member contributions of pension funds, which are limited in supply and inflexible in terms of the uses which they can be put. The UHLP collapsed after the withdrawal of state pension funds from NHMFC by the Government Service Insurance System (GSIS) and Social Security System (SSS).

The housing sector, for plan period 2005–2010, shall expand private sector participation in socialized housing by creating a viable and sustainable source of housing finance by establishing an active and liquid secondary mortgage market. The subsidy mechanism shall be redesigned to increase transparency and efficiency by phasing out interest rates on subsidies. Financing shall be through credit at market-based interest rates. Disposition of government assets and non-performing loans shall be fast-tracked, to generate additional funds for housing.

Actors in Shelter Delivery and their Roles

The Local Government Code of 1991 and the Urban Development and Housing Act of 1992 are two important legislation that devolved the responsibility of providing housing to Local Government Units (LGU). Resource pooling of National Government Agencies (NGAs) and the LGUs has been found to be effective: the LGUs provide land development, facilitate provision of energy, water and sanitary systems, while the NGAs were responsible for land assembly, coordination for infrastructure provision, like schools, health centres and livelihood or industrial establishments.

For plan period 2005–2010, the national shelter agencies shall pursue organizational restructuring and streamlining for cost-effective and efficient management. Decentralization and devolution shall be further emphasized by infusing more responsibility and accountability to LGUs in urban development, planning, finance, implementation and management in the delivery of housing and urban services to their constituents. Local Housing Boards or

14 President Arroyo’s 2005 State of the Nation Address.
16 HUDCC Medium-Term Development Plan.
Local Inter-Agency Committees shall be established in every city and
municipality, with the participation of all stakeholders.

The government shall further streamline the processes of securing per-
mits and licenses for housing and land developments, as well as securing
housing loans.

Proven multi-stakeholder and cost-effective housing programmes shall
be scaled-up, and innovative tenure arrangements shall be developed and
adopted to address the affordability issue of the urban poor.

Design

Batas Pambansa (BP) 220 is a national law that defined or set the minimum
planning and design standards for residential subdivision projects, particu-
larly on economic housing (housing packages worth Php 225,000–500,000 or
USD 4,245–9,434) and socialized housing (maximum housing package costs
Php 225,000). All subdivisions have mandatory allocations for parks and
playgrounds, neighbourhood multi-purpose centres and other community
facilities according to density (number of lots or dwelling units per hectare).
For a density of 100 and below, the percentage gross area for community
facilities shall be 1.0%, 101–150 density shall be 1.5% and above 150 shall be
2.0%. These areas are non-saleable. However, the developer may provide
areas for community facilities such as schools and commercial centres
which may be saleable.

Minimum lot areas for single detached dwellings shall be 64 m², duplex,
48 m², and row house, 32 m². For the shelter component, minimum area is
22 m² for economic housing and 18 m² for socialized housing.

BP 220 also provided for mandatory allocation of areas for parks and
playgrounds. In no case shall an area for parks and playgrounds be less than
100 m², which shall be strategically located within the subdivision project.

Relocation of Informal Settlers

History had shown that improving a nation’s railroad network would spur
economic growth, just like what happened in Sweden, when its major cities,
Stockholm, Gothenburg and Malmö were interconnected from year 1864,
thus distances shrank and previously inaccessible areas began to flourish\(^\text{17}\).
The Philippine government’s thrust of improving the railway system is aimed
not only to decongest Metro Manila, but would also serve as catalyst for
economic growth and progress. The rehabilitation and improvement of the
Philippine National Railway (PNR) system is a flagship programme of the
current Arroyo administration.

The PNR tracks, stretching from La Union, north of Luzon, to the Bicol
Region in the south, are dilapidated, had deteriorated and are occupied by
informal-settler families, who dwelled within the railroad’s right-of-way, even
within arms’ length of the passing trains. Despite the danger of living within
the tracks, these families proliferated, as affordable and decent housing is

very difficult to find in major urban centres, particularly Metro Manila. Migrant people from the provinces would rather risk their lives in squalor and danger in the tracks, just to be near their jobs or business opportunities.

The Northrail-Southrail Linkage Project had been started, and 20,211 families out of 37,416 total number of families in the north had been relocated, freeing 32.08 kilometres stretch of the Northrail system. In the south, 6,126 families out of 50,013 total number of families have been relocated to resettlement sites south of Metro Manila18.

Past experiences of the government in resettlement or relocation, however, were futile: the “resettled” families would either return to their places of origin or squat elsewhere. In the resettlement sites, those families refused or were unable to pay their monthly amortizations. Others would either abandon or sell their units. Thus the housing problem still persists.

The relocation of 87,429 families who have settled on the Philippine National Railway’s railroad tracks was expedient, to pave the way for the rehabilitation and modernization of the railway system, which could rapidly transport people and goods, and link Metropolitan Manila to outlying rural areas. A mass transport system is an absolute necessity since Metro Manila is already overburdened with traffic in its road system and adversely affected by congestion.

Administrative Order No. 111 dated 8 November 2004, was issued by President Arroyo mandating the Housing and Urban Development Coordinating Council (HUDCC) as overall-in-charge of the relocation or resettlement programme and designating the National Housing Authority (NHA) as the lead agency in implementing the Northrail-Southrail Linkage Project. The NHA, the production arm of the government’s national shelter programme and primarily responsible for providing the housing needs of the lowest 30% in the income strata, has a wealth of experience and expertise in the planning, implementation and management of socialized housing programmes, particularly the Resettlement Programme.

The Resettlement Programme, with a history of resistance and sometimes marred by violence, entails the relocation of families living on danger areas, such as river banks and railroad’s right-of-ways to sites earmarked for them by government, often along the fringes of urban centres. The program-

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me is non-cost recoverable and relies on full subsidy support for land acquisition and site development. Past relocation efforts of the government had been undermined by the relocatees' abandonment of their awarded home lots or sale of their rights to speculators. Several factors can be attributed to this problem.

- Unsatisfactory conditions in the resettlement sites, such as inadequate spatial provisions in lot or unit sizes, road widths;
- Lack of livelihood or employment and commercial opportunities;
- Lack or absence of community facilities such as schools, hospitals or clinics;
- Distant, inaccessible sites which made the relocation traumatic and economically dislocated household heads from their sources of income; and
- Substandard quality of housing components and land development, owing to the haste in project implementation or unscrupulous practices by developers.

Other concerns confronted during relocation were:

a) refusal of recipient Local Government Units (LGUs) to accept relocatees from other areas;

b) lack of understanding of the affected families on the relocation process;

c) uncertainty in the continuity of National Government Agencies’ (NGAs) and LGU support in the provision of basic services; and
d) lack or absence of private sector support in the delivery of services and livelihood interventions.

If those problems or concerns are not addressed, those relocatees would again squat elsewhere, thereby rendering the whole resettlement programme fruitless.

The Project

The existing penitentiary facilities of the National Bilibid Prison (NBP) shall be transferred to Tanay Rizal, which is at the periphery of Metro Manila. A fifty-hectare portion of the NBP Reservation Area located in Muninlupa City has been identified to be one of the relocation sites for 10,555 families that will be relocated from the 8.30 km stretch of railway tracks along Muntinlupa City.

Presidential Proclamation No. 234 dated 15 August 2002 segregated the fifty hectares as socialized housing site for Muntinlupa informal-settler families. The technical descriptions and boundaries of the site were indicated in Presidential Proclamation 234. Presidential Proclamation No. 335 dated 27 February 2003, amended the previous proclamation, designating the National Housing Authority as administrator and implementing agency of the housing project for mixed-use development.

The land use plan of the entire 416 hectare NBP area was prepared by the Metro Manila Urban Services for the Poor Project (MMUSP) of the HUDCC and Asian Development Bank. Shown below are the master plan for the entire NBP area (416 hectares), and location plan of the fifty hectare socialized housing site.
The conceptual planning and design of the 50-hectare site had already been prepared by the National Capital Region Management Office, wherein the author is Deputy Area Management Officer. The proposed Land Use and Site Development Plans for the fifty hectares housing site for mixed-use development are shown below:

The above subdivision plan has generated 7,702 residential lots with lot areas of 32 m² and 335 residential-commercial lots with 60 m² lot areas. The residential area is 57% of the total site area; circulation is 25%; community facilities comprise 5%; parks, playgrounds and open spaces account to 4%; unbuildable area total 9% of the gross area. The main arterial road linking the site to the rest of the NBP area is 12.00 meters wide, with 10.00 meters and 8.00 meters wide secondary roads. The resulting density is 160 lots per hectare.

The Local Inter-Agency Committee (LIAC) was formed in accordance to the provisions of Presidential Proclamation 234 to formulate guidelines for the disposition of the property, and is comprised of the following national and local agencies: Housing and Urban Development Coordinating Council (HUDCC) as lead agency, National Housing Authority (NHA) as Project Administrator, Department of Justice and Bureau of Corrections (Land-
A Sustainable Framework for Design

The Third World Urban Forum (WUF3) has introduced the fourth pillar of sustainable development in addition to “three pillars of sustainable development” identified in the 2005 World Summit Outcome Document, namely economic development, social development and environmental protection, and that fourth pillar is **culture and heritage**. The bias for social and economic development has neglected the cultural dimension and power of culture as a motor in development\(^1\). Culture and environment are related: it is how the people used the environment as a catalyst in having a way of life, or to what extent the environment is the result of human endeavour\(^2\). Thus the planning and management of cities and communities should address these “interdependent and mutually reinforcing pillars of sustainable development”.

It is in this framework that the project discussed above shall be evaluated and designed, with emphasis on the fourth pillar of sustainable development – culture and heritage.

Physical or Spatial Design of the Project

The residential lot sizes of 8.0 m by 4.0 m, or lot areas of 32 m\(^2\) with a buildable dwelling area of 18 m\(^2\), would be too cramped for an average family of five persons. The living space per person is only 3.6 m\(^2\), which is much below the UN figures on Asia and Pacific Region, which is 9.5 m\(^2\) living space per person in a household\(^3\). Thus the living spaces in the dwellings are inadequate.

To compensate for this inadequacy, abundant green spaces outside the residential dwellings should be provided. The plan, as it is, only provided for pocket parks, which are not enough: 1% short of the required 5% of gross area per planning and design standards under BP 220. A more compact, dense, residential area would provide for wider green/open spaces. This is possible through multi-family dwellings or medium-rise buildings (MRBs), but would need financing. In the absence of such funding, some residential

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20  Ibid.
21  UNCHS Monitoring Human Settlements with Urban Indicators.
lots should be given up in favour of bigger parks and open spaces, as shown below; (about 764 residential lots were converted to open spaces).

Habitat for Humanity Philippines has a three-storey walk-up type of housing modules, which can be used for more dense, compact, residential neighbourhoods. Their participation in the project can be tapped.

Environmental Protection

Walkable communities are desirable places to live, work, learn, worship, and play. The community should therefore be pedestrian-oriented, where safer pedestrian and bicycle-friendly routes are provided. The community plan should have 1.5 meters wide bicycle paths along the peripheral areas and secondary roads, as illustrated above.

The 50-hectare housing site is bounded by a lagoon at the west side, and a creek at its east side. These natural amenities should be integrated in the design and their use by the community residents be maximized.

The public parks can be designed by the community residents themselves, through volunteerism. When people are involved in their community’s development, they develop a sense of ownership and would manage the upkeep of their open spaces. The participation of the youth can be effective in mobilizing the community to actively take part in this endeavour.

Ensuring the security and safety in these open spaces bring about good living environments and quality of life, essential to make people willing to travel long distances from their places of work. Parks and open spaces that are safe, clean and attractive are liveable spaces which people are proud of, feel a sense of belonging and ownership. There is shared community responsibility for open space.

22 World Urban Forum Background Paper, UN Habitat.
23 WUF networking event “From Planning Urban Transport to Building Integrated Cities” hosted by Swedish Association of Local Authorities and Regions, Swedish Rail Administration and Municipalities of Jönköping, Norrköping.
Economic Development

Considering that these relocated families will be displaced from their places of work or be travelling longer distances, employment opportunities within or accessible to the community should be present. A skills survey of the families would provide an economic profile of the families, to determine what livelihood interventions can be provided. Home-based enterprises, especially for women, should be encouraged. It is in this area where microfinance institutions can be tapped to provide short-term credits for the families’ incremental/progressive housing or small-scale businesses or enterprise. Micro finance institutions have proven that the poor can save and are able to repay their loans through collection schemes tailored to their needs and preferences24. The micro-finance approach also entails consultations, workshops, negotiation meetings with individual families, which maximizes social interaction and reduces transaction costs in securing loans.

Community funds can be established through local savings groups. The community organization can be provided training and capacity building on how to operate and manage community funds. Participatory planning and budgeting have been proven effective in involving communities in decision-making and bringing higher degrees of transparency and accountability, as attested to by several resource persons in the WUF3.

The residential-commercial lots or economic lots in the subdivision plan can provide cross-subsidy to the socialized lots.

Social Development

The relocation of affected families should undergo a thorough, well-planned, well-executed process, because a hasty relocation may be more costly and its costs irreparable. There is a need to carefully plan, dialogue with the community taking into account all aspects of the new housing and sites development, to ensure an acceptable, sustainable and replicable relocation programme.

Planning is no longer designing communities where people would live in, but working with the people to translate their visions of a community where they would want to live. Thus the participatory and multi-disciplinary approach in planning would instil in the families a sense of ownership and identity with the proposed housing project.

Since the development of the project site will be done in four phases, it is important that the families be organized before actual relocation takes place. There may be four major organizational groupings based on the project phasing.

Though community participation requires time, resources and may be risks, intermediary organizations can be of great help in engaging a well-structured community participation. There is a need to collaborate with the LGUs, NGOs, and the private sector in the design and development of the community. Strategic planning workshops should be held with all the stakeholders.

Culture and Heritage

Culture is defined as “that complex whole which includes knowledge, beliefs, art, morals, law, custom, among any other capabilities acquired by man as a member of society” by Edward Burnett Taylor (1871)25. Culture is a way of life, created by the people themselves. It is the way in which a group of people has organized itself to find ways to deal most effectively with its environment, given its available resources26. The word culture comes from the same root as the verb “to cultivate” – the way people act upon nature.

Thus culture is man-made, confirmed by others, conventionalized, and passed on for younger people or newcomers to learn. It provides people with a meaningful context in which to meet, think about themselves, and to face the outer world27.

A group of people is held together by shared interests and memories, which are usually associated with places. Culture has the ability to help construct memories that can be shared collectively. It is not only a shared present, but a consciousness of a common past that creates a sustainable solidarity, a feeling of sharing a “common fate”28.

According to Lee Kuan Yew, “culture is the deepest and most determinative aspect of human life”. He further stated that “we have left the past behind, and there is an underlying unease that there will be nothing left of us which is part of the old”29.

Heritage, on the other hand, are patrimonies that have cultural significance, whether architectural, archaeological, scientific, ecological, or historical. The cultural heritage can be material or immaterial and can be converted to special places in the form of memories and traditions30.

Professor Dipesh Chakrabarty, in a WUF3 networking event “Life in the Urban Landscape: Urban Development for the Poor: the Interdependence between Heritage, Sustainability and Liveability” organized by Sida, Swedish National Heritage Board and other Swedish agencies, said that “the poor care about their heritage, poor people care about their past. Poor people have the right to their own history. It is important that communities should be planned and designed, where people can be proud of, identify with”.

This is the answer to my concern why people still move out of the resettlement sites provided for them by government. They leave because they don’t have a sense of belonging, sense of ownership of the place, community identity and pride of their place.

The poor people living in informal settlements, do they really have “culture” formed by their way of life? Here in our country, when we talk of culture, only the privileged few, or the elite are said to be “cultured”. They

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27 Ibid.
29 “Culture as Destiny”, a conversation with Lee Kuan Yew by Fareed Zakira, Foreign Affairs Vol. 73, No. 2.
are the only class of society who attend art exhibits, watch cultural shows, and rub elbows with famous artists. The lower income class people cannot afford to attend such cultural events, since they are more concerned on how to make ends meet, or provide for their daily subsistence.

But as Prof. Chakrabarty said, there are diverse ways of representing culture. The expressions of culture should come from the poor themselves, so that they own them, and identify with them.

How to draw out the expressions of culture from the people should be incorporated in the process of planning with the community. This author intends to conduct interviews and workshops with the community, through the LIAC, to generate from the people their ideas or images of being a Filipino, or how they relate being Filipinos. And since most of these settlers came from the provinces, they will rethink their past – the ideal situation that they left behind (like wide, open spaces, abundant green areas and vegetation, etc.), which they may long for, but cannot have because they are poor.

They will be encouraged to revive their past in their new settlement – what elements in the new site can be placed, that could bring back the fine memories of their past. The planning of the community should rekindle memories of the people’s past, which should be reflected in the new site’s development. Intangible heritage, like “fiestas” (celebrations), festivals, or religious rituals can be brought back and infused in the design. Past memories and aspirations can be translated in the planning and design of the community. The older residents can be effective contributors.

It is this “connection” with the site that would make people stay. People will sustain the project so long as they can relate to it. It is the “sentimental value” that would make them maintain it and not give up. The younger generation should also be made to realize the value of maintaining their community. Their participation and contributions in the project are indispensable.
Post-Disaster Housing in Yogyakarta, Indonesia

Resource Mobilization for Shelter Rehabilitation and Reconstruction

Wiryono Raharjo
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The earthquake that rocked Yogyakarta and Central Java in May 2006 caused severe damage to settlements and the death of over 6,000 people. At the same time, Mount Merapi erupted, forcing thousands of village residents around the slope to flee to refugee camps. This paper discusses the challenges faced by actors involved in the rehabilitation and reconstruction of settlements. One of these challenges is the imbalance of resources to overcome the large-scale damages. The coming of many international donors with various ways of assistance, but seemingly limited knowledge of local resources, is an example.

The following descriptions of the shelter situation and problems are intended to give reader a platform of understanding on how the existing situation influences such challenges.

Lessons learned from the World Urban Forum III are among the references adopted for developing the proposal.
Indonesia

Indonesia, the largest archipelago in the world comprises (officially) over 13,000 islands, spreading between mainland Asia and Australian continent. Among these islands, Java is the fifth largest and the most urbanized. The island comprises four provinces, namely West Java, Central Java, East Java, and the Special Province of Yogyakarta.

The family planning programme orchestrated by Suharto administration in the 1970s is rarely discussed by the later governments. Many couples tend to have over two children, which contradicts the popular slogan of Suharto’s family planning programme: “two is enough”. Such situation presumably contributes to the rapid growth of population that reached 217.6 million in 2005 of which 50.1% are female. Life expectancy of women (60 years) was slightly higher than men (58 years) in 2004. Both numbers have been increasing, which certainly adds to the growing population. It also indicates better health conditions, despite the emergence of new diseases, such as avian flu and the traditional dengue fever. Migration is significantly high, particularly in the large urbanized cities like Jakarta, which currently has around 12 million inhabitants.

Since the fall of New Order administration, the economic situation of Indonesia has been characterized by dynamic changes particularly influenced by the gradual rise of oil price. Current GNP per capita is USD 257.6 billion with 5.1% growth, relatively very low compare to the average East Asian figure (USD 2650.9 billion). The Gross National Income per capita (GNI) is USD 1,140, slightly lower than the average East Asian countries of USD 1,496 per annum.

**Table 1 Average Net Income per Month According to Sector of Occupation (2003)**

<table>
<thead>
<tr>
<th>Sector of Occupation</th>
<th>Average income / month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>332,664</td>
</tr>
<tr>
<td>Mining</td>
<td>956,013</td>
</tr>
<tr>
<td>Factory</td>
<td>680,509</td>
</tr>
<tr>
<td>Electricity, Gas, &amp; Water</td>
<td>1,067,368</td>
</tr>
<tr>
<td>Building</td>
<td>618,140</td>
</tr>
<tr>
<td>Trading</td>
<td>686,100</td>
</tr>
<tr>
<td>Transportation &amp; Communication</td>
<td>808,871</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>1,062,414</td>
</tr>
<tr>
<td>Public Service</td>
<td>912,028</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>684,915</strong></td>
</tr>
</tbody>
</table>


With regard to employment status, the number of casual employees and self-employed assisted by family members is relatively high compared to the rest. The income distribution as seen in Table 1 shows that the agricultural sector holds the lowest average, which is a paradox because farming has long been a traditional livelihood of Indonesian society. The dependency on
the import of rice also reflects that national policy on farming has failed to build and support the capacity of local farmers.

Access to Shelter and Urban Services

The latest data on housing profile of Indonesia is inaccurate. Earthquakes, tsunami, and other recent disasters in many provinces caused damage and loss of thousands of shelters, and this has not yet been documented. The debate on setting up criteria of damages often occurred, resulted in the misleading information on the need of additional housing stock. However, regardless these facts, the shortage of housing in urban areas reached approximately 735,000 per year since 2004. This does not include the backlog – the people who live in slums or inappropriate shelters – who are usually not counted.

As previously discussed, family planning was one of the strengths of Suharto’s administration, between early 1970s and late 1990s. The programme became a powerful tool for controlling the natural growth of population, with the popular slogan “two children are enough”. Based on this premise, we can assume that the ideal occupancy is 4 people per house. In other words, the common minimum standard of dwelling size of 36 m² is acceptable. Even the minimum 21 m² core houses can still allow the above occupancy. However, the standard seems inappropriate for the current situation. The neglecting of family planning programme in the post Suharto’s administrations has caused uncontrolled natural growth. Currently, young couples do not seriously bother about limiting their children. The floor area needed has, therefore, been exceeding the previous 9 m² per person.

In most places, the notion of home ownership means owning a house on a parcel of land. Having a parcel of land becomes an ideal initial target of a newly established household, before they can further build a dwelling on it. Living beyond the ground surface, in multi-storey flats for instance, is undesirable. Moreover, renting a house or living with extended family has always been considered as temporary. It is very common if one responded, “I am still renting”, when asked where does he or she live. House or room rental is mostly managed by family or individuals, and tends to be informal. Only large scale apartment or students dormitory are managed by formal enterprises, i.e., Realty Company or educational institutions. Home ownership is indicated by an ownership certificate, granted by Badan Pertanahan Nasional (National Land Board). A person usually applies for land tenure certificate after having the certificate of building usage rights for up to 10 years. The land tenure is valid forever until transferred to someone else by selling or granting it, in case the owner dies.

Construction cost of a dwelling varies from place to place, depending upon the availability of material and labour. In Yogyakarta, the minimum cost of construction of decent house is Rp. 900,000¹ (approx USD 94.74)² per m². The minimum cost of constructing 36 m² house is thus USD 3,411, still

¹ Based on personal survey in 2006.
² USD 1 = Rp. 9,500 (based on exchange rate in late June 2006).
beyond the affordability of most Indonesian residents (see GNI in previous page) if no subsidy applied. Unorganized self-help takes up to 80% of housing construction nationwide. However, access to housing mortgage only support for a small fraction of urban and rural households. Most banks limit themselves in providing loan up to only 10% of urban households. The subsidized KPR (Kredit Pemilikan Rumah – House Ownership Loan) system only supports very limited qualified low income families. The unsubsidized loan serves between Rp. 100 – 300 million, which mainly caters the upper middle to high income groups.

In general the quality of basic services is based on the location of the house. People live in urban area have more access to organized water supply from the PDAM (Perusahaan Daerah Air Minum – Municipal Water Supply Company), connected by pipe to each customer. However, the use of well is more common to households in peri-urban or in rural areas, due to the limit of access.

Sanitation generally is an individual business, which means that each house is has a liquid waste treatment system that is not shared with others. Public toilet or communal sanitation facility usually exists in low income housing complex as part of government or donors programme. With regard to drainage system, lack of proper monitoring on the implementation of municipal master plan often resulted in poorly planned drainage, which is unable to accommodate the uncontrolled growing demand. However, community-based solid waste management is presumably the best example of public response to the need of cost-effective way in waste management.

Every Rukun Warga (neighbourhood complex) usually develops a community asset management system, including collective solid waste disposal.

During the Suharto’s administration (between the 1970s and mid 1990s), Puskesmas (an abbreviation of Pusat Kesehatan Masyarakat – Community Health Centre) became the best example of top down approach in providing health care facilities to serve the predominantly low income community at district level. Puskesmas still exists today. It is a primary health services that provides emergency need and simple treatment at affordable rate.

## Existing Housing Policy

There is a wide-range policy related to housing. This part summarizes only those that might have implication to the rehabilitation and reconstruction activities. Among them land use planning and management is perhaps the first pertinent issue to be discussed. The enormous unregistered land and illegal land acquisition became a common issue in many cities, which then led the government to launch PRONA – an active and intensive land registration programme – in 1982. However, by 1992 only 22% of land parcel had been registered. In order to speed up the process, in 1994 the government launched a programme called Land Administration Project (LAP) funded through loan from the World Bank. The project is aimed at accelerating the

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3 There are growing extralegal property development initiatives that appear to be the subdivision of small parcels of land by the owners, to be used as plots for very small scale housing sold to the public.
land registration and improving the future land policy and administration. LAP intends to register 75 million land parcels by 2020\(^4\).

In accordance with the Millennium Development Goals (MDG) and Johannesburg Plan of Implementation (JPOI), Indonesia plans to improve 14.5 million sub-standard houses and 47,500 hectares of slum in 10,000 locations, in addition to the annual subsidy programme for 800,000 low income housing. By 2009, the government intends to build 1,367,000 subsidized housing units, subsidize credit for 1,940,000 organized housing construction and 1,200,000 individual self-help housing, and assist the improvement of 1,350,000 housing units\(^5\).

Some examples of housing programmes for the low income groups include the popular KIP (Kampung\(^6\) Improvement Programme), P2BPK (Pembangunan Perumahan Bertumpu Pada Kelompok – Community Based Housing Development) in the 1990s, and CoBILD (Community Based Initiatives for Housing and Local Development). The later is a micro-financing programme for home improvement.

**Actors in Shelter Delivery and their Roles**

Despite the boom of mass housing production since the 1980s, self-help housing plays the dominant role in shelter delivery. Over 80% of households in Indonesia accessed shelter by self-help. However, formal housing finance goes primarily to mass housing production by private sectors.

At national level, the Ministry of Housing is responsible for policies on housing provision; Ministry of Public Works concerns on infrastructure development; and the National Land Agency works on land use planning. Local government is responsible for providing direct facilitation in making housing, which includes governance on permits, infrastructure support, and other technical assistances. Private sector, which appear mostly as developers plays significant role in changing the land use pattern. Many of them tend to neglect the spatial planning made by the Regency government. The neglecting has also been caused by lack of local government’s discipline in giving sanction to those who do not obey local building codes.

The role of NGOs cannot be separated from the complex demand that arise from the community, which needs to be organized. Therefore, it becomes a common sense that most NGOs operate at grassroots level. In the CoBILD\(^7\) programme for instance, NGOs work directly with the community to facilitate the revolving fund management for a micro credit scheme intended to support home and infrastructure improvement.

Universities add significant contribution in shelter delivery actors, many of which are involved in tasks ranging from policy making to implementation. A lot of research on building material and technology result from

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4  Housing Indonesia Profile, p. 5.
5  Ibid, p. 4.
6  Kampung literally means “urban village”, which is formed as a result of the development of unplanned housing by migrants coming from the village.
7  CoBILD = Community-Based Initiatives for Housing and Local Development, a UNDP initiated programme.
collaboration between government and universities. In the recent disaster events, both the Tsunami in Aceh and Earthquake in Yogyakarta, universities were involved directly in damage assessment and design of earthquake-resistant shelter. The shelter working group is an example of university-initiated network that links actors involved in the remedial effort after the recent earthquake in Yogyakarta.

The Twin Disaster

Early morning on Saturday, 27 May 2006, a deadly earthquake hit the province of Yogyakarta and Central Java. The magnitude was 5.9 Richter scale, not too high compared to that of Aceh in 2004, which reached 9. However, the relatively short distance of epicentre (30 km below sea's surface) and the fact that the quake occurred at 05.55 AM when many people were still in bed have caused enormous impact. Over 6,000 people killed in the province of Yogyakarta and Central Java. In the province of Yogyakarta alone, the death toll reached 4,715 of which 4,143\(^8\) were in Bantul – the worst affected Regency in the province.

The disaster became the second hit after the ongoing eruption of Mt Merapi (altitude 2900 m), the most active volcano in Indonesia, which is located on the northern tip of the province (25 km from the city centre of Yogyakarta). The volcano had been continuously erupted since one month before the quake. On the day of the quake, Merapi burst extra ordinary large size of dark and hot cloud. People who witnessed it would think that the quake was the impact of such eruption. Apparently, seismic forces, instead of volcanic ones, caused the quake. There was no death toll at that time, but the eruption on 14 June 2006 (17 days after the quake) had killed two people who were burnt alive inside the bunker. Thousands of village residents at 7 km radius from the crater had to flee to the refugee camps. They had been living there since over a month before the quake. This situation has certainly been affecting their livelihood, because they left their farms to become temporary refugees, which relied upon the donors.

Impact on Shelter Situation

Unlike volcanic eruptions, earthquakes rarely kill people. Most injuries from earthquakes are due to fallen debris. Before the tsunami in Aceh (see Figure 1 for location), the people had not faced gigantic earthquake and tsunami for many generations. Naturally their architectural tradition, therefore, lacked any seismic consideration. The same occurred in Yogyakarta, where many buildings that had been destroyed were mostly composed of load bearing wall structures without reinforced concrete frames at all. Most of large houses built in the 1950s–1960s and heritage buildings experienced severe damages. Prambanan temple, one of the most visited Hindu temples in Indonesia (in the outskirts of Yogyakarta) is no exception.

\(^8\) Based on the record released on 26 June 2006 (Kompas, 1 July 2006, on the article “Bantul, Tanah Perjuangan yang Luka”).
There are still debates over the criteria of damages. The most common criteria that have widely been published in the media consist of three levels: (1) Totally destroyed; (2) Heavy damage; and (3) Light damage. Table 3 depicts the conditions in Bantul under such criteria.

Remedial Efforts

The second day after the quake marked the coming of numerous donors and humanitarian organizations to Yogyakarta. Many of them were the “alumni” of Aceh reconstruction projects. Some of them, particularly the international NGOs, even still handled the ongoing projects there. There has been no formal coordination between local government and these NGOs. Therefore, to facilitate communication among them, they formed a network called “Emergency Shelter Cluster Group” (ESCG)\(^9\). On the other hand, various local remedial initiatives have been taking place too. Local NGOs and universities who have long been working with local communities provide a wide-range assistance, from food to temporary shelter. These organizations have also formed a group called Mitra Kerja Permukiman (Human Settlements Partnership), which is intended to work on post emergency (rehabilitation and implementation).

<table>
<thead>
<tr>
<th>District</th>
<th>Totally Destroyed</th>
<th>Heavy Damage</th>
<th>Light Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kretek</td>
<td>1,121</td>
<td>4,665</td>
<td>2,486</td>
</tr>
<tr>
<td>Sanden</td>
<td>97</td>
<td>2,052</td>
<td>4,650</td>
</tr>
<tr>
<td>Srandakan</td>
<td>342</td>
<td>3,054</td>
<td>3,506</td>
</tr>
<tr>
<td>Bambanglipuro</td>
<td>6,587</td>
<td>2,732</td>
<td>816</td>
</tr>
<tr>
<td>Pandak</td>
<td>2,966</td>
<td>5,760</td>
<td>4,069</td>
</tr>
<tr>
<td>Bantul</td>
<td>4,708</td>
<td>7,338</td>
<td>3,301</td>
</tr>
<tr>
<td>Pajangan</td>
<td>1,228</td>
<td>2,216</td>
<td>2,610</td>
</tr>
<tr>
<td>Sedayu</td>
<td>243</td>
<td>1,800</td>
<td>4,591</td>
</tr>
<tr>
<td>Kasihan</td>
<td>1,790</td>
<td>4,657</td>
<td>11,946</td>
</tr>
<tr>
<td>Sewon</td>
<td>8,281</td>
<td>8,496</td>
<td>6,004</td>
</tr>
<tr>
<td>Banguntapan</td>
<td>5,597</td>
<td>8,232</td>
<td>7,452</td>
</tr>
<tr>
<td>Piyungan</td>
<td>5,514</td>
<td>4,801</td>
<td>3,135</td>
</tr>
<tr>
<td>Plered</td>
<td>8,139</td>
<td>2,322</td>
<td>1,438</td>
</tr>
<tr>
<td>Jetis</td>
<td>11,354</td>
<td>2,610</td>
<td>664</td>
</tr>
<tr>
<td>Imogiri</td>
<td>5,664</td>
<td>5,354</td>
<td>11,781</td>
</tr>
<tr>
<td>Dlingo</td>
<td>1,377</td>
<td>3,380</td>
<td>4,720</td>
</tr>
<tr>
<td>Pundong</td>
<td>6,793</td>
<td>1,903</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>71,763</strong></td>
<td><strong>71,372</strong></td>
<td><strong>73,669</strong></td>
</tr>
</tbody>
</table>

Source: Kompas (National Daily Newspaper), 1 July 2006

\(^9\) The author attended the first meeting of ESWG formation on 29 June 2006.

\(^10\) Bantul regency experienced the worst impact of the quake.
In response to the need of rapid humanitarian assistance, the central government decided to provide financial support for rehabilitation and reconstruction. Vice President Jusuf Kalla delivered a statement which said that the amount of financial support would be between Rp. 10–30 million, depending upon the condition of damage. A rapid assessment on the level of damage took place shortly after the statement. Collective assessment recorded that the amount of eligible beneficiaries in the province of Yogyakarta reached over 300,000 persons.

The above statement is obviously not a final one, because later he decided to disburse 1.2 billion Rupiah for the reconstruction. However, it was only in the first week of August 2006 (over two months after the quake) that the discussion on mechanism of distribution of funds took place at local government level. Final decision on how much money shall be granted for house reconstruction has not been reached. Meanwhile, NGOs continue to support the building of T-Shelter in various villages around Yogyakarta. The victims in urban areas tend to be overlooked, although many of them have been able to partially rebuild their house by means of organized self-help.

Rehabilitation and Reconstruction: Analysis of Critical Problems

Issues on Disaster Preparedness

Rehabilitation means returning to its former conditions whilst reconstruction means building an object after being damaged or destroyed, which in this case caused by earthquake. Recent earthquakes in Indonesia have not had serious enough effects to change people’s awareness of seismic considerations in building construction. Lack of willingness to learn from the past is part of the culture of construction in many earthquake prone areas. The building permit granted by municipality often does not include careful assessment on structural safety and vulnerability. There is also a lack of instruments to conduct assessment on the practice of adding space, which commonly occurs in the post occupancy period. This practice often leads to the neglecting of structural safety.

Accumulation of totally destroyed and heavy damaged houses in Bantul alone reached 143,135 (refer to Table 3). These houses are practically uninhabitable and need to be reconstructed. The number adds up the current backlog, which according to the estimation of REI reaches up to 150,000 units. Until the end of August 2006 – 3 months after the quake – the provincial government has not released the formal blue print of rehabilitation and reconstruction support system.

11 Since the second day of post earthquake, the President and Vice President had decided to take turn in monitoring the progress of self-help rehabilitation, by staying in the Presidential Palace in Yogyakarta.


13 REI = Real Estat Indonesia (Indonesian Association of Realtors). The information was based on an interview with chair of REI on August 9, 2006.
To sum up, there are two kinds of housing need to be responded. The first one is the existing backlog, which is intangible. The second, the tangible needs, is the real housing demand as a result of disaster. In response to both cases the local government has not performed a clear strategy. The problem in the first case mostly deals with land availability, infrastructure support, and financing system. In terms of finance, regional autonomy system has placed the Regency as autonomous region, which has the full authority to manage the resources in order to financially support the development. Provincial government plays as umbrella that coordinates the governance among the regencies. Latest survey indicates that the funds allocated for housing purposes in Yogyakarta City, Bantul and Sleman Regencies are among the lowest in the country.

The second one occurs as a slow development of formal policy in funding distribution to the victims, which then caused the uncoordinated and unsupervised reconstruction initiatives by both the community and NGOs. Overstatement by the central government in the media regarding the amount of money to be distributed to the victims is part of the problem. There has been a number of public demonstration recently, demanded the provincial government to realize their promises. Some demonstrations appeared to reject the involvement of facilitators in funds distribution because many of them lacked of competence and involved a lot of money to support their operation. According to the protesters, the money for facilitators can be allocated to add the amount of reconstruction funds.

In addition, there are some existing regulations imposed by central government that challenge the local development. An example is the right of way in waterfront settlements, which only considers the average width of river based on the large size rivers in Kalimantan and Sumatra. These regulations have affected the policy of funding on local infrastructure development. The funds cannot be granted to beneficiaries unless the location of housing conforms the above regulations.

**Ongoing Strategy**

As stated above, the ongoing government’s strategy to respond to the substantial amount of housing demand is unclear, complicated, and mostly occurs as paper debates rather than real actions. As a result, many frustrated international NGOs continue to collaborate with local NGOs to maintain the direct access to the community without direct coordination with the government. These NGOs have made hundreds of T-Shelters (= Temporary Shelter) in Bantul and Klaten Regency. In contrary, the provincial government had recently encouraged all the NGOs not to continue working on T-Shelter because they had assumed that it would slow down the reconstruction of permanent shelter by beneficiaries. The pre-released draft of Governor’s Decree of fund distribution for rehabilitation and reconstruction reflects the difficulties in creating the holistic approach to solution. The Decree, which was issued in early August 2006, suggests the “one step policy” in

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14 Rivers in Kalimantan and Sumatra can be over 1 Km wide, used for shipways. Most rivers in Java are small and not suitable for shipways.
fund distribution\textsuperscript{15}. Under such policy, organizations willing to provide grants or other funding support should go through the provincial government. According to the Decree, there are two levels of strategy\textsuperscript{16} as follows:

1  Basic Strategy
   - Rehabilitation and Reconstruction as a means for developing the community
   - Rehabilitation and Reconstruction as an effort to create job opportunity.

2  Implementation Strategy
   - Concept dissemination to the community and local government
   - Provide technical assistance to the community through the presence of facilitators in the construction process
   - Rebuilding the community by community organizing
   - Rehabilitation and reconstruction implementation by the organized community (POKMAS – \textit{Kelompok Masyarakat} – Community Group).

The Governor has not officially signed the pre-released Decree. It is intended to gain inputs from the Head of Regency by the end of August 2006. The document suggests that \textit{Lurah} (head of the village) is technically responsible for the distribution implementation on the ground. Facilitators are expected to assist \textit{Lurah} in managing the process of funds utilization by POKMAS.

The Ministry of Public Housing imposed a different strategy. They have planned to establish Housing Information Centre (HRC) in Yogyakarta, aimed at transferring the building and material technology to the public. In particular, it is intended to respond the need of training on earthquake resistant building. However, the plan to implement it has not been linked with both the presidential and provincial policies on mechanism of reconstruction fund distribution.

Implications of the Strategy

The above ongoing strategy reflects lack of coordination between actors of rehabilitation and reconstruction, which led to the sluggish progress of reconstruction assistance. The slow process of decision making in fund disbursement by provincial government had invited a series of demonstrations by earthquake victims from Bantul regency, asking for the acceleration of disbursement. Debates whether or not the government should distribute the funds evenly frequently occurred. Many sceptical victims do not care anymore about financial support; they have been initiating the reconstruction themselves by means of organized self help. Undoubtedly, there is no assurance whether the earthquake resistance construction has been met. In some cases, victims rejected the presence of facilitators since they thought that the involvement of facilitators might increase the cost. Besides many of them have inadequate experience in working with the community.

\textsuperscript{15} “Bantuan Hanya Diijinkan Untuk Rumah Permanen”, Kompas, August 9, 2006.
\textsuperscript{16} Petunjuk Operasional Rehabilitasi dan Rekonstruksi Pasca Gempa Bumi di Provinsi DIY Tahun Anggaran 2006.
Capacity Building

Short-term Goal: Building Awareness

Among the actors of reconstruction, the university plays an important role. Many students and faculty members were involved from the early stages of recovery. UN Habitat, CHF, IOM, and other international organizations recruited university students to conduct statistical surveys on the damage and number of victims. Local government teams to assess the strength of construction of the existing buildings were composed mainly of university faculty, particularly from the field of civil engineering and architecture. Students are potential asset for the urgent need of competent facilitators.

John Friedman in his speech at one of the WUF3 events argued that (planning) students are agents of change. These students should become aware of issues related to the changing of their living environment, including disaster preparedness and mitigation. The university, as a place for nurturing the capacity of students, should ensure that the curriculum raises students’ consciousness that the world is continuously changing.

The author’s institution, the Department of Architecture, Faculty of Civil Engineering and Planning (FCEP), Universitas Islam Indonesia (UII) was established in 1987. The undergraduate programme in architecture accepts on average 140 students per annum. Graduates follow a wide-range of professions: entrepreneurs, academics, government officials, etc. What appears to be the strength of the institution is the diversity of geographical background, which covers practically the whole country, from the northern tip of Aceh to Papua, the far eastern part of Indonesia. The tendency that most students go back to their homeland supports John Friedman’s thought on the role of university graduates as agents of change.

However, the focus on the design of buildings has led the students to be distanced from the reality of urban and rural issues. Since 1999, subjects related to urban planning and design have not been compulsory. Currently, these subjects become elective and mostly theoretical. The success of department to win the competition of educational grants in 2004 and 2005 allowed the establishment of Lembaga Bantuan Arsitektur (LBA – Architectural Advocatory Services), which links the students to community by involving them directly in the real project. Although not all of the students can be accommodated, LBA has proved to be an effective interface between the desire of students to work with the real clients and the client’s need of low cost consultancy. The institution can become an instrument for the capacity building of facilitators, which are increasingly needed today.

Long Term Goal: The Implementation of SUF

The Millennium Development Goal on Sustainable Development (Number 7 Target 11) stated: Significant improvement in lives of at least 100 million slum dwellers by 2020.

SUF is an acronym of Slum Upgrading Facilities, a UN Habitat programme in accordance with the above Millennium Development Goal. Currently the
programme is intended to be operated in 10 developing countries of Africa and Asia, including Indonesia\textsuperscript{17}. The bottom line of SUF is to “scaling up slum” by mobilizing local, provincial, and national resources. Slum can be regarded as an indicator of success of city economy. Therefore, the degraded slum means failure of local authority policy to respond the dynamic characters of slum.

Indonesia is one among four countries selected for the Pilot Project of SUF. Other countries are Ghana, Sri Lanka, and Tanzania. There are 2 cities proposed to become the pilot target of SUF, i.e., Jakarta and Yogyakarta. The author was responsible to initiate the feasibility study of the programme in Yogyakarta in January – April 2006. The study recommended two pilot projects, i.e., the organized self help housing for NGO workers in Sleman Regency and the improvement of slum along the Chode River of Yogyakarta City. However, the earthquake disaster that occurred after the recommendation was issued had led the SUF team to consider the victims to be included in the programme. Author proposed that the involvement of the victims should not be at the initial stage of reconstruction. It is more effective to involve them at the post occupancy stage to avoid conflict with the distribution of reconstruction funds.

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Hoek-Smit, Marja

UN Habitat

\textsuperscript{17} SUF priority countries include Bangladesh, Cambodia, Ghana, Indonesia, Kenya, Senegal, Sri Lanka, Tanzania, Uganda, Zambia.
Nilanthi Ratnayake is an Architect and Urban Planner, working in the Urban Development Authority (UDA) of Sri Lanka as the Director for Western Province, which is the most urbanized area of Sri Lanka. Her duties include preparation of development plans for the areas declared under UDA law, preparation of guide plans, lay out plans and formulation of action. She is also involved in preparation of planning and building regulations and their enforcement.

There was a large quantitative and qualitative housing deficit in Sri Lanka before the tsunami in 2004, despite the fact that the Government has a long history of successful housing policies and programmes. The partial or total destruction of 100,000 homes by the tsunami made increased demands on Government.

This paper describes resettlement problems and the importance of coordination. It offers proposals to strengthen the Rebuilding and Development Agency (RADA) created to deal with the tsunami victims and the aftermath of any future disasters in Sri Lanka.
Sri Lanka

Sri Lanka is located in the Indian Ocean covering a land area of 65,610 km². It spans over 432 km north to south and 224 km west to east. The highest elevation is 2,524 m. The climate varies from 17 to 32 degrees Celsius. Sri Lanka is divided into 9 provinces. Western Province is the most urbanized region of Sri Lanka. It has 25% of the total population of Sri Lanka and spans over 4% of the country’s land. Colombo is the commercial capital of Sri Lanka and it has a population of 5.6 million in 2,600 km² land area.

Sri Lanka’s total population in 1971 was 12.7 million. It increased to 14.8 million in 1981 and to 19.6 million in 2005 at a growth rate of 1.16% per annum. As a country in the South Asian region, the urbanization rate in Sri Lanka is relatively low, and according to 1981 only about 3.2 million or 21.5% of the total population was classified as urban. During the 1971–1981 period, the growth rate of the urban population was only 1.2% per annum, but between 1981–1991, indications were that the rate has increased to 2.4% per annum, increasing the urban population to about 24% of the total population. During the period of 1991–2001 it has further increased at a rate of 2.6% per annum to 27% of the total population.

23% of the population in Sri Lanka is under the age of 14 years while 7% is over 65 years. The balance 70% is at the productive age. The average population density of Sri Lanka is 314 persons per km². The infant mortality is 11.1 per 1000 population and the life expectancy is 71.7 years for the males and 76.4 years for the females.

The average household size is 4.31. The internal migration within last 12 months is 29 while the external migration shows a higher value of 60 for 1,000 population.

The economy of Sri Lanka demonstrated its resilience in 2005 by growing at a rate of 6% exceeding the expectations in the immediate aftermath of the tsunami disaster of 2004.

The service sector of Sri Lanka contributes the major share of 55% while industrial sector and the agricultural sector contribute 26.4% and 17.7% for the GDP respectively.

The government take action to develop the following in order to achieve the growth and regional development of the country.

- Enhancing the production capacity in all sectors of the economy by promoting public, private and foreign investment through appropriate reforms, market reforms and public service reforms.
- Strengthening and upgrading education sector at all levels and providing high quality, equitable, cost effective modern and sustainable health care services.
- Providing modern high quality and efficient infrastructure facilities to expand access to input and output markets. Maintaining and rehabilitating existing road network, construction of highways, increasing the availability of safe drinking water, upgrading the railway sector expanding the supply of electricity, etc.
Access to Shelter and Urban Infrastructure

Demand for houses and expansion of urban sector increases with continuing population growth and economic development. The demand for new houses in Sri Lanka is rising at around 100,000 units per year. In addition there is a need for a large number of sub standard houses require upgrading. As per the latest census of housing and population survey conducted in 2001 the shortage of housing was 218,295 units with an additional 325,880 sub-standard units requiring improvements. Further, the tsunami disaster of December 2004, completely destroyed 70,637 houses while another 30,839 units were partly damaged.

The government plays a facilitator role in the housing sector. The ministry of Housing and construction pays attention to issues such as land for housing, resource mobilization for housing finance, developing infrastructure and other services, cost effective technology development. The government is also implementing special housing programmes for targeted groups.

Housing Policy

Housing and Urban Development played a major role in the urban economy during the last three decades. The commitment of the government to promote housing development since 1977 played a significant role in the growth of this sector. This commitment was reflected in the creation of an institutional framework and introduction of various programmes for financial assistance in the housing sector. The housing development also became one of the major sectors which received political support at the highest level, and the government made every effort to increase the housing stock by setting up of various targets.

The urban housing policy maintained during last decade was mainly based on quantitative terms aiming for increasing the number of units contributing the countries overall target of providing shelter for all by the year 2000. Although country has not yet achieved 100% success along the programmes implemented through this policy, the achievement so far was found to be significant in increasing the number of units. However, the structural conditions of the housing units have not reached the adequate level.

Taking these inadequacies into account, the urban housing policy objectives presently being formulated is looking at the problems in a broad. Accordingly it is expected to achieve adequate shelter for all which includes guarantee of the right of every family to own a house according to needs. The adequate shelter referred to here does not mean shelter for all, but it is more than a roof over one’s head. The adequacy includes adequate space, adequate lighting and ventilation, adequate basic infrastructure facilities, adequate location with regard to the place of work and place of basic social services and amenities. In this analysis, the housing situation in Sri Lanka will be discussed as a component of the overall urban structure.

Accordingly the following action has been taken by the government to improve the housing condition of Sri Lanka.

- Constructions of major housing schemes in the Colombo Urban Area for middle and upper income group.
• Provision of basic facilities for low income housing programmes.
• Increase in construction of houses particularly by those who receive income from foreign employment.
• Expansion of lending facilities for building of new house
• Private Sector involvement in housing supply.
• Financial assistance and various other incentives provided by the government to the housing sector.

Housing Sector Issues

Shortage of housing can also be related to economic factors, particularly if houses are not available at an affordable price to the consumer to purchase or rent. This will also be categorized as demand not being met. In the present context the economic factors appear extremely important.

Higher land prices, high construction costs as well as speculation of land prices by the real estate agents are some of the factors that have contributed to increases in rents and price of houses. Another issue in the housing sector in the Colombo Metropolitan Regional Structure Plan is land utilization. In areas where there is high density of houses, the provision of infrastructure facilities can be more cost effective.

Issues in the Housing Sector can be classified under different aspects such as those related to lands, finance, physical planning, designs and technologies, material and labour, institutional and legal aspects.

Due to the tsunami in 2004, the issues related to housing have increased. The short fall of housing increased and the government had to take immediate action to provide housing for the affected people. However the following issues should be considered in order to achieve sustainable development in the housing sector.

• Land fragmentation due to increasing demand for small housing blocks such as 6 to 10 perches.
• Inadequate sizes of houses for growing families.
• Lack of open spaces associated with houses.
• Unacceptable sanitary conditions and water quality in small housing plots due to shorter distance between septic tank and drinking water wells. This causes contamination of water by faecal matter.
• High water table in most of the areas have contributed to further aggravation of the contamination problem.
• Many middle class and upper middle class houses are totally detached from each other. Interaction between and within social groups are at minimum. This raises the social problems such as depression, isolation, intimidation, excessive selfishness, etc. The increase in the suicide rate in the urban areas could also be associated with the increasing social isolation.
• Under utilization of land low density and carpet development are features of present housing development particularly in the homestead sector. If the homestead sector could be reorganized and re-arranged a
better utilization of land and high sanitary/social conditions could be achieved.

Post Tsunami Situation

Due to the tsunami in December 2004, many people have lost their homes. Although the affected number of Colombo district is less when compared with the other affected areas, the resettlement became a critical issue. As a result, about 60% of the affected are still in the temporary camps with lot of hardships. Although they are provided with basic needs such as food, education and health, their mental situation cannot be uplifted until they get a permanent solution. The education of the children was disturbed and they are in unsatisfactory hygienic conditions. Ultimately they have lost their future.

Although the government has taken several steps to overcome this situation, the message has not gone to the people and they are still in frustration. This may be due to the following reasons.

- Lack of awareness among the people what the government is working on.
- Delaying in government procedures.
- No control on the Foreign aid as it is not come to the Treasury directly.
- Do not have a proper organization with the qualified staff in the relevant field.
- Problem related to lands.
- Deficiencies in regulatory requirements.

The government has appointed district secretaries as the tsunami agents for each district which has been affected by the tsunami. Therefore, they have been given all the powers related to such purpose. The required funds are allocated to them. However, the effectiveness of this programme depends on their efficiency and the dedication. Some district secretaries are keen on these matters whereas others are of the opinion that they should stick on to their duty not to the humanity.

In order to provide transparency, the government has formulated some procedures specially to handle the financial matters and selection of the beneficiaries. This takes a long time and sometimes donors who are willing
to spend on housing have given up due to unexpected delays as they also have some limitations. Also the conditions provided by the government, are not acceptable to the donors as their agendas are different. Therefore there should be a compromise between the two parties.

At the early stage of the tsunami, Urban Development Authority was the sole authority for handling the tsunami matters, which include re-planning and redevelopment of the affected areas, construction of houses, provision of social and physical infrastructure facilities, land allocation, etc. However, a new organization was formed called ‘Tsunami Housing Reconstruction Unit (THRU)’ and the responsibility was given to this organization as the mandatory of the UDA may be neglected through handling additional work. However, this system was not worked properly as the staff assigned is not done to satisfy the requirement. The human resources required for such purpose should be carefully selected depending on the work to be done. The organization was consisted of about seven divisions and most of the heads of these divisions were retired officers and they are over 60 years of age. So they were rather inefficient and cannot work with the modern techniques. The involvement of planners and architects in this set-up was very minimal and the majority were involved in monitoring work.

Although there were several problems during the construction work, such problems were overlooked due to the lack of knowledge and negligence of the officers.

The problems related to land matters are different from site to site. Therefore, it should be handled by an expert who should be efficient and be able to tackle all the problems. Since there is a large number of tsunami sites and most of them are with some sort of a problem, the officer who appointed for such purpose could not handle all and this caused delays to the construction work.

At the construction stage there were several issues came out. Sometimes the officers at the site were incapable to handle these problems or less interest on their duty. If a qualified person with field experience is assigned, those problems would be overcome.

Some contractors did the work in their own way. Sometimes their work is not up to the standard due to lack of supervisors in the government side. As most of the contractors are profit oriented, they do not bother about the quality and durability of the work. Therefore there should be a competent person to monitor.

After the change of President of Sri Lanka in December, the above organization was closed and new organization called Rebuilding and Development Agency (RADA) is formed in view of supporting any disaster situations. Presently it is handling only the tsunami matters as there is no other disaster at the moment. The organization set up was changed and new staff appointed. Majority of them are just carrying out paper work. The staff who were working with the THRU were fired. Although three months has gone, the required staff is not appointed. The staff who has got appointments are extended on a monthly basis and therefore their commitment will be less due to the insecurity of the job.
The head of RADA is a financial expert, and he is more interested in getting funds rather than problems related to planning and construction. Most of the higher grade staff are not in the construction and planning relevant fields and the higher authority is less aware of the real problems in the field.

The layouts prepared by the donors are not according to the gazetted rules and regulations. Sometimes they do not bother about the minimum land extents, open space requirements, adequate access etc. These may be due to the ignorance.

Some of the houses designed do not consider the lifestyle of the people who are going to live in. Therefore the houses will not be best suitable for them. These are mainly due to the ideas of the architect.

Although the government has introduced some standards for the houses, these standards have been changed by the donors according to their standards. Therefore there will be a conflict among the affected as the differences of the facilities.

Although the lands are available to construct houses, the donors are following their agendas and implementations are delayed.

In some instances the donors are requesting to select the beneficiaries as they are spending their own money for the land and construction of houses. But this cannot be done, as the government should treat all the affected equally.

It is a requirement of a donor to sign a Memorandum of Understanding with the government for construction of houses. But some of the donors play out and they tried to collect funds by showing these MoUs. In order to overcome of this situation the government took action to sign the MoUs after the commencement of the construction.

Several donors are interested in providing funds and most of them came through NGOs. However due to the lack of a proper financial procedure, these funds would not be used properly. If these funds come directly to the government of Sri Lanka, a larger number of houses with good quality could be constructed in a lesser period.

Provision of infrastructure became a great problem, as most of the donors are willing only to build houses. Presently the government is engaged in the infrastructure provision. However it will be a problem as most of the funds came for building houses rather than provision of infrastructure.

Although some of the plans do not obtain the formal approval, these plans will be implemented taking the advantage of tsunami. In some instances the officers complain on these matters and due to the urgency UDA also given covering approval, subject to getting approval prior to the construction. However, these applications never come out. But these situations should not have happened as these houses will be occupied by the poor and once affected people. We should treat them in a humanitarian manner.

Some of the developers prepare the layouts without inspecting the sites, which results in destruction of the existing environments which could be retained for the well being of the people.
It was a necessity to come in to an agreement with the government prior to commencing construction work. This agreement was done through signing of a memorandum of understanding (MOU) by the Donor. All the conditions regarding the housing construction were included in these MoUs. However, some of the donors misused and took this as an advantage of collecting money from the foreign countries. This was mostly done by the NGOs. In order to avoid this situation the government decided to sign MoUs after commencing the construction and also forward some regulatory requirements to stop such situations.

In some instances the NGOs provide faulty information to the donor countries. They exaggerated the situations and tried to take the benefits. In some instances they show some photos from other areas and claim the shows the affected areas. Sometimes the people were used for faulty evidence. This happened even in the World Urban Forum.

**Proposal to Strengthen RADA**

The following proposals could be forwarded to overcome the above situation and as well as a solution for the resettlement of tsunami victims in a shorter period.

1. *To strengthen the RADA with the following staff.*
   - The head of the organisation should be a Town planner or an Architect or Civil Engineer who is familiar with the construction work.
   - Director board to be comprised with the experienced, Town Planner, Architect, Land Expert, Financial Expert, Civil Engineer and Administrator.
   - Staff to be allocated for the above directors.
   - The technical staff for the sites should have experience with the relevant field.

2. *The sole authority should be lie with the RADA.*
   It is necessary to establish this organisation through an Act passed by the parliament of Sri Lanka and there by it will become legal body.

3. *All the development s should be adhere to the UDA rules and regulations.*
   It is necessary to give the required advice to the donors regarding the approval procedures and all the regulatory requirements. For this purpose a division should be formed with qualified staff. It is also necessary to take action against the unauthorised constructions.

4. *All the houses should be in a same standard.*
   Presently the houses are designed as the donors wish. Therefore the standards should be stipulated by the RADA such as floor area, quality of finishes, housing type depending on the area (whether it is single storey or multi-storey), facilities such as pipe borne water, electricity etc. and it has to be monitored strictly.

5. *All the local and foreign funding should be handled by RADA.*
   A proper procedure should be adopted to handle foreign and local funds come for this purpose. In order to achieve this, planning and designing,
preparation of bill of quantities, tender procedures etc. should be done by the RADA itself and the donors’ task is to look after the quality.

6 Targets should be given for the site officers for completion of houses. A work programme should be prepared at the very beginning and it is necessary to keep to the target.

7 The involvement of the affected should be taken for construction work. This will help the affected to get an income. Also when these people involve in the construction work they will do a better job as these houses are for them.

8 A clear cut monitoring system should be introduced. Presently the monitoring system is very poor. The contractors do the work on their own. Some work are not up to the standards. Therefore it is necessary to have a monitoring team together with good supervisors.
Papers

Projects in Environment Society and Financing
Managing Urban Services in Bangladesh

A Study of an Informal Settlement

Mohammad Sazzad Hossain
Architect, Khulna University, Bangladesh, post graduate training in Conservation and Management of Historic Buildings, Lund University. Works with conservation and restoration of heritage buildings in Dhaka. He is active in upgrading informal settlements, organically developed in the historic centres. He is also involved with research, publication and other activities to revitalize the historic areas for sustainable urban development.

Dhaka is facing serious crisis with its slum settlements that house 37% of city’s overall population. Poor access to basic urban services is one of the major constraints to develop sustainable shelter for low-income communities. The report is an analytical study of urban services in slum settlements in Dhaka Metropolitan Area (DMA). The aim of the paper is to improve the condition of health and hygiene conditions in the informal settlements for sustainable urban environment through upgrading the existing services for the urban poor. The report conducts a census of slum and squatter settlements in the city with identification and analysis of the constraints to identify the opportunities to remedy the problem. Finally the paper will focus on an alternative mechanism enabling the community to upgrade their existing services and to adopt a maintenance plan to achieve long term sustainability.
Bangladesh

A slum is most simply defined as housing so inadequate or so deteriorated as to endanger the health, safety, or morals of its inhabitants.¹ The World Bank, in a survey report that was conducted in collaboration with the Housing and Settlement Directorate, Govt. of Bangladesh (GoB) and Centre for Urban Studies, defined a slum as a residential area where more than three hundred people live in one acre (0.405 ha) of land. An average of more than three adults lives in a single room. 46% of these houses are one-roomed and the average size is 120 ft². Ventilation, drinking water, electricity and sewerage facilities are absent in these houses.

![Development of Slums and Squatters in Dhaka. Source: DCC, ADB.](image)

### Number of Wards, Area, Total Population and Slum Population

<table>
<thead>
<tr>
<th>Wards no (1)</th>
<th>Total (1) Area km²</th>
<th>Total City (1) Population 2001</th>
<th>Total City (2) Population 2005</th>
<th>Slum (3) Population 2005</th>
<th>Slum Pop. % of City Population (2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 wards 12 unions</td>
<td>306.00</td>
<td>6,550,209</td>
<td>9,136,182</td>
<td>3,420,521</td>
<td>37.4</td>
</tr>
</tbody>
</table>


### Slums in Dhaka

In slum areas people generally live with their families. The total number of slum households in the slum of Dhaka city is 673,883. 80.6% slum clusters with households only 31%with mess units only and 16.3% with mixed of the two. 70.3% of the slums were located on private land, while 25.7% were on government land and the rest on land owned by various other agencies.²

### Population by Household and Mess Units in Slums of Dhaka

<table>
<thead>
<tr>
<th>Slum household population</th>
<th>Slum mess population</th>
<th>Total slum population</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,286,770 no</td>
<td>133,751 no</td>
<td>3,420,521 no</td>
</tr>
</tbody>
</table>

3.286.770 no 96.1% 133,751 no 3.9% 3.420,521 no 100%


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¹ Edith Emel Wood 1935: Slums and Blighted Areas in United States.
- **Area of Land Covered by Slums**
  In Dhaka, slums occupied 5.1 percent of the city’s total land area but accommodated 37.4% of the population. The largest single slum in Dhaka was 90 acres.

- **Density of Population & Floor area in Slums**
  The population density is 891 persons/acre in slum areas and 121 persons/acre in the city. In Dhaka, the number of extremely dense slum clusters (density above 1,500 persons per acre) was 409 (8.4% of the total in Dhaka).3

- **Land Tenure of Households**
  Evictions of slums on government land are common. One constraint to reform in the housing sector is the issue of access and rights to land. The residents live in continuous fear of eviction, due to lack of security of tenure, leading to a lack of commitment to invest in decent housing.

- **Rental Pattern in Slums**
  Of the total households (673,883), 12% own their house, 77% pay rent and 11% live rent free4.

- **Occupational Pattern in Slums**
  Slum dwellers typically work in informal sector as daily labour, transport work, formal and informal factory work, most likely concentrated informal sector garment factories, domestic work, etc.

**Pattern of Occupation of Slum Dwellers in Dhaka**
*(percentage of gainfully employed persons, excluding housewives)*

<table>
<thead>
<tr>
<th>Business</th>
<th>Vendor</th>
<th>Service</th>
<th>Daily labour</th>
<th>Domestic worker</th>
<th>Transport</th>
<th>Factory worker</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>3.7</td>
<td>10.8</td>
<td>18.6</td>
<td>5.0</td>
<td>24.0</td>
<td>22.4</td>
<td>5.0</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: CUS, Slums of Urban Bangladesh, Mapping and Census, 2005.*

- **Income Pattern in Slums**
  Slums are generally places of concentrated poverty, with many residents below the poverty line.

**Households’ Monthly Income Pattern in Dhaka**
*(percentage of households)*

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Number of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2000 Tk</td>
<td>3.8</td>
</tr>
<tr>
<td>2001–3000 Tk</td>
<td>19.6</td>
</tr>
<tr>
<td>3001–4000 Tk</td>
<td>34.5</td>
</tr>
<tr>
<td>4001–5000 Tk</td>
<td>27.6</td>
</tr>
<tr>
<td>Above 5000 Tk</td>
<td>14.6</td>
</tr>
</tbody>
</table>


4  Ibid.
• Building Materials

Shack Jhupri Mud 6.3%
Kutch flimsy structure 39.7
Semi pucca flimsy structure 52.3
Dilapidated old buildings 1.2
Others (better quality) 0.5
Total 100% (673,883)

• Drainage Situation

Only 11.4% of slum clusters can be found well drained, 30% drained moderately and 58.7% can be found with poor drainage conditions.6

• Sanitation

Household access to toilets (%)
Septic Tank 33.7
Water sealed 1.9
Pit 46.3
Hanging 13.9
Open 3.2
Others 1.0

• Garbage Disposal in Slums

45.4% of clusters have no fixed place for garbage disposal.7

• Access to Electricity and Cooking Gas among Slum Households8

With Electricity 97.1% of clusters 95.4% of households
With Cooking Gas 81.2% of clusters 57.6% of households

• Sources of Drinking Water9

Municipal tap 81.7
Tube well 15.6
Other 2.7

Housing Policy

The housing policy defines the role of government in housing as primarily that of a facilitator or enabler to increase access to land, infrastructure, services and credit and ensure availability of building materials at a reasonable price, especially for the low and middle income groups and to create and promote housing finance institutions, where actual construction of housing will generally be left to private sectors, the people themselves and NGOs10. The policy further states that greater emphasis will be laid on affordability, personal savings, self help and cost recovery. Effort will be made to enhance affordability of the disadvantaged and low-income groups,

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5 CUS, Slums of Urban Bangladesh, Mapping and Census, 2005.
7 Ibid.
9 Ibid.
through provision for income generation and income enhancement, housing loans at especially low interest, access to space for running workshops and business and such other activities. The only public sector housing finance institutions Bangladesh house building Finance Corporation offers available loan for housing construction but the mechanism works in favour of the middle and high income group. The government housing projects for the urban poor mostly depend upon the foreign donations. There are some micro-finance institutions in Private sector providing long and short term credit for housing in rural and urban areas.

**Actors from Public Sector: their Main Functions**

- Urban Development Directorate: Nation wide urban and regional planning
- Rajuk: Development planning, Dhaka metro area, approval of housing
- National Housing Authority: Provision of public housing in urban areas
- Housing Research Institute: Research on appropriate building material and technology
- Public Works Department: Construction of public buildings and maintenance
- Deputy Commissioners of Settlements: Land lease title transfer
- Dhaka Water and Sewerage Authority: Water supply, sewerage disposal, drainage and sanitation
- Dept of Public Health Engineering: Water supply & sanitation
- Housing Building Finance Corporation: Provide loans for house construction in private sector
- Dhaka City Corporation: Multiple functions, esp. conservation and other urban services
- DESA/Power development Board (PDB): Generation and supply of electricity
- Titas Gas: Supply of fuel gas

**Land Use and Physical Planning**

According to the survey of land use pattern of DMA, conducted in 1991 by JICA, 19% of the total land area of Dhaka (265 km) fell under residential use, 8% under category of commercial, industrial and institutional use, roads and other categories took 11%. Village settlements covered 4%, agriculture 45% and water bodies covered 14% (Jaica, GOB). Overall 39% of the city area was under urban use.

Dhaka city requires an integrated urban planning for sustainable development. Though the urban poor are integral part of urban development and provide different services for the city RAJUK in DMDP (1995–2015) emphasized on accessible location at the urban fringe to rehabilitate the slum and

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11 Ibid.
squatters. The master plan proposed various satellite town and development of the fringe areas to provide housing for different income groups. There is yet to address the issues to scale up the existing Slum more specifically in the master plan.

Lack of Urban Services

One of the major constraints for sustainable livelihood in slum areas is lack of basic urban services. Water supply, sanitation, drainage, solid waste management and accessibility are considered here as the elementary components of basic services. Dhaka is a mega-city facing increasing slum population and crisis of land that has created acute problems. Integration of basic components for urban services is completely ignored due to the organic development of these slum settlements. Haphazardly established set-up for instant access to services resulted failure in terms of long term sustainability. The issues of poor services can be justified as a critical shelter problem as it has got serious impact on health and hygiene at the slum areas and overall urban environment.

This section of the report will focus on the following services that are identified as a critical shelter problem for the urban poor.

- **Poor Water Supply**
  Lack of pure water and lack of inadequate water are the two major constraints for water supply in the slum areas. The dweller used to depend on the near by surface water and municipal tube wells. The slum residents directly use the contaminated water from river, pond, ditches, lakes and other sources without proper filtration. However connection to sewer or drain and leakage in pipelines cause contamination in the water supply. Moreover there is virtually no distribution system developed considering the demand and supply of water of these slum residents. Old, narrow, blocked pipelines and lack of maintenance causes low flow of water.

- **Poor Drainage**
  Slum settlements are often found on land which is in most cases not suitable in this sense for proper housing, prone to suffer from poor drainage and water stagnation. Poor drainage creates unhygienic environment and impediment for easy access.

- **Solid waste Management**
  Solid waste and human excrement, piled up around slum settlements due to leakage and absence of sewerage lines, often remain uncollected. Poor waste management makes the slum settlements hazardous and unhygienic to the adjacent localities.

- **Poor Sanitation**
  Most of the slum does not have access to sanitary latrine. Conventional latrine widely regarded as unsafe are common in slum areas and hanging latrines leads excreta to water bodies where the residents take baths or wash. Latrines are inadequate in number and mostly remain without septic tank or sewerage connection. Lack of maintenance and adaptation of inappropriate technology can be identified as key reasons for such poor sanita-
tion. In almost all slums, latrines are usually shared by two or more households.

- **Poor Accessibility**
  As most of the slum settlements are single storied and does not allow vertical extension it covers the entire land with dense settlement. In Dhaka, the number of extremely dense slum clusters (density above 1,500 persons per acre) was 409 (8.4% of the total in Dhaka). Roads are narrow enough to create poor access and problems during usual movements.

- **High consumption of energy**
  The poor slum dweller does not have adequate access to gas and electricity. Due to illegal tenure many slums remain out of the coverage of such service facilities. For cooking and other household use the poor community highly depend on the natural resources for supply of fuel, thus maintaining high energy consumption for domestic use.

## Key Causes

- **Lack of Physical Planning**
  As services for the urban poor were not considered an integral part for physical planning of the city, most of the organically developed settlements of the poor remain out of the coverage of municipal services. The DMDP (1995–2015) still does not reflect any concrete strategy to integrate those settlements within an institutional framework.

- **Lack of Trained Personnel**
  There is a lack of enough trained people in Public and private sector to provide technical assistance and management support to upscale the service facilities. More research and professional bodies are required to be raised both in private and public sector to play role for the urban shelters.

- **Poverty and Lack of Financial Support**
  Due to poverty the slum dwellers cannot bear the high maintenance cost for the utility services. The existing housing finance mechanism in public sector does not work in favour of the poor community. Moreover the existing microfinance institutes in Bangladesh do not have any scheme for the poor community to develop their housing in urban areas.14 The existing housing policy does not specify its strategy for upgrading the services in slum settlements.

- **Lack of Initiatives**
  There is a lack of initiatives among different actors and strong political will is required to organize the community and generate a common platform for stakeholders and actors to work within institutional framework.

- **Absence of Good Urban Management**
  There is a lack of coordination among different actors to generate collective effort to provide better services for the poor. Effective urban management is still a key issue that has to be emphasized.

- **Dense Population**

14 Dr Marja C. Hoek-Smith (1999): Housing Finance in Bangladesh.
High density of population and limited resources is one of the key factors to create a gap between demand and supply. Due to distorted proportion of serve and service area in the dense settlements services became inadequate.

- **High Maintenance Cost**
  Conventional technology requires high maintenance, and poor are unable to pay for the cost.

- **Complex Technology**
  The maintenance of conventional service setups are complex and not easy to install. There is a need for user-friendly technology for service delivery.

- **Lack of Awareness and Knowledge**
  There is lack of awareness among the poor community on their shelter situation creating high risk for health and environment. The urban poor are not even concerned about the financial mechanisms and sustainable community management.

### Impact of the Problem

The problem has impact on the following issues:

- **Health impact**
  The important reason to highlight the issue of the Service problem is that the poor services are often life threatening to the slum residents. Life in slums is always unhealthy. Child mortality rate in the slums are high in proportion comparing to the whole city.

- **Environmental impact**
  Unhygienic life in slums is also a threat to urban environments. More over densely populated slums are often noisy, smoky and odorous that causes noise and air pollution. The physical environment of slum and squatter is such that it acts like a cell for diseases and pollution for adjacent localities.

- **Vulnerability**
  Slums are vulnerable to fire due to open cooking without the concerning safety and poor accessibly make those settlements more hazardous.

- **High energy consumption**
  None of the slum structures are energy efficient because of lack in appropriate technical applications. Though there is huge opportunity to take the climatic advantages through modification at the structures or recycle the human excrement to produce alternative to conventional fuel but such approaches are absent.

- **Scale of the impact**
  The Slum dwellers are directly affected by the problem but the problem is gradually mounting on the over all city dwellers as slum occupies almost 5.1% pf the city’s total land and accommodated 37.4% of the total population.

- **Responsible bodies**
  Although Dhaka WASA, DESA, DCC are the public authorities for urban service delivery in Dhaka, but the problem seems to be multi-dimensional and requires unique management for coordination among different actors in
public sector including NGOs and other stakeholders to generate mutual action plan. At present LGED and different NGOs are playing such key role with funding from different international organizations.

Scaling-up Interventions

The report proposes a **conservative approach** to adopt alternative mechanism for minimum interventions, required to scale up the existing structures and set-up for adequate access to basic urban services to manage environmental transformation for sustainable urban development & to mobilize community strength to improve their services and to adopt preventive maintenance as an intermediate guideline to achieve sustainability. The following areas are identified as key components of the proposal.

- **Adaptation of sustainable technology**
  Technology needed to be affordable to the poor community, sustainable to the environment and should cover easy maintenance and easy installation. Considering the sustainability and different needs, the community’s choice should be given priority. Flexibility in selection and provision of different options may enable the community to adopt appropriate technology according to their needs.

- **Water supply**
  Though Dhaka metropolitan area has got wide coverage of WASA for pure water supply there might be requirement to find alternative solution to use rain water and surface water through treatment plant if it fails to get the WASA coverage. Deep-tube wells can be another option to use the ground water. Submersible pump can be used to increase supply in densely populated areas. Community selection may be prioritized to raise a distribution system to reduce gap between demand and supply and to bring balance between affordability and usage.

**Options for Water Supply**

<table>
<thead>
<tr>
<th>Choice of Intermediate technology</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private connection with multiple taps</td>
<td>Flexibility in access and different tap for different purpose.</td>
<td>High service charge.</td>
</tr>
<tr>
<td>Single tap yards</td>
<td>Low price</td>
<td>Purpose use of one tap by single family.</td>
</tr>
<tr>
<td>Public stand post</td>
<td>Cheap</td>
<td>Group of family have to share a yard with multiple taps.</td>
</tr>
<tr>
<td>Rain water catchments</td>
<td>Free of service charge.</td>
<td>Depends on nature</td>
</tr>
</tbody>
</table>

- **Drainage**
  Proper slope in tube well platforms and tap yards can ensure proper drainage of wastewater. Open, lined drains may be constructed for adequate drainage coverage. The maintenance of the surface drains is an important factor.
Solid waste management
Permanent garbage box or dustbin for disposal of household waste may be constructed for easy and regular garbage collection.

Sanitation
Community toilet may be a suitable option for the densely populated shelters. System using onsite soak ways can be upgraded by connection to small diameter sewer system. Settling tanks, a type of septic tank, are used to trap the solids. The sludge tank has to be emptied regularly. Shallow sewers can work more effectively for highly dense areas. The network comprises small diameter pipes laid to flat gradients in roads and alleys not subject to heavy loads.

Options for Sanitation

<table>
<thead>
<tr>
<th>Options</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin-Pit latrine, Sealed</td>
<td>Cheap, do not require water &amp; permanent super structure.</td>
<td>Require tight fitting lid.</td>
</tr>
<tr>
<td>Twin-Pit latrine, ventilated</td>
<td>Cheap &amp; does not require water.</td>
<td>Require additional cost for vent pipe &amp; super structure.</td>
</tr>
<tr>
<td>Twin-Pit latrine, Pour flush</td>
<td>Easy to use and keep clean</td>
<td>Required additional cost for pour flush and reliable water supply.</td>
</tr>
<tr>
<td>Ecosan toilet (Recycle waste and produce fertilizer)</td>
<td>Long term benefit &amp; sustainable for environment.</td>
<td>Additional cost for installation of recycling plant.</td>
</tr>
</tbody>
</table>

Energy reuse
There is a greater need on the use of sustainable construction techniques, which conserve natural resources and reduce long-term costs for homeowners. The biogas plant can be an affordable technology to reduce energy consumption in slum areas. The project can be connected to the pit latrines to recycle the human waste to generate gas for cooking and to produce fertilizers. Biogas is environmentally sustainable technology and there is no risk of failure if proper design and supervision can be ensured.

Paved foot path and street lights:
To assure easy access network street paving may be an option to be emphasized. The access way may allow slow moving vehicular access along with pedestrians. Street lights can be recommended.

Designing the Community-based Programme
For sustainable interventions conventional top-down approach should be reversed and bottom–up strategy may be adopted through designing a successful community based programme. Management of organized self-help programme through community participation is the vital factor to use the strength of the poor communities to scale up their living conditions by themselves.
Mobilization and organization of community
Mass meetings, election of committees, formation of groups, and preparation of constitutions and registration of the communities with the project can play effective role to generate community participation within an institutional framework.

Community Action Planning
The community should be promoted to identify their problems, solutions, and to generate action plan within a time frame. The community should be involved to understand their role, duties and responsibilities regarding funding and resources mobilization.

Community Contracts
There is a need to establish a legal framework to implement the programme through community participation. The community should appoint small contractors for work or distribute the work load among itself. The community should establish an agreement to raise funds for community contracts.

Maintenance Plan
On the basis of community participation a maintenance plan can be generated for long term sustainability of the project. The community should identify their role and responsibilities to adopt long term planning to sustain the continuity through community involvement.

Community Exchange Programme
There is a need to exchange views and share experiences to generate innovative ideas to strengthening the community activity. So the meeting of community representatives should be organized at different levels ranging from city to national level.

Supportive Income Generation
The gap between affordability and cost for services can be reduced if the income level of the poor community can be increased through different income generating activities. Mobilization of the poor people for development activities can help to increase their income.

Micro-credit Finance
The proposal offers adaptation of new financial scheme at micro level for the urban poor to upgrade there basic services. The proposal suggests land mortgage for security of money return as an option. Successful return of loan for supportive income generation might be another option to provide loan for upgrading the services. Successful repayment of income generating loans can be effective security for money return for the urban poor who do not own land. Different micro finance institutes can play vital role to promote schemes with reasonable interest to facilitate the poor to develop small scale business for income generation. Approach should change from subsidy to support policy.
Capacity Building

One of the significant components of the proposal is to raise skilled workers in related field and to disseminate knowledge among the community.

- To adopt innovative and appropriate technology related people from private and public sectors should be trained properly. Moreover it is a matter of paramount interest to raise trained people in housing sector.
- Priority should be given to staff engaged in community management for adequate training to motivate and organize community and to generate community participation.

The proposal suggests running supportive training programme for the community people. The slum residents should be provided vocational training for income generation. Training may also be given for managing self-help housing. Moreover selected slum residents should be given health education to raise health workers for delivery of basic health services to the community and to raise awareness on health and sanitation. Though community exchange programmes like meeting at city or national level can play a vital role to exchange views and idea with the other slum communities.

Gender Issues

Priority should be given to women of the slum community regarding access to loans and training for income generation to facilitate their active participation at the programme. Mobilization of skilled women can play effective role to raise self-reliant community.

Strengthening the Public–Private Partnership

Strengthening the public–private partnership and inclusion of the private sector can ease many problems faced by different public organizations: UN Habitat, different donor agencies, the Government of Bangladesh, private sector and most importantly the local inhabitants of the informal settlements can influence on the basic urban service delivery. Promotions of basic urban service delivery for privatization should get priority to reduce the load of public authorities responsible for urban service delivery. A key strategic approach is to strike a balance between public and private participation through overcoming the gap among the actors and developing mutual cooperation.

Integrated Urban Planning

There is a need to adopt long term policy for better urban management of Dhaka city. The city corporation should take necessary steps to prepare a detail master plan for an integrated urban planning that will demonstrate
government’s clear intention with slums. Gov can involve local expert to address their practical opinion understanding the critical issues and considering the poor as integral part for city development as they provide services for rest of the urban community.

**SWOT Analysis**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
<th>Opportunity</th>
<th>Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not going through the huge coverage of entire housing problems the proposal works with probably the most critical shelter problem that affects seriously from individual to city level.</td>
<td>Security of land tenure is not considered strongly. Still need financer for initial investment</td>
<td>It will be possible to get rid of an acute problem with limited budget in short time as the proposal is concentrated to a single issue. Sustainable for environment. Building a skilled community as a resource for the city. Vital issues for upgrading the services. Enabling the poor women to play role for economic development.</td>
<td>Due to illegal tenure eviction can take place and community might not be interested to invest without security. Might not start without donor aid</td>
</tr>
<tr>
<td>Energy production through recycling the waste. Role of community as a decision maker Supportive income generation to reduce the risk of loan defaulter. Provision of loan for improving the services. Community effort is used as major capital. Mobilizing the skill of women</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Case Study

Water and Environmental Sanitation Programme in Urban Areas
Actors: Plan Bangladesh (International Organization) with Partner NGOs
Slum: Bawniabadh (around 5,500 households), Ward 5, Zone 8, DCC.

<table>
<thead>
<tr>
<th>Implementation Strategy</th>
<th>Key Findings</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCC zone coverage concept with special focus on the slum areas.</td>
<td>Involvement of the Ward commissioners and WTF is significant for the process.</td>
<td>Frequent migration in the Slum communities.</td>
</tr>
<tr>
<td>Ensure participation of LGIs and sanitation task force from planning to implementation and monitoring of the project activities.</td>
<td>Participation of all classes of people through the CCCD approach strengthened the implementation process and development sense of ownership feelings.</td>
<td>Continuous eviction threat.</td>
</tr>
<tr>
<td>Implementation of Integrated WES programme (community mobilization for sanitation, water supply, hygiene promotion &amp; waste management)</td>
<td>CDF in collaboration with WTF committee is found active to solve the problem at their community.</td>
<td>Slum-based complex local power structure.</td>
</tr>
<tr>
<td>Formation of community group through CCCDA and make them responsible to implement the project activities.</td>
<td>Formation of users group is essential for proper O &amp; M of the installed Wat San facilities.</td>
<td>Sanitation coverage at public places.</td>
</tr>
<tr>
<td>Enhancing the knowledge and the skill of the stakeholders.</td>
<td></td>
<td>Connection of latrines and septic tank with surface drain.</td>
</tr>
<tr>
<td>Provide the WES service to the poor through demand creation.</td>
<td>Quality WES service at hanging slums.</td>
<td></td>
</tr>
<tr>
<td>Strengthening advocacy and networking.</td>
<td>Continuous follow-up and monitoring by LGI and community.</td>
<td></td>
</tr>
<tr>
<td>Hardware installation through cost sharing mechanism (community sharing percentage of cost for installation and full cost for O &amp; M).</td>
<td>Coordination and linkage between different institutions at upper level is good but at field level is poor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less coordination between different institutions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack in Housing policy regarding the slums.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of long term planning based urban development.</td>
<td></td>
</tr>
</tbody>
</table>

Conclusion

Shelter for the urban poor is an integral part for urban development. Considering the organic development of these settlements as service zone for the city emphasis should be given on these informal settlements to improve health and living condition. Conservative approach to scale up the existing set-up through minimum intervention can facilitate access to basic urban services to revitalize these areas as vital component for sustainable development of the city. Community feedback as key component for management and preventive maintenance as an intermediate principle can bring balance between intervention and adaptation for long term sustainability.
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Tannerfeldt, Göran and Per Ljung
This paper considers the problem of sanitation in Area 49 Federation Village in Lilongwe, Malawi, where members of the Federation in alliance with the Centre for Community Organization and Development (CCODE) and in partnership with government and city assemblies have constructed 222 low cost houses. The community would like to use biogas technology which is not common in Malawi at the moment. However, there are no financial resources at the moment for this activity. A case study of the Walakuba Biogas digester in Jinja, Uganda, provides an interesting example of how a local urban population can be assisted. This, coupled with World Urban Forum III experience on use of biogas, for example in Sweden, has provided a broader picture on the technology which has a sustainability element in that country. The paper offers recommendations to address the problem relating to policy, institutional arrangements and finance.
Malawi

Malawi is a landlocked country, south of the equator in sub-Saharan Africa. For administrative purpose, the country is divided into three regions: the Northern, Central and Southern regions. The country has three main cities; Mzuzu in the north, Lilongwe in the central and Blantyre in the southern region. Lilongwe is the capital city where government Ministries are, as well as diplomatic missions, most international and local Non Governmental Organizations (NGOs).

Malawian government through the Ministry of Lands, Housing and Surveys is in the process of revising the existing national housing policy so that it includes issues of housing for the urban poor, for example housing finance and partnership promotion in the delivery of housing development programmes. The housing problem for this proposal is being addressed by a Non Governmental Organization: the Centre for Community Organization and Development (CCODE) with government facilitating the entire process with other stakeholders. In the initial pilot project there is a problem of faecal sanitation. The proposal will use available literature on options as well as the lessons drawn from World Urban Forum III held in Vancouver, Canada from 19 to 23 June 2006.

Malawi, like many other developing countries is experiencing a rapid population growth. The 1998 population census gave the population of the country as being 9.9 million. At the moment, the annual population growth rate is estimated at 2 percent and projected at around 16 million by 2012. Table 1 below shows the 1998 National Census and population projections from 1999 to 2002.

The World Bank country brief 2005–06 has given Malawi population to be 11,200,000 in 2004 while that of Sub-Saharan Africa is 719 million. Life expectancy at birth in Malawi has fallen sharply over the past decade, in 1990 it was 44.6 while in 2003 it was 37.5 years. This is basically due to the HIV/AIDS pandemic, among other factors. The World Bank’s country brief shows that in the period 2003, the under-five mortality rate was 178 per 1000 live births while the infant mortality rate was 112 per 1000 live births.

In 2002, literacy rates among people aged 15 years and above were 70% for males and 46% for females (DHS education data survey 2002). Despite introduction of free primary school education in 1994, primary school completion rate in 2003 was 41% and the rate of absenteeism was 17 days per student per year. Overall education attainment is higher in urban areas than in rural areas. The proportion with no education in urban areas is about one third that in rural areas.

The country’s economy heavily depends on agriculture, which accounts for more than 90% of its export earnings, contributes 45% of GDP estimated to grow at an average annual growth of 5.3% between 2004–08. The agriculture sector employs 85% of the labour force. In 2004, Agriculture produce relating to tea, tobacco, and sugar accounted for 70% of Malawi’s exports. However, over the past two decades the economy has experienced a cyclic decline because of droughts and balance of payments problems.
Table 1: Selected Demographic Indicators, Malawi 1998

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Census Yr ('000)</th>
<th>Projections ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (Midyear)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population ('000)</td>
<td>9,934</td>
<td></td>
</tr>
<tr>
<td>Intercensal growth rate</td>
<td>2.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Total area km²</td>
<td>118,484</td>
<td></td>
</tr>
<tr>
<td>Land area km²</td>
<td>94,276</td>
<td></td>
</tr>
<tr>
<td>Population per km²</td>
<td>105</td>
<td>108</td>
</tr>
<tr>
<td>%age Urban Population</td>
<td>14.0</td>
<td>14.3</td>
</tr>
<tr>
<td>Women of Child bearing age as %age Female Population</td>
<td>47.2</td>
<td>48.2</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>37.9</td>
<td>52.3</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>6.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Crude death rate</td>
<td>21.1</td>
<td>23.1</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>121.0</td>
<td>91.4</td>
</tr>
<tr>
<td>Life Expectancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40.0</td>
<td>41.1</td>
</tr>
<tr>
<td>Female</td>
<td>44.0</td>
<td>43.8</td>
</tr>
</tbody>
</table>


Malawi has always been predominantly rural and one of the few least urbanized countries. Urban population is growing at an annual rate of 6.7% while that of Africa is an average of 34.4%. According to 1987 census, there were 878,745 people living in the urban areas of the country representing 11% of the country’s total population. In 1998 it rose to 1,377,388 representing 14% of the population. The urbanization trend is putting a lot of pressure on the infrastructure and basic social amenities in the cities and towns. The urban problems impact on the development and sustainability of our cities and towns. The problem of rapid urbanization is also impacting on housing demand in cities and towns, especially in the major cities of Blantyre, Lilongwe and Mzuzu and the municipality of Zomba. The shortfall of housing has triggered the proliferation of squatter settlements.

Some of these factors include the following: Lack of a revised policy on housing, limited access to credit and financing for housing by the majority of the poor, existing housing programmes by government and Non Governmental organizations are not spread throughout the country, and linkage between good housing and poverty reduction not well appreciated to accord housing as a priority sector.

Access to Shelter and Services

The estimated housing stock in Malawi is 2,919,414. Out of this figure, 2,559,991 houses are in the rural areas while 359,423 houses are in the urban areas. This figure is likely to change at the next survey because there is a lot
of construction going on in the urban areas. There is a deficit on housing estimated at 50,000 in the major cities of Blantyre, Lilongwe and Mzuzu. It is estimated that 77% of rural housing is substandard and temporary. Currently the country has no building regulations and standards because the National Housing Policy is under review. On the tenure of households, we have rural (customary tenure) and urban (freehold, leasehold and defacto). It is estimated that 63% of the population in the urban area are renting while 37% of the houses in the urban areas are owner occupied. The building materials used in the urban areas are burnt bricks, sun dried bricks, cement and corrugated iron sheets. On the other hand rural areas mostly use sun dried bricks, sand, wattle and grass thatch.

According to the World Bank data on the country profile, in 2002, 67% of the population had access to an improved water source while 46% had access to improved sanitation. It is estimated that in the major cities of Blantyre and Lilongwe cities, 70% of the population have access to safe drinking water and that 73.5% (1998 population census) have access to mostly basic sanitation. 30% of the urban waste is collected and disposed. The rural areas use 100% wood energy for cooking and it is readily available in most parts while the urban areas use 90% wood energy for cooking.

Malawi is in the process of revising the existing housing policy, developed in 1999, so that it includes issues such as role of central government as an enabler in the delivery of housing development programmes, issues of partnerships between central government, local government, assemblies, non governmental organizations, supporting partners, civil society and the homeless federation; housing for the urban poor, housing finance and cross cutting issues among others. In the new policy, Governments main goal will be to increase access to housing by all income groups. The strategies in attaining this goal will also be reviewed.

At the central government level, there is the Ministry of Lands, Housing and Surveys for the provision of policy direction, monitoring and land servicing. For house provision/production and land servicing, there is a parastatal known as Malawi Housing Corporation. At Local government level, there are the City and Municipal Assemblies for local policy, monitoring, delivery and land servicing. The current existing NGOs include Habitat for Humanity, and Centre for Community Organization and Development (CCODE) for advocacy and house production. The private sector housing producers include Maone Park Limited, Kanengo Northgate, Press properties Limited. The community-based organization known as the Malawi Homeless Peoples Federation is involved in house production. In terms of research and development of shelter related delivery activities, the Malawi Polytechnic Engineering Department is involved. There are also individuals who are involved in house production.

According to the 1987 Town and Country Planning Guidelines and Standards, the main types of housing development are low density permanent detached, medium density permanent detached, terraced or multi-storey, high density permanent detached, or semi detached and high density traditional detached. In general, land is zoned for a particular type of housing development and mixing of types is normally permitted. However there is no
objection to permanent housing being built in traditional housing areas. All housing developments in statutory planning areas are subject to town planning control, although there are certain exceptions in traditional housing areas. In urban areas the local authority may have building by laws, which govern the design and construction of permanent buildings. Plot areas are 2000–4000, 1000–2000, 375–1000, 300–500 and 375–1000 m² for low density, medium density, high density detached, high-density semi-detached and traditional, respectively.

Pilot Project Housing

As mentioned in the preceding section, rapid urbanization has resulted in increase in the demand for houses in the urban areas as well as proliferation of slums because the poor cannot afford to construct decent houses. Those not accommodated in slums are renting substandard houses, one to two rooms where 6–10 families share pit latrines. To address this problem a Non Governmental (NGO) organization known as Centre for Community Organization and Development (CCODE) is working with the homeless who have a Federation and a Mchenga fund that is contributory each month. Members contribute about MK 20 (USD 0.15) each month. The Federations are in all the three regions of the country. The Federation is a network of Community based savings schemes comprised of mainly women that save daily. The federation has members in all urban communities, from cities to small growth centres in Malawi.

The CCODE in 2005 facilitated the construction of 222 low cost 2 bed roomed houses as a pilot phase for some members of the federation in Area 49, Lilongwe using organized self help housing and development. Beneficiaries were granted loans MK 100,000 (USD 750 as at present exchange rate of USD 1=MK140) and these are being repaid at an annual interest rate of 12% because CCODE operates a revolving fund.

In terms of the design, the house is on 180 m² land to meet the demand. Original design was 360 m² of land. The members use adobe bricks (unburnt clay blocks mixed with straw). The technology was borrowed from Stellenbosch University in South Africa by the Federation members. The house comprises a living room, 2 bedrooms, and a kitchen. It has cement flooring and is roofed with corrugated iron sheets. There is a communal piped water system. In terms of drainage, the Federation themselves made a provision with technical advice from City Assembly.

The Area 49 project was a pilot one, the lessons to be drawn in relation to proper sanitation system will be used in the subsequent projects to follow in the other regions. Already, the Federation in Blantyre in the Southern Region has been allocated land for the construction of 460 low cost houses and work is in progress.

Sanitation

Although the construction phase has been a success, the Area 49 Federation Village has the following problems relating to faecal sanitation:
There are problems relating to the size considering the number of some of the families. However, the design allows for extension.

The standard of the faecal sanitation facilities is generally poor because of lack of a sewer system.

The Lilongwe City Assembly was expected to install a sewer system during the construction phase. However, they do not have adequate financial resources to plan, provide and manage urban infrastructure whose cost is high. The middle and high-income groups can afford to install septic tanks on their own.

The Federation members themselves have no funds for the construction of a sewer system. However, those members whose houses are situated where the water table is low have pit latrines but this is a small number compared to those whose houses are constructed where the water table is high. Ideally each household should have its own toilet and most families in the Federation village would want this if it was possible and affordable. However, their probable intention is to have a big sewer system with a digester to enable them generate biogas as a source of energy. The advantage with this system is that the houses will have flush toilets and the gas to be generated will be used for cooking. The major expenses will be felt in the initial stages involving installation of sewer system and procurement of gas stoves for cooking. However, this is an environmentally friendly system because firewood will be saved and therefore no cutting of trees unnecessarily.

CCODE does not have funds for provision of sustainable faecal sanitation services apart from the loan that was already granted to the Federation members for construction of houses.

Although Water Aid Malawi is currently implementing Water and Sanitation programmes in Lilongwe in Chinsapo, Mtandire, Mtsiriza, Piyasani, Mgona and Area 24, the programme has not extended to the urban areas such as Area 49 Federation village.

At present Malawi does not have a Water and Sanitation policy, but is in the process of developing one. The Ministry of Lands, Housing and Surveys is represented in the Committee undertaking this assignment.

At present Malawi is still in the process of reviewing its National Housing policy so that issues of housing finance, among others, are properly reflected.

Housing sector does not have funding earmarked to support housing programmes for the urban poor because it is still not yet a national priority, although there is continued lobbying so that it is reflected as a priority in the Malawi Economic Growth Strategy Document.

The partnerships are there between Government, City Assemblies, NGOs and Homeless Federation. However there is need for an institutional set up to ensure sustainability and ensuring collaborated effort in addressing problems such as sanitation in Area 49 Federation village.

The members of the Federation village do not have a readily available model that can be adapted to suit their situation unless if one is identified and a feasibility study is undertaken by an interested supporting partner.
Available literature and presentations at the World Urban Forum III indicate that there are some models on Biogas tried elsewhere which could be adapted to address the problem.

The Area 49 Federation village lacks a sustainable faecal sanitation system. Good sanitation is a crucial way of reducing incidences of contagious diseases such as diarrhoea and cholera. The community cannot afford water borne sanitation because it is expensive and it requires water. Access to proper sanitation by the community in Area 49 Federation Village would contribute towards government’s efforts in the achievement of the United Nations Millennium Development Goal because there would be an increase in the number of people accessing proper sanitation services.

The affected community are the Homeless Federation members occupying 222 houses and their families. Women are mostly affected because they are mostly regarded as being responsible for sanitation facilities at household level. The sanitation programme would contribute directly by providing an initial target at the pilot site of 1,776 persons (estimate of 8 members per family) with improved sanitation facilities and enhanced hygiene awareness. The members of the community at the federation village would also be equipped with proper sanitation skills and the lessons gained will be transferred to the next phase in Blantyre where 460 houses are being constructed.

Malawi Homeless Federation has partnerships with other Federations in the neighbouring countries for example, Tanzania, Zimbabwe, Namibia and South Africa with whom they share experiences.

CCODE has a Water and Environmental Sanitation programme with the Homeless Federation. The water and environmental sanitation programme aims at working with the urban poor communities in improving water and sanitation conditions which in most cases are in a bad state as illustrated in this proposal.

**Approaches to Faecal Sanitation**

A good faecal sanitation system has to have the following: be affordable for the low income groups in the urban area, should not generate odours, should not contaminate ground water that may pollute the environment in surrounding areas, wells and river, an understanding by the users so that it lasts long, be utilized by a household not the entire community and be socially and culturally acceptable by the users.

Different countries have used different approaches in addressing sanitation problems for the urban poor. For example, Brazil has a simplified sewerage or condominium sewerage developed in northeast Brazil in the early 1980s. Initially it was meant for low-income peri urban areas; however it has been implemented in a number of areas in low-income peri urban areas in major cities to small urban areas to villages with populations of 1,000 people. Simplified sewerage is designed to receive unsettled waste water and it is recommended that such water be treated first prior to reuse in horticulture, aquaculture. It is low cost; in 1981 the average was USD 325 per household. This technology is used throughout Brazil. In Honduras through community
participation, the urban poor living in settlements of 300,000 people in 1995 had pit latrines but no waste water systems. However, by end 1997 four simplified sewerage systems had been installed at community request.

In Malawi, Water Aid introduced the concept of ecological sanitation in 2001. However it was only practiced in few districts. The concept embraces more than toilet provision alone. It is a philosophy “which attempts to provide sanitation where pollution of the environment is reduced, water is conserved and where the nutrients available in processed excreta can be used in agriculture and growing trees”.1 The existing types of Eco toilet used in Malawi include the following: the single pit composing toilet or Ambaroo where a tree is planted on an already filled pit while the toilet is moved to a new location, the children’s toilet where again trees are planted on filled pits, double pit composing toilet where compost is produced and dug out, and the urine diverting toilet. An estimated 10,000 low cost ecological toilets have been built in Malawi under the Water Aid, CCAP and COMWASH programmes2. However, in this model nutrients available are in processed excreta and are used in agriculture and not biogas for cooking.

An Existing International Model for Biogas

An international case study of the Walukuba biogas digester in Jinja, Uganda on “turning human waste into domestic gas” provides an interesting example of how a local urban population can be assisted through collaborative and innovative efforts between local communities, local government and other stakeholders. Jinja is Uganda’s largest urban centre with a population of 100,000 residents. In 1995, the community received funding from the International Council for Local Environmental Institute to implement community environmental programmes under the local Agenda 21 model programme.

Two project areas were prioritized for funding: “one on solid waste management and the other on sewerage and sanitation. The latter led to construction of VIP latrines, establishment of public water taps/kiosks, renovation of blocked flushable toilets and construction of the biogas digester.”3 Human waste that had been a nuisance and a health hazard initially before commencement of the project was to be used to generate gas for lighting and cooking. The project was initially piloted and spread to other sites thereafter. The project experienced some challenges too such as cultural prejudices and negative attitude within the community. In the beginning the project appeared too technical for the community to appreciate. Again the building materials were found to be expensive for the community.

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1 Ecological Sanitation in Malawi, Peter Morgan.
2 Ibid.
Options for Sanitation in Malawi

World Urban Forum III
Experience on Approaches to Sanitation

At the World Urban Forum there were presentations on Waste as a Source of Energy to Combat Climate Change by the Swedish Environmental Protection Agency with reference to Sweden, and the Philippines. According to them, “Sweden should be a pioneer in efforts to achieve ecologically sustainable development.”4 The Swedish government in 1996 allocated SEK 6.2 billion for local investment programmes to support process needed to achieve sustainable development. In generating biogas, organic matter leaves households, as wastewater and garbage and these are codigested. Biogas is then upgraded to vehicle fuel and the remaining one is used for heating. The other nutrient rich goes to farms. Case studies were given on the City of Kristianstad, south of Sweden with 75,000 inhabitants where it has shown that Biogas is important for local waste treatment.

Biogas is produced from landfill, from wastewater treatment plant and the digestion plant. Another presenter Mrs Helena Kock Astnam from the city of Linkoping illustrated how biogas has led to sustainable development in this city with 138,000 inhabitants and 50 plus years of experience in Biogas. In the Philippines, Quezon City, they illustrated solid waste management best practices. The city has 2.4 inhabitants. In Latvia, with a population of 147,890 inhabitants, they came up with local integrated solutions for solid waste management and energy utilization. The advantages with biogas are that it is renewable energy source, it provides security of energy supply from local production and it promotes a sustainable environment locally and globally.

In Indonesia, The Jakarta Focus team is implementing a project to build capacities of governments, communities and the private sector to work together for improved service provisions in low-income urban neighbourhoods. Interventions may include biogas systems. The project is currently underway in Kelulahan Penjaringan, one of the largest slum areas.

The other events at the World Urban Forum 3 shared experiences in water and sanitation programmes in general and not specifically on Biogas. These include a Networking event organized by CIDA and SIDA on “Addressing Conflict in Water and Sanitation services for urban poor” with case studies on India, Zimbabwe, South Africa, and Vietnam; another networking event on “Water for Asian Cities Programme: Developing Pro-poor Water and Sanitation Governance Frameworks for Achieving Target 10 and 11 of the Millennium Development Goals” with case studies from India, Vietnam, China and Pakistan. Another networking session on “A Partnership for Water and Sanitation in African Cities” organized by UN Habitat, Water and Sanitation branch is aimed at improving urban water and Sanitation management in African cities. Some of the cities that have benefited are in Uganda, Tanzania, and Senegal.

Ways Forward

It is expected that the lessons learnt from the pilot phase will be used in the subsequent phases already being implemented in the southern and northern regions of the country. The actors in the project include Ministry of Lands, Housing and Surveys, Lilongwe City Assembly, Centre for Community Organization and Development and the Homeless Federation members. These actors are in partnership that is being strengthened. Government’s role is facilitation of the project by ensuring, for example that land is provided and providing policy direction where necessary.

At the moment Malawi is in the process of revising the National Housing policy so that issues of housing for the urban poor are included as well as housing finance. The National Water and Sanitation policy is also being developed which will provide guidelines in addressing such issues.

The World Urban Forum III shared the Swedish and Philippines experience on biogas as a source of Energy. In these countries, biogas is not only used for cooking but also as fuel for vehicles. Available literature has also illustrated the Ugandan experience on biogas where the local community have adapted to this technology. These experiences have illustrated how partnerships have facilitated provision of biogas programmes and also how government has taken a leading role in the case of Sweden.

The Area 49 Federation Village has an advantage that it is the first of its kind constructed by the community themselves, with a number of houses. The structures are available as well as space where a sewer system and a digester could be built. The community are willing to accept the new technology that would generate energy.
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Resource Mobilization for Service Provision in Zambia

Proposal for Public-Private Partnerships

_Towera Kazunga_

studied Building Construction before reading for a degree in Urban and Regional Planning at Copperbelt University, Zambia. Since graduation in 2000, she has worked as a planner for the Department of Physical Planning and Housing, Zambia. She was Senior Planner in North West Province, based in the provincial capital Solwezi when this paper was written. She is now Senior Planner for Luapula Province, based in Mwansa.

This paper focuses on ways to mobilize resources for service provision in Solwezi. North-Western Province has become an economic powerhouse in the country. With the rise of the copper prices on the world market, Solwezi has seen the opening of two mines, one of which is considered the biggest current mining project in Africa. Many Zambians are seeking jobs in Solwezi, but the level of infrastructure and other social services in the municipality remain the same. The municipality must find resources to provide essential services.

Zambia is among the least developed countries in the world and has undergone economic structural adjustment programmes to qualify for debt relief. The country still faces a number of challenges such as high poverty levels of about 73%, high unemployment of about 80%, low health and educational standards, inadequate access to safe and clean drinking water and sanitation, non-availability of affordable and adequate shelter.
Zambia

Zambia is a former British colony. It gained its independence on 24 October 1964. The country is landlocked, sharing borders with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of Congo and Tanzania. It has a total surface area of about 752,614 km². Administratively, the country is divided into nine provinces. These provinces are further divided into a total of seventy-two districts.

The population of Zambia has still to grow. The 1980, 1990 and 2000 census estimated the population of Zambia at 5.7, 7.8 and 9.9 million respectively, thus in that number 65% resided in rural areas and 35% in urban and semi-urban areas. Zambia is said to be one of the highly urbanized countries in sub-Saharan Africa. Zambia’s population is regarded young in that 46% of it is under 15 years.

The fertility is declining though at a slow pace. Total fertility declined from 7.2 to 6.5 and finally 6.0 in 1980, 1990 and 2000 respectively. The life expectancy of Zambians is estimated at 50 years.

During the 1990s, the government introduced a number of fundamental changes in the economic policies. A broad based programme of liberalization and deregulations was implemented. The government’s dominant role on commercial activities was substantially reduced. To date about 260 State Owned Enterprises (SOEs) have been privatized.

Given these structural and policy changes the economy has been experiencing a modest recovery with positive increases in real incomes since 1999, Of 1.4% annually. Zambia’s real GDP per capita grew by 2.7% in 2003 and 4.7% in 2004. But this is a modest recovery which is far below the 5–7% necessary to reduce poverty significantly. Per capita annual incomes are at USD 395, placing the country among the world’s poorest.

As a result of Zambia’s performance under the economic reform programmes, the country reached the Highly Indebted Poor Countries Initiative (HIPC) in 2005. This has led to the country receiving debt relief.

Access to Shelter and Urban Services

According to Living Conditions Monitoring Survey Report of 2003 there are 1.7 million dwelling units for a population of approximately 10 million people which represents a ratio of 1 unit to 6 people. About 70% of the urban population live in unplanned settlements. Further, the report also revealed that most of these dwelling units are located in the rural areas at 64%, with only 36% being in urban areas. However it is important to bear in mind that most of these houses are below acceptable standards for decent habitation both in size and condition. Apart from being small in size, 62.4% of them are of traditional nature built with mud bricks, grass thatched roofs and mud floors. 78% of the households owned the houses they lived in, 12% rented from landlords and 8% occupied free housing. Owner occupation was found to be higher in rural areas where it stood at 92%. On the other hand, private renting showed more prominent in urban areas at 34% against a mere 2% in rural areas.
According to the Living Conditions Monitoring Survey Report for 2002–2003, only 52% of households had access to clean and safe drinking water. In urban areas water is supplied from water companies, boreholes, or hand dug wells. The former source is erratic, while many of the stand posts have been vandalised. The most common form of toilet facility, according to the report, is pit latrines while 14% of the households country wide have access to flush toilets. They use basic unprotected pit latrines, which pollute the underground water drawn from shallow wells. In urban areas, the majority of the households (62%) had dug out pits for garbage disposal since there is no systemic waste collection. In terms of energy, the most common source of lighting energy in households was found to be kerosene representing 52% while electricity was represented by only 18% of households countrywide.

**Housing Policy**

The main areas of concern for the Zambian Housing Policy were Housing Finance, Land Delivery, Building Standards, Infrastructure Development, Local Building Materials, Employment Creation and Home Ownership. There has been no implementation of what was hoped to achieve in the Zambian Housing Policy. It therefore makes it difficult to evaluate the policy.

**Actors in Shelter Delivery and their Roles**

The role of government now is more of a facilitator than a provider though it still provides some major infrastructure such as main roads, electricity.

The Local Government is mandated to provide services to its community. It has a number of functions it has to undertake such as: Refuse collection and disposal, Health and Welfare services, Education, recreation and libraries, Sanitation and Sewerage, Public housing, Renovation and Conservation.

**Financial Problems of Local Authorities**

Almost all Local Authorities in Zambia are facing serious financial problems mainly due to lack of support from central government, a narrow resource base due to loss of their traditional source of income, poor revenue collection records, untapped potential for income generation and outdated policies which confine them to being an implementer with no participation in issues such as determination of certain levies. The major sources of revenue for local governments are property rates, ground rent, trading licences and personal levy which have proved inadequate for service provision and carrying out of capital projects. Many local governments are unable to pay salaries for their workforce; some local government workers have not been paid their salaries for years. Although the law stipulates that central government should pay grants to local governments in lieu of rates, generally the government does not do so.
Problems with Provision of Public Services

Local Governments are mandated to provide public services at district level but are constrained in terms of resources due to a narrow resource base, poor revenue collection records, untapped potential for income generation, loss of most of their traditional sources of income (which included housing stock, water rates, motor vehicle licensing) as well as the inadequate and erratic grants from Central Government. Even when the grants are sent, there are usually spent on other issues such as salaries, allowances, etc. Though the councils have been mandated to come up with by-laws to address their financial woes, the process is very long, taking a period of not less than two years.

The implementation of plans is poor mainly due to the fact that most of the Local Governments have limited financial resources. Sound financial position of the Local Governments is crucial for the service provision and infrastructure operation. Although some major infrastructure (highway roads) is provided by the Central Government that for which Local Governments are responsible for is poorly maintained and provisions lag back urban growth. Poor road infrastructure drives away investment, increases the cost of doing business and limits accessibility.

The quality of life of the people is affected adversely more so for the poor and vulnerable as a result of the failure to deliver quality services by the Local Governments. Access to clean and safe drinking water has continued to elude the poor thus leading to outbreaks of waterborne diseases. The fact that the Local Government has insufficient resources and is not vigorously looking out for alternative initiatives to enable them finance service delivery as well as maintain existing infrastructure also impacts on the competitive condition of a locality and thus slows down local economic development.

It is also true that there has not been much effort to exploit the resource potential of the private sector at the district level for the promotion of local initiatives and commercial development by enhancing national, provincial, district as well as local linkages.

Whatever efforts have been there in the public, private and the communities have been scattered and isolated and thereby having limited impact in transforming service levels at district level.

Public-Private Partnership

It is widely acknowledged that building partnerships is one way of coordinating and linking resources available in private and public sectors and strengthening the community level institutions for exploiting the potentials existing in the district. Public-Private Partnerships are based on the recognition that both the public and private sectors can benefit by pooling their financial resources, know how and expertise to improve the delivery of basic services to all residents. PPPs also provide an adequate governance pattern for local economic development because they encompass representativeness and a common goal.
There are many spheres in which the Solwezi Municipal Council can work with the private sector to deliver social services and to provide infrastructural services.

Solid Waste Management

Inadequate solid waste management remains one of the major aspects of environmental degradation. Unfortunately solid waste management is still believed by many to be the responsibility of local governments. Unlike in the past when the national economy was ticking and local governments were heavily funded by central government, local governments can no longer adequately provide solid waste management services without the involvement of other stakeholders such as local communities and the private sector. The best practices can be taken from Mauritania.

Mauritania Solid Waste Management

The project in Mauritania aims to improve solid waste in Basra in the city of Nouakchott. It is being implemented by an NGO known as Tenmiya, the project supports and organizes local level stakeholders involved in solid waste management. Stakeholders include the Municipality of Basra, small private waste collectors, and community based organizations in Basra. The project has contributed to the transformation of informal small private operators into organized small businesses (known as Groupment d’Interet Economique – GIE) that provide solid waste collection through a direct PPP contract with Basra municipality. The project has enabled the municipal authorities to develop formal contracts with small private operators for the collection of solid waste in poor neighbourhoods, establishing monitoring mechanisms that involve local communities, and generate additional revenues for both the private operators and the host municipality.

Sustainable Water Resources and Sanitation

There is no community that can exist without the adequate supply of water. Whenever sewerage has not been treated or disposed of properly severe health and environmental risks have occurred leading to outbreaks of cholera and other waterborne diseases and the subsequent loss of lives.

Yet the indiscriminate and unregulated sinking of boreholes, construction of septic tanks and soakaways, pit latrines and digging of shallow wells are leading to water contamination. Some examples can be drawn from Mozambique and Argentina on how they have been dealing with these issues. Zambia has also undergone some reforms in the water sector which is comparable to Mozambique.

Mozambique Water Supply Services

The project in Mozambique is being implemented under the broad reform in the water sector led by the World Bank and a number of bilateral donors. This project in Mozambique has led to private sector participation in the water and sanitation sector, and aims at improving access to good quality
and affordable water to the poorest consumers in two major municipalities, Maputo and Matola. The project complements the reform in the water sector and focuses on developing a model for urban service delivery and associated sanitation activities in the context of a privatized water supply system that is experiencing challenges in reaching poor neighbourhoods. It is being carried out in partnership with the Water and Sanitation Departments of the Maputo and Matola municipalities, the independent Water Regulatory Council (CRA), the private water operator Aguas de Mozambique (AdeM), the Water Assets Holding Company (FIPAG), and the local branch of the NGO CARE International. This programme is being implemented in Mozambique in line with the national policies for decentralization and private sector participation in water utilities and has contributed to the inclusion of marginalized urban communities in the water supply planning process. It has also opened lines of communications between the private water service provider, the municipal authorities and their constituents. This is part of a national initiative that has established Technical Working Groups at the central and municipal levels to guide the process of private sector participation in water supply in Mozambique.

Argentina Water and Sanitation Services

In Argentina, the project aims to build capacity of community organizations. Local government and the private sector work together, within the framework of the Applied Management Model, to provide water and sanitation services to the informal settlements in Moreno, a suburb of the city of Buenos Aires. Private sector activity in new informal settlements of the city is often lacking due to the inability of business to secure land leases. The PPP in place has, however, proved an effective means of expanding the provision of services to these informal settlements. The project addresses the special needs of the low-income population by contributing to the institutionalization of partnerships-based management to serve their settlements. The project also coordinates initiatives needed to ensure the delivery of effective services, technological systems and financial mechanisms to the settlements.

Other Sources of Revenue

Parking Fees

Solwezi has seen a raise in the number of vehicles in the district due to increased income for the residents and a number of people coming into Solwezi for business opportunities due to the on-going mining activities. Parking fees are used in the countries like Costa Rica as a way of providing residents with employment, money for the municipal, protecting the vehicle from break-ins. It calls for no capital investment for the purchase of parking machines.
Market Levy
In Lusaka, the local government has entered into partnership with the private sector in the development of markets. The local government has provided land while the private sector has provided finance. The local government issued a lease agreement to the private sector to run the market for a specified period, enough to recoup their investment and make profit before handing over the markets to the local government.

Bus Station Levy
Unlike before the central government and local governments had buses they used to run but the situation now is that the central and local governments are not involved in the transport business. This is mostly done by the private sector. In cities like Lusaka and Kitwe, the local government charges the private buses for the use of bus stations. This money is used to maintain the bus stations, the council receives some income. In most instances most of these monies is not properly accounted for. It is generally felt that a private company can run these stations more profitably and at the same time provide services such as public toilets.

Expected Outcomes from PPPS
- Increased pool of financial resources in the district for service delivery.
- Increased social benefits to the residents (including the poor and vulnerable groups) as a result of joint interdependent initiatives.
- Reduced Local Government exposure to commercial risks by sharing risks and rewards with other stakeholders.
- Regular maintenance of assets overtime and reduced long term costs.
- Enhanced business capacity and competitiveness amongst businesses.
- Increased locational quality in terms of the quality of life and the business environment.
- Enhanced local development and high value investments in place.
- Increased opportunities for employment and income generation within the locality and hence increased contribution to local economic development.
- Increased linkages between the community, private sector, civil society, and public sector.

Possible Challenges to be Addressed
- Underlying legal, political and institutional obstacles to forming effective Public-Private relationships.
- There is absence of experience on partnerships between public and private. Before it was generally felt the state will do everything then later it was believed the free market economy will solve the problems but not the two working together.
- Mistrust and lack of understanding of each other’s interests and needs. How can private companies, working on a principle of profit-maximization be the right partners for development? Within the business world, the image of public institutions as potential partners who are perceived to be bureaucratic, moving slowly and inefficiently. How can agencies like these become partners of the private sector where decisions and actions must be taken swiftly?
- Most of the local leadership are sceptical about this idea as it is considered western. It is considered that it will fail like other programmes that were introduced. It is generally felt that these are experimental. This is due to the many negative experiences that have been experienced.
- Most of the elected leaders are scared that they will lose their powers to the private firms. This is evident with the Water companies where the Local Governments once owned these companies, have now become mere shareholders in these companies.
- Developing of capacity in the various technical aspects of PPP design and implementation at the local government level.
- Developing of capacity in tendering procedures, tariff setting contract compliance guidelines for companies who will want to partner with the local government.

**Conclusion**

According to the second schedule of the Local Government Act, Chapter 281 of the laws of Zambia provides that the council executes sixty-three (63) functions. These range from general administration, advertisements, agriculture, public health, education, public order, registrations to drainage and sanitation. For the local government to provide these services requires a certain level of financial resources which the local government does not fully possess. Therefore it is unrealistic for the Local Government to think that it will provide services to the citizens without the involvement of other stakeholders. It will be economically beneficial for the public sector, civil society, NGOs, communities and private sector to partner for the purposes of designing, planning, financing, constructing and operating projects which would traditionally be considered as a preserve of local governments. This participatory approach to development entails that there is no central but a holistic approach to development.
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The lack of a formal housing finance institution in Tanzania is the major problem in addressing adequate housing. Although Tanzania embarked on trade liberalization in the early 1990s, no public or private mortgage finance institution was formed, except for few private commercial banks that offer the services in one of their sections. Tanzania Housing Bank, a formal housing finance institution was established in 1972, but collapsed in 1995 due to dependency on short term deposits to finance long term loans, weak capital base, poor record keeping, poor administration and corruption\(^1\). Housing finance problems were clearly felt after the collapse of the THB.

The paper considers the need for a formal housing finance institution to developing sustainable housing programmes, alternative options of financing housing, and proposes ways to address these housing finance problems.

\(^1\) (www.nationmedia.com/eastafrican/17012005).
Tanzania

The need for a formal housing finance institution is twofold. The first one being shortage of adequate houses to meet required needs. This need arises from the fact that there is a high rate of urbanization in the country. By 2002, about 23% of the population were residing in urban areas (Kyessi 2006). Taking an example of Dar es Salaam city, which is the commercial capital of Tanzania; its population density is 1793 people per sq. km (highest population density in the country) while Lindi Region has the lowest density 12 per km$^2$. The population grows at a rate of 1.83 % per annum. Statistics on housing backlog is still sketchy. However, in 2000 the backlog was estimated to be 2 million housing units (Kyessi 2000).

The second reason is that currently most houses are financed through the informal means, especially the low to middle income earning classes. Individuals contribute to about 95% of total housing stock in the country, while 5% is contributed by real estate developers, NGOs, and other public bodies. Income distribution of the people (who are the main house suppliers, targeted clients, and house renters) is described below in the basic general data section.

The country has a population of 34,584,607 people (2002 census). Per capita Gross Domestic Product (GDP) of Tanzanians is USD 251, and that of Gross National Product (GNP) is estimated at USD 246.

Table 1: Income Distribution

<table>
<thead>
<tr>
<th>Source</th>
<th>Dar es Salaam</th>
<th>Other urban</th>
<th>Rural Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment – Government</td>
<td>3.8%</td>
<td>5.1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Employment – Parastatal</td>
<td>3.1%</td>
<td>1.6%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Employment – other</td>
<td>16.0%</td>
<td>9.6%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Self employ – with employees</td>
<td>5.9%</td>
<td>4.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Self employ – w/out employees</td>
<td>18.1%</td>
<td>16.7%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Unpaid family helper</td>
<td>10.5%</td>
<td>13.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Housewife/household chores</td>
<td>19.2%</td>
<td>11.2%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Farming, livestock, fishing</td>
<td>3.0%</td>
<td>26.9%</td>
<td>75.8%</td>
</tr>
<tr>
<td>Students</td>
<td>8.6%</td>
<td>4.3%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Inactive</td>
<td>11.6%</td>
<td>7.2%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Household Budget Survey 2000/2001

Statistics in the 2000/2001 Household Budget Survey shows that about 65% of people’s income is spent on food, 23% on non-durable items, 7% on durable items, 2% on medical, and 2% on education. Also, about 36% of the population live below the poverty line. A study by Women Advancement Trust (WAT) revealed that a person saving Tsh 20,000/= per month (USD 1 is equal to Tsh 1,300) can afford to build 2 rooms of total 25 m$^2$ after saving for about 10 years.

2 http://www.tanzania.go.tz/ppu/pdensity.htm
### Table 2: Percentage of Population in Poverty

<table>
<thead>
<tr>
<th></th>
<th>Dar es Salaam</th>
<th>Other Urban Areas</th>
<th>Rural Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Poverty</td>
<td>7.5</td>
<td>13.2</td>
<td>20.4</td>
</tr>
<tr>
<td>Basic Needs Poverty</td>
<td>17.6</td>
<td>25.8</td>
<td>38.7</td>
</tr>
</tbody>
</table>

Source: Household Budget Survey 2000/2001

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**Access to Shelter and Basic Services**

Most Tanzanians opt to own houses rather than rent. Housing construction is taking place in both planned and unplanned areas. Nationally, about 84% of the residents own the houses they live in (quantitative), although in urban areas over a third rent privately (Household Survey 2000/2001). About 75% of urban dwellers reside in informal settlements (Mlaki 2006).

Land is state owned. Surveyed plots are acquired formally from the government on short and long-term lease bases (between 33–99 years). Surveyed plots are not necessarily serviced (with the exception of the sites and services projects, and the 20,000 pilot project). The responsibilities of surveying and servicing plots for construction lies to the respective municipalities; but due to scarcity of funds, the financial burden is shifted to the communities, and sometimes to donors in conjunction with the Government. When it comes to informal settlements, unauthorized individuals sell informal plots to other individuals. The pieces divided by the owner/seller consider few or none of the town planning ethics and codes of conduct. Nowadays, these informal pieces of land can legally be rented from the Government, subsequent to application (by the owner) for the particular plot that is illegally occupied. The responsible municipalities will then accommodate the plot in their neighbourhood plans as per the existing standards and regulations.

Most urban areas lack drainage channels (except for those residing near regional roads and few other roads). Waste disposal (solid) is commonly practised in inner urban areas, and some very few areas far from the city centre. There are no services of collecting solid waste in rural areas. Liquid waste is either connected to central sewers, or disposed in oxidation ponds, or using septic and soak away pits. In rural areas, pit latrines are predominantly used.

**Actors in Shelter Delivery and Their Roles**

The Government works through various ministries responsible for land and human settlement development, infrastructure services development, and local government. The main roles played include making policies, soliciting funds for different projects at national level, preparing national development planning schemes, and acting as enabler of the development project.

Local Governments work at the regional and municipal levels. Their main tasks include: coordinating and monitoring national development projects in their areas, collecting property taxes, and generally initiating development projects in their areas; for example, working together with communities/helping in soliciting funds for developments projects.
Non Governmental Organizations (NGOs) are pressure groups. They can be large or small organizations. They work together with communities and/or municipalities in developments projects, soliciting funds from donors to finance development projects, coerce changes in systems that bring about proper developments, to mention a few activities.

The private sector is business oriented. They construct and sell or rent houses to those who can afford, they lend to those who can pay back (financial banks), contracted to provide infrastructure services. They work together with the Central Government at provision of housing for rent, lease or sale.

Community organizations are small groups at a neighbourhood level. They are the residents that are in need of improving their living standards. Their main roles include identifying priorities shelter problems they have, participate in housing delivery at individual and group levels (in terms of finance and ideas), provision of infrastructure services, use and maintain shelter.

The research institutions may be private or public. They conduct training in capacity building, quality control, and carry out research and advise accordingly.

Other actors include politicians, housing cooperatives, donors/ international organizations, and all groups that in one way or another are involved in the housing delivery process.

Need for Formal Housing Finance

With rapid urbanization, new settlements are formed at a very fast speed. However, the speed with which these new settlements are formed exceeds the Government’s financial capacity of providing infrastructure services necessary for and required by these settlements. As a result, most of the time the burden of financing infrastructure services is shifted to the end users. This increases the total costs of investing in housing, as the client incurs the costs of constructing a house coupled with land costs of acquiring plots and installing infrastructure services.

The challenge of Lack of a Formal Housing Finance Institution in the country arises from the fact that there is a need of increasing housing stock with no financial means to finance the projects. Also, as illustrated earlier, the building clients, majority of them being middle and low income earners, are forced to pay higher price for housing units from their pockets, housing cooperatives, commercial banks, or other opportunities they could get. The current known sources of housing finance in the country are; own savings/capital, cooperative savings, example SACCOS, upatu groups and borrowing from commercial banks.

Own Savings/Capital to Finance Housing

The income versus expenditure data show that most Tanzanians do not have enough money left after buying food and other necessities. The small
amount they could save (as indicated in the affordability ratio by WAT) takes too long to be sufficient for housing projects.

The result of this on the individual level is that, they resort to constructing and living in sub-standard houses they could afford. Also, incremental investment (especially for individual investors) takes too long to complete one project and move on to another development task. Individuals opt to invest in unplanned areas where most of the time plots are cheaper, and rules and regulations are not enforced. Weakly organized neighbourhoods (whether planned or unplanned) do not invest in infrastructure services regardless of their importance, to reduce the total cost of a house.

Likewise, real estate developers, have difficulty in revolving their investment capital. Taking an example of the National Housing Corporation, they are able to invest to less than 100 houses per year if they use their own capital without borrowing from the existing financial institutions. When the corporation injects its capital in housing for sale projects3, it receives back the invested capital beyond the anticipated return back period. This is due to the fact that, clients are unable to save enough money to meet the last date for completing payments as indicated in their contracts. The effects of this include the difficulty for the corporation to realize maximum profit from the project due to delayed payments and inflation state of the local currency, re-invest as fast as it wishes, hence a slow process of minimizing the housing backlog, and, reach and serve the very low income groups.

Cooperative Savings to Finance Housing

Although this is a very good means of securing funds for housing projects, it is only sufficient for very small housing projects, single house construction, and self help projects. Also, the loans provided depends on the amount invested/deposited in a monthly basis by the member, i.e. loans are provided to members only when they invest the required minimum amount as set by the cooperative. As a result it is difficult in securing individual or group loan as much as one’s wish since loan amount depends on how much money the borrower has saved. The higher the savings the faster the member will obtain the sufficient loan. Again this prevents the most disadvantaged group from developing faster. Also, although the loans provided are meant for helping the most disadvantaged groups, they still have costs. Again the most financial disadvantaged groups in the society are forced to borrow less as compared to the required amount so as to return the money in time. This further affects the quality of the end product (house).

Real estate developers cannot borrow from these groups since their funds are insufficient to meet the required amounts for big investments.

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3 The Housing for Sale Project is done whereby the National Housing Corporation acquires plots, prepares house designs with room for modification from its clients, calculates costs, constructs the houses including infrastructure services, and sale on loan basis, i.e. the client pays instalments for a certain period of time as indicated in the contract.
Upatu Groups

This is an informal means whereby a group of people contributes an agreed sum of money on monthly basis then at the end of each month they allocate the money to one member in the group. If the saving is specifically meant for housing, the group may opt to buy building materials for the member entitled to receive the money so as to be sure that the money served the purpose. But again, this depends on the group agreement. This source is sufficient for individual/self-help projects only. Small savings result in slow pace in housing sector investment because groups practicing this method are mostly low income earners, and will contribute very small amounts as they can afford. The funds revolved might take up to ten or more lapses to be sufficient enough to buy building materials enough for the house, disregarding other costs (such as labor, registration, lands, and infrastructure services investments costs).

Commercial Banks and International Banks

Commercial banks available in the country provide short term basis at 18–24% interest rates for most of their lending business. On top of that, they need collaterals requirement (amongst others) that are difficult to meet for majority of individuals before one is allowed to borrow. These requirements lead to high costs of borrowing.

International housing finance institutions have some similar characteristics found in the commercial banks operating in Tanzania, like requiring a sound guarantor, which individuals and even small corporations fail to provide. High interest rates on loans from these institutions and unstable currency may lead into heavy debts to the borrowers. These result in:

- High costs of the houses constructed by the borrowing institutions that may limit customers to only those who can afford the prices.
- Difficulty in realizing the project’s investment capital as the little inserted capital may cover the interest in case the client default in paying for the house.
- The loan requirements and interest rates charged discourage individuals from borrowing from local commercial banks.

All the above mentioned means and several others available are insufficient enough to cater for large scale housing schemes as well as infrastructure services at an affordable cost as well as the required development speed. Due to that, there is a need of developing a proper means of formal housing finance to promote housing delivery and sustainable urban development.

Proposal for Effective Housing Finance

The main sources of these proposals are the lessons drawn from shared experiences, trainings, dialogues, and networking events in the World Urban Forum III. The proposals are presented at National Level, Real Estate Developers’ Level and, finally, Individual Level.
National Level

United Republic of Tanzania needs to scrutinize and change the following for attaining a dynamic financing system for proper housing delivery schemes. The available options are discussed hereunder.

A Sustainable Formal Housing Finance Institution

It is strongly advisable to re-invest in a formal housing finance institution. The institute has a big part to play in the development of big as well as small housing schemes. However, before re-forming the institution, lessons from previous mistakes have to be corrected so as to structure a sound and stable institution. Since the institution is for a long term strategy, time is needed to research on the best way of investing, sources of finance and management. Some lessons can be drawn from the networking events on ‘Finance for Sustainable Human Settlement Development Housing Finance: Principles, Instruments and Examples’ in the World Urban Forum III (WUF3) provides several success tips. For this reason the Government of Tanzania can learn and adopt the proposed ethics for the sustainable development of its system.

Establishing a Sustainable System of Financing Infrastructure Services

The Central Government should carry on its role of ‘a facilitator’ in helping municipalities, especially smaller ones to achieve the tasks of increasing their finances. There are possibilities of shifting back responsibilities of providing infrastructure services to the municipalities in the long run. Municipalities may learn on how to mobilize domestic capital for financial empowerment from Johannesburg Municipality, South Africa. Other lessons to be taken into considerations are from the networking sessions on ‘initiatives and steps taken by the city of Niamey to increase its local funding capacity, the efforts of the city of Duala, Cameroon on collecting private capital for development projects, and forming micro-credit facilities for the poor people by the Dakar city’. These may be tailored to suit our environment then employed to form our own municipalities’ private capital.

Meanwhile, short term solutions to solve infrastructure problems should be continued. Municipalities should continue to work in partnership with the other stakeholders and service providers in solving infrastructure problems. Lessons from other projects like ‘Orangi in Pakistan’, and ‘innovative approaches of financing infrastructure services in Bangalore’, have to be used to add more knowledge and experiences on what we have, especially in participatory budgeting and infrastructure improvement programmes.

Creating Enabling Environments for Private and Public Investors in Housing Finance Institutions

It can be done by encouraging investors from international organizations by creating conducive environments. Moreover, local public investments may be helped to receive necessary access to essential resources from social security and pension funds like National Social Security Funds (NSSF), and
Parastatal Pension Funds (PPF). All individuals/community groups should be supported and guided in the self initiatives processes of raising finances for housing programmes.

**Improve Micro Credit Facilities for Low Income Groups**

Lessons from successful micro credit systems in Guatemala and Nicaragua may be used to check out if they can be added on top of the currently used ones in Tanzania. This will help in improving our micro finance system for individual and small scale projects.

**Encouraging Participation Especially in Financial Matters**

This is not a way of raising finance for construction purposes but of managing public finances so as to maximize its utilization. For example, through Public Private Partnership (PPP), priority infrastructure services to communities will be earmarked and installed, hence investors will only have to deal with the house construction.

**Real Estate Developer’s Level**

The real estate developers may look for ways of expanding their markets. The writer uses the National Housing Corporation in proposing matters that may be useful by all real estate developers.

**Form Micro Credits Facilities**

Attaching micro credit section for house loans to real estate organizations should be explored. The German *Bauspar* system may be modified to suit the Tanzanian systems. This system allows the micro-saver buy the house from the developer, after saving and reaching a required level of savings. The National Housing Corporation will benefit from this facility by being ensured of clients for its houses, guaranteed the payments, and speedy pay-back so as to revolve its capital.

**Explore Other Available Sources of Income:**

**Costs of Infrastructure Services**

Developers must look for ways of soliciting funds for infrastructure services from other sources so that it can minimize the final costs of its project. The National Housing Corporation must continue to join forces with neighbouring communities to its projects, work in partnership with service providers, and to solicit funds from donors and municipalities for infrastructure services.

The National Housing Corporation may add some capital from other sources. This can be achieved by organizing re-development of infrastructure services in planned rich neighbourhoods lacking the services and charge the communities. The funds obtained from these projects may be used in increasing its investment capital and further infrastructure developments in its estates.
Individual Level

They must be aggressive enough in matters concerning their house developments. They must dedicate their time in participating in planning and shelter development in their neighbourhoods, especially fund raising and budgeting.

Conclusion and a Way Forward

The problem of housing finance as explained above can be resolved by the use of existing and proposed new systems. Re-investing a dynamic formal housing finance institution, sustainable infrastructure services, and by the use of other options available. The champion behind this possibility is the fourth phase Government of the United Republic of Tanzania. Leaders responsible can do it simply by promulgation of relevant sources of finance from within and outside the capacity that the government have. We praise the reintroduction of the guarantee scheme (2002/03) for small and medium enterprise by the government, which is another vehicle of revamping small holders’ growth.

Examples from many countries (Republic of South Africa, Senegal, Guatemala and Nicaragua – just a sample – the list is long) may be used as proven cases of good housing finance for the Tanzania perspective.

Lessons learnt from the failed housing bank is another strategy that can be employed by the government and related regulators in ensuring that the framework for this vital institutions will be placed at a robust foundation. Finally it is suggested to include the identified stakeholders (real estate developers) in an endeavor to put in place sustainable housing finance institutions.

It can be done and in this case Tanzania is not late!
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Housing in Jordan

Imbalance in Supply and Demand

*Nuha Salah*

Civil Engineer, Head of the Housing Division, Housing and Urban Development Corp, Amman, Jordan. She works with the development and management of upgrading of poor quality housing and low cost housing schemes. She acts as coordinator with all key stakeholders including private and public organizations, and is experienced in all aspects of environmental impact assessment.

Jordan is a Middle Eastern country with 1,619 kilometres of border. The Gulf of Aqaba and the Dead Sea give Jordan a coastline of 26 kilometres. The climate in Jordan is dry and hot; since the country is mainly desert. The population is highly urbanized. More than 70 percent of the population live in localities of more than 5,000 inhabitants.

The Gulf crisis brought back an estimated 300,000 Jordanians from the Gulf States, particularly from Kuwait. The large influx of people created problems of unemployment and poverty, and a general worsening of the standard of living. Internal migration has generally taken place over short distances and occurs mainly in the central region. The movement of people from rural to urban areas is an important factor in the rapidly increasing population density in urban areas.

The housing sector faces problems: access to finance for poorer households, for private developers interested in the lower income end of the housing market, for new financial institutions and for the introduction of new mechanisms to support the housing sector. There is also an over-supply of serviced plots and housing, but these are not affordable for low-income families.
Jordan

In 2004 the population of Jordan Population reached 5.35 million, of which 38% live in Amman.

- The male part of total population was 51.5%.
- Population growth is 2.8%, and population density is 60.3 persons/ km².
- The Urban Population is 82.3%, and Rural Population is 17.7%.
- Population under 15 years of age is 37.1% and around 70% of the Jordanian population is under the age of 30 (i.e. about 3.8 million).
- The average household size is 5.4.
- Total fertility rate for women 15–49 years of age is 3.7.
- Life Expectancy is 70.6 years for men, and 72.4 years for women.
- Infant mortality rate in 2005 was 24 per 1,000 births. i.e. 24‰.
- Women headed households is 11.5%.
- GDP per Capita at Current Prices is USD 2342.
- Public expenditure: Expenditure on Education as a % of GDP is 5.5%.
- Ministry of Education Budget to Total Government Budget is 11.4 %.
- Public expenditure: Expenditure on Health as a % of GDP is 2.9%.
- Ministry of Health Budget to Total Government Budget is 6%.
- Unemployment rate is 12.5%, males 11.8% male and females 16.5%.
- Poverty: Households below the poverty line of JD 392 per capita per year 14.2%.
- Females of Total Employed Persons Age +15 Years is 13.1%.
- Average Household expenditure:
  - Food Stuff 36%
  - Housing & related Expenditure 28%
  - Transportation & Communication 13%
  - Education 7%
  - Health 3.6%
  - Other 12.4%.

Housing and Basic Services

- Number of existing housing units is 1.2 million, and the housing annual growth 3.7%.
- Median area of unit is 118.8 m².
- The owned houses are 68.2%, the rented houses are 23% of the total inhabited houses, and 50% are rented by low-income families.
- Housing of durable materials 98%.
- Occupied houses are 98.9% of total permanent houses.
- Housing supply in 2005 was 40,000 units.
- Housing demand in 2005 was 32,000 units.
- Percentage of apartments has increased from 56.2% in 1994 to 73.3% in 2004.
House price to income ratio in 2004 was 6.3.
- Percentage of households who can not afford 70 m² residential unit without subsidy in 2004 was 62%.
- Average household income who can not afford 70 m² residential unit in 2005 was JD 430.
- Number of marginal houses was 15,000 units, poor houses 11,130, squatter and camps needing improvement was 22 sites.
- About 97.9% of houses are connected to water networks, 99.5% are connected to electricity and 57.3% are connected to sewerage networks.
- Transportation: Proportion of work trips undertaken by private cars is 51%, buses 21%, and others 28%.
- Health: hospital bed/10000 population are 17. Total hospitals 98, Ministry of Health (MOH) Primary Health Centres are 368, MOH Comprehensive Health Centres 57, Physician/10,000 pop are 23.5, and Nurses/10,000 pop are 29.4.
- Education: Adult literacy rate in 2004 was 90%. Female/Male Students Ratio Basic Education 96.2.
- Female/Male Students Ratio Secondary Education was 100.

**National Housing Strategy (NHS)**

Jordan government set the National Housing Strategy in 1988. The main recommendation of the strategy was to:

1. Encourage and direct the private sector to be the main provider of housing for all income groups.
2. The public sector should withdraw gradually from the provision of housing supply and play the role of the facilitator and enabler for the private sector.
3. The strategy recommended a study of restructuring the housing sector to improve its institutional efficiency.

The main achievements in implementing the strategy were establishment of the Housing and Urban Development Corporation (HUDC) 1992 by the merger of two government agencies, the Housing Corporation and the Urban Development Department.

HUDC’s main objectives are:

1. Responsible on setting and administering housing policies and the restructuring of the housing sector.
2. Providing housing for the low-income groups through its site and service schemes.

**Housing Sector Reform Project**

To implement the (NHS) recommendations, HUDC prepared the Housing Sector Reform Project, which was approved by the government in March 1996. The achievements of the Housing Sector Reform Project are:
- Implement the Cabinet of Ministers’ decision to grant the private sectors the right to utilize the models, standards and criteria developed by HUDC by issuing a by-law for this purpose.
- Amend the rental law to activate investment in housing production for rental purposes. The amendment stipulated that the contract is the legal basis to which the parties to the contract shall refer.
- The Secondary Mortgage Facility Company (SMF) was established to increase liquidity for housing lending. This company provides long-term loans to the banking sector.

**Housing Programs**

**Public – Private Partnership Program**

A specialized unit was established in HUDC. The objective is to encourage the private sector to take its role in meeting the continuous housing need, for various target groups especially the low income group.

**Partnership Achievements**

- Signed (44) partnership agreements till 31 March 2006 for the construction of housing units at HUDC projects. Whereby 8443 apartments will be built for low-income groups and 8780 units of served lands.
- Eleven agreements have been signed to finance partnership projects by HUDC, were the total amount of financing was about (JD 2,780,000).

**Housing Loan Subsidy Program**

A specialized unit was established in HUDC, the Housing Loan Subsidy unit in (HUDC). In accordance with the royal grant, it allocates JD 50 million to subsidize low-income and middle-income class of the public sector employees to obtain housing finance from banks.

Housing Loan Subsidy Program Achievements: 439 beneficiaries were directed to financial institutions for subsidized loan. The value of grants to the end of February 2006 was about JD 54 million.

**Social Productive Program**

**(Community Infrastructure Projects CIP)**

The Government of Jordan, concerned with rising poverty and unemployment, has launched the Social Productivity Program (SPP) with the support of Donors to improve the conditions of the poor and unemployed. The Social Productivity Program was introduced in 1997, with four components, to be implemented in parallel at the local level, one of the four is:

*Improving the living conditions of the poor through the provision and upgrading of essential infrastructure (Community Infrastructure Project, CIP)*

**Part A:** (1998–2003) upgrading on-site and off-site essential infrastructure (Upgrade Infrastructure networks, improve the living conditions and protect sites from risks, establish 20 community facilities, 8 community centres, 8 schools, 4 health centres) in about 15 squatter settlements and 10 refugee
camps, this part implemented by the Housing and Urban Development Corporation (HUDC); The total cost for upgrading squatter settlements sites and camps is JD 39 million, serving 353,000 citizens.

**Part B:** upgrading or providing essential infrastructure in about 230 low-income municipalities and villages throughout the Kingdom, this part implemented by the Cities and Villages Development Bank (CVDB). The total cost of this part JD 29 million.

- Project Finance: World Bank (loan), Arab Fund for Economics & Social Development (loan), Treasury Islamic Bank (loan), KFW Germany (grant).

**Poor Housing Program**

The Ministry of Social Development has implemented this part.
- 320 residential units have been constructed for poor people who live in marginal residences.
- 480 residential units were maintained for poor housing in different areas in Jordan.

**Finance:** Ministry of Planning, Social Productive Program.

**Royal Noble Deed Projects For Poor and Low Income Groups:**

Housing and Urban Development Corporation has implemented two pilot projects, constructed core units to house Bedouins using local labour; these units have been freely distributed.
- Al-Azrq Area: 100 units, built core 61 m², plot 750 m².
- Al-Mizfer Area/Aqaba: 30 units built core 65 m², plot 700–800 m².

**Finance:** Ministry of Planning (Social Productive Programme)

To carry out the Royal Noble Deed instructions in securing adequate shelter for poor people, treasury land will be allocated to the Housing and Urban Development Corp. to develop and provide with infrastructure services in order to sell to the low-income groups at a reasonable price, involving the following:

1. Providing 2,000 residential units in all the kingdom governorates of total cost JD 20 million for the next five years.
2. Providing 2,000 developed lands of total cost JD 6 million within 5 years.
3. Granting housing loans to the public sector employees through Housing Loan Subsidy Program at annual rate of 1,500 loans.

**Actors:** different governmental agencies.

**Finance:** The execution of this project depends on the availability of sources (Land & Finance), initially JD 10 million was allocated out of the present government budget.

**Actors in Shelter Delivery**

**Governmental Agencies**

Housing and Urban Development Corp (HUDC)
Governmental Agencies include all ministries and institutions concerned with infrastructure and community facilities. They are involved in design criteria and responsible for operation and maintained, they have the responsibility to revise and approve the layout and building regulations.

Private Sector

Formal Private Sector: (large scale, small scale investors and housing co-operative associations) the contribution of this sector to total housing production has increased by 4.7% in year 1994 to be 24.6% in year 2003. The annual contribution in production has increased by 85.74% through years 1980–1985 to 98.3 % through years1994–2003

Informal Private Sector: Owner builder, over the last twenty years this sector was the largest contributor in housing production. However, this contribution has decreased by 85.7% through years 1980–1985 to be 84.45% through years 1994–2003.

Imbalance in Housing Supply and Demand

The housing demand and supply mechanism is not in balance, most of the annual housing about 60% is for the low and limited income groups. Less than 20% of the housing supply is affordable by low-income groups and is mainly provided by the public sector. The following is a summary for the problems facing housing sector.

- Mis-match between the housing supply and housing demands in terms of the affordability of the targeted income groups. Therefore almost 60% of the targeted population cannot access the existing housing options available in the market because it lies beyond their financial affordability.
- 2% of households (15,000) still live in marginal residences. While 22 squatter, camps and under served sites still need to be improved.
- Formal private sector is still inefficient in producing houses for low-income people.
- The high cost of residential organized land. The prices of land have risen in a rate 100% and the prices of building materials have risen by 50% during the last year.
- An excess of large serviced plots of lands, and a lack of small, serviced plots.
- Squatting on land owned by the treasury.
- An expansion in zoning that exceeds the population growth, which resulted in a waste in expenditure on the infrastructure.
- Lack of coordination between the agencies involved in the housing sector.

In spite of the tangible improvement concerning housing finance, the low-income class still has difficulty to obtain loans because they are unable to provide an additional guarantor other than the mortgage of the real estate.
The growth of the housing sector has accelerated in the last years, and the most important factors for this growth are:

4. The annual population growth, which increases the housing demand.
5. The value of most of the residential units is more than the household income. Also, the market demand remains in flats with an area less than 125 m².
6. The rise of the rental house price comparing to the income that prompting the Rentals to buy flats through long term finance which increase the housing demand.
7. The increase of housing demands from foreign and investments in this sector. Because of the bad political and security situations in neighbouring areas, and the political stability in Jordan, there is an increase in immigration to Jordan.
8. The amendment of the governmental laws in the housing sector lead to increase the demands in this sector, for example the amendment of the laws which control the relation between the owner and rental, in addition to the low interest and the extension of the loans for 20 years.

The above mentioned factors lead to the extreme increase in the prices of the housing units which caused by the increase of the building material’s prices and the workers charges, which effects on the low and middle income group. Since 60% of the Jordanian households in Amman do not have the ability to finance buying a housing unit with low limits specifications of 70 m² area according to the prices levels and bank loans available in the market. And since the estimated housing demand was 32,000 residential units while the housing supply was 40,000 residential units, then the housing supply record superabundant against the demand and failure in meeting the needs of great group of the Jordanian. And this will cause a lot of problems such as:

- A lot of the householders tend to increase their expenditure on the housing against their necessary needs.
- A lot of householders tend to meet their housing need by squatting on other properties.
- Many of the householders tend to expand in horizontal or vertical violating the construction laws.
- The stagnation of the construction work and many of the householders continue to reside in crowded house units.
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The Beauty of Addis in Danger

Heritage and Redevelopment in the Core of Addis Ababa, Ethiopia

Zelalem Berhane

Architect, is a partner and manager of the Ethiopian branch of a Swedish consulting firm, working with architectural design and project coordination. He is interested in historical buildings and is a member of Ethiopian Heritage Trust and Clean and Green Addis. He lives in the core of Addis. The core has life; it breathes, grows, and sometimes even dies. But its death is usually followed by resurrection, a rebirth for better or worse.

This paper is about Addis Ababa’s housing problem in relation to its socio-spatial pattern. Although a capital city in a poor nation, it has relatively healthy social interaction and a peaceful atmosphere. The crime rate is low considering the high number of unemployed, street dwellers, prostitutes and underprivileged.

Addis Ababa is a city where there is no segregation of rich and poor in settlement pattern. It is common to see a luxurious villa in the midst of dilapidated poor houses, and vice versa. This settlement makes a contribution to social cohesion and gives Addis a peculiar beauty. Unless we acknowledge such value and try to incorporate it in our policy and strategy, we might gradually lose it even without really understanding what we lost until it is too late. It is only when we acknowledge the value that it could be reflected in our policy and strategy, and subsequently could guarantee the sustainability of this “Beauty of Addis”.
Ethiopia

Ethiopia is located in the east of Africa with an estimated population of currently 75 million. The recent population census was done in 1994, which depicted population of 49,218,178. Under the previous regime from 1974 – 1991 Ethiopia has followed the socialist ideology and had a command economy policy. From 1991 onwards the regime in power pursued free market trend in its economic policy.

Addis Ababa is the capital city of Ethiopia geographically located in the heart of the country. Though only 9° north of equator, Addis Ababa has a moderate temperature due its high altitude. It is the third highest capital city in the world with an altitude of 2200 m above sea level. Number of gullies, creeks and streams crisscross Addis Ababa. Addis Ababa covers an area of about 540 km² of which 18.2 km² is rural. Of the 2.3 million population counted in 1994, 28,149 live in the rural section (less developed section) of the city. Elected cabinet by the public administrates Addis Ababa and the cabinet elects the mayor.

The population is currently estimated to be 2,973,000 while in the 1994 census was 2,112,737 and accounts for 84% of the total urban dwellers in Ethiopia. Women to men population ratio is 51.6 to 48.4.

32% of the city’s population is below 15 years old and only 1.7% is above 64 years old, country wise this ratio is 43.7%, 53.6 and 2.7% respectively. Life expectancy in Ethiopia is 42 years for male and 43 years for female. Fertility rate is assumed to be 5.22 children per woman. Child mortality under 5 years is 184 per 1000 children. 44% of the population is below poverty line.

Population density is 63 per km²; 85% of the total population is rural. Population density in Addis Ababa is 650–2500 inhabitants per ha for the core area and 150–650 inhabitants in the intermediate zones and up to 75 on the periphery. Core of Addis covers a 5 km radius from central market Merkato and Teklehaymanot area.

There is a high degree of food or waterborne diseases, bacterial and protozoal diarrhea, hepatitis A, typhoid fever, and hepatitis E. Of the vector
born diseases, malaria and cutaneous leishmaniasis are also high risks in some locations of the country. HIV/AIDS is a major threat in Ethiopia, especially in the towns. According to estimates in 2003, 1.5 million adults live with HIV/AIDS in Ethiopia.

Main exports for Ethiopia are coffee, hides; oil seeds, beeswax, sugar-cane and other agricultural products and livestock. Horticulture has recently become a booming business with high future potential. Addis Ababa serves as the hub of the country’s export.

Women and children are engaged in small economic activities as the main source of income. Income level for 60% of the households is below poverty line with 41% of the households belong to the poorest segment of the society at GNP/capital of USD 110.

Economic activity rate for Addis Ababa is 53.08% with 65.22% for men and 41.89% for woman.

According to Central Statistics Authority (CSA) out of Addis’s population 15.6, 67.25 and 17.16% earn monthly income of less than Birr 167, 167–1050 and above 1050/ month respectively. USD 1 = about Birr 8.5.

Access to Shelter and Services

According to PADCO 1995 report on 389,000 families, 50% earn monthly income of below Birr 340, about 24% between 340–670 and only 26% earn above Birr 670/month. The first category represents household living below subsistence level that cannot afford to borrow money from the formal institutions for construction. The second category are considered to be able to finance part of the housing construction cost through savings and only the last category is believed to be qualified for full mortgage.

Household expenditure: as shown above, the 50% earning below Birr 340 are categorized as below subsistence level, the same study of the master plan revision report shows that the second category earning from Birr 340–670 can allocate 20–25% of their income for housing.

- Housing stock: 1994 Population and housing census registered 374,742 housing units in Addis Ababa. In 2000 this rose to 444,742 units.
- Housing deficit: In the year 2000, Addis Ababa had accumulated housing backlog of 233,132 to 241,432 units.

The 1986 Addis Ababa Master Plan was for 314,422 house units to be supplied or implemented for the period from 1986–2006. In the fourteen years from 1986 to 2000, only 70,000 housing units are supplied.

Occupancy: According to Central Statistics Authority (CSA) 1999, persons per house unit is 5.5, and average household size is 5.1. The number of households per house unit is 1.1.

Housing standard: About 60% of the city core is dilapidated. The expansion and in-fill areas have also high percentage of informal sector. 25% of the housing units in Addis are built informally and located mostly in the expansion and in-fill areas.
Table 1: Estimated Households in Addis Ababa 2000 Compared to the Master Plan Proposal of 1986

<table>
<thead>
<tr>
<th>SN</th>
<th>Housing required for</th>
<th>Estimated need</th>
<th>Housing supply or implemented</th>
<th>Outstanding need or backlog</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New families formed</td>
<td>210,000</td>
<td>70,000</td>
<td>140,000</td>
</tr>
<tr>
<td>2</td>
<td>Replacing deteriorated units</td>
<td>42,840</td>
<td>Insignificant</td>
<td>42,840</td>
</tr>
<tr>
<td>3</td>
<td>Relieving overcrowding 1.1 HH/HU</td>
<td>50,302</td>
<td>120–190</td>
<td>50,302</td>
</tr>
<tr>
<td>4</td>
<td>Relieving overcrowding 1.1 HH/HU</td>
<td>8,290</td>
<td>None</td>
<td>8,290</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>311,432</td>
<td>70,000</td>
<td>233,142–241,432</td>
</tr>
</tbody>
</table>

Water and sanitation: According to the 1994 census; In Addis Ababa 44% of the houses have tap water and more than 45% obtain drinking water from outside their compounds.

Addis has a limited sewerage system, which is designed for 200,000, but presently covers only 6,000 households.

Energy in Ethiopia: Ethiopia has a high potential of hydroelectric power. Electric consumption was 1.914 billion KWH in 2003.

Ethiopia is landlocked since 1991 and used port of Assab and Massawa of Eritrea and port of Djibouti. Djibouti port is still used while the Eritrean ports of Assab and Massawa are no more used, following the Ethio-Eritrean conflict in 1999. Common public transportation is public buses and shared taxis. The Ethio-Djibouti railway connection from Addis Ababa to Djibouti is mainly used for transportation of goods.

Communication: Telephones in use was 435,000 in 2003. There were 178,000 mobile phone users in 2004, and 113,000 internet users. Though this looks like less than other developing countries, telecommunication coverage is expanding rapidly.

Housing Policy and Actors in Shelter Delivery

An urban police was approved in 2005. There was no clear policy regarding housing before then. This urban policy generally can be termed as inclusive when it comes to housing. It mentions the need for different income group mix, and also different functions to be mixed instead of zoning.

The 1986 Addis Ababa Master plan proposal suggests three approaches to be implemented in various parts of the city to alleviate the housing problem in the city. This proposal is to build new houses in expansion areas, redevelopment, in-fill or densification strategies in the city core and intermediate area.

In 2001, the office for Revision of Addis Ababa Master Plan (ORAAMP) has reviewed what is done as per the master plan from 1986 to 2000. As per the report from ORAAMP, the application was relatively successful on the expansion areas, and all the developments planned in in-fill areas was done, however nothing significant was accomplished in the redevelopment of the city core and intermediate areas.
After reviewing this Gap on the core, The ORAAMP has come up with detailed plans for these areas. A redevelopment programme (renewal, upgrading, hybrid) is suggested for twenty-one prioritized *sefers* (quarters) of the city core. However there is no significant activity in realization this approach even after 2001.

In Ethiopia the formal housing finance institutions provide services mainly to the upper and middle-income groups because the urban poor lacks collateral, regular income and savings. The urban poor depend on social credit sources such as *ikub*. These are often successful because they are based on social ties; require little bureaucracy and paper work. However they can offer only limited capital compared to the cost of construction.

The Master Plan revision office proposed thirteen points for housing finance and is expected to be reflected in the coming revised policies. I have summarized these suggestions into 5.

- Use social security funds and revenue from sale of public houses as a seed money for housing.
- Redress taxes related to housing, capital gain, rental income tax etc
- Use funds from housing rent to finance housing development. This fund shall be used as revolving fund.
- Expand micro finance programme for housing. Reinstating the former housing and construction and saving bank.
- Exploit possibilities of financing housing projects.

There are quite a number of housing projects developed by individuals, government and real estate developers. Most ongoing projects focus on the supply of housing for the middle income and high-income groups.

Almost all real estate projects by private developers are aimed to target the middle and high-income group. Unfortunately these projects could not be accessible even for the middle class due to the high market price.

Individuals constructing their own houses also contribute a major share to the housing sector. The owners handle most individual projects by contracting professionals from the private sector contractors and consultants.

Government direct role was not the usual case in housing provision in Addis Ababa. For the first time, two years back the city government started to involve in housing directly. The project started with the idea of constructing condo buildings for the low-income group. Currently, there are about 33,000 household condominium buildings either finalized or under construction.

Before the coming of these condominium buildings, the city government allocated private house builders a plot ranging from 105 to 175 m² free of lease. However this process is stopped in the last two, three years. Already registered and waiting groups for this allocation were informed to be organized in associations and construct walk up apartments. It follows the same idea as the government condominium buildings density wise. However most of these associations are for middle income and plots are allocated in the expansion areas, while most government condominium projects are either in the core or in the in-fill areas.
Design

The existing building regulation and codes prohibit the use of local building materials like, wood and *chika* (straw reinforced mud), mud-bricks, compressed earth blocks or soil flooring. As these materials are the only building materials the poor can afford, the November 2001 ORAAMP (Office for the revision of Addis Ababa master plan) report recommends for the revision of this regulation.

The official Construction Permit Guideline of Addis Ababa, February 2005, though is detailed in some aspects mentions nothing about building materials except in one chapter which prohibits use of slippery flooring material for public corridors.

As per the Construction Permit Guideline of Addis Ababa, February 2005, the minimum room size shall be 6 m² and minimum room width shall be 2 m except for special functions like toilets. Minimum room height is also set to be 2.6 m. This guideline also sets minimum and maximum density for condominium buildings.¹

<table>
<thead>
<tr>
<th>SN</th>
<th>Density Zone</th>
<th>Existing Population density Inhabitants/ha</th>
<th>Proposed Density Household/ha</th>
<th>Population density Inhabitants /ha (Proposed density)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Core Area</td>
<td>650–2500</td>
<td>190–380</td>
<td>950–2000</td>
</tr>
<tr>
<td>2</td>
<td>Intermediate</td>
<td>150–650</td>
<td>120–190</td>
<td>600–950</td>
</tr>
<tr>
<td>3</td>
<td>Periphery and expansion</td>
<td>Up to 75</td>
<td>54–120</td>
<td>280–600</td>
</tr>
</tbody>
</table>

As can be seen in the chart, the idea behind this density setting is to lower the density in the core and to densify better the intermediate and the periphery.

Redevelopment of the Historic City Centre

The critical shelter problem area this paper tries to address is the city core, and its socio economic and spatial pattern as a tool for development. How can we preserve the historical pattern of living in harmony of different socio economic groups? How can we redevelop the core of the city and at the same time keep the heritage? How can we protect our heritage and use it as a component to address our housing problem?

Addis housing problem could be summarized into four categories. The first one is shortage of housing. The second housing problem is poor unit condition. This is especially reflected in the centre where ownership of the houses is mostly government. The third problem is low infrastructure

¹ Population density in Addis Ababa is 650–2500 inhabitants per ha for the core area and 150–650 in the intermediate zones and up to 75 on the periphery.
development, and the fourth one is low affordability mainly due to very low household income.

The challenge is how to use our social heritage “The Beauty of Addis” and incorporate it in our strive to achieve the MDG of alleviating poverty in an inclusive manner.

The historical value of the core seems to be neglected. The inclusive social pattern is at risk in the past couple of decades. This begins with the supply of residential plots for higher and middle class groups in expansion area. As a result the poor is being left behind in the core. The existing housing policy and strategic plan for these areas indicate that we need to have redevelopment. But as the master plan revision office in 2003 reported nothing tangible is done in these areas regardless of the master plan in 1986.

Any one who is concerned about “The Beauty of Addis” may feel relieved to see that it is not applied for fear of its social and heritage implication. This redevelopment plan proposed in the strategic plans is not detailed and does not incorporate heritage explicitly.

In the last two years however the government has started condominium buildings of 3 and 4 stories in these areas. The idea of not displacing the poor is to be appreciated. Had it been successful in addressing the poor, this could have been an example for an inclusiveness strategy. However at the end of the project, these condo buildings end up too expensive for the poor regardless of its relatively low cost compared to the market price. The middle class and higher class took advantage of this opportunity and bought the right from the poor. The target of alleviating the shelter problem of the poor is once again missed. The positive outcome is at least we have started to try to address the problem. Though it does not benefit the intended group, in a situation of big housing backlog to have some more houses is a plus.

The problem in poor housing condition in the centre of Addis could be traced back to the very beginning of the city and its subsequent development in spatial pattern. Addis as a city was developed from the highlanders’ concept of ketema, which means a settlement where there is a transient military camp. Ketema developed in a location where regional chiefs establish their garrison. Like all its predecessor ketemas, Addis was a garrison for the king. Being the seat of the emperor it also accommodates the cantonment of the regional chiefs who accompany the emperor permanently, or they come temporarily for different reasons with their tens of thousands of soldiers. These soldiers settle in an area around the house of their chief (or tents in some cases) and gradually changed to sefers (neighbourhood).

This neighbourhood approach of settlement with some significant distance between the sefers left a footprint of the city socio-economic pattern till today especially in the city core. With population increment and density increment these sefers merged to each other gradually. One of the main impacts of this process is that you do not see dwellers segregated according to their socio-economic status. Many who visit Addis Ababa agree that it is one of the cities today where you do not see segregation of the poor and the rich.
This historical uncontrolled or unplanned or rather organic development of sefers to a big city like Addis had also and still has its own draw back. The main draw back of this development is that these areas are developed in a spontaneous manner and do not respond to the modern way of life, infrastructure, etc. Land ownership has also been and still is the major cause of these problems. In the emperor era before 1974, the majority of the houses were built by leaseholders. Only land owners had title to land, the majority, the leaseholders, has no right for title deed. The implication for deterioration of housing quality from the very beginning is obvious.

Contrary to this housing condition there are lots of pre 1974 houses that have a very good quality and workmanship, which is not seen even today. Like the over 100 years old historical buildings of Addis these houses are also built in the same settlement pattern mixed among the poor houses. When we talk of redevelopment, we have to take into consideration the social and economic value of these buildings. In a way keeping valuable buildings while doing redevelopment makes the task more challenging but fruitful in the end with relatively planned organic outcome. We should not also forget that rigid geometrical pattern or grid is not an option in Addis Ababa’s topography.

On the fate of some historical buildings we may protect it through regulation by the ministry of youth and culture. However how many of these buildings are under this protection? By preserving few buildings to preserve the social heritage could be ideal. But do we have to keep the number of our historical buildings only to that of the registered ones should be an issue to be raised here.

What about the very idea of social heritage, is it ideal to try to save this heritage? Or is it something, which should die with “modern life”? What about its implication on social cohesion and the culture of supporting each other? Support in Addis context is not only in donation or giving a penny to the beggar; it has also a bigger scope of creating informal and formal job opportunity to the poor in his next door.

One approach could have been used to sustain this coherence is to incorporate the middle, and upper middle-income groups in the coming projects in the core. This could have been exercised also in the condominium buildings of the government. Though the project claimed that it has affordable houses for middle and low-income group it is not reflected in any other cost or quality implication. The very fact that it has a mix of studios, one bed room, two bed and three bed room types should not be seen as different income groups.

If it was done in this combination, the profit collected from the middle class could have been used to subsidize the low income, and also could be used as a revolving fund and avoid demanding 100% settlement from the poor.

Rental Housing Possibility

Particular project of rental housing in Vienna and experience from Amsterdam were good examples at WUF3. Less segregation in Amsterdam housing
in the income range and. the social mix of the particular project from Vienna was also exemplary as it involves a wide range of different people.

One option to solve this problem in the core would be, the government providing rental housing in these areas instead of building for sale. We have witnessed lots of successful stories in WUF3 regarding rental housing if we have good tenure tenant relationship. However to enforce tenant and tenure relationship may not work in our case with the new perspective of free market policy. This could be applied only on government owned apartments. Even on the government buildings this could not be taken as the only solution as it has its own draw back. For financing such projects we need to have revolving money and renting is not the best in quick return.

Self Help Housing Possibility

We need also to keep in mind that only one single solution may not solve everything, like rental housing above. It could help the problem to a certain extent especially for the youth and middle class bachelors as well as for the low income who cannot afford to have their own house. For poor families, we can also consider self-help housing options like Sida is promoting in Latin America in the PROMESHA Programme. This may be applied in the expansion areas and in the intermediate zone, but in the core it may not work due to density requirement and high value of land.

From the possibilities above rental housing could be taken as an option in the core area. Government could provide rental housing to some extent and may focus on facilitation and providing dynamic strategic plan.

Coordination of Developers and Dwellers

The third much better alternative in our context would be to involve private developers in coordination with the dwellers. A call for private developers to find creative approaches to develop these areas at the same time enable the poor to have house is also a possibility. This call shall have guidelines for historical buildings, income group combination and functional mix.

This option could also be used by NGOs in cooperation with the dwellers following the same concept above for private developers.

Most houses in these areas, including the historical ones, are government owned.  

This also raises a question if we demand developers to respect these buildings “untouched” in their redevelopment process, who shall take the responsibly of maintenance? Who shall have the ownership title in the first place?

As experienced in Palestine (networking event in WUF3, Heritage, Sustainability and Liveability) we could keep them as cultural heritage and at the same time letting the dwellers to continue using them. This is good sustainable solution however the problem in this context is ownership. As most of these buildings are owned by the government, there could be

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2 Functional mix and income group mixture, we already have it in our urban development policy. However the importance of heritage is not indicated.
reluctance or lack of accountability on their maintenance. There could also be interest and boundary conflict with developers. The best sustainable solution for these selected heritage buildings would be to privatize them and sell them to the dwellers inside with long-term instalments.

This third option could work much better for the core of Addis especially if it is supported by good strategic plan and follow up. Participatory approach at all levels of the civil society, interested groups, universities and NGOs are also very vital here as it involves inter related problems and inter related approaches to solve the problem.

Policy Support

In all alternatives and possibilities above, we can see that which ever actors will be involved in ownership, construction or redevelopment, we need to have a strategic plan guiding the development. This guide shall have a special consideration on the historical buildings and their implication on the socio economic and spatial pattern of the area. We should also be aware that following one option for grant and trying to apply in large scale could be disastrous.

Proposal for a Strategic Plan

Strategic plan should have general redevelopment plans keeping the historical buildings in consideration.

Mixed-use function and mixed income groups combination shall be the main target for the redevelopment of the core Addis Ababa.

The strategic plan should incorporate social heritage by using cultural heritage related buildings as a tool. We should acknowledge the social heritage as well as the physical heritage and their possible inter relation, What we plan to preserve our physical heritage should be given a bigger scope and shall be planned in a way to accommodate our social heritage.

An initiative for private developers shall be set so that their projects could be inclusive when it comes to income groups. Like what we had on the extension areas, 50 m² free of lease for developers working on the extension areas when they work for 250 m² and less plot residences.

Design: This redevelopment plan could be designed in a regular manner taking into consideration the topography and the deviation from the regular pattern to accommodate these heritage buildings could be used as an advantage of breaking monotony in the physical planning.

Process: we have to take into consideration the dynamic nature of design and redevelopment. No single developer or no single approach could be given full right and mandate to involve in large-scale redevelopment. To handle these areas could be done gradually one project following the other. This gives us a chance to learn on ground.

A more inclusive definition of heritage buildings shall be set. The one we had by ministry of youth and culture encompasses only few. Or on top of them a second level heritage buildings standard shall be set and their legal protection due to historical value could be hierarchical.
Second level heritage (SLH) buildings could be all in good condition buildings with high workmanship quality relative to the one we have. All good condition buildings of pre 1974 could be encompassed based on the particular area land use map. Saving SHL buildings could also be seen from economic point of view of saving resource on top of the heritage value both as a physical element and social structure.

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Caring for the Urban Poor of Kampala, Uganda

Intervention in the Shelter Crisis

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Integration of heritage conservation and improvement of housing conditions is seldom considered in urban cultural and socio-economic growth and development. Kampala has experienced a boom in property and wealth, but the painful shelter conditions of Kampala’s slums offset the intended ‘gross national happiness’. The city’s shelter situation shows gross economic and social deprivation, and high unemployment/underemployment of the slum dwellers. The city’s growth and expansion place little or no priority on shelter as a driver of social transformation and improvement of slums. This boom and growth is at the expense of cultural and natural heritage within and around the city. Yet sustainable use and conservation of natural and cultural heritage today is a formidable engine for social, economic and urban regeneration.

Conclusions from the World Urban Forum III are that such a situation cannot continue. Kampala’s slum dwellers have a right to decent shelter. Responsible authorities have a duty to integrate heritage conservation and improving housing conditions in sustainable urban governance.
Kampala, Uganda

Uganda possesses 24.7 million people. Kampala with 1.2 million persons and population density of 4,581 people per sq km “…constitutes 41 percent of the total urban population” (McLeod 2004: 7). The city represents a national crisis in which 56% of Ugandans live below the poverty line, feeding on less than a dollar per day (Appleton 1999). Of these, “…46% cannot afford housing and other basic necessities” (Ngatya 2000: 19). Furthermore, over 60% of residents in urban areas live in slums or similar settings (Ministry of Works, Housing and Communication 2003).

Commonly located in fragile low-lying malaria, typhoid, and cholera-infested swampy areas, the slums are heavily congested, prone to flooding, without adequate garbage disposal, road networks and drainage systems. The phenomenal rural–urban migration has catalysed proliferation of these slums and the conventional sequence of ‘plan – service – build – occupy’ makes housing unaffordable in them. While slums cover only about 10% of Kampala’s land area, their average population density stands at 14,112 persons per sq. km, far above the city’s average of 4,581 persons per sq. Pit latrines are the most basic sanitation but are in acute shortage in quantity and quality. The few that exist are shallow and untidy. In peak rainy seasons, they flood and add to the stress of the slums. In fact, most “… latrines are built above water streams. During rains the area residents usually open a hole to release faeces from the latrines. The rain then washes away the faeces to streams, from where they fetch water!” (Tenywa 2003: 18). Some of the dwellers also dispose excreta in drainage channels in polythene bags locally termed Buvera, which has earned them the name: ‘flying toilet’. The sanitation situation can best be summed up as follows (NEMA’s Kampala District Profile 2000: 5):

- 9% of population uses a water-borne system
- 5% uses septic tanks
- 12% uses private latrines
- 72% uses shared pit latrines
- About 80% of households lack latrines/toilets
- About 700 pupils use one toilet in UPE1 schools.

Kampala’s housing dilemma is so acute that 54% of the residents reside in single roomed tenements and 12% in stores and garages (Ministry of Finance, Planning and Economic Development 2000 in McLeod 2004). Despite being roofed with corrugated iron sheets, about 36% of the houses are illegal structures built of mud and wattle walls, straw, cardboard and at times papyrus, tarpaulin or polythene rolls: all under the threat of demolition. Within, children and adults alike are undernourished, hungry, sickly and without clean water. NEMA (2000: 4–5) states that for the whole of Kampala, only “… 50% of population has access to piped water. 8% of population has running water in their homes. 36% of population has protected spring water. 11% of population uses unprotected spring water. 65% of city spring water is

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1 Universal Primary Education.
contaminated.” Yet the majority of the urban poor survive on spring water. In these circumstances, obvious emphasis is on survival and housing improvement fall to the bottom of their priorities. It is no wonder that amidst the high risk of AIDS infection, adolescent girls from slums prostitute themselves to get the money for school fees. Consequently, a buoyant underclass of commercial sex workers thrives in the slums. The males work as porters on building sites to move or off-load bricks, sand, etc. Many young men suffer physical injury and their mental ability retarded. As a result, these youngsters are stigmatized as underclass citizens, as a cheap reserve of child labour.

According to Biryabarema (2006: 20) Uganda currently has a “… housing deficit of 500,000 units with Kampala alone lacking about 70,000 houses.” Durable housing stock stands only at 20%: of which 51.6% needs replacement, 44.5% needs upgrading and only 1.9% is decent (Household Budget Survey 1989, in National Environment Action Plan Secretariat 19952).

Other demographics catalytic of slum development include high fertility rate of 7.1, declining mortality, internal migration, international migration, choice of industrial location, and “… 800,000 internally displaced persons arising out of insurgency in northern and north eastern Uganda” (Ministry of Works, Housing and Communication 2003).

In addition to these factors, a number of other features also catalyse poor shelter in Kampala. Warah (2003) distinguishes them as:

- Economic cycles
- Trend of severe disparities in national income distribution
- National economic development policies spanning
  - General apathy and lack of sustainable political will among authorities to attend to improvement of shelter conditions of the urban poor
  - Blanket acceptance of World Bank and International Monetary Fund’s Structural Adjustment policies that negatively impact on the low income earners and
  - Corruption.
Corruption is particularly a stinging source of “… disgust and frustration for the poor …” and is seen “… as a feature of governance in Uganda that maintains the poor in chronic poverty” (Lwanga-Ntale et al. 2003: 20).

“Corruption substitutes ‘competitive’ bribery for open competition. It retards private sector development and discourages investments … (i) decisions are taken not for public benefit, and (ii) high cost, complex and prestigious projects invariably favoured over cost-efficient, community-based initiatives” (Tunku 2001: 2). Local authorities in Kampala have manifested all sorts of corruption over the years. There is no apology in disclosing their evils that impact the urban poor. In fact corruption and poor governance are “… the major reasons cited by most aid agencies and development banks for withdrawing from large-scale capital projects in urban areas in the developing

world” (Tibajuka 2003³). Greedy leaders stall benefits of development programmes and divert pro-poor funding into their own pockets. Furthermore, whereas Kampala is immersed in “… critically important wetlands, which not only support habitat but also provide materials for housing …” corruption is impoverishing these natural environments due to bending of rules by responsible authorities and keeping a blind eye on encroachment. “As well, resource management policies have been put in place that abandons traditional village-based knowledge …” as Kampala becomes more urban and industrialized (International Institute for Sustainable Development 2005: 3). Concurrently, the blind eye syndrome exposes chunks of built heritage to frequent demolition, and replacement with residential and/or commercial urban development or re-development schemes (Lwasa and Nyakaana 2004).

Thus, current times “… have seen a frenzy of construction, and old buildings are being demolished with little thought for their significance … there is rarely any opposition to the demolitions … many Kampalans seem to have little regard for the old buildings” (Wakabi 1998: VIII). Also, accompanying inflation in land values and strain from the high-density urbanization is inducing ruination of Kampala’s positive identity and civic pride. The above incidents have intensified in recent times via vague award of land for development in the city, often unscrupulously permitted by KCC authorities or powerful politicians at the expense of the urban poor. For instance, in 2003 Kampala City Council gave the urban poor of Naguru and Nakawa estates three months to vacate or else be forcefully evicted. However, the eviction was in breach of housing rights of the residents. COHRE managed to avert the eviction (COHRE, 2004⁴).

In a nutshell, corrupt urban governance tendencies have caused conversion of conservationist and environmentally sensitive land to other inappropriate urban uses. Whatever humane, natural or cultural heritage value and socio-economic dividends such land can generate is absolutely disregarded. In addition, absence of pro-conservation legislative controls on market activities of this type has fuelled the entire threat to environments of natural and cultural heritage value.

Hamdi (2004) contributes to the debate and explains that ignorance is another critical factor. Would-be professionals who would drive to success programmes of poverty eradication and better housing are so emasculated by “… ignorant political bureaucrats who stand somewhere between knowing and not knowing … suspended timelessly in a state of optimal ignorance – knowing just about enough …” to see things without a long-term perspective (Hamdi, 2004: 131–2). Hence, constraints presented by ignorant political bureaucrats, lack of their political will, limited administrative and/or legal resources cause good plans to remain on paper. Consequently, most development in Kampala and other urban centres follows lines of least political resistance rather than plans drawn ethically and professionally by

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⁴ “COHRE helps to avert evictions in Uganda”. 

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Caring for the Urban Poor of Kampala, Uganda

architects, city/town planners, physical planners, environmentalists, sociologists, cultural and natural heritage conservationists, etc.

Intervening in Kampala’s Shelter Crisis

Reflecting on outcomes from WUF3 and experiences from past and current initiatives from relatively successful cities, the move to intervene in Kampala’s situation revolves principally around the following:

1. Setting of priorities to attend to shelter needs of the urban poor
2. Building a knowledge base for shelter programme and policy development by central government and local authorities
3. Public-private sector engagement in sustainable planning, management and/or urban governance/local government practices
4. Spearheading partnerships and inter-sectoral collaborations and civic participation – the PPPPs
5. Sustainable utilization of urban natural and cultural heritage resources and environments in making domiciles of Kampala’s urban poor more fit for human habitation
6. Effective co-ordination of fundraising and prudent use of funds
7. Community awareness and support for pro-poor access to opportunities, social inclusion and cohesion
8. Capacity building in provision of water, sanitation and social services
9. Developing a regime of transparency among urban governance managers
10. Championing small scale-medium size business development and enterprise among the urban poor
11. Application of best value frameworks to the holistic urban poverty alleviation agenda.

Priorities

Setting priorities first obliges both central and local authorities in Kampala to expedite their duty to attend to entitlements of decent shelter conditions for the urban poor. In so doing, these authorities need to identify things that must be done now and in the near future, strategies, procedures, and time frames by which they must be archived. These are bound to span creating an enabling institutional framework, infusing attendant mechanisms, policies, legislation, management structures, and budgetary allocations for both short and long term provision of decent shelter for the target group.

Knowledge Base

Experiential exchanges at WUF3 added to the surprising realization that some central government and municipal officials in most African countries either have little background and training in shelter matters or they come to work with inadequate experience, understandings, and tools of the sector. Uganda is no exception. Building a knowledge base for shelter programme
and policy development is therefore crucial in Kampala’s context since it would particularly minimize political, administrative, procedural contradictions towards shelter progress. Knowledge gaps have also created immense distances, mistrust, suspicion, among would-be enablers of shelter provision and respective target groups. Seminars, workshops, programmes, posters, leaflets, the media, educative programmes on TV, radio, etc., can be rolled out to eliminate such gaps by capturing local interest and raising public awareness, inducing compliance, and arousing participation.

Public-private Sector Engagement in Urban Governance

Urban governance is defined by UN Centre for Human Settlements in Newman and Jennings (2003: 155) as:

... the exercise of political, economic, social, and administrative authority in the management of a city’s affairs. It comprises the mechanisms, traditions, processes, and institutions (whether formal or informal) through which citizens and groups articulate their interests, exercise their rights, meet their obligations, and mediate their differences. It is thus a broader concept than government, which refers only to the formal and legally established organs of the political structure.

UN’s Habitat Programme regards it as a continuing process through which conflicting or diverse interests may be accommodated and cooperative action can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens. Furthermore, good urban governance is inextricably linked to the welfare of the people characterized by sustainability, decentralization, equity, efficiency, transparency, accountability, civic engagement of citizens which all secure social, economic and political and environmental livelihood for all. Good governance is therefore critical towards sustainability.

As implied by Srinivas in Newman and Jennings (2003: 155) “… There is now international consensus that good governance is a crucial prerequisite …” for sustainable shelter provision. Good Governance structures and processes ease visioning processes, prop up empowerment and development of public-private partnerships. Good Proximity and Network relationships embed in the day-to-day operation of government with the sense and value for sustainable shelter provision in a multi-sectoral context. Good proximity and network relationships also cause good governance to facilitate the flourishing of pro-shelter provision community initiatives. Kampala’s local authorities can take advantage of these proven good governance merits.

The UNCHS ‘Draft Declaration on the Norms of Good Urban Governance concludes with the argument that “… good urban governance, to deserve that qualification must ensure that everyone shares equally the benefits of urban life” (Paskaleva-Shapira 2001: 7). For that matter, local government is often the means for bridging those benefits for all.
Traditionally, local government in particular is proven convenient/efficient political and administrative machinery for implementing policies towards urban shelter provision and environmental management (Local Government Committees 2000). This is so because local government has much influence and power as the symbol and structure of local democracy and hence the custodian of the immediate local community's interests (Ashworth 1992). To Ashworth (1992), it is the first line of defence thrown up by the community against common enemies – poverty, ignorance, heritage and environmental mismanagement. Secondly, it is most strategic in implementation of sustainability-led development at grass-root level because of three main attributes:

- Pluralism, through which it contributes to the national political system
- Participation, through which it contributes to local democracy
- Responsiveness/mobilization, through which it quickly and easily reaches out to local needs or delivery of services.

Hence, local government is suited to the generation of local urban shelter stock, and sustainable management of local urban environments. This is particularly relevant in current times, which eye local authorities as enablers. From this perspective, to attain maximum shelter benefits for all, public-private partnerships between the stakeholders are essential. This is the subject of the next section.

Partnerships, Inter-Sectoral Collaborations and Civic Participation: PPPPs

Reports of rapporteurs from most of the networking, training, dialogue, special, roundtable and plenary sessions of WUF3 unanimously placed Public-Private Partnerships at the forefront of pro-poor welfare and development initiatives. A concise definition of PPPs for the urban context is suggested by the International Consortium for Urban Decision Making (MUNICIPIA 2001) in Paskaleva-Shapira (Undated: 22) as “… partnership between the public and private sector for the purpose of delivering a project or service traditionally provided by the public sector.”

At WUF3 UN-Habitat came to regard PPPs as most useful in collaborating varied stakeholders in meeting challenges of pro-poor urban shelter renaissance. A fourth P denoting involvement of the ordinary ‘People’ was added: hence the PPPPs that connote a powerful spectrum of possible working relationships between public and private actors for collaborative urban renewal and sustainable shelter provision. However, to operationalize the PPPPs into Kampala’s situation, I suggest the transformation of the above MUNICIPIA definition to view partnership more broadly as “… a process of sustained collaboration, in which distinct organizations (partners) come together to define, resource and achieve a shared vision where the idea of collaboration is important from the perspectives of ‘collaborative advantage’ of locations and groups” (Paskaleva-Shapira, Undated: 23). From this perspective PPPPs in Kampala would be capable of mobilizing stakeholders in shared responsibility to attain shelter goals and revitalize the city’s pro-poor shelter and urban heritage.
Advice by UNEP as reported by Casanova (2003: 10) would warrant Kampala’s authorities to take maximum advantage of the “… the 7Cs of partnership building: … (1) Contacting key persons; (2) Communicating the purpose; (3) Community visioning; (4) Confidence building; (5) Collective action; (6) Creating external links; and (7) Continuing support”. These 7Cs are widely acclaimed for ensuring attendant innovation, creativity, efficiency and entrepreneurial spirit, urgently required in salvaging Kampala’s pro-poor shelter deficiency, (UNECE 2004).

Utilization of Urban Natural and Cultural Heritage

Considering that Kampala is imbedded within low national capacity to plan for and manage urban cultural and natural heritage and their respective environments, attendant resources are in danger of being irrevocably damaged. In response to the multi-dimensional threats, for a start, I suggest the sustainable utilization of urban natural and cultural heritage resources and environments to improve housing for Kampala’s urban poor. It might start with initiation of small and/or medium range locally managed community-based culture and nature tourism projects in spots carefully selected to harness maximum advantage to slum dwellers to produce community-based eco-tourism products. Given the evidence of wealth of ethnic and cultural diversity and rich artistic talents latent in Kampala’s slum dwellers, I call for establishment of appropriate infrastructures such as cultural villages, art galleries, open air theatres, etc., to enable access to production, training and marketing of varied cultural goods and services. Open amphitheatre and performance spaces would double as rich destinations for colourful cultural performances, which would attract tourists who would induce variable trade during these performances. PPPPs-driven reproduction of such performances and local music on CDs, and rejuvenation of cultural industries or traditional crafts spanning souvenirs such as jewellery, pottery, woodwork, T-shirts, place caps, trays, local, badges, tapestry, wall hangings, postcards, scuffs, caps, ties, creative textile/clothing, leather embroidery, touristic footwear, etc, is appropriate.

I would encourage the private sector to invest in the development of open amphitheatres and technology for reproduction of reproducible souvenirs, appropriate incentives from central and local governments permitting. I would also challenge Uganda government to strengthen copyright laws so as to ensure patenting of various cultural goods and services, and to incorporate them in modern international copyright systems. In partnership with Uganda Museum, NEMA, and relevant NGOs, these endeavours would largely boost pro-poor community-based urban eco-tourism of Kampala to minimize urban socio-economic deprivation. The trickle-down effect would be reflected in increased household incomes and bettering of their dwellings.
Effective Co-ordination of Fundraising and Prudent Use of Funds

The wide range of proposals made above would require some form of seed money to energise Kampala’s pro-poor socio-economic, environmental and shelter regeneration process. This element was spotlighted in the WUF3 dialogue of the ‘Great Debate’. Statements from that debate are informative enough to warrant the conclusion that a pre-requisite for bettering conditions of the urban poor rests on capacity of lead teams to mobilize sufficient funding. Such funding addresses practicalities of short and long term goals, management structures and modalities of implementation. This is not easy since the responsible teams require the following merits:

1 Effective coordination of fundraising besides managing the attendant institutional, legal and policy climate for the projects;
2 Qualities that attract and sustain donor interest and commitment;
3 Sustained evidence of genuine accountability, transparency, making right choices and decisions on funds.

In addition to capacity to attract funds, lead teams or managers need to exhibit clear criteria for resource allocation mapped on the shelter objectives, sound accounting and auditing and systematic project appraisal. Resources should often be released at the right time to deserving partners, in right amounts for the right initiatives in the right locations. There has to be timely and appropriate access to the resources needed to make things happen.

I would recommend the appointment of a community education officer to take charge of organized, democratic and effective consulting, information sharing, lobbying, brokering solutions, and involving the people by engaging them in informative, persuasive and participatory seminars, dialogue, etc. The thrust would be along heritage conservation-led pro-poor best value shelter provision, income, welfare and environmental improvement.

Capacity Building in Provision of Water, Sanitation and other Social Services

Often overlooked is the fact that provision of water and sanitation determines the level of pro-poor economic activity and, in turn, the overall success of their shelter renaissance. Holistically, the thrust on shelter cannot succeed satisfactorily without a finger on water, sanitation, roads, electricity, health services, etc. Hence, their cognate delivery in Kampala’s slums would contribute “… major benefits in economic growth, poverty alleviation, and environmental sustainability” (World Bank 1994: 2). Because there is no substitute for reliable water and sanitation utilities, the solutions must include budgets to build and manage sustainable and sound systems.
Developing Transparency among Urban Governance Managers

Considering that corruption and poor governance are notorious for discouraging aid agencies and/or development banks in urban areas in poor countries, a sustainable regime of transparency needs to be instituted in Kampala's urban management structures. Good institutions are hatcheries for good governance and lesser corruption. It is good governance that at the end of the day set the moral and ethical quality of public behaviour. However, good governance is only as strong as the institutions that “…underpin their planning and implementation capacity which must be based on serving the needs of the many and not the interests of the few” (Tunku 2001: 2). Therefore, in unison with proposals of WUF3, the following advice from the Informal Preparatory Meeting of the Ad Hoc Committee for the Negotiation of a Convention against Corruption (2001: 2) in original text should be adapted by Kampala's central and local authorities.

The public service is fundamental to good governance. Holders of public office (including elected officials and in particular ministers) should act solely in terms of the public interest. They should not do so in order to gain undue benefits for themselves, their families or their friends. The keystones of public service are selflessness, integrity, neutrality/objectivity, accountability, openness, honesty, and leadership. Corruption flourishes where the public service lacks such an ethos, where public servants are poorly remunerated, and where appointments are not based on objective professional merit. Governments need public services that are merit-based, ethical, professional and non-partisan, managed with appropriate recruitment and retention systems (including adequate pay) and transparent arrangements for promoting ethical conduct (including codes/rules of conduct and asset declaration where the potential for conflicts of interest arises) and appropriate sanctions for breaches.

Governments should adopt measures to reduce existing or future opportunities for corruption within the public service. Such measures could focus on, inter alia:

1. Use of a merit-based system for recruitment and promotion;
2. Adoption, implementation and enforcement of a code of conduct for the public service;
3. Asset declarations by public servants in cases of potential conflict of interest;
4. Job rotation systems;
5. Adequate salaries;
6. Requirement to report corruption cases;
7. Education and training programmes for public servants to enable them to meet the requirements of the correct and honourable fulfilment of public functions;
8. Establishment of a public service commission.
Championing Small-scale Enterprise among the Urban Poor

The rejuvenation of cultural industries noted above coupled with affordable modern technology is strongly recommended. They can be transformed into practical means of pro-poor small scale/medium scale enterprise development. The cultural industries should be able to “… produce tangible and intangible artistic and creative outputs. They have an enormous potential for wealth creation and income generation. They are, therefore, an important tool in poverty alleviation. They have high export potential through the exploitation of cultural assets and production of knowledge-based goods and services” (Assaf 2005: 3).

Furthermore, Kampala being immersed in such a rich agrarian hinterland and with support of pro-poor micro-finance credit, the urban poor can pursue mini agro-based cottage industries. For instance with relevant skills training, manual and electric peanut butter machines, can be introduced to partnerships of these urban poor. Other can engage in businesses driven by shellers and roasters. Given appropriate guidance and supervision from the Bureau of Standards in meeting minimum requirements for processing and packaging, their products would be able to reach the market of local grocery stores, schools, and hospitals, neighbourhoods, etc., and beyond.

Application of Best Value Frameworks to the Urban Poverty Alleviation Agenda

It is important for Kampala’s local authorities to commence linking best value to all political and management arrangements and to community engagement in the fight against urban poverty and deprivation. In this regard, they require utilizing comparative performance information and evidence of best practice to propel pro-poor shelter rejuvenation and enhancement of their aspirations on a continuous basis. Inherently, Uganda government and Kampala City Council need to make firm commitments towards “… delivering on their high level priorities, implementing identified improvement actions and making arrangements to report progress to the public” (Perth & Kinross Council, no date: 3). They have to ensure that best value is the critical focus in delivering pro-poor priorities with a call for efficiency, economy, effectiveness, and equity.

Conclusion

This paper has considered aspects of improving the shelter and general welfare of Kampala’s urban poor. Given total political commitment and support to accomplish the definitive objectives of poverty alleviation and the Millennium Development Goals, the proposals put forward should innovatively utilize Kampala’s natural and cultural heritage to empower the urban poor and transform slums into places fit for human habitation and diminished deprivation.
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Comayagua was once the capital of Honduras and has a lot of architectural and cultural heritage. The historical centre was declared a monument by the National Anthropology and History Institute (IHAH), and it is being regulated and conserved by three institutions that work closely in its revitalization and conservation: Comayagua Municipality, the IHAH and the Spanish Agency for International Cooperation. The Master Plan Office is in charge of the urban development of the area and the zone of influence. It works under the municipality and manages funds from the local government as well as cooperation funds. It is in this part of the city that the housing plan is to be designed, given that the technical structure exists to manage such a project and that the funds are framed into historical centres revitalization to better living conditions.
Honduras

Honduras is located in Central America. It has coast in the pacific and Atlantic ocean and limits to the north with Guatemala, and to the south with El Salvador and Nicaragua. The type of government is a democracy, and there is an executive power, legislative power and judicial power.

Honduras is geographically divided into 18 departments, which also subdivide into municipalities that then subdivide into villages and towns. There is a central government that controls the national policies and municipal or local governments that execute projects in their communities.

The region where the project is located is the department of Comayagua, which is in the central part of the country.

The population of Honduras is 6,535,344 inhabitants. 43% of the population is concentrated in the cities of major development. Of this population, 5.5% lives in the department of Comayagua and the average age of the population is 22.9 years.

The age structure for the country is the following:

- 0–14 years: 39.9% (male 1,491,170/female 1,429,816)
- 15–64 years: 56.7% (male 2,076,727/female 2,077,975)
- 65 years and over: 3.4% (male 113,747/female 137,061) (2006)

Literacy is 80% among the population 15 years or older.

The index of urbanization is 40.9, which is the fourth place in the country.

The birth rate is 35.1 (crude birth rate per thousand inhabitants). Fertility rate is 4.7, mortality rate 5.1, life expectancy 71.5, infant mortality 37.9 for the department of Comayagua.

Comayagua, due to its geographical location is the intermediate city between two points of development in the country, which are Cortes and Francisco Morazán.

The GNP per capita for the country is USD 970. Although this may seem high Honduras presents, according to the Honduras Human development 2006 report, one of the highest levels of inequity in the income distribution, among 18 countries in Latin America and the Caribbean. This cause is strongly attached to certain factors such as access to education, the job market and other assets.¹

The government budget is generally distributed according to the following:

- In education 4% of the GNP
- In public health 4.3% of the GNP
- In private health 2.5% of GNP
- 2% in others such as FHIS (Honduran Fund for Social Investment which works in the construction of schools and medical clinics, National Institute for the Childhood and Adolescents, Housing Program, National Institute for Capacity Building INFOP and the national Institute for Pensions INJUPEMP).

¹ Informe Sobre Desarrollo Humano Honduras 2006.
National Statistics in employment\(^2\)
- 2,759,410 habitants are working actively in 2006, 64% of this population where men.
- 1,597 lempira USD 84.00 income per capita in Honduran homes
- 9.8 % unemployment rate in the Central district, highest of the urban population.
- 240,253 people have visible under employment, they work for 36 hours per week but wish they could do it more.
- 854,424 workers stay in the line of invisible underemployment, they work for more than 36 hours per week but their income is under the minimum salary wage.

According to the index of human poverty 2004 for Honduras is 34.6. This index measures five different factors which are the following:
- Probability of being born and not living more than 40 years
- Illiterate rate on population over 15 years
- Percentage of the population with no access to good quality water
- Percentage of children under five years of age with malnutrition according to weight
- Dignified level of life.

Access to Shelter and Services

According to UNDP, Honduras faces a housing deficit of 800 thousand shelters being one of the major problems of this the low income for the families. About 2.6 million Hondurans have no access to government loans because of their low salaries (from USD 50.00 per month)

It is considered by 1999 studies in Honduras that 66% of the housing stock was deficient. This means that the houses are made out of carton, wood, or other temporary materials. Overcrowding is extreme, 4–10 people per room and access to basic infrastructure is poor or nonexistent.

In Honduras, housing tenure by ownership is divided the following way: 59% of the housing stock is located in the rural area and the rest is distributed in the urban area. 88% of rented housing is located in the urban area, due to high cost of construction and land acquisition in big and medium cities. Housing given without payment is located, 58% in the rural areas and 71% of recuperated housing without legal ownership are in the urban area.

It is estimated that in Honduras there are 1,308,019 houses, of which 51% are in the rural area and 49% in the urban area. 71% are owned, 14% are rented, 11% are given in exchange for other services and 4% are recuperated, which means that they are localized in an illegal land or are in the process of legalization. In the urban areas, percentages of not owned housing are higher, 39% in the urban areas versus 18% in the rural areas.

\(^2\) INE National Institute for statistics 2003
According to World Bank 90% of the population have access to an improved water source, and for low to middle income it is 81%.³

**Housing Policy and Actors in Shelter Deliver**

The housing policy is still a draft and really has not been approved by the government. The main objective of the law is to establish the basis for the organization and modernization of the legal, institutional and regulatory frames of the Housing and Urban Development sector in Honduras, so as to secure the emission and execution of policies in a coordinate and integral way, promoting the adequate attention to the housing needs of the population, specifically for the population with lowest income.⁴ Currently the Ministry of Public Projects and Housing has presented a sectoral table in housing in which they have launched the presentation of the *Propuesta para el Sistema de Subsidios Habitacionales de Honduras, Como una Política de Estado*, which means a housing subsidy system as a state policy. This subsidy plans to be the only existing subsidy in the country and will envelop the other subsidies actually existing, through a national bank. This sectoral table pretends join the civil society and the government as a strategy to plan and order the public investment to execute the country’s strategy of poverty reduction.⁵

The new government has approved a funding of USD to create 200,000 new homes under the Citizen Housing Program. There have been approaches to involve the private sector in financing these homes, although they have not reached an agreement. Generally, in the past, the government has given a subsidy to the families in order to keep the cost of the houses minimally affordable.

After Hurricane Mitch, most of the homes built, as a donation or sold at very low rates, where given to women headed homes.

The principal actors in shelter delivery are commercial banks and savings associations managing 59% of the housing stock leaving the other 41% to others such as NGOs. The state acts as a promoter, getting rediscouts with the commercial banks and savings and associations, and local governments generally have no role in shelter delivery, although the proposal to do so exists.

**Design**

Most low income housing is built from concrete block, zinc roofing, and louver windows, cement flooring (sometimes no flooring at all). In the historical centre ownership has often lead to subdivisions of the properties. Most of these houses have an inner courtyard design but when they are partitioned, many lose this typical characteristic, bringing problems in

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⁴ [Borrador Ley Marco de Vivienda/Objetivos.](#)
⁵ [Estrategia para el fortalecimiento de las mesas sectoriales/ Strategy to Reinforce Sectorial Tables.](#)
ventilation, drainage and rain water drainage. The functions of the house are forced into less space. Added to this, the regulations for the historical centre constrain many interventions of how to realize new openings in the existing structure and most of the time they are prohibited. (As well as partitioning the structure but many have happened before the establishment of the regulations back in 1996).

The idea is to include owners in the process of awareness of the heritage they own, as to better the local and national identity.

Comayagua Historical Centre

The historical centre in Comayagua has mainly two uses, for living and commercial use. Many of the houses are in poor condition due to the high cost restoration implies. Many families have little resources to repair their homes, and the cultural heritage is being slowly destroyed.

The historical centre of Comayagua is composed of different one-storey buildings made of adobe. There are also monumental buildings and churches that are a mixture of rock and adobe construction. The other buildings are civil buildings such as homes and commercial buildings.

The office has made a listing of all the buildings to be conserved, among which, many homes are included. These have been evaluated to determine the state in which they are, evaluating factors such as existing structure (roofs, walls, floors, infrastructure, basic services) and ownership (many houses really deteriorated are rental houses). Many have precarious electrical systems.

As mentioned before the office for the historical centre is proposed to be inserted into the structure of the municipality as follows. This office has the technical assistance specifically for the restoration of these buildings or has the contact with the IHAH, to assess in specific cases. The IHAH also recognizes the office and even has an architect assigned to the office permanently. The office has created a framework approved and enforced by the municipality to regulate the interventions made in the historical centre,
in order to preserve and maintain the existing buildings. This framework has also been approved by the IHAH.

Cooperation Project in Architecture, Housing, and Urban Development

The Housing Project for the Historical Centre in Comayagua aims to create a process that will generate better living conditions for its residents, conserving or rehabilitating existing historical structures. This project is part of an acting protocol between the Junta de Andalucía Consejería de Obras Públicas y Transporte and the city of Comayagua to develop a cooperation programme in architecture, housing and urban development.

This programme is being designed (physical and socio-economic evaluation of the historical centre and its influence zone), the determination of the financing for the interventions (fund managing, beneficiary selection) to the actual interventions in the housing units, with the technical consultation from the office and the way to make it a participatory action. Participatory means to have a counterpart contribution from the homeowners, and this contribution could be economic or participation in the construction process.

For this Comayagua, already has the Historical Centre Office that regulates all the interventions in the historical centre and its influence zone.

Being Comayagua, one of the cities in rapid development in Honduras, and being one of the cities that counts with the technical office already structured, it is a major priority to design local policies for this special case that may suppose a case study for future interventions along the country.

Financing and Keeping Residents in the Area

Having made the ownership evaluation for the historical homes, many appear to be rental houses. The rent is really low because of the state of the house. The tenants rarely can make renovations because the owners are not really interested in keeping their property.

The housing project, should offer funding for the renewal of derelict buildings, agreeing with owners that actual residents should be kept, to avoid turning them away with high renting costs. The design of a criteria or a catalogue of the renovations that can be made through this funding is necessary in order to regulate the rental costs. In this way, the existing tenants can have an opportunity to keep their homes and the interrelation with different economical classes can be achieved.

The seed funds for the project exist as a donation from international cooperation. These funds could be managed by financial institutions with social orientation. Many families may also appear to have enough resources to apply to a credit at low interest rates to make it more attractive for them to recover their buildings. The legal framework should be revised in order to keep the use of the building as residential use and to favour tenants already living in the area.
Stakeholders: Giving Tenants a Stronger Position

Given that many owners do not live in their properties within the historical centre, the rental policies have to be analyzed and amendments be made if necessary to give tenants a stronger position. Necessities of the residents are to be coordinated with the technical office in order to design the renovation criteria for the project.

Along with this a heritage awareness campaign should be developed. This will help to prevent more deterioration of the existing structures after the renovations are made or for buildings in fairer state.

Housing Programme for the Historical Centre

In summary, the creation of a programme that responds to national policies to achieve better housing conditions for the residents of the historical centre in order to maintain them using these structures as a way to conserve the heritage, is the main issue.

The residents are affected because of the technical difficulties to preserve such structure. These structures are mainly made out of adobe, a material that is no longer commercially found and is difficult to produce along with the adobes incompatibility with other existing materials (concrete, burnt brick) and the economical factor to recuperate these structures. Ownership is another factor that limits the residents’ interventions in the renovations needed. Lack of policy, for programs to help rehabilitate existing structures is another major problem.

To act on this situation the government should define the policy to be implemented and the existing framework can be analyzed and localized for the local government. This framework includes the existing draft for the housing policy, the rental policy and financing structures, which integrate the central government, the local government and the community along with external cooperation. This policy should address the case for historical centres specifically since the characteristics for housing projects here are different and should be analyzed specifically.

This problem is permanent; the historical centre is a reality that has to be preserved because it helps citizens as an identity factor which helps to develop the region (private investment). Heritage should be seen as a way to develop a region. The problem starts when the houses deteriorate and the owners do not have the money to invest or don’t care about their properties. (There are many houses that are left to ruin by their owners so they don’t have to rebuild the same structure.)

The cause of the problem is part of the projects objectives, to determine the kind of action needed in each specific case.

This problem affects the whole community since each building contributes to form an urban space that composes the historical centre which creates a sense of identity and pride in each resident, and that makes them want to be a part of this space.
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Projects in Governance and Policy
The Zambian government launched a housing policy in 1996 as part of the enabling shelter strategy to “provide adequate affordable housing to all income groups in Zambia.” In recognition of the participative way in which this policy was formulated, the UN awarded it a scroll of honour. A decade has now passed and apart from piecemeal and un-coordinated implementation, this policy has been shelved, thereby failing to achieve its goal.

Lack of implementation of the 1996 housing policy, robbed us of the tools to use in making informed judgement regarding the soundness of this policy, but had it been implemented, the policy would have failed to achieve it goal, because it lacked the correct strategies and the legal tools to make it operational. The country still lacks a policy whose strategies will adequately address both quantitative and qualitative housing needs. Since nothing has been achieved, the 1996 housing policy was either a false start or a fruitless march towards adequate shelter for all.
Zambia

<table>
<thead>
<tr>
<th>Area</th>
<th>752,614 km²</th>
<th>Population</th>
<th>11,502,010</th>
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</thead>
<tbody>
<tr>
<td>Urbanization</td>
<td>+ 38 %</td>
<td>Migration</td>
<td>0/1,000 pop</td>
</tr>
<tr>
<td>Fertility</td>
<td>5.39 child/woman</td>
<td>Life expectancy</td>
<td>40.03 years</td>
</tr>
<tr>
<td>Pop. Growth rate</td>
<td>2.11%</td>
<td>HIV/AIDS rate</td>
<td>16.5% adults</td>
</tr>
<tr>
<td>Literacy rates</td>
<td>74.8%</td>
<td>GDP per capita</td>
<td>USD 900 (2005 est.)</td>
</tr>
<tr>
<td>GDP Real growth</td>
<td>5.1% (2005 est.)</td>
<td>Labour force</td>
<td>4.8 million (2005)</td>
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<tr>
<td>Unemployment</td>
<td>50% (2000 est.)</td>
<td>Poverty</td>
<td>69% and 53% (CSO, 2003b)</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>19% (2005 est.)</td>
<td>External debt</td>
<td>USD 528 m (after HIPC)</td>
</tr>
</tbody>
</table>

Natural Resources: Copper, Cobalt, Coal, Emeralds, Gold, Silver, Uranium, Hydropower


Zambia, located in the resource-rich southern part of sub-Saharan Africa (SSA), is a least developed and a Highly Indebted Poor Country (HIPC). Except for South Africa, countries in this region are challenged by high external debts; attract low Foreign Direct Investments (FDIs); have the lowest per capita; and high poverty levels, they constitute the most underdeveloped countries in the world. It has an area of 752,614 km², comprising a young population of 11.5 m inhabitants (CSO 2006), distributed as follows: the 0–14 year age group make up 46.3%; while the 15–64 year age group comprise 51.3%; those aged 65 and over comprise 2.4%. In the next few decades this population will age, it will have more older people needing more specialized facilities such as, home based care, medicines, and special housing etc. If the HIV/AIDS scourge, ravaging Zambia with an infection rate of 16.5 percent is factored in, then more aged adults will end up looking after those infected and their affected orphans, instead of being looked after. If not checked now, this paradigm could soon reach alarming levels.

About 64 % of the population lives in rural areas and 36% in urban areas, indicating a drop from the 1990’s urban level of 39%. Despite this decline, Zambia is still one of the most urbanized in SSA. Most of its major urban areas and industries are located along the line of rail from Livingstone in the South to Chililabombwe in the North. Lusaka, the capital city with an estimated population of 1,307,000, lies equidistant between these two points. The high concentration of people along this belt resulted from rural urban migration, which transformed the area from an agrarian based economy into an industrial based one, after the discovery of copper and the establishment of the mining industry in the 1920’s. This in turn attracted the railway line and other related industries. Other provinces are rural, although they all have urbanized administrative capitals. The high rate of urbanization was not matched with provision of adequate housing and its related infrastructure, accompanying poor policies led to imbalanced development and the proliferation of squatter settlements.

In 1969, 0.74 million people migrated, the number increased to 1.18 million, 1.44 million and 1.68 million in 1980, 1990, and 2000, respectively (CSO 2003a: ix). In the same period, international migrants made up 6%
of the total population; this declined to 4% in 1980, 2% in 1990, and by 2000 constituted only 1% of the total population. The 1970–1980 inter-censal period indicated an annual growth rate of 7% per annum, it declined to 3% between 1980 and 1990, and to 1.4% per annum in the period up to 2000 (CSO 2003a: xi). The fertility rate for 2006 was estimated to be 5.39 children born/woman and the child mortality rate at 86.84 deaths/1,000 live births (CIA Fact Book).

At Independence in 1964, Zambia inherited a strong mono based copper mining economy from Britain. It deteriorated in the mid 1970’s following a sharp decline in copper prices, compounded by the oil shock of 1973 (PRSP 2002, Saasa 2002: 24). Failure to make positive policy changes to diversify the economy, weak macro-economic management, rising foreign debt and recurrent fiscal crises, led the per capita income to drop by 60% in 2000 from its levels in the late 1960s (PRSP 2002:1). As a result Zambia’s GDP since 1994, was quite weak and usually showed a negative growth (figure below). Economic decline coupled with the emergence of the HIV/AIDS scourge, dipped life expectancy to 36 years in 1990, but it rose again to 40 years in 1996 (CIA Fact Book).

After the change of government, in 1991, pragmatic adherence to IMF prescribed conditions, reductions in government borrowing coupled with positive copper prices on the world market, and debt forgiveness, led to a reduction in external debts. New economic activities, acting as an impetus for investors to build, expand and renovate run down infrastructure, have attracted Public Private Partnerships (PPPs) in housing and real estates, which were long neglected.

Access to Shelter and Urban Services

The poor macro-economy, high debt, and other factors led to lack of investment in housing. Interested actors could not move in because of restrictive legislature such as the 1975 watershed speech, under which housing was nationalized, private participation including estate agents, FDIs, and capital injection in housing and real estates were banned. Only parastatals and municipalities were allowed to speculate, but they also failed due to inter
alia, lack of financial, and human resources to compete on the open market. They left a big gap, which was filled by un-qualified, illegal, and unregistered speculators who still comprise the majority of players in the sector. Since formal institutions were restricted, informal institutions took over. This led to an increase in unauthorized settlements, which now make up over 36% of all urban housing. In Lusaka, squatters account for about 45% of the total population.

Out of the nation’s 1.3 million housing units, only 31.0% of the total housing stock was formal and fully approved in 1990. The remaining 69% were informal and poorly serviced or not serviced at all. About 11,000 of these were actually not meant for use as housing units (MLGH 1996: 6; CSO 2003b: 3). In 1996, Zambia had a housing backlog of 846,000 units which required a building rate of about 110,000 dwelling units per annum to be offset (MLGH 1996: 7). However, the Swedish Institute of Urban Planning (SIPU), estimated this need at 45,000 units/annum (SIPU 2003: 59). The Government (GRZ) and FINNIDA, on the other hand, estimated this to be growing at 68,000 units/annum (GRZ, FINNIDA 1985: 10), both reports only estimated 1500 as the number of units being built annually to approved standards. If we factor in these quantities, the current housing need estimate appears as shown in the following table.

*Ten Year New Housing Needs Projections 1996–2006*

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SIPU Units (000) (+45,000)</td>
<td>846</td>
<td>891</td>
<td>935</td>
<td>978</td>
<td>1,021.5</td>
<td>1,065</td>
<td>1,108.5</td>
<td>1,152</td>
<td>1,195.5</td>
<td>1,239</td>
<td>1,329</td>
</tr>
<tr>
<td>Less 1500</td>
<td>889.5</td>
<td>933.5</td>
<td>976.5</td>
<td>1,020</td>
<td>1,063.5</td>
<td>1,107</td>
<td>1,150.5</td>
<td>1,194</td>
<td>1,237.5</td>
<td>1,128</td>
<td></td>
</tr>
<tr>
<td>GRZ/FINNIDA (000) (+68,000s)</td>
<td>846</td>
<td>914</td>
<td>980.5</td>
<td>1,047</td>
<td>1,113.5</td>
<td>1,180</td>
<td>1,246</td>
<td>1,313</td>
<td>1,379.5</td>
<td>1,446</td>
<td>1,512</td>
</tr>
<tr>
<td>Less 1500</td>
<td>912.5</td>
<td>979</td>
<td>1,045.5</td>
<td>1,112</td>
<td>1,178.5</td>
<td>1,245</td>
<td>1,311.5</td>
<td>1,378</td>
<td>1,444.5</td>
<td>1,511</td>
<td></td>
</tr>
</tbody>
</table>

*These figures do not consider 10% yearly dilapidated housing stocks.*

According to this table, the number of units needed to clear the backlog since the policy was launched is now estimated at 1,511,000 for the highest deficit and at 1,128,000 for the lower deficit. It is clear from economic indicators that by going it alone, the government could never clear this backlog, hence the need for other actors and PPPs to come in.

National distribution of housing units in 1990 and 2000 is shown in the table opposite. During the inter-censal period 1990–2000, the housing stock increased from 1,321,062 to 1,768,287 units of which 66.2% were classified as informal. This included all units located in rural areas, indicating an increase of 3.0% from the previous figure of 63.2%; the remaining 33.8% were formal. Out of a total of 1,768,287 only 33.8% were in urban areas.
The 1996 Zambian Housing Policy

Inter-censuval Location and Percentage of Housing Units

<table>
<thead>
<tr>
<th>Residence</th>
<th>1990 No. of Units</th>
<th>2000 No. of Units</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>1,321,062</td>
<td>1,768,287</td>
<td>33.9</td>
</tr>
<tr>
<td>Rural</td>
<td>834,426</td>
<td>1,170,781</td>
<td>40.3</td>
</tr>
<tr>
<td>Urban</td>
<td>486,638</td>
<td>597,506</td>
<td>22.8</td>
</tr>
</tbody>
</table>

(Source GRZ CSO 2000: 3).

A further break down of the housing stock reveals that about 80% of the units in the country were self built, 12 percent purchased, 4 percent freely acquired and about 3% inherited (CSO 2003c).

Ownership of most of the housing stock is now in private hands. Public housing was abruptly privatized in 1995 after realizing that the economic burden of maintaining the nationalized stock was too high for the public budget to bear.

The most common materials used for house construction in Zambia are tabulated in the three tables that follow below.

Housing Units by Construction Material of Floor

<table>
<thead>
<tr>
<th>Place</th>
<th>Total units</th>
<th>Construction Material of Floor (%)</th>
<th>Concrete</th>
<th>Cement</th>
<th>Brick</th>
<th>Tiles</th>
<th>Mud</th>
<th>Wood</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>1,768,287</td>
<td></td>
<td>4.6</td>
<td>28.8</td>
<td>0.3</td>
<td>1.2</td>
<td>63.0</td>
<td>0.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Rural</td>
<td>1,170,781</td>
<td></td>
<td>1.4</td>
<td>10.2</td>
<td>0.3</td>
<td>0.2</td>
<td>85.5</td>
<td>0.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Urban</td>
<td>597,506</td>
<td></td>
<td>10.8</td>
<td>65.1</td>
<td>0.3</td>
<td>3.1</td>
<td>18.8</td>
<td>0.2</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: CSO 2003b.

Housing Units by Construction Material of Walls

<table>
<thead>
<tr>
<th>Place</th>
<th>Construction Material of Walls (%)</th>
<th>Burnt Brick</th>
<th>Mud brick</th>
<th>Blocks/Slab</th>
<th>Cement blocks</th>
<th>Stone</th>
<th>Iron Sheets</th>
<th>Asbestos h/ board</th>
<th>Pole &amp; dagga</th>
<th>Grass</th>
<th>other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td></td>
<td>14.8</td>
<td>38.4</td>
<td>7.5</td>
<td>15.0</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>19.9</td>
<td>2.2</td>
<td>1.6</td>
<td>100</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td>16</td>
<td>45.7</td>
<td>1.3</td>
<td>2.4</td>
<td>0.1</td>
<td>0.1</td>
<td>0.4</td>
<td>29.1</td>
<td>3.1</td>
<td>1.8</td>
<td>100</td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td>0</td>
<td>12.4</td>
<td>19.7</td>
<td>39.9</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>1.9</td>
<td>0.3</td>
<td>1.2</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: CSO 2003b.

Housing Units by Construction Material of Roof

<table>
<thead>
<tr>
<th>Construction Material of Roof (in percentage)</th>
<th>Concrete</th>
<th>Cement</th>
<th>Asbestos Sheet</th>
<th>C/S</th>
<th>Grass/Thatch</th>
<th>Tiles</th>
<th>Slate</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>0.4</td>
<td>18.9</td>
<td>17.1</td>
<td>62.2</td>
<td>0.3</td>
<td>0.0</td>
<td>1.1</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>0.1</td>
<td>3.4</td>
<td>8.9</td>
<td>87.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.6</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1.1</td>
<td>49.3</td>
<td>33.1</td>
<td>13.6</td>
<td>0.7</td>
<td>0.1</td>
<td>2.2</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: CSO 2003b.

These three figures indicate that the most common material used for floor construction is mud (63.0%) which is used in most rural houses and in
informal units except for a few. Cement (28.8%), which together with concrete (4.6%) add up to 33.4%, dominate the floors of most formal housing units. Mud at 38.4%, followed by concrete related wall materials together add up to 22.5%, dominating materials used in wall construction. For roofing, the traditional thatched roof common in all rural and most informal housing stands out at 62.2%, then asbestos\(^1\) cement at 18.9%, and corrugated iron roofing sheets at 17.1%.

About 36% of the 1.7 million households in Zambia were supplied with piped water, 38% were using wells or bore holes, and about 26.0% used rivers or streams. 17.0% used flush toilets and 54% were using pit latrines, about 29% had no toilet facilities. The scattered nature of rural housing makes it difficult to provide services. Of all the houses in the urban areas, 70% of them were poorly serviced (MLGH, 1996). The first phase of the World Bank funded urban water supply to nine urban cities on the Copperbelt and Lusaka has just been completed, drastically reducing erratic water supplies which were being experienced in these areas.

The 1996 Housing Policy:
Goals and Achievements

The UN awarded a scroll of honour to this policy\(^2\), which was launched in 1996 as part of the enabling shelter strategy. Its goal was to provide adequate affordable housing to all income groups in Zambia. Its implementation was to be the starting point for Zambia’s sustainable march with the rest of the world towards “Shelter for all” by the year 2010 (MLGH 1996: 1).

The policy was formulated at a time when performance of the national economy had plummeted and was still reeling from negative GDP growth. The country was experiencing high levels of poverty and the national estimates were 69 and 53% for overall and extreme poverty respectively (GRZ CSO 2003a: 4). Other estimates were higher than 80%\(^3\). It was hoped therefore that implementation of the policy would jump-start the construction industry and create employment, thereby help in turning the economy around. It was also supposed to help clear the housing backlog and alleviate the shelter affordability problems of the poor (MLGH 1996: 6).

Provisions of this policy were not implemented; hence, there have been no tangible outcomes from it. The paradox of its aspirations is that, the housing deficit has worsened, housing indicators have deteriorated, and living conditions in both formal and informal housing have become very bad. This means that, the award winning policy has failed the acid test, which is less what governments say they will do or guarantee, and more what they achieve (Doling 1997: 205). It also confirms that it is almost a law of policy

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1 The use of asbestos was banned in other countries, due to its threat to human health.
2 Housing Policy will be simplified and defined for use in this study as ‘a deliberate course action or inaction directed towards the shelter provision process’.
3 When those surviving on less than a USD 1 per day are used as a measure.
The 1996 Zambian Housing Policy

analysis that intention and outcome rarely equate (Lowe 2004: 2). All efforts made previously have turned out to be ‘a fruitless march towards adequate shelter for all by the year 2010’.

Documented attributes of a good housing policy are that it should adequately address both the house planning as well as the fiscal policy instruments (Oxley 2004: 5). The parameters which the housing policy intended to use were:

**Housing Markets:** These were seen to have become a disparate mix of uncoordinated bodies and actors with no significant impact on the housing scene. Neither strategy to tackle this situation, nor their expected outcomes were laid down.

**Regulatory Frameworks:** Building and construction standards were to be revised to make them functional and performance based rather than prescriptive, flexibility was to reflect the affordable principle of all income groups. It was seen that adopting housing development strategies and programmes, would involve changes to existing legislation. It identified 12 pieces of legislature which needed to be reviewed and appropriately amended to enable legislative authorities enforce policy goals and principles. Building inspectorates in all local authorities were to be reinforced through training to ensure developers complied with minimum approved building standards. It is still not clear whether this has taken off as yet.

**Housing Programmes:** Were not addressed but it was noted that community based and co-operative housing development, had proved to be a viable option for delivery of cost-effective and affordable housing, which also recreated mixed income communities. CBOs were tasked with five roles and functions at community level. Organised self-help housing strategies copied and adapted from Fuprovi in Costa Rica could be used to fill this gap.

**Housing approaches and strategies:** These were completely missed in the policy, and yet these are the element we could have used to analyse whether the planned approaches and strategies were workable, had it been implemented or not.

**Financing/Funding Schemes:** It was pointed out that in the past, there had been no frameworks for a consistent approach to housing finance. The government had played a passive role in mobilising funds to use in the maintenance of existing and provision of new shelter. Actual investment dropped from about 3.0 per cent of GDP in 1969 to less than 0.5% of GDP in 1992,\(^4\) indicating a figure well below the UN and World Bank minimum of 5.0% (MLGH 2001). No way forward was plotted.

**Poverty Alleviation:** It was assumed that the amount of activity, generated from the effects of this housing policy would drastically reduce the high levels of poverty. Most of the programs were expected to be labour-intensive to offer more access to paid employment, and income, which could have had a multiplier effect on the economy. The Policy was not implemented.

**Gender Issues:** The housing policy did not have a genderised approach. It did not acknowledge the complementary and supplementary roles, and

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\(^4\) No housing was constructed in this period, so it is difficult to ascertain where this figure was spent.
the need for both genders to work together. Traditionally women had specifically assigned roles in housing provision: they drew water for moulding bricks, collected firewood for curing them, and they cut grass for thatch, in some cases, they actually constructed the roof.

Roles of the Actors in Shelter Delivery

The actors identified to play a crucial role in shelter delivery are:

The co-operating partners; whose main role, *inter alia*: is to support the organisation of international forums, where universal Laws are formulated. They are mandated to assist in funding programmes.

The central government; whose roles are to sign and adhere to international protocols and to create a conducive atmosphere in which the private sector could operate. At WUF3, in Vancouver, Canada, Governments were recognized as the main players in PPPs, its main role was to avail infrastructure for development.

The local government; is the main actor at local level where the action takes place, they understand existing conditions and know what areas need investments. In Zambia, they keep custody of land on behalf of the state, and they can easily buy it off speculators to avail it to potential investors, they have the task of interpreting macro policies formulated at the top into actions on the ground. They just need proper legal and Institutional frameworks to operate effectively.

International and local Non-Governmental Organizations (NGOS), Community and Faith Based Organisations (CBOs and FBOs) have the knowledge, expertise, capital, the confidence of the communities where they operate. They understand the needs of communities and offer hope to HIV/AIDS sufferers. They are able to transpose best practices from other NGOs for testing at local level.

The Private Sector; has the capital and the willingness to take risks, they invest where prospects look good and atmosphere conducive. The housing backlog and the growing needs gap are enough to spur investments in housing. Reducing legal and institutional encumbrances; providing serviceable land; offering tax rebates and other incentives in housing could be one way of encouraging them.

Research Institutions; could assist by researching on effective policies, developing new and better building materials and appropriate regulations to serve communities; they should be geared towards networking with other stronger, well funded and more established research and capacity building institutions around the globe.

Finally, individuals and others; have a moral duty to survive using the most sustainable methods possible. They have to use water, forest products, soil and other natural resources bearing in mind that future generations will also depend on them for survival.
Policy and Finance

Good policy and adequate finance are the most important aspects to the shelter problem in Zambia. The country lacks a policy whose strategies could adequately address both quantitative and qualitative housing needs. It inherited a small and inadequate housing stock, of such high quality that it is very difficult to maintain under the prevailing economic climate. Colonial rulers left very rigid and stringent regulations, these are not only an encumbrance, they are expensive to follow and they do not even adequately address emerging urban issues such as, mitigating the effects of HIV/AIDS, orphans, female/child headed households, the street kids issue, etc.

Zambia’s current housing problems are intricately interwoven into its past, it was basically a mining colony, whose mines had an uncertain life span. The colonial government formulated policies geared towards two guiding philosophies, ‘Industrialization without urbanization’ and regarding ‘natives as temporary urban dwellers’. The former was the overriding policy and it meant that the colonialists only created mining related industries. They were not prepared to create urban areas which they thought would be too expensive to administer. The latter based on the former, eliminated the need to build permanent houses in urban areas, since natives were temporally sojourners, and their permanent home was in their rural homes. Consequently, the first urban houses were made of thatch, until much later when they changed to permanent materials. The CBDs developed were spatially and racially segregated into the 1st, 2nd and 3rd class shopping areas. Housing areas were separated into the High cost yards, amayadi, for Europeans. Medium cost, mediarnu, for Indians and mixed races, and Low cost compounds, amakomboni, for indigenous Africans. The quality of infrastructure and other social amenities provided depended on the classification of each area. Since most of these houses belonged to employers and was employment tied, extensions or alterations were not allowed. This led to urban areas being segregated, dysfunctional, and unpleasant to live in.

Even if there has been remarkable spread in market-based housing finance throughout the world and the world has since 2000 changed towards a generally affordable market based mortgage finance system (World Bank 2006: xii), and also despite Zambia having a well functioning financial system, the most significant problem to housing delivery in the country is the issue of housing finance. The cost of borrowing money for housing development for both commercial and subsistence investors is too high (the bank lending interest rate, has just dropped to 35% from 40%). The prolonged poor state of the Zambian economy, which entailed two or three digit inflationary figures and interest rates has affected the affordability of the majority of the population, for a long time self built housing delivery remained poor.

The problem which this study has identified is lack of a well-balanced policy on Housing. The policy formulated to solve Zambia’s housing problems has not been implemented. This in itself robbed us scholars and analysts of the correct tools for making informed judgements. We only speculate on what would have happened, had it been implemented. So far only piecemeal implementations, which were not even part of the policy in
the first place, have been effected. As a result, housing problems in Zambia continue to grow unabated. Positive spin offs from good housing delivery programs such as employment, have not been created, and the economy has not improved.

The entire cross section of society is affected by lack of a good policy because it leads to inadequate shelter. The economy suffers because of a reduced tax base, since squatters do not pay rates. These settlements destroy the environment because untreated solid and liquid waste emitted pollutes rivers, overcrowded people in unplanned areas cause diseases, and their occupants use un-sustainable building and survival techniques. They are dissatisfied and remain potentially an active volcano.

The colonial legacy of segregated and dysfunctional cities still exists because, after independence, the Zambian government sensitive of its colonial past in, which Africans were treated as second-class citizens, made two tactical errors in addressing this issue. Firstly, it attempted to provide urban Zambians with houses suitable for dignified men, in so doing, it laid down minimum standards, especially of services provision, which were too high and as Tipple (1981) rightly observed, have by their cost, denied a large proportion of workers an opportunity to rent or own a house in the authorized sector. Secondly, it incorporated all unauthorized housing areas, which the colonial government had kept on the periphery, into the jurisdiction of urban planning systems without matching the increased responsibility with available human and material resources.

New policies formulated to address these issues have been inadequate. Currently housing is segregated on economic lines. The former European areas located adjacent to the CBDs are now the high-income areas, the former Indian and Coloured quarters are now the middle-income areas, whilst the former African and all informal settlements located on the periphery, are now the low-income areas.

Plotting the Way to a Future Paradigm

The role that my institution and I can play to alleviate this problem is two fold: the first approach, is to conduct research into the best ways of formulating policies, and to develop an analytical model suited to the Zambian situation, which could also be applied to other countries in the same predicament. The second, is to incorporate the policy formulation process into the current teaching modules, so that existing and emerging issues affecting society, are incorporated. Issues such as HIV/AIDS; the resultant orphans; the street kids phenomena; paradigm shifts from mostly men to women/child headed households, poverty alleviation and street/home based income generating activities etc., which did not exist could be contextualized and addressed.

Although it may have lost some of its dominance after other schools opened in Malawi and Zimbabwe, the SBE is still a regional school. It still draws students from all English speaking neighbouring countries, and has new entrants from Portuguese speaking Angola. It needs to be repositioned and marketed effectively to attract even more students from the region and
beyond. Most graduates have in the past, trekked to South Africa, Europe, and America, immediately upon graduation. This means that seeds planted at SBE are dispersed and extrapolated on the entire globe.

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Human Settlements Policy in Bangladesh

Sustainable Shelter for the Urban Poor

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Bangladesh is already highly urbanized, and rapid urbanization has led to a large number of slums and squatter settlements in all towns and cities. About a third of the total population in Dhaka lives in such areas.

There is need for better urban policies so that a rapidly urbanizing developing country like Bangladesh can manage its on-going urbanization processes. The Government of Bangladesh has many relevant documents – from the country report to Habitat I in 1976 and the 2nd Five year Plan 1980–1985, but there is not yet a Human Settlement Policy.

The PWD, the main construction agency of the Government, is fully geared to meet the challenges of the twenty-first century. It puts special attention on protection of the environment in urban settlements and the environmental health problems caused by unplanned settlements.
Bangladesh

Bangladesh is experiencing a rapid pace of urbanization. Although the level of urbanization is low (25%) the country already has a huge urban population, over 34 million (World Bank 2005). The positive association of urbanization with industrialization and economic growth is well known in today’s world. Actually urbanization is an index or determinant of economic growth of the country. There has been a phenomenal increase in the level of urbanization and urban growth in Bangladesh for the last three decades. In 1974, the urban population was only 8.8% of the total population while this percentage increased to 34% in 2005 and it is estimated that 42.5% of the total population will live in urban areas in 2020.

All major urban centers in Bangladesh have slums and squatter settlements, the largest concentrations being in Dhaka, followed by Chittagong, Khulna and Rajshahi. Thus it would not be so easy for the policy makers and conceded authorities to handle such rapid pace of urbanization in the context of population and economic growth and physical development. Past experience shows unplanned, unregulated and haphazard urban development resulting in low living standards of urban dwellers, which is mainly due to lack of proper planning, and short-sightedness of concerned authorities. In this situation, the urban areas of the country need to be shaped as economically vibrant, self-reliant, livable, peaceful and environment-friendly.

The main challenges of the urban authorities should be to ensure planned and regulated urbanization and efficient management of urban areas by practicing effective urban planning policies and guidelines. In this respect sustainable shelter for urban poor, whose contribution is the maximum in the development process, is a vital and prime concern to government as well as for professionals and policy makers.

According to World Bank data, the country has a population of 141.8 million (2005); a population density of about 962 per sq km and an annual growth rate of 1.9 per cent. The sex ratio is 104:100 (male: female). Life expectancy at birth is 62. The infant mortality rate is 56.4 and under-5s is 77.0 (WB Group 2005). The country already has got a huge urban population, which is more than 34 million. Rapid increase in urban population affects the health and safety aspect of the environment and leads to a general deterioration in the physical condition of cities.

Bangladesh has an agrarian economy with 21.8% of GDP coming from the agriculture, forestry and fisheries sectors. Readymade garments occupy the top position among exportable items. Private investment as a percentage of GDP has gradually improved over the past three years and currently stands at 17.5 percent. Per capita GDP in the country is now USD 470 (World Bank 05). Bangladesh has one of the most vulnerable economies, characterized by extremely high population density, low resource base, and high incidence of natural disasters. These have adverse implications for long-term savings, investment, and growth. About 60 percent of the urban population live below the absolute poverty line that was determined at Tk 3,500 (USD 88) per household per month and 40 percent are considered hardcore poor with a monthly household income of Tk 2,500 (USD 63).
It is universally accepted that housing is central to survival and human dignity. Housing status is often a major indicator for economic and social base for development status of the individual and family. The problems of housing of Dhaka, and in other metropolitan areas of Bangladesh, are very acute. Dhaka requires between 55,000–83,000 housing units each year, whereas all public and private efforts together can only produce 25,000 housing units a year. The proportion of people living in slums and squatters settlement in the city is between 35–55 percent. The situation is similar in other cities of Bangladesh. The household stock of the metropolitans and municipalities is about 5.0 million and the deficit is around 8.5 million (Bangladesh Bureau of Statistics 2001). The Government is unable to provide adequate housing for the ever-increasing urban population.

The real estate and housing companies of Bangladesh are playing a very important role in solving the housing problems of urban areas especially of Dhaka, but they are providing housing mostly to the middle and upper income group in the urban areas due to their higher investment cost. The poor do not have the scope to manage housing from private public sector and they are compelled to live in slums. Some of them are street dwellers and they are the poorest of the urban poor. The magnitude of slum dwellers and squatters is about one-third of the total population of Dhaka.

The problem of slums and informal settlements should be understood as the physical manifestation of the poverty situation in Bangladesh. Informal, poor settlements with inadequate basic services are also an indicator of the state of governance in our country. Many Government documents have identified the slum problem as a manifestation of poverty processes in this country; all the documents have advocated the application of a mix of steps to alleviate the situation, namely: in-situ development, slum relocation, grant of title or lease, land sharing, and avoidance of forcible eviction of slum dwellers.

Government is not in a position to create formal employment for such large group of urban poor. The majority of these communities are self employed and this has given birth to a large informal economy that is very dynamic and gaining momentum. It is well documented that the average income of the urban poor living in Dhaka slums is three times higher than that of the rural poor.

Temporary structures and slums constitute nearly 75 percent of the housing of urban poor. Less than 14 percent of urban households are employed in the formal sector. Less than half have access to sanitary toilets. Only 44 percent have formal access to electricity.

About 40 percent of school age children do not attend school. A limited number of households use government health care facilities.

On the brighter side, an Asian Development Bank study (1997) reports that access to safe drinking water has improved; child immunization rates are fairly good; and over 50 percent of households use family planning measures. In a developing country like Bangladesh delivering essential services is one of the critical issues concerning urban governance for ensuring equitable urban development.
The rapid growth of urban population has already created pressure on the service delivery agencies and these agencies are producing services far behind the actual demand. For example, less than 20% people of the country have access to electricity. Gas is an important resource of Bangladesh. It has an important contribution for industrialization in the country.

In the field of transportation, the lack of transport planning and efficient traffic engineering results in low quality traffic management.

However, better coordination between physical development plans and economic programs is highly necessary for balanced and sustainable urban development, but, where the management of services by interdependent organization is concerned, the objective should be the design and implementation of complementary service provisions.

In the field of education and health care, although government has earned few achievements, more concentration needs to be given in this sector. The urban poor have little access to education. The literacy rate of urban 7+ populations is 59.9%. The primary school net enrolment ratio is 95.4%, but the rate of dropout is extremely high and most of the dropouts come from hardcore poor family. They are working in informal sector and education is far behind their mind of thinking. The government needs specific policies to attract and retain urban poor children to school.

Although the Government of Bangladesh has long been aware of both the rapid pace of urbanization in the country and the associated physical, economic and social problems, it has not yet adopted an explicit urban housing policy. However, a number of government documents and other initiatives have from time to time indicated the policy thinking of the government with regard to urbanization and urban development. The National Habitat Report, submitted to the UN Habitat I conference in Vancouver, Canada, in 1976, recommended the identification of various planning regions and in each region, to choose one medium-sized town as the focal point of regional growth in order to create spatially balanced urban development. The second five year plan (1980–85) envisaged that infrastructure and service facilities would be extended from 100 urban centers to 1200 growth centers throughout the country. The following priority issues conform to the initiatives of the government’s Developments Plans, particularly in relation to: physical planning, water supply and housing sector, preparation of national human settlement policy; infrastructure and environmental protection; urban basic services provision to the poor communities, with special consideration for poor women and poverty alleviation with income generation; improvement of access to land, finance and shelter, giving special preference for the poor including female-headed households; improvement of urban social services such as public toilets in business and commercial areas and parks; income generation and economic development for special opportunities for women; improvement of access to transport, etc.

In order to alleviate the existing housing problem, the Ministry of Housing and Public Works has been implementing a number of residential projects under annual development programme, but few of them were constructed for urban poor. National Housing Authority has already constructed 2600 unit of row houses at Mirpur and 1020 unit row houses at Tongi, Gazipur for reha-
bilitation of the slum dwellers. In spite of urbanization, the psychology of the people in general did not change much and most people continued to prefer living in individual houses rather than in flats in multi-storeyed buildings. Apartment buildings were becoming a vogue in Dhaka towards the middle of the 1970s, and by 1985 the trend gained a momentum with large-scale acceptability of the concept of living in flat houses, under acute shortage of land and in a situation of rapid increase in land prices and the cost of construction.

At present the private sector developers are mainly working in Dhaka City. In the process of urban land management, the main objective of the government is to provide policy outline and administrative framework to ensure smooth operation of the urban land market. The policy framework should ensure the availability of adequate land for all including low-income people and that environmentally and socio-economically sound and sustainable development can take place.

Land, as an essential resource for the development of human settlements and generation of infrastructure services, is a major problem in many cities. Land is not only required for the development of services such as water supply, human waste, drainage/flood control, solid waste management, slum upgrading and urban roads. But land management issues have an influence on housing schemes, urban renewal or resettlement programs, land consolidation and Guided Land Development. In Bangladesh the land to person ratio is extremely low and has been worsening. The capacity of our land to absorb the fast increasing population in the urban areas is decreasing.

In the process of urban land management the main objective of the government is to provide policy outline and administrative framework to ensure smooth operation of the urban land market. There are two main reasons for which government must give emphasis on land development process. Firstly, this process is very cost effective if large amount of land is developed. Change of existing land use with its building and infrastructure is very costly but efficient land management can considerably reduce future public expenses. Through this process, government can achieve considerable improvement in the existing circumstances with relatively small expense. Secondly, government can resolve housing problems by focusing on land development and management, as the housing problem is acute in most of the big cities in Bangladesh, especially in Dhaka. As government rarely have the resources for large public sector development projects, it should invest in the provision of key infrastructure and deregulate unnecessary processes in order to support and stimulate individual and private sector investments. The case for focusing on land development is especially important at urban fringe areas as almost all land conversions take place in this part of our cities. Government often does not concentrate on the urban fringe areas, sometimes because these are located outside the administrative boundaries.
Shelter Problem: Unplanned and Overcrowded Housing

The large population lives in conditions of chronic poverty and recurrent natural disasters in urban areas of Bangladesh. They are a long way from living in an agreeable house, which is a fundamental right. The critical shelter problems in our urban areas are as follows.

- Inadequacy of land and shelter for urban poor.
- No credit facility to low-income group for development of housing.
- Haphazard formation of slums.
- Unpleasing urban environment; air, water and land pollution.
- Poor physical planning, power supply, water supply, sanitation, etc.
- Unplanned location of commercial and industrial areas.
- Lack of environmentally sound management of hazardous solid and toxic wastes.
- Lack of shelter for urban girls (almost 0.5 million), working in the garments sector, is a great problem.
- Increased gap between rich and poor, which creates social problems.
- Lack of green and recreational areas for physical and mental growth.

The critical shelter problems are unplanned and over-crowded housing, proliferation of slums and squatters, deterioration of environmental conditions, highly inadequate supply of clean water, high incidence of infectious diseases, over-crowding in schools and hospitals, unplanned locations and inadequacy of commercial and industrial areas, over-loading in public transport and increase in traffic jams, road accidents, social violence, crimes and social tension. These features are characteristic of urban centers of Bangladesh, especially Dhaka.

The majority of the urban poor are rural migrants with low affordability. An unfairly structured city and a distorted economy have restricted their access to land. They resort to living under inhuman situations in the slums, rough outside of footpaths, vacant public buildings, railway stations, bus stop, steamer ghats (stations), etc.

Scarcity and high cost of land is a major obstruction to the growth of proper housing in urban Bangladesh. The poor rural migrants, majority of whom are unskilled, poorly educated agricultural surplus labour to the urban canters, often failing to find gainful employment and residence in the urban centers are compelled to sleep roughly or take shelter in the substandard residential areas known as slums or squatter settlements. From a study (Centre for Urban Studies 2005), it was seen that about 40% of Dhaka’s population lives in the slums.

About 55% of slum dwellers get tap water through informal sources; some depend on public supply points outside the slum. About 40% of the poor use tube wells, one for 100–200 families. They use unclean water from various sources. About 55% of them cannot use sanitary toilets. Fewer than 20% of the slums are served with a proper sanitation system; another 60% have temporary sheared latrines. The rest have no latrines. Few of the slums
have electricity; 41% of the houses have access to electricity and another 26% have connected illegally. About 12% of the poor have access to gas; generally people share cookers.

The major and probably adverse impact of rapid urbanization is transformation and, in many cases, the deterioration of the natural environment. Excessive population density, poverty, deforestation, unplanned and uncontrolled urbanization, unregulated industrialization, etc. are the main causes of environmental degradation in urban areas of the country. Degradation of air quality is mainly caused by the emissions from motorized vehicles and industries. Traffic congestion, flooding, solid waste disposal, black smoke from vehicular and industrial emissions, air and noise pollution, and pollution of water bodies by industrial discharge are common features of our urban areas.

Lead concentration in Dhaka air is 10 times higher than the government safety limit. Because of a heavy concentration of cars burning leaded gasoline, Dhaka’s children have one of the highest blood lead levels in the world. Almost 90 percent of primary school children tested had levels high enough to impair their developmental and learning abilities.

Water pollution is already out of control. Dumping of waste to the river by industries is rather indiscriminate. The unsystematic discharge of domestic sewage, industrial effluents and open dumping of solid wastes are becoming a great concern from the point of water-environment degradation.”

Around 5400 tons of human, 3500 tons of solid and a similar volume of industrial and other waste are released in the air, surface and ground water table in and around Dhaka everyday. Nearly 49 per cent of the city’s solid waste is generated from residential areas, 21 and 24 percent from commercial and industrial areas, and the rest from hospitals and clinics.

“From the total of wastes generated by the healthcare activities, almost 80 per cent are general wastes comparable to domestic wastes. The remaining 20 per cent approximate are considered hazardous materials that may be infectious, toxic or radioactive,” says the World Health Organization.

Proposal for a National Human Settlements Policy

The process of urbanization, if badly managed, is accompanied by adverse social, health and environmental consequences, thereby obstructing the realization of the tremendous potentials of urbanization: safe and healthy living conditions and culturally rich and diverse lifestyles. On the other hand, well-managed urban growth and development can contribute not only to economic advancement but also to reduce poverty and improved the quality of life for all citizens, including the poor. What is needed, therefore, is better urban policies so that a rapidly urbanizing country like Bangladesh can manage its on-going urbanization processes in a way that can help increase its chances of meeting the Millennium Development Goals.
In Bangladesh, there is a need for appropriate management through a National Human Settlements Policy, which will include policy on urbanization and urban development. The management capacity should be improved through capacity building of the concerned authority and people. As well as the following recommendation may be considered to overcome the present situation of urbanization.

- Stress on decentralized urbanization, by:
  1. Establishing satellite towns within commuting distance of a big city.
  2. Encouraging growth of cities and small towns.
  3. Encouraging planned growth of rural towns or compact townships as a form of new settlement

- Better manage the urban areas through capacity building of human resources as well as concerned authorities and institutions.

- Micro financing can assist poor people to gradually improve, rebuild or construct a house with small loans and technical assistance.

- Innovative finance for infrastructure and basic service provision for low-income human settlements.

- Increase urban productivity through technological and entrepreneurial development.

- Alleviate urban poverty by income-enhancing methods; improve productivity of the informal sector. The role of NGOs should be encouraged in this area.

- Reduce inequality within cities by adopting a people-oriented resource allocation, urban land-use and service delivery planning. Particular attention needs to be given to allocation of land for housing for all income categories, particularly the low-income groups, and to allow space for economic activities of the poor.

- Adopt a transportation system that would be efficient, affordable and environment-friendly like CNG (Compressed Natural Gas) operated Bus, Public transport and Sky rail.

- Protect cities from floods and other natural hazards, but in a manner that ensures protection against new kind of environmental problems like water logging.

- Control environmental pollution such as of air, water and land.

- Urban waste can be recycled as a source of energy for better management of waste and environment.

- Provide low-cost shelter and urban services especially for urban poor by participatory and contributory approaches. Introduce self-help housing.

- Special schemes for housing the urban poor and destitute should be taken by concerned agency by constructing low cost core housing with provision for upgrading on self-help basis.

- Slum development with the participation of slum dwellers should be taken up as high priority projects in all urban areas. Urban local government bodies should coordinate the activities of various Government and semi-government organizations in this regard.
• Public toilets, baths and tanks should be constructed and maintained at various points in the urban areas on the basis of user charges.
• All urban local bodies should provide for and maintain open spaces, wood lots, playgrounds parks, theatres, public libraries, night schools for adults, slaughter houses, burial grounds, cremation grounds, etc.

The Public Works Department

The Public Works Department (PWD) has been working as the premier construction agency of the Government for two centuries. The department has highly qualified and experienced professionals forming a multi-disciplinary team of civil, electrical and mechanical engineers who work alongside architect from the Department of Architecture. With its office network throughout the country and around 20,000 (Twenty thousand) skilled officers and workforce PWD is fully geared to met the challenges of the twenty-first century. The working areas of the PWD are design, construction, repair and maintenance of government offices and residences: maintenance of public parks, acquisition and requisition of land for construction work, valuation of land and property, etc. With its existing facilities and expertise, the PWD has keen attention on environmental degradation protection by taking the following steps:

1. To integrate environmental considerations into housing and urban planning activities.
2. To work in phases in gradually extending environmentally sound amenities to all existing urban and rural housing areas.
3. To monitor and control housing and urban development schemes that may have an adverse impact on the local and overall natural environment.
4. To accord greater importance to water bodies for their part in maintaining ecological balance and beautifying urban areas.

Public Works Department (PWD) is capable to organize and implement the knowledge and experience gained at USDD and WUF3, to solve the shelter problems and maintain sustainable urban environment, specially adopting the following proposals:

1. Provide low-cost shelter and urban services especially for urban poor by participatory and contributory approaches for this. Introducing self-help housing concept.
2. Special schemes for housing the urban poor and destitute should be taken by constructing low cost core housing with provision for upgrading on self-help basis.
3. Public toilets, baths and tanks should be constructed and maintained at various points in the urban areas on the basis of user charges.
4. Reduce inequality within cities by adopting a people-oriented resource allocation, urban land-use and service delivery planning. Particular attention needs to be given to allocation of land for housing for all...
income categories, particularly the low-income groups, and to space for economic activities of the poor.

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Housing Policy in Palestine

Land Shortage and High Population Density in the Gaza Strip

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Gaza Strip is a small area (365 km²) with high population density (3,663 person/km²). It is a part of historical Palestine and has been under Israel occupation since 1948. A peace agreement was signed between Palestine and Israel in 1993 but has not been put into effect.

This paper describes the difficult economic and planning situation that especially affects the refugees who have lived in the camps since 1948. The problem for the planner is to find solutions within the regional and local development planning process to the existing situation of land shortage and high population density: how to make land available for more housing units without losing more land, and how to legalize the existing units in order to incorporate them into well-served residential areas.

The paper proposes an alternative for change and improvement that can be implemented as soon as the political situation allows.
Gaza and West Bank

Palestine is part of Belad El-Sham, a geographical region on the west of the Asian continent that includes Syria, Lebanon and Jordan. The area is the home of the first humans, the sacred place of important religions, the birthplace of ancient civilizations; it was a bridge for commercial activities and military incursions over many historical eras. It was long a transit route for people, and it enjoys a focal location that attracts all those who want to settle down and live in prosperity. Therefore, it is quite natural that Palestine attracted many who wanted to control it and to exploit its resources. In the last century, Palestine was subjected to a British mandate. Britain and the allied forces took great advantages of Palestine’s location during the Second World War. Before leaving Palestine on 25 May 1948, the British paved the way for the establishment of a Zionist state in Palestine to serve as a base for Western countries and as a separation point that divides the Muslim Arab nation. Since 1948 up to the present, Israel still controls Palestine and exploits its strategic geographical location.

Under terms of the declaration of principles, signed between the Palestinian Liberation Organization (PLO) and Israel on 13 September 1993, the status of West Bank and Gaza Strip become autonomous under the Palestinian National Authority (PNA). The PNA is still in the process of setting up its administrative and governmental institutions. The PNA territories comprise two areas separated geographically: West Bank and Gaza Strip.

West Bank

The term West Bank is used to mean the disputed land of Palestine within a 5,700 km² area west of the Jordan River between Israel and Jordan. It has been under Israeli military occupation, together with East Jerusalem, since June 1967. West Bank is divided into four geographical regions. The Northern area includes the districts of Nablus, Jenin and Tulkarim; the Center includes Ramallah and Jerusalem; while the South includes Bethlehem, Al-Khalil and the sparsely populated Jordan Valley including Jericho. Many areas of the West Bank have diversified communities. There are observable differences in lifestyle and living conditions not only among classes or socio-economic levels and religious affiliations, but also among urban, rural and refugee camp communities with their respective subdivisions. Up to sixty percent (60%) of the population lives in 400 villages and nineteen refugee camps, and the remainder in urban refugee camps and cities of which Nablus, East Jerusalem and Al-Khalil are the most populous.

Gaza Strip

Gaza Strip is a narrow piece of land lying on the coast of Mediterranean Sea. Its position on the crossroads from Africa to Asia made it a target for occupiers and conqueror over the centuries. The last of these was Israel that took the Gaza Strip from the Egyptians in 1967. Gaza Strip is very crowded place with an area of 365 km². The population is mainly concentrated in the cities, small villages and eight refugee camps that contain two thirds of the
population. The main source of income for people of Gaza was working in Israel, in addition to the poor agriculture products that have to be exported via Israel. Part of the refugee population was moved from camps to new areas. A part from the weak economic situation and its consequences for the public health, the population of Gaza as all Palestinian population has lived through several consecutive wars (1948, 1956, 1967) and a long stressful period of Israel occupation.

Population

The estimated number of Palestinians all over the world at the end of 2003 was 9.7 million distributed as follows: 3.7 million in Palestine (38.7%), one million (11.1%) live beyond the green line (inside Israel), 2.8 million in Jordan (29), 436,000 Palestinians (4.5%) live in Syria, 415,000 (4.3%) live in Lebanon, and 62,000 (0.6%) live in Egypt. The number of Palestinians living in the other Arab countries was 595,000 (6.2%). There are 236,000 (2.5%) in the USA and 301,000 (3.1%) in other foreign countries.

The population of the Palestinian Territory is estimated at 3.8 million at mid-2005, thereof 2.4 million in the West Bank and 1.4 million in Gaza Strip, 1,905,642 are male and 1,856,363 are female. The expected number of the population in Palestinian Territory in mid-2010 is 4.41 million, thereof 2.74 million in the West Bank and 1.67 million in Gaza Strip. The number of Palestinian people in the Jerusalem Governorate is 398,633.

According to the most recent estimates, 46.0% of the population in the Palestinian Territory is under 15 years: 44.2% in the West Bank and 49.1% in Gaza Strip. The percentage of Palestinians aged 65 years and above is 3.1% (3.3% in the West Bank and 2.6% in Gaza Strip). The median age in the Palestinian Territory in mid-2005 is 16.7 years, in West Bank 17.7 years, and Gaza Strip 15.4 years.

42.6% of the population in the Palestinian Territory are refugees. They are estimated to 1.6 million at the end of 2004, thereof 686,000 (29.9%) in the West Bank and 892,000 (65.5%) in Gaza Strip.

Fertility: The fertility rate in Palestine is high compared to other countries, which maybe due to early marriage especially among females, the desire to have many children, and the prevailing traditions of the Palestinian society. However, indicators show the fertility rate started to decline toward end of the 20th century. The total fertility rate in Palestine was 3.89 (3.4 in West Bank and 4.7 in Gaza Strip. It declined from 4.39 in 1999 to 3.89 in 2003.

Life Expectancy: The decline in the mortality rate in Palestine led to longer life expectancy: 70.7 years for males and 73.8 years for females in 2003. There are regional discrepancies: life expectancy in West Bank is 71.2 years for males and 74.3 years for females compared with 70 years for males and 73.2 years for females in Gaza Strip. The improved health situation and the gradual decline in the infant and child mortality rate contributed to longer life expectancy.
Palestinian Economy

According to Palestinian Monetary Authority (PMA) the Gross National Product (GNP) in Palestine fluctuated greatly during the last five years. Gross National Product per capita (GNP/capita) was USD 1,806 in 1999 and decreased to USD 1,020 in 2003. Gross Domestic Production (GDP/capita) was USD 1,496 in 1999 and decreased to USD 896 in 2003. The number of workers in Israel decreased from 135,000 in 1999 to 50,000 in 2003. In 2003, the PMA reported that the unemployment rate increased sharply from 11.8% in 1999 to reach 31% with constant fluctuation during the last five years due to the political situation and Israeli actions including closure of access to the Palestinian region and cities.

Poverty

The governments of South Gaza were the poorest in the Palestinian Territory with 41.4% in poverty in 1998, which was a slight improvement compared with the previous two years when half the households of South Gaza were below the poverty line, followed by Central Gaza with 37.9%, and then North Gaza. The least poor was Gaza City where the poverty rate was 25.9% in 1998. Jenin and Hebron recorded the highest poverty rates in the West Bank with 20.50% and 20.46% respectively. The rate in Jerusalem was much lower with 3.1% in 1998. It is worth mentioning that excluding the Jerusalem results; there was a slight increase of about 2% in poverty rates. Thus there was a rise in poverty in the West Bank from 14.5% to 16.3% in 1998. The data showed that the camps are still the poorest among the population groups in the West Bank and the Gaza Strip.

Access to Housing and Services

The housing problem in Palestine did not develop as it did in other countries over the world, because of the occupation over the last thirty years. The problem started in 1948 with the occupation of Palestine by Israel, which forced Palestinians to move from their land by force. The occupation of the West Bank and the Gaza Strip region in 1967 resulted in more demographic change. In addition Israel’s policy of demolishing housing makes the housing problem more difficult and leaves the region without any planning.

After establishment of the Palestinian Authority in 1993 the dimensions of the housing problem began to become critical. For this reason many institutions at national and regional level began to develop a strategy and policy to address the problem. Housing is one of the difficult problems facing the Palestinian National Authority especially in Gaza Strip, because it relates directly to people’s life and economic and social situation that reflects in the health of the society.

The housing demand will be high in the coming years because of high fertility, returnees and other needs. The housing demand depends on average family size average, existing urban style and socio-economic factors. According to the census of housing made in Palestine in 1999, the total
housing units in the West Bank and Gaza Strip were 284,119 units for 1,893,476 persons in West Bank and 135,015 units for 1,002,207 persons in Gaza. The total number of housing units in the Palestinian territory is 419,134 units with total population 2,895,683 persons, and with family average size 6.1 we find that we need 32,647 units to cover the current housing deficit.

We find that the housing sector suffers from a deficit and weakness.

The highest urban population in the Palestinian Governorates of Gaza Strip and the West Bank was in Gaza Governorate where the urban population constitutes 81%, the rural population is 1.8% and the camps 17.2%. Khanyounis Governorate comes in second place where the urban population is 69.6%, the rural is 12.8% and the camps 17.6%. The highest percentage of camp residents is in Deir Elbalah Governorate where 65.6% of the total population resides in camps. Rafah Governorate comes in second with 49.2% of the total population in camps. The lowest percentage is in Hebron Governorate with only 2.8% of the total population residing in camps.

There are three main types of building methods used as follows.
1. Sand block and clay building: this type is mainly found in old city.
2. Cement blocks and concrete buildings: this type is concentrated in the center of the towns and along the main roads. It is found in Gaza mainly as 1–5 storey buildings.
3. Asbestos and corrugated sheets roofs and concrete blocks buildings are mainly found in the camps.

A household environmental survey in 2004 showed that 89.2% of households in the Palestinian Territory are living in housing units connected to piped water, and 88.0% of households in the West Bank consider the water quality as good, while 13.3% of households in Gaza Strip consider the quality good.

Local authorities collect solid waste for 73.0% of households in the Palestinian Territory; UNRWA is responsible for waste collection for 11.0% of households and in 8.8% of households a household member removes it. Throwing waste in the nearest container is the most important disposal method for 40.3% of households.

The total daily quantity of household waste produced is estimated at 2,695 tons in Palestine; the daily production of household waste was estimated to be 4.5 kg, and the average per capita daily production of household waste is estimated to be 0.7 kg.

Cesspits are used by 56.1% of households in Palestinian Territory: 66.0% in the West Bank and 36.6% in Gaza Strip. A sewer system is used by 42.9% of the households in the Palestinian Territory.

Waste water disposal is through a pipe network 42.9% of households in the Palestinian Territory, while cesspits are being used for 56.1%. Traffic is the most important source of noise for 64.2% of households, and 73.6% of households reported that they are often exposed to dust, and the unpaved roads is the most important source of dust. Burning waste is the most important source of smoke pollution for 37.3% of households exposed to smoke.
Housing Policy in Palestine

Developing the housing sectors in Palestine is the biggest task facing the Palestinian National Authority at this stage, because of the important effects of housing on the social, economic, health and psychological areas. Many attempts have been made by the Palestinian Authority since its establishment in 1993 to solve the housing problem. The Authority implemented many different projects, despite its limited resources. This was with cooperation with all partners, ministries and local governments through short plans and limited programmes for urban development.

The Palestinian Authority through the Ministry of Housing and other partners have implemented many different projects for low income families but still does not cover the needed housing units. The political situation affects all activities of the Authority, especially in Gaza with a high population density, 4044.8 inhabitants per km² in comparison with West Bank 9446.3 inhabitants per km².

Housing Conditions in the Refugee Camps

The Housing Conditions Survey conducted by the Palestinian Central Bureau of Statistics in 2003 showed the average number of household members per room in the Palestinian Territory. There were 2.0 persons per room in the West Bank refugee camps and 2.1 persons per room in the Gaza Strip camps. Likewise, the percentage of household members living in highly crowded conditions (three members or more per room) varies as well, 22.2% in the West Bank refugee camps and 21.5% in Gaza Strip refugee camps.

The Housing Conditions Survey indicates that 99.3% of Palestinian households in the refugee camps of the West Bank and Gaza Strip have access to electricity, 98.5% have access to public water networks. The percentage of households connected to public sewage networks is 83.9%. 35.2% of households have access to telephone service. Also, the survey revealed that 1.4% of these households do not have bathrooms. In West Bank the number of housing units in the refugees camp 16,657 housing units. In the Gaza Strip, the number of housing units in the refugees camp 40,570 housing units.

Actors in Shelter Delivery

Ministry of Housing: the Ministry enables the Authority to provide investors, private, public and cooperatives for land needs for projects.

Ministry of Planning and International Cooperation: has responsibility for the development of plans, programs, general policies, norms, standards and guide lines related to physical planning at the national and regional levels.

UNRWA: have responsibility for all refugee camps

Palestinian Housing Council: provides housing for low-income groups.

Municipality: provides technical infrastructure, utility services and facilities

Users: the refugees living in over-crowded areas for long time. The average number of family is 7 people, with more than one family living in the same
place. The cultural attitude to life style must be considered during planning stage for the families.

**Land Ownership**

The study of land ownership in Gaza Governorate is an essential step towards improving planning and land management in the region. Land ownership structure and the property laws represent a serious problem to the implementation of any plan, since there is no system that deals with the relationship between land ownership, proposed plans, projects or programme.

There are four type of land ownership found in Gaza Governorate: government, private, beer El Saba’a and El Waqf land. Private land is the largest area, about 50.8% followed by government 30.1%, Beer El Saba’a 17%, and El Waqf land 2.1%.

Most government land is located in important natural resource areas that should be preserved. In the plan future development will be directed towards privately owned and Beer El-Saba’a land.

Moreover, the division of land into small parcels throughout the municipalities makes it difficult to implement large-scale projects needed to serve the planned urban expansion. Lastly, one of the main problems is the fragmentation of land ownership that often covers wide areas in Gaza. The reason for this is the traditional system of inheritance and division of the land to family members over generations.

To conclude, the land ownership structure and property laws represent a serious restriction on the implementation of the regional plan. This is because there is no system that deals with large-scale development and legal system that handle expropriation and re-division in relation to development of land. In other words, at the moment there are no regulations to enforce land use change or to implement the proposed density guidelines.

**Institutional Deficiencies**

Currently, the planning institutions are immature, and they lack some of the essential means necessary to fulfil their planning role satisfactorily. Some of the institutional problems likely to be encountered are lack of central policy directives, weak cooperation between planning institutions at central and local level, underdeveloped control function and the lack of a modern legal framework needed to tackle the present problem.

These problems are felt to be major constraints for the planning process, approval of the plan and then the decision making for the implementation. Subsequently, the plan will yield regional policies that would outline a course of action to be followed by the decision-making system for regional development.

Since Gaza Governorate lacks such managerial and decision-making systems, and tasks and responsibilities are not yet distributed and established, policy generation and implementation will be difficult.

The magnitude and the complexity of the imminent environmental and developmental problems demand high institutional proficiency and capacity and will require the following institutional reforms:
Setting up regularly and legal bodies to cover the land use, transportation, and the physical consequences of social economic development.

General transparent structure to facilitate public involvement.

Definition of the roles, main functions and mandates for the Ministers.

Division of responsibilities and powers at national, intermediate and local levels.

Adoption of integrated top-down and bottom-up approach in planning.

Promotion of the concept of decentralization to be a goal for institution building.

**Shelter and Politics**

The role of the government during planning stages for the housing, to lead to improved housing conditions, the following items should taken into consideration especially in the current situation the Palestinian Authority operates in.

1. Bad situation of infrastructure, because of living under occupation for long time, and until now.
2. Limitation of land available for housing projects.
3. Limitation of resources and funds needed for implementing housing projects.
5. Opening the borders by the Palestinian Authority (PA).
6. High rate of population growth.
7. Decreasing standard of living and increasing unemployment and poverty.

It is clear that most dependent countries suffer from many problems, especially housing projects aimed to meet the needs of their population. Since the Palestinian Authority (PA) was established, all Palestinian land has been under the control of Israel. They also control all the borders which makes every thing more difficult. All plans and policy drawn by the Palestinian Authority cannot be implemented in the proposed time because of the Israeli occupation.

The housing problem in Palestine is especially acute in Gaza Strip which suffers from high density estimated about 4,000 inhabitants km². The problem began when Palestinians were forced to leave their homeland in 1948, moving to West Bank and Gaza Strip. Many live as refugees in camps located in Gaza Strip, West Bank and other Arab Countries. At that time the United Nations built small shelters for the refugees according to the size of the family, and since that time the UN is responsible for serving the people who live in the camps. At the beginning the people thought they would be in the camps for a short time, and that they will return to their homeland soon, but the years and decades passed and the people still live in the same places, hoping to return.

The problem especially affects people living in the refugee camps. In the beginning they were given a small plot with a shelter consisting of two or three rooms with kitchen and toilet (depending on the size of the family),
but the high fertility and increasing family size created a problem of crowding and density, especially when there is more than one married couple sharing the shelter. This situation forced people to move and built new rooms in the street beside the existing house within the camp. The occupation of open space resulted in blocking the roads and most streets became narrow, 70 to 100 cm. The second result of living in bad conditions was that people started to move outside the camp and to build new shelters on government land without permission from any authority in area without services or plans, which results in creation of slum areas.

The main cause of the problem is the occupation of Gaza Strip and West Bank by Israel since 1967. After establishing the Palestinian Authority in 1993 the Authority faced many problems because the Israel occupation destroyed infrastructure, roads and housing to ensure security for military. We can say that the Authority took over a territory where everything was destroyed. It started from zero to plan and design a policy to meet the urgent needs of the people. Housing was one of the priorities, and the Ministry of Housing was given authority to start planning for the housing sector.

The Ministry made many different types of plan to provide shelter for poor people, but the poor did not benefit from the projects because of high cost of the units. That is still the problem of housing.

The United Nations did not implement any housing project for the refugees. People living in the camp are the responsibility of the UN, but the UN sees its role as limited to repairing the shelter or building small emergency shelters. There are two reasons for the current situation. The UN has no program to relocate the families that need housing. The second reason is political, that the Palestinians chose to live in the camps and wait for a future political solution.

The difficult situation facing the Palestinian Authority includes daily attacks from Israel destroying infrastructure and demolishing housing. Closing the borders causes delay in implementing plans and leads to failure of all planning policy.

Most projects depend on funds from donor countries to Palestinian. Funds are often late or incomplete for planned projects, which leads to delays in implementation of the projects.

Ways Forward for Housing

The political situation plays a key role in the daily life of all Palestinians. The Authority has the responsibility to see that there are plans and a vision for the future in case the situation changes. The plans can be short term and long term to meet developments in the political situation.

The role of the Ministry of Housing, the ministry responsible for planning housing projects, should be to continue planning. The Ministry can at least identify the current problem with its dimensions, and start planning suitable solutions.

Since establishing the Authority, we found that the Authority was limited in allocating funds to cover the needs of the housing unit, and thus supporting housing projects. We can say here the availability of funds for
Palestine comes from donor countries, and the donor always decides where the money should go. This is a problem for the Authority, that it cannot decide on the use of the money.

The Ministry of Housing implements many projects addressed to poor people, but we found many problems with these project. For example the unit price is very high and cannot meet the needs of the poor, thus the new plans and designs should address of the project “housing the poor”.

Second: the area of the apartment is very small for the size of the family; the new plans should take the area into consideration and can make different designs appropriate for the family size.

The Authority should play its role in finding funds from donors especially for the housing sectors, to solve the housing problem.

Planning for housing can be directed in better ways by following different types of planning policy, such as:

- Support the people with land to build their own house, separate from commercial contractors in the private sector. It will save their money and build shelters faster.
- Cooperate with other social institutions to implement housing projects at a lower price to serve the poor.
- Work with the community to identify solutions. Ask the people about their needs, how they like things to be and so on. This will lead to better results and solutions.
- Considering the high density of the population, this is very difficult issue because of religion, but the Authority can support family planning programmes.
- The United Nations also should play an important role in addressing the problem of refugees living in camps and still waiting after sixty years.
- Because of limited land in Gaza Strip, an idea in planning for housing could be to go up. High buildings can be another solution to increase density and give more space to individual households.
- Involve the community in finding housing solutions.
- The plans for shelter done by the Ministry of Housing should consider the needs of the poor.
- Ensure long term loans from the Palestinian Authority to help people build their house.

I hope the situation will change, especially the Israeli policy in the occupied territory, to allow Palestinians to live free without Israeli authority.
A New Approach for Policy Development in Ecuador

Towards and Intelligent, Dynamic and Sustainable Housing Policy

Esthela Espinoza
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Ecuador, with over 12 million inhabitants, has one of the lowest rates of social investment among the countries of the Latin American region and almost 40% of the nation’s budget is used to pay external debts. This situation has lead to high levels of social vulnerability. 55% of the country’s housing stock is in precarious condition and there is a deficit of more than a million units, increasing by 60,000 per annum. In Guayaquil, the largest city in the country with almost three million inhabitants, housing is cited by citizens at the top of unsatisfied demands, followed by education and health care.

Local and central governments have the urgent need of developing a sustainable and dynamic housing policy that can show the way to the creation of sustainable human settlements in the country, and guarantee an accurate housing delivery process for the most vulnerable groups. Lessons learned from the World Urban Forum III shape this proposal for a new vision regarding housing policies in Ecuador.
Ecuador

Ecuador has an area of 272,000 sq km, with a population of 12.3 million inhabitants, almost half of whom live in urban areas. The country has 22 provinces. The capital is Quito, but the main city and centre of economic development is Guayaquil, on the coast.

Ecuador is the fourth country in the world with the largest cultural diversity and biodiversity together in a small-size territory. There are thirty indigenous and Negro nationalities (40% of the population), with a majority of Meztizos (50%) and a minority of Whites (10%). Fifty-one percent of the population are women.

Quito and Guayaquil, the two major cities, have doubled their sizes in the last 40 years and now have about 6 million people together (almost 50% of the total population).

According to the last national census (2001)\(^1\), 80% of the population is considered poor, 30% of which lives below poverty line. Child mortality (53.2) and infant malnutrition (45.1)\(^2\) rates are still high among the countries of the region due to low investment on social security systems. At the same time, life expectancy is very low for such an ecologically healthy environment: 65 years for men and 70 for women.

About 12% of the population is illiterate (most vulnerable groups: indigenous and Negroes) and only 10% of people over 18 years have university studies. Over the last 20 years, due to very hard economic conditions, about one and a half million Ecuadorians have migrated to “developed” countries in search of better opportunities: in the United States almost a million are settled in the New Jersey, Florida and California areas; the rest chose Spain and Italy for the similarity of cultures and languages.

According to the World Bank’s statistics the GNP per capita in Ecuador is USD 2210, which is among the highest in the region. Nonetheless, these figures are based in the country’s revenues from oil export and remittances sent from migrants to their families. Consequently, the income distribution is not equitable and 80% of people are considered poor and have no adequate access to shelter, education or healthcare. In 2004 the basic salary for a worker was established at USD 120 per month, yet a family’s expenses reach almost USD 350 monthly (for food, clothing and services).

The housing stock is highly deteriorated (almost 75%), the backlog is over a million units and increases in 60,000 per year\(^3\). Furthermore, as in many countries of the region, the rate of urbanization is out of control. Rapid urban growth has created major social and physical problems: inadequate access to shelter and basic services, social alienation, proliferation of slums and informal settlements, inadequate transportations systems, and an overall poor living environment. Nationwide, 34% of settlements lack basic sanitation and 62% have no access to the main water supply systems\(^4\). In the city of

\(^1\) Instituto Nacional de Estadísticas y Censos INEC (2001).
\(^2\) Idem.
\(^3\) Instituto Nacional de Estadísticas y Censos INEC (2001).
\(^4\) Idem.
Guayaquil, about 60% of the urban area is built upon informal settlements. The dwellers of these areas do not have land ownership. Bamboo is the most popular building material used in these settlements for floors and walls, and zinc sheets are used for roofing.

**Existing Housing Policy and Actors in Shelter Delivery**

The last Housing Policy in Ecuador was developed in 2001. It states that access to shelter is a right and declares the central government as provider of this shelter. The main aspects of this policy are:

- Creation of a strong housing finance system, through the consolidation of a direct and transparent subsidy scheme, as well as the development of a structural reform for the former National Housing Finance Bank
- Strengthening of the land titling market.
- Development of information and monitoring systems for housing delivery
- And, strengthening of institutional capacities, mainly in the central government.

This Housing Policy was shaped by the staff of the Ministry of Housing and Urban Development. Governments are aware of the necessity of creating a dynamic housing policy and its legal framework, one that can be implemented at local and national levels; however the methodology used to develop the former and actual policies does not assure sustainable processes and holds back all the benefits for the most vulnerable groups.

The Central Government is the policy and decision maker in regards to housing and urban development. The Ministry of Housing and Urban Development is the administrative body that has the power to develop policies and strategies to come across the solution for the country’s housing situation. Historically, local governments have not been appointed to solve housing issues in their territories. Though, very successful municipal administrations (like in Guayaquil) have claimed the rights to build up initiatives on this matter; and at the moment are validating them in some local projects (mainly sites and services schemes).

In the mid-80s some NGOs also carried out low-income housing projects, but they had problems since the projects were not sustainable and even collapsed once they moved on to the next one. Nowadays, most NGOs have drifted away from this line of work. Community organizations have been more successful with the very few housing projects they have undertaken.

The Private Sector (construction companies) is the one making the “best business” in the country. Over the last years, and with the stabilization of the economy (through the adoption of the US dollar as the national currency), banks are willing and flexible when granting loans for construction to private companies. However, in these cases the problem is the quality of the dwellings they deliver, as well as, the huge revenues they get.

Only few Research Institutions devote their capacities to shelter design and development in Ecuador. The Instituto de Planificación Urbana y
Dimensions of the Housing System

In order to have a clear picture of the shelter situation in Ecuador, we must first acknowledge the dimensions that operate in the country’s housing system: building technologies, affordability, land markets, housing production, supply and demand of dwellings, and social organization. The new Housing Policy will have to deal with every one of these dimensions and their interactions; and seek for sustainability and dynamism throughout its development process.

![Fig.1 Housing System in Ecuador.]

These six dimensions that shape the Ecuadorian Housing System must work together towards finding the equilibrium of the system itself. The aim of this proposal is to build up a policy to conduct this process. The first step is to identify the issues and resources for each dimension.

Building Technologies

*Issues:* The government does not consider technological progress a priority. Building technologies are not researched, nor developed; and there is also a misuse of local resources (material and human). Furthermore, low income groups only trust new “traditional” ways of building (concrete blocks) and so they direct their expectations towards that particular way of building.

*Resources:* The country’s diversity (climatic and cultural) provides with wise traditional building techniques and environmentally friendly materials (e.g. adobe). Universities and professionals are investing more time and resources in developing new ways of building affordable and better quality houses.

Affordability

*Issues:* Poor families cannot afford a good quality house because the options are just not available. Little research on building technologies makes it more difficult to come up with new alternatives and the government is incapable
of meeting the demand through its subsidy scheme. Cheaper materials (bamboo, concrete blocks and zinc sheets) are not the best choice for the climatic conditions of the country but people prefer what they can afford.  

**Resources:** Technology research can help lowering the prices of materials and save time for construction. To mobilize private investment, in partnership with the community and governments, is also an alternative to build affordable housing.

**Land Market**

**Issues:** The land market is not regulated by the government, land in the country is mostly private and only the indigenous groups have communitarian land. Therefore private land is invaded on daily basis to build dwellings with precarious materials. Private land owners are part of powerful groups in the country usually related to political parties.  

**Resources:** Land itself is a valuable resource; particularly the land of indigenous groups (belongs to the community, and by law they are not allowed to sell it). With the adequate regulation this land can be used for sustainable settlement development, so finding a strategy to give people land ownership is another issue the governments should sort out.

**Housing Production**

**Issues:** Construction accounts for almost 50% of the productive activities of the country. However, only private companies build in the country and so they only do it for those who have access to a bank loan or a direct loan from the investor (middle and high income groups). The national government has not built mass housing projects since the beginning of the 1980s and local governments only develop sites and services schemes.  

**Resources:** Construction activities are profitable. Investing on those who are in desperate need can also be “good business” if we find the right financing mechanisms.

**Supply and Demand**

**Issues:** As stated before, the housing backlog of the country is more than a million units and increases by 60,000 per annum, the poorest groups are the ones in greater need of a house. The country’s supply (private construction companies) for richer groups meets the demand; but low income housing projects are very few, because it is not considered “good business” for investors, and the government does not build for the poor. Two NGOs, few CBOs and individuals through self-help construction are the ones left with all this overwhelming work.  

**Resources:** The government could review its subsidy strategy to assist the most vulnerable groups.

**Social Organization**

**Issues:** The “spiritual shock” that people suffer when moving from rural areas to cities has undermined the development of bonds and shared
commitment among citizens. In Guayaquil, families living in informal settle-
ments are not organized; they reject community work and expect everything
(land, infrastructure, houses) to be “delivered” to them.

*Spiritual shock is what people experience when they move out of
rural areas, running away from poverty, and they arrive in the
city only to find out that poverty ran faster and it is already there
waiting for them...*

Sam Luboga. Makerere University, Uganda
“Bridging the gap: Spirituality and Sustainability in the Urban Context”.
Round table, WUF3, Vancouver, Canada.

**Resources:** People are their own best assets. In developing countries and especially in the countries of the Andean Region (Venezuela, Colombia, Ecuador, Peru and Bolivia) there is a strong communitarian tradition: residents share responsibilities of planning, management and development of their settlements.

**Lack of a Housing Policy**

As we can see from the background analysis, the critical shelter problem in the country is the *lack of a sustainable, intelligent and dynamic housing policy*. This void is the beginning of all the other problems within the housing system. Therefore, in order to engage in housing issues, the first step is to develop a *scientific housing policy*, a policy based on *science* to be developed in a way that no one can argue, nor oppose; a *sustainable* policy (in time and context) as well as *intelligent* and *dynamic* (able to adapt and respond). The universities/academic institutions should contribute to policy development and help governments, and only then will it be “natural” to apply them in the country’s daily life.

The present housing policy ruling the country needs a different vision and focus. It lacks specific ways of achievement. It also needs to start from an integrated (more comprehensive) approach and move down to strategy development in order to facilitate implementation and monitoring. Still, the country’s political and economic environments do not contribute to the improvement of sustainable social policies and do not facilitate the development of strategies to tackle housing issues. Mass Housing Programs, for instance, have not been very successful so far, because none of them has implemented sustainable processes: they do not involve the future owners in the design stage, neither do they take into account technology management and building materials for construction, nor have they a plan for communitarian organization or environmental impact assessment.

**Proposal for a Housing Policy**

**Definition of Policy**

A policy is a group of ideas (even dreams!) and determinations of a government or a society. Policies are ways to “build the road” of a system that has a common purpose: to improve the quality of life of people. Policies are cre-
ated, established and dissolved in the process of planning, development and management of territories. A policy has objectives, goals and processes to build up and carry out. And above all, a policy must be intelligent, meaning that it should be able to adapt and respond to continuous change.}

Science Based Policies

The New Science helps comprehend human and social issues through Quantum Physics, Biology, Cosmology and the Conscious Phenomena. John Hagelin, a world known quantum physicist for instance, compares the Government of Nature to the Government of a Nation, and states that three fundamental characteristics are found in the former can be used as basis to develop the latter, these are:

- Nature’s Government is rich in profound order.
- Nature’s Government is maximally efficient. Whatever nature accomplishes, it accomplishes with maximum efficiency and economy, nothing is wasted and nothing is harmful for any of its living creatures.
- Nature’s Government is inherently evolutionary, life supporting. Evolution is the very nature of life. Wherever we see life, we see growth, complexity, capability, power, knowledge.

Quantum mechanics helps understand physics at an atomic level (the deepest level of life found by scientists to this day) and study our genuine nature, which is the basis to build up the human being’s road to evolution and happiness.

Policies in a Governance System

Good Governance is a fairly fresh term used especially in regard to political administration of national and local governments. Sustainable development is harder to achieve if there are no open spaces for governance. In order for this to happen, continuous planning and efficient management must play an important role as well. The Good Governance System, with its three dimensions: planning, management and governance, helps us put policies into context and find out their interactions with other elements of the system. This facilitates identification of problems making it easier to solve them at their starting point.

6 The New Science is a new branch of science studied and developed by world known scientists such as Fritjof Kapra, John Hagelin, David Bohn, Rupert Sheldrake, Ervin Laszlo, Murray Gell-Mann, among others.
8 This term was also discussed in the policy table at the networking event (workshop): “Urban development timeline: learning from the past to inform the future” WUF3, Vancouver, Canada.
The New Intelligent, Dynamic and Sustainable Housing Policy

It has been argued throughout this proposal that the methodology for policy development must be renewed in search for sustainability and dynamism. The new housing policy will then be created with a brand new purpose, objectives, goals and processes, having specific actions to undertake in order to benefit from the resources identified for each dimension of the housing system.

Purpose

Sustainability, adaptability and responsiveness of policies.

Objectives

- Main: To develop a sustainable, intelligent and dynamic housing policy for Ecuador
- Others: To guide the process of policy development.

Goals

- To commit politicians, professionals, research institutions, the community and other stakeholders in the process
- To guarantee collective rights through participation
- To develop a sustainable housing delivery process for the most vulnerable groups in the country
- To create sustainable human settlements.

Processes

The new housing policy must contemplate and expand the following processes for each dimension of the housing system.

Building Technologies

Building technologies are a fundamental tool to construct human settlements and have direct influence on urban development, culture, accessibil-
ity to resources and sustainability. The choice of appropriate building technologies guarantees adequate use of local resources, creates bonds between people and their territories, generates a better understanding of the environment and improves the quality of life. The new policy needs to promote:

- Appropriate use of local resources (material and human) as the one and only alternative for low income housing projects.
- Research and development of traditional (inherited) building techniques. Building technologies must be assessed in order to become affordable, socially accepted and ecologically friendly, resulting in safe structures and good quality shelter.
- Technology transfer will be encouraged and supported at national and local levels.
- Building codes will be created for every region (the country has four natural regions with different climate, local resources and cultures).

**Affordability**

- The government will invest in technological research. Every year the nation’s budget will consider an amount of money for research institutions that work in housing issues, which will help lower construction prices and improve the quality of dwellings for low income families.
- The government will support low income groups who are willing to develop partnerships with private investors, research institutions, local governments.
- The government will protect the financing system of the country in order to attract local and foreign investment.

**Land Markets**

- Organization of territorial structures will be mandatory for every municipality of the country.
- Land markets will be regularized by the municipalities (prices, legal framework).
- The indigenous groups that have land ownership will make good use of this resource and prepare proposals for sustainable settlement development. They will have full technical support of local governments.

**Housing Production**

- The National government will research, build up and implement the construction of New Sustainable Towns: small human settlements and low income housing projects that will function with a different vision: sustainability, dynamism, cooperation and development of learning processes for the communities.
- Local governments will engage in construction of low income housing projects through sustainable processes: society’s participation, appropriate use of technologies and local resources; and, organization of the new communities.
Local governments will also find financing mechanisms for production of low income housing with the support of central governments and innovative partnerships.

Supply and Demand

- The Ministry of Housing and Urban development will systematically assess the housing supply in the country.
- The national government will regularize the type of construction and point out the target groups that are in major need.
- The investors that build for low-income groups will be supported by local governments and have softer conditions to qualify for construction loans in public and private financial institutions.

Social Organization

- Local governments will support social organization. Organized groups that develop proposals for housing will receive grants and technical advice.
- Capacity building in regards of housing and human settlement development for decision makers and the community will be part of every local government’s agenda.

Challenges

1. *Simplify and decentralize the political and administrative structure of the country.* Many plenary sessions, networking events and round tables at WUF3 focused on successful cases of decentralization in developing countries as means to mobilize financial resources and promote active participation of citizens. Local governments are playing a very important role these days, even policy conception starts at local level and this is helping make development processes more and more sustainable. The city of Ougadougou in Burkina Faso9 is a successful example of decentralization: new departments have been created in the municipality to take care of the most important problems the city faces. These teams of professionals work with partnership development, strengthening of stakeholders’ roles, strategic planning and participatory budgets, among others.

2. *Integrated public management.* Public management must use holistic perspectives; develop interdisciplinary studies and systemic analysis of problems in our cities. Concrete ways of implementation must become the main goal of urban development plans.

3. *Innovative participatory strategies.* The time has come for citizens to get involved in the development of their towns. Being a “citizen” is having rights, but also duties. However, in developing countries poor education systems prevent people from becoming aware, analyze, question and

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9 Simon Copaore, Mayor of Ouagadougou, described the decentralization of his city in a plenary session at WUF 3, Vancouver, Canada, 2006.
propose ways to improve their actual living conditions. Innovative ways of promoting active participation are: development of civic programmes and projects in schools and universities where students get acquainted with the city's issues, organization of neighbourhood committees, municipality's open meetings to the public, etc.

4 **Intelligent use of local resources.** Local resources ought to be mapped and inventoried within territories (territorial organization). Governments must know what are the attributes and wealth of each part of their districts: land for urban development, agriculture, mining, natural reserves (natural resources); universities, companies (human resources), etc.

5 **Partnerships.** Strategic alliances and partnerships are the roots of successful development. The new urban world requires the construction of a system where the urban stakeholders can rightly and effectively interact and work together; where exclusion is reduced and common practices of cooperation are developed.

6 **Mobilizing financial resources.** These capitals are tackled with different strategies: decentralization, innovative partnerships, effective taxation and use of local assets.

7 **Capacity building.** Capacity to implement sustainable policies and strategies in our cities requires commitment to learning from all sources and successful practices around the world. Professionals working in public and private sectors are constantly required to build capacities and re-think ideas in order to find the equilibrium of the urban systems.

8 **Rebuilding identity.** Identity is created by the appropriate use of public spaces in the city, when these spaces are conceived as instruments of social cohesion and collective self-esteem; assuming that public spaces are also political spaces, where collective will is expressed. Social organization at neighbourhood level also helps rebuild identity by taking part in the city's life, in its planning and management.

9 **Creation of a sustainable housing delivery process for the most vulnerable groups.** Governments and stakeholders must commit and devote all their capacities to guarantee decent, affordable housing for the lowest income families. Systemic thinking helps understand complex issues and develop intelligent, dynamic and sustainable solutions.
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Need for Inclusive Housing Development in Addis Ababa

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Provision of land without sufficient infrastructure, with very few options in housing finance, loose enforcement in planning as well as land administration rules and regulation, lack of exploration of innovative ways of making affordable housing and other similar limitations occur mainly because the government has focused on provision rather than facilitation. It would be advisable for the government to be able to withdraw gradually from its present role of provider to a position of facilitation through establishing and granting revolving funds as well as enforcing and regulating legal frameworks. Partnership with the community and private sector will be essential in this respect to give the necessary focus for the government to the poorest of the poor in this scheme. This paper highlights and identifies the components lacking in the practice of housing development approaches in Addis Ababa during the last decades, which could possibly be the root cause of persistent failures in meeting the shelter needs of the poor.
Ethiopia

Addis Ababa the capital city of Ethiopia was established in 1886 with only 50,000 inhabitants and covering an approximate area of 54,000 square km. According to projections (CSA 1994: 341), the population of the city in 2006 is 2,973,000 out of which 48.03% are male and 50.2% women. The highest population density is 2500/ha in the city core, while 75/ha is the lowest population density in expansion areas of the city (ORAAMP 2002:54).

The city is a self-governing chartered city structured in three administrative hierarchies, having 10 sub-cities at the intermediate level and 100 kebeles at the lower level.

Access to Shelter and Urban Services

In 1994, housing stock in Addis Ababa was 374,742 (CSA 1994). During 1994–2000, about 84,525 additional housing units were built by private (formal and informal) and public sector making the total housing stock 449,592 (AACA 2004:8). According an annual report (HDP 2006), in 2004, the city government launched the construction of 32,447 condominium-housing units in the city. Furthermore, land delivery was carried out based on various modalities for housing development. In 2006, LDAA reported that during 2000–2006, 624 plots are delivered for apartments and individual housing through auction, granted 9617 plots through lottery for individuals and 116 plots for real estate developers through negotiation. The area of the delivered land accounts for 168.5, 7.4, and 461.3 hectare land respectively. Moreover, LDAA has reported that the city government has granted land to 29,000 families, to build condominium buildings between the years 2004–2005.

The housing deficit in Addis Ababa is estimated to be 45,377 and 96,648 in the year 1994 and 2004 respectively. The estimation is made based upon the above data with out considering non permanent structures, use changes and with the inclusion of estimation of informal settlements during the period 1994–2000 (ORAAMP 2000).

According to 1994 census, 97.4% of housing units in the city are constructed with permanent structures. However, 82.3% of the total housing stock was built from local materials (mud and wood). The nationalization of urban land and confiscation of extra houses in 1975 has changed the tenure status from private to public. As a result, 37.92% of the housing stock was owned and administered by the government, (CSA 1994). Due to the tenure arrangement (public ownership) and poor administration, the houses are hardly maintained resulting in high rate of structural damage (PADCO 1998). Similarly, the urban inequity survey of 2003, (UN-Habitat 2004) has also shown the percentage of non-slum households range between 0.9%–15.8 percent in the city.

Later in 1991, the federal government privatized a number of public houses. In the (AACA 2004), it was estimated that the public taking 34.0%

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1 Data was not available on the actual number of Households produced through the delivered land.
and private owned houses are 58.8%. The share informal housing sector has also accounted around 20% of the total housing stock (ORAAMP 2001).

Many of the housing units constructed in the city are of poor quality due to old age, limited variety, shortage of building materials and poor workmanship. The scarcity of shelter related infrastructure, especially lack of adequate water supply and sanitation has also contributed to the poor housing condition. In ORAAMP 2001, it is stated that out of the total city's population 15.6%, 67.24% and 17.16% earn monthly income of less than 167 (USD 20.40), 167–1050 (USD 20.40–126.05), and more than 1050 (USD 126.05), respectively.

Currently the cost of construction per square meter of floor area in Addis Ababa ranges from Birr 1,500 (USD 172.6) for the most basic structure to Birr 2,500 (USD 287.6) for a unit of acceptable standard (Mulugeta, S. 2006:28). Moreover, financial institutions dominantly take income, not asset as a mortgage and expecting at least one quarter of gross monthly income payment.

Housing construction has been performed by different actors formally and informally. The government, individuals, housing cooperatives and real state developers as well as some NGOs have involved in the formal housing construction sector.

The common type of housing construction in the city is single storey and semi detached housing units, such houses are constructed mainly by semi-skilled labour based contractors hired by individuals and housing cooperatives. The materials used in this type of construction are mud and wood, hollow concrete block, brick or stone. Recently, the construction of two and three storey housing units is becoming common. The remaining is the construction of multi-storied walk up apartment buildings by the government. The materials used in the latter two construction types are mainly hollow concrete blocks and bricks with concrete structures.

Although the construction industry in Addis Ababa has recently boomed, there is a very high shortage of building materials and the cost is escalating rapidly. This is due to the existence of very limited number of building material manufacturing industries and their limited production capacity. Moreover, the variety of materials is very limited.

The 1994 census has indicated 96.7% of the housing stock had tap water supply, out of which only 4.4% had piped water inside house and 22.45 within private compound. In 2004, a report of AAWSA has indicated that water supply coverage of the city is 69% of the demand (AACA 2004:4). Based on an urban indicator survey (UN-Habitat 2004:12), improved, affordable and sufficient water supply in the city ranges between 25–68.8%.

**Housing Policy**

Until recently, the city as well as the nation had no housing and urban development policy. However, in the last three years, the city government has given due attention for the deep-rooted housing problem. In 2003, the five years housing development programme was formulated aiming to address housing shortage, improve living condition of residents, improve and change the dilapidated housing stock, minimize unemployment,
increase income, and specifically improve micro enterprises. The construction of 50,000 housing units annually and in total 150,000–200,000 with in the five-year period (2004–2009) was among the main goals stated in this programme.

In 2005, national urban development policy has been formulated. Housing development along with urban land provision is among the main issues addressed in this policy. As stated in the policy document, the two main roles of housing development in the urban development process are making the construction of low cost buildings and encourage real estate developers.

Based on this policy, housing development packages have been prepared at national level targeting the implementation on main towns of the country including Addis Ababa. The package planned the construction of 396,000 low-cost housing units within four years time in Addis Ababa and creating an opportunity of 197,802 jobs.

The urban policy document states source of finance for the housing development under the government programme is the city government’s revolving fund, saving of the beneficiaries, initial down payment, low interest rate loan, and long-term payments basis ranging between the years (15–20 years).

Design and Spatial Planning

Housing design has naturally different typologies and styles for various groups. The design of individually constructed houses is guided by the owners’ interest and financial capacity as well as the designer’s input, while the housing cooperatives mostly use replicable/standardized housing designs with the option of certain modifications. Apart from this, publicly constructed housing designs use standardized design typologies.

The structure plan of Addis Ababa has designated the major part of the city to be used for mixed development incorporating residential use with varying proportion. Based on the structure plan designation local development plans are prepared indicating detail uses (all types of housing development options considering social segmentation), rules, and regulation including the implementation strategy.

Standards for social mix and population density has also been indicated in ORAAMP 2002:2, as the percentage of high, middle, and low-income group to be allowed with minimum serviced lands is 5, 21 and 74% respectively for all housing development options. Net population density level in the three density zones (city core, intermediate zone and expansion areas are (125–380 HH/ha), (80–125 HH/ha), and (54–80 HH/ha).

Addressing the Lack of Shelter

The shelter problem of Addis Ababa ranges from unacceptable housing quality to critical shortage and unaffordability. In the last decades, attempts were made by the state and local government in fulfilling their duties of meeting the shelter demand of citizens’ through various approaches and
interventions. Despite the efforts, the housing development approaches were unable to successfully address the needy majority which are of low and lower middle income group.

Although the factors causing these consecutive failures are numerous, the generic cause could quite be pinpointed to be the choice of non-inclusive housing development approaches that responds less to local situation. Hence, this calls for an adjustment of the strategic approach in tackling the severe shelter problem of the poor which have long persisted in the city.

The occurrence of shelter problem in the city of Addis Ababa can be dated back to the last few decades. At all times, efforts were made to alleviate the problem but the city is still facing the challenge tremendously. Particularly, the challenge lies in the provision of shelter for the poor.

The identified generic and root cause of critical shelter problem in the city is the implementation of non holistic housing development approaches since the establishment of the city. Apart from this, as shown in some studies, the outcomes of the mentioned problem can be explained as critical affordable housing shortage, existing housing stock are of a poor quality mostly beyond repair and inadequate coverage of housing related infrastructure and services.

Since the problem is diverse and persisting, it would be essential to analyse briefly the deep-rooted shelter problem of the poor by looking the historical perspective focusing on housing development approach and practices of three different eras where there was three major political changes throughout the history of the country.

The Imperial Government (pre-1974): During this period, land was owned privately by landlords who were predominantly the nobilities and clergies. In 1966, it was estimated that 95 percent of privately held land in Addis Ababa was owned by 5 percent of the population (PADCO, in Mesfin 1995, 1997:18). According to same study, 60–62 percent of housing units were rental. Land was parcelled and sold for individuals by the landlords and rental housing was built devoid of planning and authorization of the government. As highlighted in Wubshet 2003:12 “The houses were below standard in terms of size, space organization, and infrastructure”. Similarly, the UN in 1966 has estimated 90 percent of the population, mainly the urban poor, lived in substandard dwellings lacking basic infrastructure and services (PADCO 1997). Hence, it is obvious that the system did not favour the poor in terms of ownership and housing quality.

During the period of Socialist Government, 1974–1991, the economy was mostly command economy. Land was transformed from private to public ownership based on the proclamation 47/1975 nationalizing all urban land and extra housing. The confiscated houses were rented with very low monthly payment for the poor. According to CSA 1994, 37 percent of the housing stock is under the administration of the government. In this period the main provider of housing were the government and housing cooperatives as well as individuals. While the government was providing various types of housing for rental purpose, the latter were developing only on owner occupied basis. Incentives were given for housing cooperatives
through mortgage loan for households with the minimum monthly income of USD 50 (Birr 250) with interest rate as low as 4.5%. Building material was subsidized and land was given for free. In spite of the determination of the government in favouring the poor through creating access to land and housing was not with much of success. As described in PADCO 97:20 the total planned housing production satisfied a maximum of only 21% of the demand at that time. Moreover, minimal monthly income requirement for mortgage has eliminated nearly 80 percent of households. Thus, the provision the existing confiscated houses was just a one time grant to the poor. In addition to this, the insufficient housing production and mainly lack of holistic housing development strategy/approach could not satisfy the increasing demand of housing supply and quality, for the residents in general and for the poor in particular.

**Federal Government**, period after 1991: land and existing confiscated houses remained under the hands of the government and land holding system was changed into lease holding system.

Starting from 1993 till 2002, plots with an area more than 73 m² were leased out through lottery for residents who have the capacity to deliver blocked account of a pre-set amount. Plots with the size of more that 175 m² were given through auction and the price was determined by the auction. A few plots with an area of 73 m² were specially allocated for free without prerequisite of blocked account mostly to families relocated because of natural hazards or other development options. The government's encouragement of private sector to have an active role in national economy (proc. No. 37/1996) also attracted a few real estate developers, apart from the involvement of individuals and housing cooperatives in housing development sector. However, land provision related to housing development, as before was not methodical and also not focused to the urban poor. This is mainly due to the long term national economic development strategy, which was and still is Agricultural-led Industrialization (ADLI) that focused on the development of rural areas, expecting to result in a reduced rural urban migration, a classical anti-urban policy (Wubshet 2003:14).

According to PADCO 1997:28, there were two major problems in the land and housing delivery during this period, one is the rate of plot production was too slow and the other is the standard requirement of building construction was too high considering low earn of the majority. The estimated yearly demand of housing production at that time was 22,320 but not more than 2,500 residential plots were given on a yearly basis. Moreover, the first entry registration payment to participate in the lottery, the down payment and the requirement of financial institutions with an interest rate of 10 percent as well as a certain amount of income as mortgage ruled out the majority, according to PADCO 1997, 96% of the population out of the land delivery system. Hence, the majority of the poor were not favoured by housing development strategy of that time. As reported in Ashenafi 2001, the fact that the exclusion of the low income group from the landholding system throughout the years created a serious housing shortage and made evident the development of informal settlements and further deterioration of the existing housing stock.
The situation altered during and after 2002 for two reasons. The first is the completion of revision of master plan and second is the introduction of sustainable development and poverty reduction strategy (SDPRP) based on ADLI, capacity building programme, civil service reform and decentralization. On the basis of these, transitional city administration was in place with new focus on urban development issues. Decentralization was implemented together with major organizational restructuring. Institutions were formed and divided into municipal and non-municipal functions. Housing development agency, land development agency, and land Administration Authority were established under the municipal functions. Together with this, citywide upgrading, and low-cost housing construction programmes were launched. As pointed out in Mathewos (2005:33): “The federal and the city government's commitments have been shown by the municipal and city reform programme and the subsequent projects underway in the city, further, the city government has been allocating unparalleled budget for slum upgrading and low cost housing programmes.” The main housing development approaches/strategies were low cost housing development and land provision for individuals, housing cooperatives and real estate developers. Upgrading and some urban renewal as well as regularization schemes that were limited to only provision of title deed have also been implemented by the government.

**New housing development by individuals and housing cooperatives:** Land was provided for such development through auction, lottery and allocation mainly on owner occupied basis. According to the report of LDAA 2006, nearly 34,954 households had access to land in the form of individual plot, as well as condominium high-rise apartments and attached housing units. The land allocation for such housing development, like before, was available only for a specific income group (high and middle income) able to make a deposit of 20 percent of the construction cost prior to the land delivery. However, many of them have not even started the construction due to several reasons among which are: lack of financing for the continuation of the construction, the allocation is in expansion area of the city where infrastructure (mainly access to water and access road) is not readily available and the escalation of cost of building materials. Other mechanisms are not looked into to facilitate the development and make sure the inclusion of the poor. Thus, the approach have not able to make the middle income the house owner only with the provision of land moreover, the poor may be more than 80 percent are ruled out from such land and housing provision.

**Real estate development:** differently from all other times, real estate developers are encouraged to build and minimize the housing shortage though the least proportion of residents in the city could be accommodated in such housing provision. Only after 2002/3, according to LDAA report 112 real estate companies have been given nearly 426.24 hectare land to construct houses for high and higher middle income group mostly through negotiation. Except very few who took land in 1990s, many of the developers have not started to construct houses. However, based on the standard household density, there is a potential of accommodating 22,136 housing units. Despite the increase of housing stock with good quality houses in such
development, it is clear to see the creation of social segregation and low density housing development. Further more, since the plots provided for real estate developers are on farming land in expansion areas, the livelihood of the farmers is another issue which was not well considered. Unless, regulated, there will be no mix of social groups as well as the housing stock will not increase as envisaged. In the face of such development trend, it is unthinkable for the poor to have access to housing or land.

Land was also provided for building apartments: With in the last four years 471 plots are given on 151 hectare land. However, many of them change the use of the land to office or other function or build individual housing. With such provision, also, the housing stock couldn’t increase and very few were beneficiaries.

Condominium housing development by the government: Introducing change in the culture and attitude towards living in multi-storied apartments, condominium laws were enacted and air rights are allowed in support of the multi-storied condominium housing development programme. Based on this programme, till mid 2006, 32,447 housing units are constructed. Some are completed and some are under construction. Such type of housing development is new in its kind for the city and as in many development sectors it has its own success and limitations. The main successes are introduction of vertical and dense development followed by the attitude change towards living in high-rise apartments, which is new for 97 percent (CSA 1994) of households that lived in single storied housing units in the city for decades. The other main successes are creation of job opportunities and increase of the housing stock providing access to housing with out land and infrastructure cost as well as low housing price, compared to the market.

The main limitations in this development project, apart from certain technical drawbacks, are lack inclusiveness in the strategy of the programme implementation resulting in missing the target group, the low-income group which were supposed to be the main beneficiaries. In addition to increasing the housing stock, the main objective of devising this housing development strategy was to renew the dilapidated housing stock in the city centre where by the low-income residents live. However, some discrepancies are observed in the programme, on the one hand the programme advocates of making the low-income residents the main beneficiary; on the other hand, it indicated the lowest monthly income Birr 300 (USD 34) as minimum requirement which automatically ruled out more than 50 percent of the residents. Moreover, it was unaffordable for the majority to pay the first entry payment for the smallest housing typology which is 10 percent of the construction cost, even though modalities of long term payment for the remaining cost offered. Apart from these, owning the houses through long term payment was a very good option to create affordability, however, the housing units were sold through special allocation and lottery for studio-type and one bedroom units and through highest bid, practically 100 percent payment, for two bedroom and three bedroom apartments which takes up 44 percent of the housing units. By proportion studio and one bedroom type, housing units take 56 percent, out of which nearly 40 percent of the housing units are taken up by higher lower income group. If this proportion is com-
pared with the social segmentation in the city, like other schemes this project is also not addressing the majority. As mentioned earlier the strategy did not exhaustively indicate different mechanisms of making the poor the main beneficiaries.

Currently, at least for the present fiscal year, the government took different direction from previous, avoiding relocation of the residents and demolishing of the city centre for constructing the low-cost apartments. Given the lack of vacant land in the inner and intermediate part of the city, the new sites for the construction of the apartments are thus pushed towards expansion areas where the infrastructure is not readily available. Moreover, according to the programme this year’s share was construction of 33,000 housing unites which in the first place was more than 50,000. These indicate that project may not be able to continue in a sustainable manner with the initial concepts.

**Upgrading projects:** These projects usually are limited to provision of access routes, communal toilets and water points, leaving the poor housing condition unimproved or in certain occasions; the residents end up in being relocated to temporary shelters or expansion areas.

**Regularization of plots:** This project has also been conducted to improve tenure/provision of title deeds for residents but this also is limited to specific localities that are in intermediate zone excluding inner city for urban renewal projects and expansion areas where there is wide range of informal settlements.

In general, the lack of integration of the stand alone projects and efforts described above imply unsustainable housing development approach in the city. Moreover, the above analysis has tried to highlight the successive failures of different strategies in providing shelter for the poor. No matter the governments are committed to the poor due to failures in devising holistic strategies and shelter development mechanisms, the majority still lives in indecent sub-standard living condition lacking the very basic needs of human being. The issue of partnership and the role of urban planning are not sufficiently addressed. Further, locational values, segmentation of social groups, financial issues, the role of the government as well as other actors are not clearly designed and implemented in the process of providing affordable housing for the poor.

Despite the shortcomings of the recent housing development efforts, the intention of identifying the poor as a main target group, the focus in low-cost housing development, encouragement for the private sector in terms of real estate development, recognition of role of spatial plan and the objective changing and improving the city image, the institutionalization of housing development, the budget allocation, the potential increase in housing stock and creation of numerous job opportunities and most importantly the formulation of urban development policy could be listed as main achievements.

The above analysis and following table are revealing, on the one hand, the critical shelter problem of the poor have not been sufficiently addressed by the previous housing development approaches. On the other hand, the housing deficit is in a relatively fair position for a city like Addis Ababa. Since
most of the modalities of housing and land provision are favouring high and higher middle income group (7.5 percent and 4 percent of residents, ORAAMP 2002) the significant drop of housing deficit, could only imply unbalanced housing and land distribution. A significant proportion of the population is being housed indecently in dilapidated kebele houses and in informal settlements as tenants or sub-tenants.

Table 1: Potential increases in housing stock compared to housing deficit (2000–2006)

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Year</th>
<th>2000</th>
<th>2006</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>No</td>
<td>1994 (Base year)</td>
<td>2,112,737</td>
<td>2,805,000</td>
<td>2,973,000 (CSA) 3,363,114 (FEDB)</td>
</tr>
<tr>
<td>Required Housing Units</td>
<td>No</td>
<td>2000</td>
<td>550,000</td>
<td>571,731</td>
<td>646,752 HH size = 5.2 (2006) (ORAAMP)</td>
</tr>
<tr>
<td>Permanent structures (Housing Units)</td>
<td>No</td>
<td>2000</td>
<td>453,042</td>
<td>564,443</td>
<td></td>
</tr>
<tr>
<td>Housing Deficit</td>
<td>No</td>
<td>2000</td>
<td>96,958</td>
<td>7,288</td>
<td>82,309</td>
</tr>
</tbody>
</table>


However, it is obvious that unlike other times, after the year 2002, housing development has become the top priority of the federal and city government. In this regard, the good intentions and achievements can be taken as a good ground and starting point prior to proposal for changes.

Proposal for a New Approach

It is important to propose change and improvement in the housing development approach based on reliable and up to date data which is scarce in the case of Addis Ababa. However, this study has tried to base its proposal on the general trends and indications of available data analysis and experiences gained from WUF3.

The analysis has tried to summarize the inter related problems of housing development into the basic framework of strategic approach, which has

2 In the computation of 2006 housing stock, land use change, informal housing supply (2000–2006) are not included. The underlined number shows not only the ones that are actually built but the potential observed through the delivered land – assumptions are made based on moderate net household density for expansion areas as 65HH/ha and twelve housing units for 25% of plots that are allocated for apartments.

3 Housing Deficit is computed based upon the population estimate by FEDB in 2006.
been designed and implemented for decades excluding the majority of the population. As the outcome of the analysis indicated, the main focus of the housing development approach should be provision of affordable housing on the basis of real demand of the majority (low and lower income group) that have not been housed, or live in kebele houses or in informal settlements. The direction of land and housing provision should focus on urban redevelopment, upgrading and regularization of informal settlements including the new housing development provision proportional to the income segmentation. Moreover, the approach should be redirected and focus has to be given for housing the poor in a manner that would mix the social group in order to minimize the presently surfaced social segregation and maintain un-segregated character of Addis. In respect to this, the role of planning should come out in a manner that indicates appropriate proportion and location of different social segments with diverse solutions and development mechanisms again targeted at specific social segment. Thus, based on experiences from WUF3 and the analysis, different mechanisms of creating access to land and housing to the poor are proposed as follows.

**New Housing development by individuals and housing cooperatives:** Site and service could be an option for the middle and lower middle income residents if especially it is supported with viable financing and credit system. The development and strengthening of this option in Addis Ababa context is very essential. As mentioned in Badshah, K 1996, if the housing demand of the middle income group goes unmet, the housing need for the poor can not be reasonably satisfied. In Table 1, it is indicated that land has been provided for the middle income group, the future programme also shows the tendency of such modality, thus prior to land provision adequate infrastructure especially water has to be provided. Along with this, self help with technical support and incremental housing development with micro-finance system can be designed especially for higher low income groups.

**Condominium housing development:** There is a big chance for the poor to be the main beneficiary in this scheme because initially the main aim of the government’s condominium housing development programme was provision of affordable housing for the poor. The price of the housing units is very low compared to the market price, land and infrastructure is free, and the scheme allows ownership through long term payment. Thus, it would be essential to incorporate self help mechanism for the poor to make them participate in the construction providing labour through minimized cost so that they can be owners of the housing units in a long term payment. While the existing financial institutes provide finance for the formal sector on a long term basis, the initial payment could be made by NGOs and seed money allocation by the local government through micro-credits long term payment could be devised for the poor. Moreover, the options with respect to housing unit typology have to be improved, in proportion as well as area wise in a manner that make the poor benefit.

In the long run, it would be more advisable for the government to be able to gradually withdraw from its present position of provision to position of facilitation through establishing and granting revolving fund as well as enforcing and regulating legal frameworks. Partnership with the community
and private sector will be essential in this respect to give the necessary focus for the government to the poor of the poor in this scheme.

**Real estate development:** In the last two to three years, land has been provided for a number of companies in expansion areas of the city. The area coverage for this development is extremely high while a very low proportion of social group is beneficiary. Hence, extra care has to be given for such development before its continuation with the same scale. It is a good opportunity that not many of the companies have started the projects, because there would be time for the government to enforce and regulate planning rules and regulations. In this respect, density can be maximized through the construction of rental apartments for middle income groups with an affordable price as well as for efficient land utilization feasible site occupancy ratios could be maintained. Thus, the government should provide incentives to alleviate the housing problem for a wider group in such manner.

**The upgrading scheme** also works very much in almost every part of the city in one way or another. A number of settlements could be upgraded in infrastructure and access route provision together with securing the tenure, so as to improve the housing condition. Such scheme can also be combined with other approaches like the urban renewal scheme. Partnership between communities, NGOs and government is essential to be able to achieve sustainable improvement.

**Renewal of dilapidated housing:** There are more than 142,095 housing units in the city centre that have to be replaced with adequate and affordable housing. Location is very important in this regard since distance is a big factor for the poor, to keep their livelihood undisturbed. Land is also very expensive in inner cities and in order to keep the existing residents in the same locality, incentives should be provided for the private developer or the capital gained through the land value should directly or indirectly be invested on the housing and infrastructure provision. Multi-storey housing development could be used in order to use the land intensively and economically. Such development can best be done through partnership between government, private sector and the community. Here the government has to be committed and play vital role in facilitating such development in such a way that social and economic security is achieved along with housing development through the tri-modal development scheme. In such manner without much financial and administrative burden, the government could insure provision of housing, along with social and economic security. The social mix with an appropriate density and efficient land utilization could as well be kept. Self help could be integrated in such scheme in order to make the poor financially stable through the construction industry. In WUF3 experiences in Sri Lanka has presented an innovative and successful scheme through land sharing.

**Regularizing informal settlements:** Incremental housing development and self help could also be implemented in regularizing informal settlements. This could be developed through partnership between government, NGOs and communities. Poor households have to be identified carefully because in the case of Addis there are many speculators in informal settlements. Thus, incrementally the housing could reach to the level that the
planning could envisage. Here, regulations regarding usage of building materials have to be revisited.

Unlike the current housing development programmes in the city which are three to five years, from WUF3 experience, housing development provision is a long term incremental process that can not fit in such a short period. Thus, long term programmes have to be in place in order to achieve sustainable, affordable housing provision for the poor. Moreover, different financing mechanisms have to be devised especially for Addis Ababa with the high percentage of low income residents.

Housing development is very a complex process that can not be accomplished with a single actor. As understood from the above analysis; few actors in housing development in the city are overburdened and struggling to alleviate the problem individually. Thus, as best experiences in WUF3 indicated partnership between actors is inevitable. “Optimal solutions to address the massive shortage of adequate housing are yet to be found but it is clear that given the magnitude and the nature of needs, no sector can deliver housing by itself. Thus, business leaders, social leaders, and innovators are needed to develop affordable housing solutions at a large scale to take a lead in tackling the various dimensions of the systematic solutions.” Apart from this all actors should be exhaustively identified together with their best role and position

Provision of land without sufficient infrastructure, presence of very few options in housing finance, presence of loose enforcement in planning as well as land administration rules and regulation, lack of exploration of innovative ways of making affordable housing and other similar limitations occur mainly because the government has focused on provision rather than facilitation. Discussing the success of Singapore and Hong Kong as an exception due to their relatively high per capita incomes, Badshah, A. 1996:9, stated, elsewhere in the world increasing government spending does not increase the housing stock or improve housing for the poor. Thus, the main housing development actor (the government) needs gradually to divert its role from being provider to facilitator to bring all its efforts in a balanced manner. Apart from the mentioned role, government should facilitate a wide range of production of building materials in quantity, quality and affordability. Moreover, capacity building in self help skills and other construction technologies is essential for communities as well as for practitioners.

This paper has tried to highlight and identify the component lacking in the practice of housing development approaches in Addis Ababa for the last few decades, which could possibly be the root cause of persistent failures in meeting the shelter need of the poor.

However, the components highlighted and the recommendations forwarded are merely generic. Further research and deeper investigation of housing demand and supply, based on updated and complete data, is required to provide specific and practically applicable recommendations for improving the existing housing development approach.
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Finding Lost Space to Recapture

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The shelter situation in Venezuela in 2006 is unique and risky for all the actors, with a huge housing shortage, unprecedented economic resources, important political changes in progress and almost no planning. Private consultants are facing new challenges all around the world. In Venezuela, private consultants should redefine their roles, both to avoid the major risk involved and to contribute more significantly to solve the problems.

Using the events of the WUF3 as a framework, this paper examines in detail the current situation and proposes some actions that could be taken by small consultants.
Venezuela

Venezuela, located north of South America, has a population of 26.28 million inhabitants, of which 4 million live in the capital Caracas. The population is growing at 2% per year. Most of population, near 82%, lives in cities concentrated in the north of the country. The south, with almost half of the territory, holds only 5% of the population.

Due to the high international oil prices, the main industry in Venezuela, during the last years the national income has been the largest in the history of the country, USD 450,000 million since 1999.

However, the poverty figures are as bad as ever and according to some researchers, getting worse. The biggest study about poverty was done between 1998 and 2001 by the Universidad Católica Andres Bello. It found 57.1% of the population was poor in 2001. For the same date, the INE (National Statistics Institute) says the poverty was 39.04%. The poverty figures have been extremely controversial in recent years, with a national discussion about how the poverty should be measured. But everybody agrees that the income distribution is unbalanced, with only 2% of the population in the higher levels, and almost 80% in the lower ones. Nearly 60% of the population works in the informal sector of the economy, being this fact one of the main obstacles to alleviate poverty.

Access to Housing and Urban Services

**Housing deficit:** According to a study carried on in October, 2004 by Fundación de la Vivienda Popular, a NGO with national presence, in 2004 there were needed 1,085,000 new dwellings and other 1,813,000 should be improved. Recent figures of the Central Government locate the numbers in 1,600,000 and 900,000 for a total of 2.5 million shortage. The housing deficit has often been manipulated for political reasons, with researchers locating it in even 3,800,000 units. The last official figure (June 2006) is 2,800,000.

**Yearly built dwelling units:** Between 1990 and 2001, an average of 150,000 new dwellings was built each year, 87,000 of which are in the informal market (58%). From 2000, the average fell significantly, with the low point in 2003 (only 8,000 formal units). The current housing policies are trying to correct this situation.

**Informal Settlements:** 52.89% of the occupied dwellings were in informal settlements in 2001. Although more recent figures are still not available, the combination of few units formally built and the central government’s speech about free land for everybody, allow us to estimate that the current figure should be significantly higher.
Access to and cost of Basic Services/Infrastructure: 85% of the housing units have water services and about 68% have access to sanitation. Although the figures just before don’t seem so low, as most dwellings are inside informal settlements and many of them are near 40 years old, the quality of the water services, the sewerage and the drainage is declining very fast. Almost daily there are houses collapsing because of problems related to saturated soils or with jammed streams. The homeless families go to temporary shelters and the protests in the streets are more frequent and desperate.

Existing Housing Policy and Actors

Any discussion about the current housing policy has to start by remarking that this, 2006, is an electoral year and that most of the government’s actions aim to win the presidential election in December. This fact is openly recognized for all the actors, as after failing in the 2004 and 2005 goals of 100,000 new formal dwellings per year, the National Government established a new goal of 150,000 for 2006.

The failure, 13,000 houses built in 2004 and 22,000 finished in 2005 is as large as the effort that represents the current policy: Mision Habitat.

The “mission” mechanism has been applied since 2000 to solve almost all the national problems: literacy, education at all the levels, health, unemployment, food distribution and recently the shelter problem. A mission is essentially a program working outside the regular institutions with its own budget and based in “emergency” laws. As political weapons as they may seem, and are, they have succeeded in passing through the jungle of bureaucratic procedures that paralyzed most of the public institutions and have produced some tangible results. The quality of those results and the corruption potentially involved are still to be evaluated.
For “Mision Habitat”, managed by the newly created Ministry of Habitat and Dwelling, many actors have been recruited: all the ministers and public institutions had been asked for their cooperation, the private associations for construction and real estate have been called for first time in years, the banks have now new rules and obligatory minimum amounts for both short and long term construction credits with fixed rates, and all the people have been asked to register in a national census and apply for new houses.

In an effort to facilitate the access to the formal market, in 2005 was established a new subsidy to the demand, giving the buyers a non-refundable help of near USD 8,000 and regulating the interest rates. The immediate impact was the saturation of the market with the inevitable rise of the prices.

In search of ready houses to substitute those collapsed by natural disasters or frail soils, the government offered up to USD 23,000 for houses in the informal sector, and in few weeks that was the base price for almost all the houses inside the informal settlements.

In the hunt of new dwellings to correct such a distorted market, the government has offered to buy almost all the unfinished private residential developments, thus the supply of construction material collapsed and the municipal permits agencies are cave in mountains of new projects.

As tumultuous and improvised as it could seem, in May 2006, the Misión Hábitat appeared to have succeeded; according to the private construction association there were 150,000 units in progress, 27,165 of which were announced finished in June 8. However the minister was changed in July 2, mainly because delivery is still not fast enough, and paradoxically, the change has made the process even slower. With so many changes in a very short time, it is too early to evaluate and almost impossible to predict the results. For the good of the many homeless, let us hope for the best.

But, how are the potential dwellings? Where are they located? Have they public services? And, what about other shelter problems, not only production of new units? Let us examine the case of Caracas.

The “Plan Caracas”

With near 15% of the country’s population, and being the densest capital city in Latin America, Caracas represents a special case. Nowadays its long valley is completely full as well as most of the surrounding mountains. It has almost no space to grow. In spite of the overcrowded streets, the contamination, the housing shortage and the high prices, the decentralization attempts have been more or less unsuccessful. Even the poorest families choose to live in a hut in an informal settlement rather than move far from the city and its employment opportunities. As we “caraqueños” say, “Caracas is Caracas, the rest is just grass and snakes”.

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Recognizing this fact, the central government started early this year the “Plan for the Structural and Physical Transformation of the Metropolitan Area” or “Plan Caracas”, to build new housing units inside the city.

In search of improving the living standards and to avoid further densification, all the new houses are supposed to be substitute dwellings, for families already residing in Caracas, in inadequate houses. Those bad houses will then be demolished giving space for new ones, starting a process that will hopefully end with a fixed, safer and more liveable city. As a house should “have dignity”, it was established that all should have at least 75 m², and a minimum of 3 bedrooms. Excluding the land, each unit should cost USD 36,200.

As hard to believe as it may be, the plan started with an helicopter flight over the city, during which the President of the Republic identified “available” or “empty” places to locate new dwellings. Based mostly in its size, and without studying in detail the topography, the land tenure, the accessibility, the zone codes or the public services, each site was associated with a number of apartment units and an estimated budget. Some of the sites are empty public lots, but most are inside or in the neighbour of informal settlements.

To manage the plan, several public organizations were requested. Without housing experience they were instead selected for their familiarity with construction and management. Among the organizations involved are the National Petroleum Company, the Natural Resources Ministry, the National Water Company and the Ministry for Basic Industries and Mining.

The 26 selected sites, with its 17,000 new dwellings, were distributed between these organizations that began their task in April. The order is to have, in November, as many finished units as possible.

The Role of Private Consultants

The data above pictures an almost helpless situation: a huge housing shortage increasing each day with more and more families in real emergency; short term housing policies and inexperienced actors taking leading roles. As private professionals, our firm is just in the middle of this chaos. Of the 26 projects included in the “Plan Caracas” we are in charge of the design of 5 of them, and 4,245 housing units. And also, coming from former policies now dismissed, we have several ready to build (but not under construction) projects for upgrading, including two informal settlements. It represents a big responsibility, both with the city and with the people: the communities we have worked with for nearly seven years, people now living inside or in the neighbourhood of the selected sites, and the next generations that shall enjoy, or suffer, the consequences of our decisions. In normal circumstances this responsibility would fall on the government. But circumstances are not normal anymore and the roles of the actors are mixed up.
What is the role of private consultants in the housing delivery process? What should it be? What are the risks the consultants face within these processes? What mechanisms would allow a private firm to reduce risk and at the same time have greater influence in the political decision making? Is this a one-time special circumstance or should it be expected to be recurrent? What would happen when housing policies shift again?

The aim of this paper is to examine all these questions and to propose a set of achievable and concrete actions, both in general terms and specifically for Proyectos Arqui5.

The World Urban Forum III

Leaving these problems back in Caracas, and in the search of innovative ways to face them, attending to the World Urban Forum III in Vancouver showed that both “private” and “consultants” are in trouble everywhere.

The Gap between Planning and Action

This issue was endlessly discussed in almost all the forum events. And it makes sense, following the theme of the forum: “Taking ideas into Action”. Although all actors share responsibility in the matter, consultants, planners in particular as they used to be powerful, are blamed for a big deal of the problem. Statements as “poor can not be asked to be patient any more” or “the documents, resolutions and paper are just dead letter” show how big the gap is and how far many professionals, sitting in their offices, are from the pressing troubles of poverty.

There are countless examples of plans that never were implemented, and policies that could not be applied. Many plans, absolutely divorced from reality, were however basis for forced evictions, enormous expenditures in useless infrastructure, or excuse for just doing nothing. The short history of planning presented in one of the dialogues explained how planners acted like gods fifty years ago and how cities are dealing with the consequences of their actions. We, nowadays professionals, have to accept that we have no such power anymore.

What is Trendy Now? Who are the Heroes?

Undoubtedly, participation is fashionable, and communities the protagonists. This was more than clear in all the events. Slum dwellers, representatives of grassroots groups, young people, women, all were enthusiastically celebrated no matter what they said, and many times they just sorrowfully complained; extreme statements as “upgrading of slums should not be done for contractors and consultants, but instead for the dwellers themselves” were applauded. Even the organization of events showed this trend: there were roundtables for governments in several levels, for youth, for women, for
indigenous, for universities and researchers, for NGOs. The private sector roundtable was “private”. And there was only a professional one: the environment roundtable. What happened with the urban design roundtable? Not to mention the architects’ or the builders’ ones? And why the single networking event dealing with urban design was hidden behind a “conflict resolution” title?

The paragraph above, probably a little bitter, does not mean to argue against the benefits of participation, partnership or inclusion. Most groups now taking leading roles were for long time dismissed and they still are in many countries. But what is important to remark is that the space for city professionals, architects, engineers, planners, seems to be completely occupied by other actors. Can cities really be discussed without drawings, maps or pictures?

And the Private Sector?

The presence of the private sector was not as large as others groups (12% of the participants), but still significant. It is difficult to decide if they were more rejected more than the planners; but in general, they are often considered to be greedy, they were not very popular.

But after attending several events dealing with public-private partnership, it was evident that the “private sector” is not a homogeneous group. There are, of course, the big private companies whose main goal is the profit. But they are not alone: the social entrepreneurs, looking for profit but also caring for social problems; small business, that could have great influence in local decisions; independent professionals, for whom profit only means survival. Other private groups were missing: social responsibility programmes of big companies, for example, private universities and unexpectedly, private banks. Their diversity means that their roles should be different, as are their needs and possible contributions.

Apart of their diversity, it was also interesting how thin the lines between each group are. What is the difference between a small professional firm with no or little profit and an NGO? Or between a small local business and a grassroots organization? Sitting in the same table discussing how to improve dialogue and participation, nobody would have had clue about each person background. The different backgrounds, however, was clearly evident in the concreteness of private proposals, and their goal-driven attitudes.

The Role of Private Consultants

None of the examples of the Forum are directly applicable to our current situation. Maybe this was because of the singularity of the Venezuelan circumstances, perhaps because few consultants could attend the forum. It was helpful, however, to discover how poorly understood is the role of the
consultants. Because of that, the analysis of the problem should include a scrutiny of the role of the private consultants.

How can They (We?) Contribute?

Starting with the obvious, or maybe not, let us say that the main contribution of private consultants is their professional knowledge. Architects, engineers, planners have been trained in specific subjects, have dealt with similar problems more than once, and know the regulations that should be applied. Even the most well informed community lacks this knowledge, and this experience.

Other important contribution is their independent judgment. As consultants are not personally involved in the problem as the dwellers are, do not have previous commitments as most politicians do, and generally their profit is not linked to one specific solution as happen with the contractors, they can provide objective views. It is true that “Prima Donna” consultants could try to propose solutions to satisfy their egos but they are not as many as people usually think and can easily be disarmed by asking for a second opinion. In a slightly different view, consultants can see the broad picture, because they are looking from outside.

The contributions above, when put together, make of the consultants good advisors and facilitators in negotiations among several actors. When issues are treated with little professionalism and lots of passion, as for example forced evictions are, it is difficult to find solutions. But objective and science-based approaches led to better decision making. If consultants are actually prepared to fulfil this role, and what to do to improve the skills required is discussed below in this paper.

One not so evident contribution is that consultants make projects cheaper. The hot issue of consultancy fees that seems to upset many communities and governments will not be discussed here. Let us only state that good planned and well designed projects, no matter their cost, are the best way of avoiding costly mistakes during execution. To convince other actors of this advantage is among the biggest challenges the consultants face.

What the consultants cannot, or should not, do?

Trying to have things done, and distrusting other actors, consultants have often tried to participate in all the phases of the housing delivery process. And maybe that’s why they are now in difficult situation.

Clearly, consultants cannot propose policies which are the privilege of politicians and governments; at the most they can give advice or, better, by concreting projects, make the consequence of those policies visible to the society. Consultants should work within the framework already established, but should not lose time trying to change it.

Consultants cannot activate communities. They can give advice and support, but if the will does not come from within the people, if they don’t trust
in themselves, it is little that consultants could do. At the same line, con-
sultants, private consultants in particular, should not raise funds. Non-profit
organizations could fulfil much better that role, although the collaboration of
consultants providing information is valuable.

To keep transparency, consultants should keep apart from the tender
process and contractors. That does not mean they should not be involved in
the building process, but trying to influence in contract selection will reduce
their objectiveness.

Risks Involved in Our Projects

Back to the Venezuelan case it is evident how risky the position of all actors
is. That’s why a qualitative risk analysis could be a useful tool. Below is a list
of risks involved in housing projects both for the consultants and for the city.

For the City and for the Society

No matter how well meant the policies, the fact is that poor planning is risky.
The latest changes in housing policies, switching from stress in upgrading
of informal settlements to only build new houses, generated a quantity of
unfinished projects, with huge fruitless investments. As the design phase is
easier that the implementation, many projects are never built, or need to be
redesigned, with the consequent frustration of communities.

Referring specifically to the “Plan Caracas”, because the selection of the
sites was not very objective, there is an enormous risk of ecological damage.
Not all the sites are equally risky, some of them already in the slums are
impossible to spoil. But we are building in mountains, in unstable land,
changing the streams and deforesting vast zones. In this sense, it is also a
risk of promoting new informal settlements, as the projects increase acces-
sibility of some sectors. If some of the projects remain unfinished, this risk
grows.

The short term vision of the Plan Caracas puts in risk the sustainability of
the same city that is supposed to improve: some of the proposals will make
difficult future investments in the city, as future infrastructure is not included,
and some plots ideal for public services are used for housing.

It is still not clear how the new houses will be distributed, how much
they will cost and how or if the families will pay. Some of the communities
are becoming enemies of the projects, threatening to paralyze the building
process and making negotiations difficult.

The emergency framework of the plan gives plenty opportunities for cor-
ruption. The pressing deadlines make impossible an adequate selection of

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1 Project Risk Management, according with the Guide to the Project Management
Body of Knowledge, PMBook, published by the Project Management Institute.
consultants and contractors, and are excuse for hiring friends or profit-oriented professionals.

For the Consultants

Being a private business, the risk of losing money is always present and of main importance. But poorly defined project scopes, clients that change their representatives continuously, incredibly slow administrative procedures, all conspire to raise the economic risk that can put any firm out of business.

But the possibility of economic loss is nothing compared with the risk of losing credibility. The professional authority is the main asset a consultant has, as the future projects depend on it. And in an environment of changing policies, non-experienced clients and mad deadlines, mistakes could easily happen. The confidence of communities is very hard to obtain and extremely easy to lose.

Relating with this confidence, and due to the intense political conflicts in which the whole country is involved, consultants are in risk of being identified with a specific political party, or that one specific project could be used as a flag either to favour the government or against it. In a country where people are classified according to their political thoughts this is a serious matter.

A risk related with the particular moment, and particularly with our firm is to grow too fast. The huge effort of the “Mision Habitat” represents tons of work, after several years of an almost paralyzed construction industry. That means many projects concentrated in the few surviving firms. And unlike other business, consultancy is based on knowledge, and to hire and train new professionals takes time. And time is just what we don’t have.

The risk of be involved, or accused, of corruption is also high. Even working honestly, there are many people and many interests involved in each project, so misunderstandings and mistakes could happen.

In addition, the near future is difficult to predict. A new change of housing policies is possible. The government can easily change their policies, or in December we could have a new government. In that case we will be facing a similar problem over again.

But risk is not about bad things that could happen. A broad definition refers only to the uncertain factors that could influence a project, both positively and negatively. Many visible projects could bring our firm to a new level of respectability from which we could contribute more significantly to solve the housing problems.

Risk Response Plan

The next step in a risk analysis is to propose a Risk Response Plan: to decide what actions could be taken to mitigate the risks, how some risk could be
avoided, if some of them could be transferred to other actors, and finally what risk should be accepted to carry on the projects.

The plan is organized in urgent actions to carry on the on going projects, and others medium or long term, to prevent those risky situations to affect our firm again.

How to Manage the On-going Projects

To succeed in finishing on time and well the projects in progress, let us start noting the advantages we have: a strong political intention to have the houses built, flexible administrative procedures that help to do it fast, and a relatively generous budget to spend.

This is a gold opportunity to reduce the gap between planning and action. For this, rather than try to make important design statements, it would be better to propose simple, easy to build small actions. In this way, the projects could be used to show how design matters, and that is possible to provide housing for the poor and at the same time built city. And also start to build confidence in consultants as allies, not enemies of communities, governments and contractors.

We will need to fast-track the projects, and the construction already started even if the designs are not ready. Of course will be risk of mistakes and over cost, but it will be also easier to promote our involvement during the construction phase. The learning and on field experience for all the members of our team will be valuable in future projects and during the growing of our firm.

But, how manage the most important risk? First those related with long term damage of the city and the environment. Here, rejecting damaging projects it is not an option, as the contracts are already signed. But it is possible to become the conscience of the city, even in danger of losing the project. That includes forewarning damages, proposing alternative solutions and being firm even before high level officials. In some of the projects, mostly the ones that deal with relocating families, our role should be to protect their rights that are in risk of being dismissed.

The actions proposed in the last paragraph will only be possible if consultants are respected enough. For this, it is extremely important to keep a technical and objective attitude. That is, of course, important in any project, but in the present situation is indispensable. The desired attitude has to do with moderate opinions, but also with sensible and strong based design proposals and also with a detailed documentation of all the process. In that way the risk of lose credibility is mitigated as well as is the risk of being involved in the political controversy.

Other important action to minimize the frustration of communities is to keep expectations as realistic as possible, never offering more that is possible, and being very clear about the scope of the project.
The risk of losing money or being involved in corruption should be accepted as part of the “Plan Caracas” projects. We can only expect that the detail of project scope is enough to make those risks minimum.

**Future Decisions: Where to Draw the Line?**

The objective of the medium term planning is to avoid the risk related with the probable new change of housing policies next year. Related with this is the thorny problem of rejecting projects. It is impossible to be aware of how risky are some projects for the city, and not take definitive actions. But on the other hand, how to maintain a business without enough work?

Of course this “line” that cannot be crossed is movable. Its position depends on how strong a firm is, to what extent it is profit-motivated. However, it is possible to set some criteria to evaluate if a project deserves to be done.

One possible criterion is the probability a project has of be constructed. Paper projects not only are a waste of public funds, they are also dangerous because increased expectations in communities, and later, when nothing is done, it is very difficult to generate again the commitment of people.

When there are initial unacceptable parameters is easier: too small units, no space for urban services, or exotic constructive systems.

Other projects in line to be rejected are the ones with weak background, proposed only to satisfy a short-term political goal. In our country there are lots: big administrative buildings to be located inside slums, residential areas just in the middle of nothing.

Finally, there are the difficult ones, when it is hard to decide if they are good or not for the city. The upgrading projects in very frail sector, but with strong communities, the new projects in supposedly protected zones, the ones that open the door to new informal settlements.

In the end, each firm has to make its own decisions, always having in mind that the consultants’ share of responsibility is not negligible, and that if we want a bigger space and a louder voice we could be asked to give up profit. But, at the same time, being stronger would make easier to take tough decisions. That’s why being more solid is one of the main aims of the action plan proposed for our firm.

**Can We be More Influential, Raising our Voice?**

Even against some opinions expressed in the World Urban Forum III, we, designers and planners need a louder voice. Otherwise we will be giving up our responsibilities with our cities.

A louder voice needs *well informed interlocutors*, so an initial action should be to look for a way of explaining our advantages and capabilities to the general public, starting with our clients. Of course, the best way to let them know what consultants could do for them is just doing it, but it is also possible to be clearer in the proposals, and suggest services that clients maybe have not considered. Even at risk to be evident, or redundant, the
portfolio and the firm web page are also opportunities to explain the consultant’s role. There is also a lot to do at the universities, to make students realize that the role of architects and designers is broader that just making the drawings, that, as professionals, they will have responsibilities with the city and its inhabitants.

In this sense, it is important to team up with other consultants. This is the role of professional associations, that in Venezuela should be stronger, but sometimes it is also interesting to share experiences with professionals working in the same kind of projects. For example, the architects working in the upgrading of informal settlements or in social housing almost never have the opportunity to know what the others are doing. The knowledge should go further than just publishing the projects in newspapers or magazines, and consultants should encourage the evaluation of the work done, so participate in and promote professionals meetings is imperative. For sure it could sound strange in other countries, where associations function and where policies change once in a while. But in Venezuela, with our mad change of policies and actors, sharing with other consultants could be the only way to keep track of the events, avoid mistakes and evaluate the projects.

Our voices, no matter how loud they could be, are nothing without the media. And media can be powerful. Most professionals have no training in using the media, and most consultants firms never think in terms of promoting their services, most publicity is consider inelegant. As a consequence, when journalist need professional opinions or advice regarding housing, city planning or shelter policies they always ask the same two or three people that maybe are architects but probably are not the most informed about the specific issue. So, consultants need to look for opportunities to show their work and thoughts, and be prepared for disapproval and polemic.

At the end, to raise our voice means to get out from the office and participate more actively in the society. For this, consultants will surely need knowledge and training in new fields: negotiating, for example, and why not public speaking?

Perhaps in the next Forum in Nanjing, there will be a lot of drawings, plenty of new projects, and private consultants, if not the heroes, will be less evil and better able to interact with other actors. And hopefully, Venezuela will send more than just one participant. “Mision Habitat” will show its results, and none of the huts in the exhibition will show our flag.
Lund University

The City of Lund was established in the 10th century when the region of Skåne was ruled by Denmark. The 1658 Treaty of Roskilde ceded the region to Sweden. Lund University was established in 1666 and is Scandinavia’s largest institution for education and research. It has 40,000 students and 6,000 employees. Lund University cooperates extensively with other universities, colleges and research institutes around the world. It is one of 14 institutions in Sweden and Denmark that make up the regional Öresund University, which has 140,000 students.

Architecture and Built Environment

The Department’s field of research covers the entire process of planning, construction and management, from conceptualisation to demolition and reuse. Research studies include technology as well as social studies, humanities and arts. These can be studied in an interdisciplinary and multi-disciplinary way, or more in-depth studies can be carried out within one of the subject areas of the research field.

Housing Development & Management

Housing Development & Management (HDM) is a division of the Department of Architecture and Built Environment. It undertakes training and research in housing and urban development from an international perspective: planning, design, use and management, as well as the relationship between the dwelling and its surroundings from the neighbourhood to the city level. HDM’s aim is to understand and analyse how the processes which lead to good housing and sustainable urban development can be improved, especially for the poor.

HDM conducts advanced international training for planners, architects, engineers and other professionals, which is sponsored by the Swedish International Development Cooperation Agency (Sida). HDM staff conduct research and studies in the following main areas:

- Housing improvement and local development;
- Gender aspects in planning and design of housing and the built environment;
- Housing segregation;
- Risk management for settlement development in regions prone to ‘natural’ disasters;
- Building design with consideration for climate, comfort and energy consumption;
- User participation in housing processes; and
- Environmentally aware and cost-efficient construction.

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This report is a compilation of papers written by architects, engineers and planners from Africa, Asia and Latin America, presenting projects for change and improvements within the frame of an international training programme offered by Housing Development and Management (HDM) Lund University, carried out in conjunction with the third session of the World Urban Forum (WUF3) in the year 2007. Half of the world’s population is expected to live in urban areas. Urban areas are acknowledged as centres of economic, social and cultural development, but at the same time urbanization in much of the world leads to a precarious existence for the poor. Many urban poor live in slums with unacceptable shelter conditions, insufficient water and sanitation, poor social infrastructure and hazardous environments.

The papers included in this report take the built environment as a starting point for discussions and proposals of how decent shelter and sustainable urban development can contribute to poverty alleviation, as a means to improve living conditions for the urban poor. The authors of the papers are involved in housing as government officials, in municipalities, in private practice and consultancy, at universities and in non-governmental organisations. What they have in common is their strong commitment to address the living conditions of the urban poor, be it related to urban planning, access to urban land, improvements of sanitation or the need for new policies.