

Eritrea:

Housing/Urban Development Policy Report

**Ministry of Public Works/Department of Urban Development, Eritrea
United Nations Human Settlements Programme [UN-HABITAT]
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Disclaimer: The views and opinions in this report are those of the authors
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Abbreviations

BC	Budget Committee
BOE	Bank of Eritrea
CBE	Commercial Bank of Eritrea
DUD	Department of Urban Development
EAE	Eritrean Agency for the Environment
EDHS	Eritrea Health and Demographic Survey
EDIB	Eritrean Development and Investment Bank
EEA	Eritrean Environment Act
EPLF	Eritrean People's Liberation Front
ERN	Eritrean Nakfa
GDP	Gross Domestic Product
HCBE	Housing and Commerce Bank of Eritrea
HLGF	Housing Loan Guarantee Fund
IDP	Internally Displaced Person
IMF	International Monetary Fund
KFW	Kreditanstalt für Wiederaufbau
MDG	Millennium Development Goal
MIF	Municipal Infrastructure Fund
MoE	Ministry of Education
MoF	Ministry of Finance
MoLG	Ministry of Local Government
MoLHW	Ministry of Labour and Human Welfare
MoLWE	Ministry of Land, Water and Environment
MoND	Ministry of National Development
MoPW	Ministry of Public Works
MoTI	Ministry of Trade and Industry
NEMP-E	National Environmental Management Plan for Eritrea
NGO	Non Governmental Organisation
NICE	National Insurance Corporation of Eritrea
O&M	Operations and maintenance
SMCP	Savings and Micro-Credit Programme
UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities
UN-HABITAT	United Nations Human Settlement Programme
UNICEF	United Nations Children's Fund
USD	United States Dollar

USD 1 = ERN 15

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Executive Summary

Eritrea has a population of approximately 3.4 million¹ people, a Human Development Index of 0.439 and a life expectancy at birth of 52.7 years². Its urban population, estimated at 850,000 people, is projected to reach 1.14 million by 2015.³ Around a half of urban residents, live in Asmara, the capital city and principal commercial and industrial centre. The rural population, currently estimated at 2.55 million, will grow to 3.43 million by the year 2010⁴.

After independence in 1991, development efforts focused on reviving the war-ravaged economy by reconstructing essential services and infrastructure, and providing social services. But a coherent housing and urban development, policy has been lacking until now, making it difficult for government to address shelter needs countrywide.

Eritrea faces a serious housing and urban development challenge, in common with many other countries in Sub-Saharan Africa. Although the level of urbanization is low by global standards, as only around 25 percent of the national population live in towns⁵, access to housing and urban infrastructure services is severely constrained by poverty and an inadequate institutional capacity to deliver the inputs critical to housing and urban development: land, urban planning services, infrastructure, finance, skilled construction labour, and building materials. At the same time, there is a pressing need to resettle the households displaced by the recent border conflict with Ethiopia as well as to accommodate expellees and returnees from abroad.

On average, during the next ten years, over 5,000 new dwelling units a year will be required in Asmara alone in sharp contrast to the estimated annual production of less than 1,500 dwellings.⁶ These figures point to a substantial and widening urban housing deficit, strongly indicating that an increasing population is being accommodated within slum areas. To achieve Target 11 of the Millennium Development Goals, which calls for a significant improvement in the lives of slum dwellers by the year 2020, the country will need to deliver affordable housing in greater numbers through new construction and upgrading of the existing informal settlements. The most acute concern is to house low-income households since the majority of urban households fall below the poverty line, and

¹ Estimate by the study team based on local sources.

² UNDP (2004) Human Development Report.

³ Estimate by the study team based on local sources.

⁴ Estimate by the study team based on local sources.

⁵ Estimate by the study team based on local sources.

⁶ This figure is based on the number of building permits issued per year. Although it gives only a rough estimate, the number of building permits nonetheless provides a useful indicator of formal housing production. Since not everyone who obtains a building permit actually builds, the number of building permits overstates the level of production.

live in over-crowded housing with limited access to affordable water and safe sanitation⁷. As women-headed households are disproportionately represented among the poor, they constitute an important target group for housing and urban development policy. In the rural areas, where the majority of poor households live, livelihoods and economic opportunities will need to be improved as a means towards raising the standards of housing and infrastructure services.

This executive summary pulls together the key housing and urban development challenges facing the country with a focus on several themes critical to policy design: governance and institutions; land for housing; urban infrastructure finance; housing finance; rental housing; housing construction industry; gender and housing; the environment; and rural housing. For each of these themes the main issues are drawn out and policy recommendations made. In the main report, these themes are elaborated upon in order to provide a better understanding of the underlying issues as well as a full justification for the policies recommended.

Governance and Institutions

The central government has devolved some of its powers to six regional governments, towns and villages. Towns are classified into three categories⁸: towns independently categorized as sub-regions; towns that include villages in their outskirts; and towns that serve as the centres of their sub-region. Asmara is a special case, as it is the capital city, and together with its satellite villages constitutes the Zoba Maekel.

On the national and local levels, a number of institutions and programmes carry out a range of functions related to land, urban planning and housing. The main national institutions include the Department of Urban Development of the Ministry of Public Works, the Ministry of Lands, Water and the Environment, the Housing Commission, and the various municipalities. Within the housing sector, the *Warsay Yekealo*⁹ campaign plays an important role in delivering middle- and high-income housing.

Whilst a framework for decentralization exists two indicators point to limited autonomy at the local level: the central government appoints the executives of local governments; and local governments depend heavily on the central government for programme design and implementation. Moreover, although local governments have taxation and spending powers, the revenues raised are not adequate making it necessary for the central government to finance the major urban infrastructure works. Fiscal autonomy is more pronounced in urban areas

⁷ The 2004 Interim Poverty Reduction Strategy Paper estimates that about 70 percent of the urban population fall below the poverty line.

⁸ This categorization is being revised.

⁹ This campaign, funded by Government, mobilizes the youth for development projects in a diverse range of sectors, including housing and infrastructure.

(than in the villages) as towns have a more substantial revenue base. Still, towns are financially weak largely as a result of their limited capacity to collect revenue;¹⁰ and the lack of a system of central-local grants denies the central government the use of important financial levers¹¹ to influence local government behaviour and to ensure financial equity among towns.

Other issues are: (a) the lack of participatory planning within towns, thus diluting the involvement of urban communities in urban development; and (b) severe capacity limitations within both central and local government departments.

Recommendations

To improve urban governance in the country, it is important to:

- Build the capacity of municipal authorities to improve their capability for urban management, participatory planning, and financial management;
- Strengthen the Department of Urban Development so that it can deliver urban planning services, monitor housing policy implementation and maintain an updated data-base on housing;
- Build the capacity of the Department of Land to make it more effective in the delivery of land;
- Introduce a system of central government grants to local government. This would enable government to: (a) use financial levers to influence local government behaviour; and (b) improve financial equity among towns.

Land for Housing

Proclamation No. 58/1994 and Legal Notice No. 31 /1997 govern the delivery of land for housing. This legislation vested the ownership of land exclusively in government and prohibited the sale, transfer or mortgaging of land whilst allowing government to allocate land through leaseholds or similar rights. The two legal instruments gave every Eritrean the right to land for housing in urban areas and ancestral villages, subject to meeting certain allocation criteria.

There are two distinct forms of land tenure for housing, *Tessa* and lease land. *Tessa* land (land for housing) refers to village land that is allotted to an Eritrean whose origin is in the village. Lease land is allocated in urban areas and houses built on it may be sold, donated, inherited, transferred or mortgaged.

Owing to the inability of the land delivery system to respond with equal speed to the need for housing land, a priority system has been introduced which takes into

¹⁰ No specific investigation of this aspect has been conducted. But severe capacity constraints in all areas of municipal operations were reported during fieldwork.

¹¹ For instance, as happens in some countries, grants could be made conditional upon a local government improving its financial performance as well as introducing participatory planning.

account the needs of specific social groups. Since the enactment of the current land legislation, Tessa and lease plots for housing have been distributed around the country providing an important incentive to households to build their houses. The number of Tessa plots distributed by the end of 2004 reached 24,283 plots and lease plots, 20,592.

The main land issues centre on land use standards and affordability, land delivery and location, and the use of land as collateral.

Land use standards: Existing land use standards are high¹² and could be reduced to increase the number of plots delivered, reduce the costs of development per plot (as these fall with plot size), and thus improve affordability by low-income households.

Land delivery and location: The demand for housing land exceeds supply, especially in Asmara. The failure of land delivery institutions to meet demand has spurred the growth of unplanned settlements and/or raised levels of overcrowding.

The location of urban housing land has important cost implications. Where land is located far from the city centre, typically the case for Tessa land in Asmara, huge capital investments in infrastructure are required. In contrast, servicing land that is next to the existing service networks is much more cost-effective. For households, locations far from employment opportunities imply high commuting costs.

Land as Collateral: Undeveloped land cannot be used as collateral and this denies landholders the opportunity to borrow for house construction. Indeed, for Tessa land, even land with immovable property on it cannot be used as collateral.

Recommendations

Plot sizes and affordability

- In the future Tessa plot sizes should be reduced to at least 250 square metres in order to cut down on development costs and optimize the use of land;
- Present allottees should be allowed to subdivide and sublease their plots to enhance their incomes and improve their housing.

Land delivery and location

- Legal tenure should be provided to low-income urban dwellers through tenure “regularization” and slum upgrading programmes with minimum dislocation of residents;
- Land delivery should be improved through:
 - Speeding up the preparation of urban development plans;

¹² For example, Tessa plots tend to be about 500 square metres.

- Building the capacity of departments responsible for planning and land delivery so as to quicken the allocation of land for housing;
- Prioritizing the development of vacant “infill” land in urban areas and discouraging the creation of an urban sprawl by locating housing and related urban developments in areas next to existing infrastructure networks.

Land for housing as collateral

- Legislation should be amended to allow the use of land as collateral. In addition, holders of Tessa land should be allowed to exercise their legal right to use developed Tessa plots as collateral.

Urban Infrastructure Finance

Government finances the major urban infrastructure works in the country, usually through external grants and loans. Municipalities focus on the provision of infrastructure services to residential and other areas, and on meeting the costs of operations and maintenance of infrastructure¹³.

Asmara, for which data are readily available, provides useful insights into some of the financial issues surrounding the financing of urban infrastructure, particularly water and sanitation. Water operations in the city are managed by the Department of Water, which is semi-autonomous. Departmental revenues, ring-fenced from the rest of the city budget to ensure that they are not used for purposes unrelated to water, generally meet the more pressing costs of operations and maintenance. Lower income households usually buy their water from private trucks and pay far much more for their water (ERN 20 per m³)¹⁴ than consumers with piped connections (ERN 3-5 per m³).

The Department of Water is also responsible for the disposal of liquid waste but only a small area of the town is served by a sewerage system, part of which is quite old and in need of rehabilitation. Septic tanks are common in the more affluent parts of the city that have no sewer connection whilst poor neighbourhoods rely on pit latrines (private or shared), and on public toilets. Some households do not have access to any form of safe sanitation at all and dispose of their excreta on open ground.

The financial position of Asmara municipality has improved in recent years because of a more effective system of revenue collection, made possible by a

¹³ In Asmara, infrastructure services are also financed through the sale of land in foreign currency to where land is sold

¹⁴ The official price is ERN 4 per barrel of 200 litres but private truckers do charge “non-official” prices of ERN 6-7 per barrel, equivalent to ERN 30-35 per m³

recently introduced system of property registration and the linking of service provision to tax payment. The municipality's surplus on its current account has grown from ERN 123.7 million in 2003 to ERN 220.3 million in 2004, and is projected to grow to ERN 223.5 million in 2005. The surplus demonstrates that the municipality is able to pay its way and that it has the potential to borrow for capital projects.

The most critical issues, based on the Asmara experience, but applicable to other towns as well, are:

- Municipalities have limited access to capital funds, because of their weak financial position, and thus rely on the central government to finance their major infrastructure projects;
- Pricing of infrastructure services, in particular water, tends to be regressive; and,
- The limited information available on cost recovery suggests that charges for infrastructure services typically meet only the main costs of operations and maintenance.

Recommendations

- A Municipal Fund for Infrastructure (MFI) should be established to provide long-term loans to local authorities for purposes of financing urban infrastructure;
- Prices for water and sanitation should be reformed to make them more equitable;
- A more coherent approach to cost recovery should be introduced.

Housing Finance

Eritrea has a small formal financial sector consisting of the Bank of Eritrea (central bank), the Housing and Commerce Bank of Eritrea (HCBE), the Commercial Bank of Eritrea, and several other specialized financial institutions. There are also a number of micro-finance programmes/institutions including the Savings and Micro-Credit Programme (SMCP) and Acord.

The Bank of Eritrea (BOE) through "Proclamation 94/1977 regulates the financial sector: Financial Institutions Proclamation". Interest rates are set administratively by BOE and the annual rate on savings deposits is presently 4 percent while the lending rate ranges from eight to twelve percent. BOE presently does not regulate micro-finance institutions, as the scale of their operations is still relatively low.

Conventional housing finance is provided primarily by HCBE, which offers 25-year mortgage loans at annual interest rates between 8.5 and 9.5 percent. Asmara accounts for a substantial share of both the outstanding loan balances (50.2

percent) and the number of borrowers (54 percent). The bulk of loans go to middle and high-income borrowers.

The major providers of non-conventional finance, primarily for income generating projects, are SMCP and Acord. SMCP was established in 1996 with financial support from the World Bank and has established a countrywide network of village banks through which low-income borrowers obtain micro-loans for business. Acord started its operations in 1994 and focuses on supporting rural grassroots organizations, although the extension of activities into urban Asmara is envisaged. Employee-based savings and credit associations, housing cooperatives, and informal credit and savings groups (*Ukubs*) exist but these have not been important channels of housing finance. By far the largest proportion of housing is self-built, with funding coming primarily from personal savings.

A range of problems, which have constrained its further development and affected negatively on housing finance, both conventional and non-conventional, has beset the financial sector:

- The high rate of inflation (21 percent), in a setting with low nominal interest rates on savings deposits (4 percent) has meant that the real rate of interest is substantially negative (-17 percent), potentially suppressing savings by households;
- Conventional housing finance, as in many developing countries, has had little impact on the housing needs of low-income households;
- Developed Tessa land cannot be pledged as collateral, ruling out its use to secure mortgage loans; and,
- Whilst micro-credit for enterprises has been successful, its focus has been income-generating enterprises, primarily in the rural areas, with practically no support for house construction or purchase. This is consistent with micro-finance practice around the world but the potential exists to use micro-finance channels to generate small construction loans.

Recommendations

- A Housing Loan Guarantee Fund should be established primarily to support the expansion of housing loans to low-income groups;
- Technical assistance should be provided to the two commercial banks and micro-finance institutions to enable them originate and manage loans for low-income housing;
- There should be a shift towards a market-driven financial sector, as soon as conditions allow, to foster competition and innovation.

Rental Housing

Both formal and informal rental housing offer viable housing solutions for many families. The formal rental housing stock consists of both private and public rental dwellings, with private rental dwellings comprising by far the larger proportion of this stock. In Asmara, there are nearly 40,000 private and 10,000 public tenancies, strongly indicating that over a half of households in the city are tenants. In the rest of the country, this proportion is lower, ranging from around 17 percent in small towns and 22 percent in the medium-sized towns¹⁵. Within unplanned settlements in Asmara, the proportion of tenants is estimated at 76 percent¹⁶. Rent control for private dwellings was introduced in Asmara for a temporary period through Legal Notice No. 94/2004 “Regulations to Control Private Residential House Rent in Zoba Maekel”.

There are a number of issues facing the rental-housing sector:

- There is a shortage of rental housing affordable by low-income groups, largely as a result of the poor delivery of housing inputs: land, building materials, finance and labour;
- The public rental housing stock requires substantial resources for its management and maintenance, and is poorly maintained;
- Rent control, and the scarcity of housing inputs, constrains investments in housing.

Recommendations

Private rental housing

- The rental market should be liberalized as soon as possible to encourage private investors to enter the market;
- The production of rental housing should be facilitated by providing finance for households who wish to expand their units for rental purposes;
- The delivery of housing production inputs should be expanded, especially land, building materials, finance and labour.

Public rental housing

- Government should consider divesting its public rental housing stock to the private sector with priority given to sitting tenants. A technical and socio-economic study should be carried out to determine how best to implement divestiture without harming the existing public tenants many of whom are poor.

¹⁵ 2005 socio-economic survey

¹⁶ Ibid.

Housing Construction Industry

The large import content of construction materials¹⁷, and the scarcity and high cost of labour, contribute to the deteriorating housing conditions and escalation of housing costs. In particular, the importation of building materials is a drain on the badly needed foreign exchange.

The main construction materials, including cement and reinforcement steel, are in very short supply due to import limitations. Government is the sole importer, and since purchases of materials at government distribution points are in foreign currency, in-country nationals find it extremely difficult to buy materials. These supply constraints, and the inability to commercialize the production of alternative local materials, such as stabilized earth blocks, have resulted in sharply rising prices in recent years. In the rural areas, there is an abundance of local materials for traditional construction but the over-exploitation of wood for building has had adverse environmental consequences.

The inadequate supply of building labour, especially in the skilled and semi-skilled categories, constrains housing delivery and raises construction costs. Labour supply has been undermined by the limited capacity of the existing training facilities. Another important concern is the lack of statistics on construction labour, making it difficult to identify areas of severe shortages and to formulate labour policies.

Recommendations

Building materials

- The country's dependence on imported construction materials should be reduced by promoting the production and utilization of local materials;
- A new cement factory should be established to meet the high and growing demand for cement;
- The production of local building materials industries should be supported through tax incentives;
- Restrictions on the importation of building materials should be removed in order to augment supply and reduce prices.

Labour

- The capacity of training facilities should be strengthened;
- Labour should be trained to support the marketing and commercialization of local building materials;

¹⁷ It is estimated that, on average, the value of construction materials imports is 70 to 80 percent of total building materials costs.

- A labour statistics unit should be established at the Ministry of Labour and Human Welfare to collect data and monitor the construction labour market.

Gender and Housing

Female-headed households have more limited access to adequate housing and urban infrastructure services than their male counterparts do. Without specific assistance to this group, housing projects run the risk of leaving out an important segment of Eritrean society. Many gender-related issues can be identified:

- Female-headed households are relatively *over-represented* in (low income) urban areas, meaning that relatively more of them, than their male counterparts, live in unfavourable housing conditions;
- Female-headed households are in general poorer and have less stable income sources;
- Female-headed households often have children to take care of, limiting the time they can allocate to income-generating activities;
- In the Zoba Maekel, women-headed households have been allocated less than a third of the plots distributed although they constitute at least 40 percent of households. This suggests that women have more limited access to land;
- There exists some reluctance in the villages to abide by the 1994 Land Proclamation, which provides for equal access to land for both men and women.

Recommendations

To address gender issues it is important to:

- Start savings groups and open micro credit schemes for women to improve their financial position;
- Support income generating activities for female household heads;
- Provide security of tenure for low-income urban households including women heads of household;
- Ensure access to land for low income *urban* households, with special emphasis on female-headed households;
- Promote equal participation of women in the labour market, and support ‘equal pay for equal work’.

The Environment

Eritrea faces a number of environmental concerns including:

- The deplorable condition of the urban environment in the unplanned settlements which lack safe drinking water and adequate sanitation facilities;
- Progressive environmental degradation resulting from excessive use of fuel wood and tree cutting for construction purposes. This contributes to soil erosion and the subsequent decline of the water table;
- Increasing levels of urban air and water pollution and the inadequate management of solid waste disposal;
- Inadequate institutional capacity to enforce environmental protection measures, and the lack of a formal legal framework for environmental protection and management;
- Air pollution in both Asmara and Massawa where most of the polluting factories are located;
- Extreme cases of water pollution in Asmara and Keren;
- Excessive and uncontrolled water pumping along the coastal urban areas, resulting in the intrusion of saline seawater into coastal aquifers.

Recommendations

- There is a need to improve the housing and living conditions of low-income urban dwellers through upgrading of urban infrastructure services and granting security of tenure;
- The enactment of an environmental regulatory framework should be accelerated to assure the protection and management of water and forest resources, promote proper solid waste management, and ensure that environmental impact assessments are carried out where appropriate;
- Alternative sources of energy in rural areas should be promoted to replace wood as a building material and as a fuel source for building materials production;
- Alternative building materials should be commercialized to reduce dependence on wood for construction;
- Women should be trained as educators and agents for improving the natural environment given their important role as managers of environmental resources;
- The capacity to monitor and enforce environmental regulations should be strengthened;
- A statistical unit should be created at the Department of Environment to collect and disseminate environmental information and assist in monitoring environmental management.

Rural Housing

The rural sector accommodates the majority of the urban poor, with 65 percent of the population below the poverty line¹⁸. In the small towns and villages, the median income is ERN 1,700 and ERN 1,183, respectively¹⁹. Close to 50 percent of the population in small towns and over 30 percent of the village population, consume water supplied by trucks, emphasizing the need for sustainable access to improved water sources. Over 80 percent of the population require access to improved sanitation.

The inadequate delivery of services, infrastructure and improved governance has increased rural-urban migration, leaving rural areas with fewer people of working age and subsequently with a lower potential for development. At the same time, rural-urban migration has put pressure on the living conditions in urban areas.

Compared with the severe housing shortages in most urban areas, especially for low income groups, the housing situation in small towns and villages does not seem to be very critical. However, much needs be done in these settlements to enable the rural population to achieve minimum standards of services, infrastructure and housing as well as to promote local governance, gender development and employment creation.

Recommendations

- The small town and village councils should have adequate authority and resources to improve livelihoods and uplift the standards of housing and infrastructure services;
- Capacity building and training is important for small towns and villages, especially to empower women and mainstream gender issues;
- The central government should promote, support and empower councils in small towns and villages to increase their capacity for project identification, planning and implementation;
- It is important to develop the rural transport and communications network to facilitate the flow of goods and information among villages, towns and urban centres;
- Secondary and tertiary economic activities should be promoted so as to improve rural productivity, employment and broaden the rural economic base beyond agricultural production;
- It is important to promote the production of improved local building materials without impacting negatively on the environment;

¹⁸ 2004 Interim Poverty Reduction strategy Paper

¹⁹ 2005 socio-economic survey

- Small towns and villages should develop a statistical database on the housing and infrastructure conditions in their respective areas, with special emphasis on vulnerable groups

Housing/Urban Development Policy Report

Introduction

Adequate housing is one of life's necessities, along with food and clothing, for it provides a safe and healthy living environment for the citizens of a country. Well-planned affordable housing, and infrastructure of acceptable standards, affords dignity, security, and privacy to the household and the community as a whole, and thus contributes to a nation's social and political stability. In economic terms housing is both an investment and consumption good, constituting a significant proportion of a country's gross fixed capital formation, generating employment for a large part of the work force, and providing a flow of services to its occupiers. Moreover, housing has strong linkages to other sectors of the economy. In countries where the building industry maximizes the use of local materials, house construction has a substantial multiplier effect, influencing positively on the rest of the economy. Improved housing conditions also raise the productivity of the labour force. During the life of the typical household, furthermore, a house constitutes the single largest investment.

Given the substantial investments needed for housing and urban development, it is critical for a country to accord priority attention to housing and infrastructure services. Housing and urban development should be guided within a clear policy framework to ensure that the housing needs of all are met and that there is adequate access to infrastructure services. Such a policy framework should also ensure that resource use is cost-effective, that resource inputs including land, building materials, finance and labour are available when needed and are affordable, and that stakeholder interests are coordinated and reconciled. Above all, policy must address itself to the needs of the poor, especially those who live within unplanned settlements.

Housing and urban development policy serves a number of critical functions: it enables shelter priorities to be identified at both the national and local levels; it provides an important vehicle for confronting poverty; it ensures that housing and urban development objectives and strategies are consistent with the country's wider socio-economic goals and resource endowments; and it acts as a medium for forging partnerships among stakeholders as well as assigning responsibilities among them.

In Eritrea, political statements, existing legislation and ongoing housing programmes show that there is a strong political commitment to the delivery of housing and infrastructure services. For example, the Land Proclamation of 1994 provides a solid and valuable framework for land administration in addition to setting forth important incentives for households to construct their housing.

This Housing/Urban Development Policy Report is the result of seven months of intensive research and analysis. One principal outcome of this process is a Draft

Housing/Urban Development Policy for Eritrea and a Housing Policy Implementation Plan, issued as a separate document. The Implementation Plan provides the policy goals and objectives, the implementation period, the implementation actors, and broad estimates of resource needs where these can roughly be determined. The scope of this policy project was limited to the formulation of a policy for housing and the related urban development issues, with emphasis on the infrastructure services that accompany well-planned housing.

Besides investigating aspects, central to housing policy, such as land, housing finance, construction and building materials, the report examines urban development with a focus on a range of topics: legal and regulatory issues; institutional capacity building and coordination; infill development *vis a vis* urban sprawl; urban development and the environment; governance and fiscal decentralization; urban infrastructure finance, and gender equity. The scope of the policy project did not include the formulation of an urban development strategy for the country as a whole.

A socio-economic household survey was conducted in representative towns and villages countrywide in order to generate the empirical data needed to inform policy formulation. The policy proposals in this report were discussed at a multi-stakeholder workshop held from July 7-8, 2005. The extensive discussions at that forum, mostly by specialized working groups, enabled consensus to emerge on the policy recommendations in this document. Although the policy proposals have been formulated at a time when the country is in a state of transition, the accompanying Implementation Plan has been crafted to take account of a longer-term perspective.

The Housing/Urban Development Policy project has been a joint effort among the Eritrean Ministry of Public Works/Department of Urban Development, the United Nations Development Programme (UNDP) and the United Nations Human Settlement Programme (UN-HABITAT). Once the Government of the State of Eritrea formally approves the policy, the recommendations should serve as the official policy framework for all agencies and institutions involved in housing and urban development in the country.

The Housing/Urban Development Policy Report is divided into four parts. The first part, in two chapters, describes the urban context and the existing national housing and urbanization situation in Eritrea. It draws on data from the household survey carried out in the initial stages of the policy study. This part of the report also describes gender and housing, the environmental situation and rural housing. Part two of the report, divided into five chapters, looks at governance and institutions, land, housing and urban infrastructure finance, and the construction industry. Part 3 is divided into nine chapters and identifies the key issues and constraints that need to be addressed to accelerate the delivery of housing and

infrastructure services. Annexes are attached with details on housing needs and affordability analysis.

Part 1:
Housing/Urban Development:
The Existing Situation

Chapter 1

Urban Context

Urbanization in Eritrea

- 1.1 Eritrean urbanization has its modern roots in the colonial period and most cities were founded as centres to cater to the needs of the colonial interests in the metropolis. Urban development has gone through a number of stages commensurate with the political and economic development of the country.
- 1.2 The Italian colonial period, extending from 1890 and 1941, witnessed the establishment of the main Eritrean cities and towns. During this period, town plans were designed for fourteen cities and towns including Asmara. By the year 1941, when the Italians left, the city of Asmara had basic services for sewage disposal, water supply, and health care systems and public housing²⁰.
- 1.3 Between 1941 and 1952, Eritrea came under the British Administration, a period characterized by discontinuation of the urban development process started during the Italian era. This period coincided with the onset of an international and regional economic recession that left its negative impact on urban development in the country.
- 1.4 In the 1960s, Eritrea was incorporated into and later annexed to Ethiopia, a period characterized by economic decline and political domination that led to a war of liberation that lasted for thirty years from 1961 to 1991. The three decades of war had a devastating impact on the economy, mismanagement of resources including land, sprawling urban development and springing up of shantytowns and deterioration of urban services.
- 1.5 The year 1991, signalled the beginning of emergency relief and economic reconstruction efforts throughout the country. Due to years of neglect and war, Eritrean cities and towns lacked adequate infrastructure and services. The situation was aggravated by inadequate institutional capacity, at both central and municipal levels, to carry out national and municipal development programmes.
- 1.6 Since 1991 and especially during the transitional period after the war (1991-1993), the following urban planning initiatives have been implemented:
 - Planning and reconstruction programmes covering both urban and rural areas;

²⁰ Tzeggai, Gabriel, Urban Planning and Development in Eritrea, A paper presented at the Methodological Workshop on Urban Planning and Management for Eastern and Southern Africa, Dar-Es-Salam, October 12-21, 1993

- A Department of Town Planning and Development was set up in 1992;
- 1.7 In spite of manpower and financial constraints, the Department was able to undertake preliminary surveys of major cities and towns, and prepare topographic maps and town planning proposals for selected sites.
 - 1.8 As indicated earlier the initial focus was on immediate relief and emergency programmes. These included identifying sites to settle returning refugees and attract investors to create employment opportunities for the returnees and rehabilitate infrastructure. However, the planning and development efforts were hindered by a shortage of skilled manpower, funds and a reliable database.
 - 1.9 While the country was busy repairing its economic and technical infrastructure, it had at the same time to look ahead and prepare new sustainable development policies and plans. Planners had to balance between the immediate objectives of providing shelter and employment for an ever-increasing urban population and the long-term urban development plans and programmes.
 - 1.10 The border war with Ethiopia, between 1998 and 2000, dealt a severe blow to the on-going recovery and growth efforts that had been underway since 1993. Nearly 450,000 Eritreans were displaced from war-affected areas and over 78,000 were expelled from Ethiopia. Most of these people settled in urban areas particularly Asmara. This migration of extra households into urban areas worsened an already overcrowded housing situation. Initial post-conflict assessments of border communities report that over 100,000 homes were destroyed, seriously damaged, or partially damaged²¹. Along with the accumulated shortages of affordable housing in the country, Eritrean housing problems are currently compounded by the additional pressure to address the return of the internally displaced persons to their places of origin as well as to house expellees and returnees from abroad.
 - 1.11 Whilst cities such as Asmara and Massawa started developing before the 14th century, the Italians influenced much of the urban design in the last century. In 1972-1974, a new master plan for Asmara was made in the light of ongoing developments. At the time, the size of Asmara was defined to be 114 square kilometres. During the Italian period 1935-1941, the population of Asmara increased from 18,500 (3,500 Europeans and 15,000 nationals) to 175,000 (55,000 Europeans and 120,000 nationals) by 1941²². Table 1.1 shows the demographic growth of Asmara between the years 1982 and 1993. During this period, the population of the city grew from 319,471 to 420,000. Presently the population of Asmara is estimated at 450,000 inhabitants²³.

²¹ CHF, Survey on Affordable Housing for IDPs, Background, October 2004

²² Manderstam Consulting Services (1998) "Building Materials" Draft Final Report, Volume 3, Appendix E-1

²³ Ibid.

Table 1.1 Historical population growth of Asmara

Year	Population
1982	319,471
1983	320,516
1984	325,169
1985	325,766
1986	326,062
1987	329,140
1988	329,140
1989	335,082
1990	346,782
1991	350,956
1992	382,196
1993	420,000

Source: Manderstam Consulting Services (1998)

Other Eritrean cities and towns have not grown proportionately to Asmara. Table 1.2 shows the present population of the largest Eritrean cities and towns.

Table 1.2 Population of the main Eritrean towns

City/Town	Population
Asmara	450,000
Keren	81,195
Afabet	45,279
Massawa	41,306
Dekemhare	38,420
Mendefera	37,576
Tesseney	33,755
Adi Keyih	27,663
Barentu	25,418
Assab	24,637
Ghinda	24,234
Senafe	23,389

Source: MOPW-DUD and Zoba administrations

- 1.12 The primacy of Asmara is obvious. The second largest town's population is only 18 percent of Asmara's indicating a disproportionate share of the urban population. Balanced development planning, according to the rank-size planning model, requires a systematic relationship between the rank and size of cities and towns. In other words, the population size of the second largest city should be roughly half of the population size of the first city and the third half of the second and so on and so forth as one goes down the hierarchy of cities.
- 1.13 In Eritrea, the distribution of the population does not match the rank-size model (except in the case of Keren and Afabet) indicating an imbalance in the development opportunities among cities and towns thus are explaining the disproportionate size of Asmara's population.

Relative distribution of the urban population

- 1.14 Next to Asmara, there are 11 medium sized towns with population sizes between 20,000 and 100,000 inhabitants (Table 1.2). These towns represent the major urban²⁴ centres in the country.
- 1.15 Table 1.3 gives a tentative estimation of the proportion of inhabitants in different settlement types, showing that about 850,000 people live in an urban setting. This is around 25 percent of the population in the country.
- 1.16 It is estimated that of the population in urban areas, 21.1 percent (or about 180,000 people) live in new development areas, 42.3 percent (or about 360,000 people) in popular planned inner city neighbourhoods, and more than one third (36.6 percent, or about 310,000 people) in unplanned housing areas.

Table 1.3: Distribution of population by settlement category in Eritrea: 2005²⁵

Settlement category	Population size	#	Estimated population per category	% of total	Housing fabrics in category	% of fabrics in category	Estimated number of inhabitants in fabric
URBAN							
Capital	450,000	1	450,000	13.2	Developer housing	1	4,500
					Established residential	6	27,000
					Mixed residential	15	67,500
					Popular planned	55	247,500
					Unplanned	23	103,500
					Total	100	450,000
Medium sized towns	20,000 – 100,000	11	400,000	11.8	New developments	20	80,000
					Popular planned/core city	28	112,000
					Unplanned	52	208,000
					Total	100	400,000
Sub total urban			850,000	25.0			850,000
RURAL							
Small towns	8,000 – 20,000	10	125,000	3.7			125,000
Rural population centres	2,000 – 8,000	24	110,000	3.2			110,000
Villages	< 2,000	-	2,315,000	68.1			2,315,000
Sub total rural			2,550,000	75.0			2,550,000
Total			3,400,000	100.0			3,400,000

Source: Study team, based on local sources

²⁴ “Urban” is characterized by a number of features: a basic level of urban infrastructure such as hospitals, schools, markets; and a concentration of urban services such as major administrative offices, banks, post offices, hotels, and so on. The cut-off point between ‘urban’ and ‘rural’ settlements is tentatively taken to be 20,000 people.

²⁵ Based on population data from the MOPW and the Zoba administrations. The 3.4 million estimate for the total population of Eritrea is based on a 2001 estimate by the MOLG 2001, projected to the present. Percentages of housing fabrics in Asmara are derived from the 2004-2005 Asmara Infrastructure Development Study. The percentages used for the medium sized towns have been estimated by the study team for this study using maps, field investigation and the 2005 Survey data.

Chapter 2

Existing Housing and Urban Situation

2.1 This chapter describes the existing housing and urban situation in Eritrea, with a focus on urban housing, gender and housing, the environment, and rural housing. The purpose is to set out, using statistical information obtained from the 2005 household survey conducted for this report, a reasonably detailed picture of the existing situation and thus provide the backdrop against which the subsequent analysis of issues (Part 3) is conducted and recommendations proposed.

Urban Housing

2.2 This section describes the housing situation of urban households, illustrating the housing conditions of households in primary cities and secondary towns.²⁶ The housing conditions in smaller settlements and villages are discussed in more detail in the section on rural housing but some aspects are examined here for purposes of making broad comparisons across settlement types.

Income

2.3 Income levels vary by settlement type, with the largest proportion of high-income households in primary cities, and the largest proportion of low-income households in villages. In the primary cities,²⁷ 27.1 percent of the surveyed households fall into the lowest income group. In secondary towns,²⁸ this proportion is 40.4 percent, rising to 52.8 percent in the villages.²⁹ The lowest income group has an income of about USD 0.5 per person per day.

Table 2.1: Household income groups (in ERN)

Settlements	≤1250		1251 - 2500		2501-3750		> 3750		Total	
	#	%	#	%	#	%	#	%	#	%
Primary cities	88	27.1	116	35.7	57	17.5	64	19.7	325	100.0
Secondary towns	149	40.4	153	41.5	37	10.0	30	8.1	369	100.0
Villages	56	52.8	37	34.9	6	5.7	7	6.6	106	100.0
Total	293	36.6	306	38.3	100	12.5	101	12.6	800	100.0

Source: March 2005 Household Survey

²⁶ The section draws mainly on data from the 2005 Household Survey, with a sample of 800 households countrywide.

²⁷ Asmara, Keren, Mendefera, Barentu, Assab, Massawa

²⁸ The towns in the survey were Serejeka, Aditeklezan, Dubarwa, Haykota, Thio, and Ghinda

²⁹ The villages surveyed were Tsaeda Christian, Eden, Terra-Imni, Mogolo, and Gahtelay

Household Expenditures

2.4 Table 2.2 shows the type of expenditure by settlement. About 26.3 percent of household expenditures in primary cities go to housing/land and related expenditures including electricity, sewage, sanitation and water. This percentage drops to 13.1 percent in secondary cities. For all households, the highest percentage of expenditure goes to food, ranging from 44.0 percent in primary cities to 55.7 percent in secondary towns to 54.6 percent in villages.

Table 2.2: Average household expenditures by type of settlement (ERN)³⁰

Type of expenditure	Primary cities			Secondary towns			Villages			Total		
	Average monthly Expenditure (ERN)	As % of total expenditure	As % of total income	Average monthly Expenditure (ERN)	As % of total expenditure	As % of total income	Average monthly Expenditure (ERN)	As % of total expenditure	As % of total income	Average monthly Expenditure (ERN)	As % of total expenditure	As % of total income
School	128	5.4	4.7	44	2.7	2.2	42	3.2	2.7	79	4.2	3.5
Medical	49	2.1	1.8	28	1.7	1.4	26	2.0	1.7	63	3.4	2.8
Recreation	45	1.9	1.6	16	1.0	0.8	28	2.1	1.8	36	1.9	1.6
Water	97	4.1	3.5	75	4.6	3.8	60	4.6	3.8	82	4.4	3.7
Sanitation	19	0.8	0.7	35	2.2	1.8	-	-	-	22	1.2	1.0
Sewage	6	0.3	0.2	1	0.1	0.1	1	0.1	0.1	4	0.2	0.2
Electricity	236	9.9	8.6	92	5.7	4.6	53	4.1	3.4	133	7.1	5.9
Housing/Land	268	11.2	9.7	74	4.5	3.7	82	6.3	5.2	156	8.3	7.0
Food	1051	44.0	38.2	906	55.7	45.5	712	54.6	45.5	939	50.3	41.8
Transportation	146	6.1	5.3	88	5.6	5.1	76	5.8	4.9	110	5.9	4.9
Clothing	165	6.8	6.0	120	7.4	6.0	103	7.9	6.6	136	7.3	6.1
Ceremonies	176	7.4	6.4	146	9.0	7.3	120	9.2	7.7	155	8.3	6.9
Total	2,387	100.0	86.7	1,576	100.0	81.6	1,281	100.0	83.2	1,868	100.0	83.2

Source: March 2005 Household Survey

House Tenure

2.5 “Owner-occupier” is generally the predominant form of house tenure at 69.4 percent. “Private renter” comes second at 20.2 percent followed by “government renter” (4.4 percent) and “sharer”³¹ (6.0 percent). Owner-occupation is highest in villages, at 81.9 percent, and 71.3 percent in secondary towns, falling to 63.0 percent in primary cities (Table 2.3).

Table 2.3: House tenure by type of settlement

Settlement	Owner		Private renter		Public renter		Sharer		Total	
	#	%	#	%	#	%	#	%	#	%
Primary cities	203	63.0	84	26.1	21	6.5	14	4.4	322	100.0
Secondary towns	261	71.3	66	18.0	13	3.6	26	7.1	366	100.0
Villages	86	81.9	10	9.5	1	1.0	8	7.6	105	100.0
Total	550	69.4	160	20.2	35	4.4	48	6.0	793	100.0

Source: March 2005 Household Survey

³⁰ All figures per item calculated for households having expenses on that item.

³¹ ‘Sharing’ as used in this report refers to the households who ‘live in’ with relatives or friends, without paying rent.

2.6 When Asmara is taken alone, the data show that renters account for 58 percent of households. However, there is a remarkably large share of renters (76 percent) in the unplanned areas of the city and a relatively small proportion (15 percent) in ‘developer housing’ (Table 2.4).

Table 2.4: Tenure status in Asmara³²

Housing fabric category	% of renters	% of sharers	% of owners	Total (%)	Number of cases
Developer housing Jacaranda housing and Space 2001	15	-	85	100	13
Established residential Upper Geza Banda and Tiravolo	58	7	35	100	283
Mixed residential Gejeret Neishto South, Paradiso, Mai Chehot, New Kushet	56	9	35	100	465
Popular planned Acria, Arbate Asmera, Mihram Chira, Haz Haz, Mai Temenai, Sembel, Idaga Hamus, Gejeret Abi, Aba shawel 1964, Kahawta	52	13	35	100	1708
Unplanned (within Asmara Proper) Haddish Adi, Geza Tannica, Godaif village, Gejeret village	76	7	17	100	650
TOTAL	58	11	31	100	3119

Land Title

2.7 The majority of households (64.5 percent) indicated that they have private land title and 22.1 percent have Tessa land title. About 13.4 percent either have no title, or did not know or have other forms of title. Private land title is highest in primary cities at 72.7 percent and drops to 59.8 percent in secondary towns and 55.6 percent in villages (Table 2.5).

Table 2.5: Land title by type of settlement

Settlement	Tessa		Private		None		Others		Don't know		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Primary cities	13	4.0	237	72.7	18	5.5	10	3.1	48	14.7	326	100.0
Secondary towns	123	33.4	220	59.8	6	1.6	-	-	19	5.2	368	100.0
Villages	41	38.7	59	55.6	-	-	-	-	6	5.7	106	100.0
Total	177	22.1	516	64.5	24	3.0	10	1.3	73	9.1	800	100.0

Source: March 2005 Household Survey

Method of House Construction

2.8 The dominant method of house construction is “self-built”. Households who reported self-built construction were 85.9 percent, followed by “purchased” (8.3 percent), construction with community assistance (5.2 percent) and with external assistance, 0.6 percent.

³² This table is derived from the June 2004 Population Survey conducted for the Asmara Infrastructure Development Study (3,296 households interviewed). Information on developer housing was obtained from the March 2005 survey.

2.9 Purchased houses are highest in primary cities at 19.4 percent, falling to 2.0 percent in secondary towns and to 1.0 percent in villages. The “self-built” method of construction shows significant variation among the three settlement types: 78.0 percent in primary cities, 92.2 percent in secondary towns and 85.7 percent in villages (Table 2.6).

Table 2.6: Method of construction of houses by type of settlement

Settlement	Self built		Purchased		Community assistance		External assistance		Total	
	#	%	#	%	#	%	#	%	#	%
Primary cities	209	78.0	52	19.4	7	2.6	-	-	268	100.0
Secondary towns	319	92.2	7	2.0	20	5.8	-	-	346	100.0
Villages	90	85.7	1	1.0	10	9.5	4	3.8	105	100.0
Total	618	85.9	60	8.3	37	5.2	4	0.6	719	100.0

Source: March 2005 Household Survey

Source of Funds for housing construction

2.10 Seventy percent of the households reported that they had financed their house construction from personal savings. Family loans and formal sector loans were reported as sources by 7.4 percent and 6.0 percent of households, respectively. In primary cities, 10.7 percent of households used formal sector loans, but in secondary towns and villages, the percentages fall to 3.5 percent and 1.0 percent, respectively. (Table 2.7).

Table 2.7: Source of funds for house construction by type of settlement

Settlement	Personal saving		Family loan		Formal sector loan		Informal sector loan		Don't know		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Primary cities	187	60.3	23	7.4	33	10.7	1	0.3	66	21.3	310	100.0
Secondary towns	281	76.4	28	7.6	13	3.5	-	-	46	12.5	368	100.0
Villages	81	77.9	7	6.7	1	1.0	-	-	15	14.4	104	100.0
Total	549	70.2	58	7.4	47	6.0	1	0.1	127	16.2	782	100.0

Source: March 2005 Household Survey

Sources of Water

2.11 Table 2.8 shows the distribution of sources of water by settlement. Of the 800 households interviewed, 48.6 percent obtain their water from vendors and trucks. The remaining households get their water from public taps (21.1 percent, a tap on the plot (16.0 percent), an in-house private tap (10.0 percent), or from wells, springs and rivers (4.3 percent). The proportion of households drawing their water from wells, springs and rivers is a mere 0.6 percent but 10.6 percent in the villages.

Table 2.8: Source of water by type of settlement

Settlement	In-house private tap		Tap in plot		Public tap		Vendor/truck		Well/spring/river		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Primary cities	54	16.7	99	30.7	10	3.1	158	48.9	2	0.6	323	100.0
Secondary towns	25	6.8	25	6.8	105	28.4	193	52.3	21	5.7	369	100.0
Villages	1	1.0	3	2.9	53	50.9	36	34.6	11	10.6	104	100.0
Total	80	10.0	127	16.0	168	21.1	387	48.6	34	4.3	796	100.0

Source: March 2005 Household Survey

Sanitation

2.12 About 42.6 percent of households in the three settlement types do not have any form of safe sanitation. This percentage climbs to 77.3 percent in the villages but drops to 21.5 percent in the primary cities. Of the surveyed households, about 21.9 percent use pit latrines, 18.5 percent a private WC, 10.3 percent a shared WC, 4.7 percent a shared pit, and 2.0 percent a public toilet (Table 2.9).

Table 2.9: Sanitation by type of settlement

Settlement	Private WC		Shared WC		Private pit		Shared pit		Public toilet		None		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Primary cities	100	31.2	56	17.4	62	19.3	18	5.6	16	5.0	69	21.5	321	100.0
Secondary towns	41	11.1	24	6.5	99	26.9	16	4.4	-	-	188	51.1	368	100.0
Villages	6	5.7	2	1.9	13	12.3	3	2.8	-	-	82	77.3	106	100.0
Total	147	18.5	82	10.3	174	21.9	37	4.7	16	2.0	339	42.6	795	100.0

Source: March 2005 Household Survey

Sewage Disposal

2.13 Table 2.10 shows that of the surveyed households the majority (54.8 percent) do not have sewage disposal facilities while 33.5 percent are connected to the municipality network and 11.7 percent use septic tanks.

Table 2.10: Sewerage system by type of settlement

Settlement	Municipality network		Septic tank		None		Total	
	#	%	#	%	#	%	#	%
Primary cities	206	64.4	41	12.8	73	22.8	320	100.0
Secondary towns	52	14.2	46	12.6	268	73.2	366	100.0
Villages	7	6.6	6	5.7	93	87.7	106	100.0
Total	265	33.5	93	11.7	434	54.8	792	100.0

Source: March 2005 Household Survey

2.14 There are variations among urban areas. The percentage of households who have no access to sewage disposal facilities is high at 73.2 percent in secondary towns but only 22.8 percent in primary cities. The percentage of households connected to the municipality sewerage network in primary cities is 64.4 percent, falling sharply to 14.2 percent in secondary towns.

Indoor Area

2.15 Table 2.11 shows the distribution of households by indoor space. More than a half of households have less than 50 square metres and only 23.5 percent have more than 100 square metres.

Table 2.11: Indoor area by type of settlement

Settlement	<6 m2		7 - 25 m2		26 - 50 m2		51 - 100 m2		>100 m2		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Primary cities	6	1.9	87	27.1	59	18.4	70	21.8	99	30.8	321	100.0
Secondary towns	-	-	92	25.4	93	25.6	102	28.1	76	20.9	363	100.0
Village	-	-	29	29.0	40	40.0	22	22.0	9	9.0	100	100.0
Total	6	0.8	208	26.5	192	24.5	194	24.7	184	23.5	784	100.0

Source: March 2005 Household Survey

Plot Area

2.16 Table 2.12 shows that nearly a quarter of households (23.2 percent) have a plot of less than 172 square metres and only 11.2 percent have plots of more than 476 square metres. The proportion of households with plot areas less than 75 square metres is higher in primary cities (9.9 percent) and secondary towns (9.0 percent) than in villages (1.0 percent).

Table 2.12: Plot area by type of settlement

Settlement	< 75 m2		76 - 175 m2		176 - 275 m2		276 - 375 m2		376 - 475 m2		> 476 m2		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Primary cities	30	9.9	55	18.2	62	20.5	79	26.2	34	11.3	42	13.9	302	100.0
Secondary towns	33	9.0	49	13.3	96	26.1	98	26.6	62	16.8	30	8.2	368	100.0
Village	1	1.0	11	11.0	18	18.0	30	30.0	26	26.0	14	14.0	100	100.0
Total	64	8.3	115	14.9	176	22.9	207	26.9	122	15.8	86	11.2	770	100.0

Source: March 2005 Household Survey

Main indicators

2.17 The following are the main indicators of the existing housing and urban situation which have implications for policy:

- Due to low incomes, the majority of households are not be able to afford conventional housing solutions;
- Household expenditure on housing is second in importance after food;
- Owner-occupation is the predominant form of house tenure except in Asmara where nearly 60 percent of households are tenants;
- The majority of households have private land title (lease);
- The majority of households are owner-builders;
- Personal savings are the main source of housing finance;
- A large proportion of households have no safe form of sanitation: 21.5 percent in primary cities; 51.5 percent in secondary cities; and 77.3 percent in villages;

- More than 50 percent of households have an indoor floor area of less than 50 square metres.
- Nearly a quarter of households (23.2 percent) have a plot of less than 172 square metres and only 11.2 percent have plots of more than 476 square metres.

Gender and Housing

2.18 This section looks at female-headed households and their access to housing. Women have always played an important part in Eritrean society but their role has largely been defined by a society that is traditionally male-dominated³³. Two wars in recent history have shaken tradition as females participated on an equal footing with male combatants. This has had a major impact on male attitudes towards women, earning women respect ‘as equals’.

2.19 But whilst war has left women more independent, confident, and more respected it has also left many women without their husbands, depriving them of protection and security. Because of the last two wars³⁴, there are a relatively large proportion of female-headed households in rural areas (43.2 percent) and in urban areas (52.2 percent)³⁵. Female-headed households, whether strong, young and independent or bereaved and vulnerable, form an important part of Eritrean society, and a group to consider in all development interventions.

Housing situation of female-headed households

2.20 **Tenure:** Female-headed households are more likely to rent or share accommodation than their male counterparts. Far more female-headed households (9.0 percent) than male-headed households (4.8 percent) are sharers. But the proportions of those renting is not very different: 23.7 percent for male-headed households against 26.6 percent for female-headed households.³⁶

³³ Eight of 9 ethnic groups are patriarchal, while only one group, the Kunamas, are matriarchal.

³⁴ The 30 years struggle for Independence, which was won in 1991, and the recent border conflict with Ethiopia of 1998-2000.

³⁵ The Eritrea Demographic and Health Survey 2002 (EDHS 2002) gives an estimate of female-headed households of 46.7 percent. The estimate of the March 2005 Household Survey was 27.8 percent. If males who are actually living elsewhere (17 percent) are excluded as heads of household, the adjusted percentage of female household heads rises to 44.8 percent, a proportion comparable to the EDHS figure.

³⁶ Figures are from the March 2005 Household Survey conducted for this project.

Table 2.13: Tenure by gender

	Male-headed households		Female-headed households		All households	
	#	%	#	%	#	%
Owners	408	70.6	143	64.4	551	68.9
Renters	137	23.7	59	26.6	196	24.5
Sharers	28	4.8	20	9.0	48	6.0
No data	5	0.9	-	-	5	0.6
Total	578	100.0	222	100.0	800	100.0

Source: March 2005 Household Survey

- 2.21 **Precarious shelter:** Female-headed households are relatively more often found in unplanned urban areas³⁷ than their male counterparts are. The percentage of female-headed households in unplanned urban areas³⁸ is 36.7 percent, 8.9 percent higher than their proportion in the whole sample (27.8 percent).

Table 2.14: Female-headed households in unplanned urban areas

	Male-headed households		Female-headed households		All households	
	#	%	#	%	#	%
Unplanned urban areas	88	63.3	51	36.7	139	100.0
Total sample	578	72.3	222	27.7	800	100.0

Source: March 2005 Household Survey

- 2.22 **Income levels:** Female-headed households earn, on average, less than their male counterparts do. More female-headed households fall into the lowest income group (52.3 percent) than their male counterparts (30.4 percent). Moreover, the average income of female-headed households within the lowest income group is ERN 85 lower than the average income of male-headed households in the same group. The average income of all female-headed households is lower by ERN 696 than the average income of male-headed households (Table 2.15).

Box 2.1: Female-headed households in Asmara

The traditional spontaneous areas and traditional villages in Asmara together comprise 23 percent of the Asmara population. These areas are known for being overcrowded and under-serviced; the average population density is 750 persons/ha; the average room occupation is between 3.2 and 4.9 persons per room; there is no sewerage network; road access is bad; and water is bought from private trucks. The median income in these neighbourhoods is around ERN 800 per month. A June 2004 study found that the proportion of female-headed households (nearly 50 percent) is highest in these areas³⁹.

The study team has estimated that in Asmara Proper, more than 11,000 households are female-headed, and live in the most precarious urban housing conditions.

³⁷ These are areas with insecure tenure and limited access to infrastructure services.

³⁸ The sample includes unplanned urban areas in Asmara, Keren, Ghinda, Massawa and Mendefera

³⁹ BCEOM-Groupe Huit-Optima (2005) "Asmara Infrastructure Development Study 2004-2005"

Table 2.15: Distribution of households by income group and gender

Income groups: ERN	Female-headed households			
	No.	%	Mean income	Median income
≤ 1250	116	52.3	827	853
1251 – 2500	70	31.5	1723	1604
2501 – 3750	26	11.7	3011	3000
> 3750	10	4.5	7226	7896
Total	222	100.0	1671	1195
	Male-headed households			
	No.	%	Mean income	Median income
≤ 1250	175	30.4	912	917
1251 – 2500	236	41.0	1813	1795
2501 – 3750	74	12.8	3079	3000
> 3750	91	15.8	6024	5000
Total	576	100.0	2367	1745

Source: March 2005 Survey

- 2.23 **Income sources:** Female-headed households are more dependent upon aid and remittances than male-headed households are aid and remittances make up 22.2 percent of the average income of male-headed households but 44.4 percent for female-headed households. Female-headed households earn 9.4 percent of their income from informal activities, while their male counterparts earn only 3.3 percent of their income informally.

Female-headed households and access to housing

- 2.24 **Access to land:** Traditionally, in Eritrea, land entitlement has followed the male line. Only one of the nine ethnic groups in Eritrea uses a matrilineal organisation. The 1994 Land Proclamation has given women and men *equal access* to land.

Box 2.2: Traditional land allocation system (highlands)

When an adult male marries an adult female, the newly formed household becomes a ‘Gebar’, or ‘a member of the village community’. The couple would then move to the village of the man, where the man would get land for housing and agriculture. In the highlands of Eritrea, land intended for housing construction is traditionally called Tessa land⁴⁰.

Customary law entitled an unmarried woman to half of a Gebar entitlement in the village of her father. The same regulation applied to unmarried men.

- 2.25 **The 1994 Land Proclamation:** Since the 1994 Land Proclamation, both males and females can get land in either the father’s or the mother’s village, and a married couple has a choice as to where to settle: either in the wife’s or in the husband’s village. However, popular attitudes still favour tradition. It is generally accepted that women fighters can obtain Tessa land in their villages, but other married women should get land in their husbands’ villages. Many villages are reluctant to accept the new law that permits women equal rights to land⁴¹.

⁴⁰ ‘Tessa’ means ‘hearth’ or fireplace. The Tessa land tradition is typical for the Eritrean highlands.

⁴¹ Bahta S. (2005) “Assessment of Gender Issues Related to Housing and Associated Social and Urban Services” report prepared for the Housing/Urban Development project.

2.26 **Land allocation figures:** Table 2.16 shows the number of Tessa land plots allocated up to 2004:

Table 2.16: Tessa land allocation by gender up to 2004

Zoba	For Male		For Female		Total allotted plots	
	No.	%	No.	%	No.	%
Maekel	11,506	71.8	4,528	28.2	16,034	100.0
Debub	1,543	73.8	548	26.2	2,091	100.0
Northern Red Sea	2,612	78.4	719	21.6	3,331	100.0
Anseba	1,272	82.4	271	17.6	2,495	100.0
Gash Barka	997	77.6	287	22.4	1,284	100.0
Southern Red Sea	-	-	-	-	-	100.0
Total	17,930	73.8	6,353	26.2	24,283	100.0

Source: MoLWE, Department of Land

2.27 On average 26.2 percent of Tessa plots are given out to female-headed households. This is slightly less than the proportion of female-household heads in the March 2005 survey (27.8 t). However, in Zoba Maekel, the proportion of plots allocated to female-headed households (28.2 percent) is far lower than the share of female-headed households in the Zoba, conservatively estimated at 40 percent⁴².

2.28 The allocation of lease land as shown in Table 2.17 shows that 26.9 percent of lease plots have been allocated to women. In Zoba Maekel, relatively more plots have been allocated to women, with 36.5 percent of ordinary lease plots and 32.7 percent of ‘Bond’⁴³ plots going to women. Since ‘Bond’ land is not accessible to local residents, a better indicator of access to lease land for female household heads is the distribution of ordinary lease plots. The relatively high percentage (36.5 percent) of such plots allocated to females in Zoba Maekel seems to match the high proportion of female-headed households in the Zoba, suggesting that the prioritisation system is working well. However, the *number of allocated plots is small* (266), severely limiting access to all households, female or male-headed.

⁴² Percentages of female-headed households found in Asmara vary from 40 percent (March 2005 Household Survey conducted for this study, 117 households interviewed), to 44 percent (June 2004 Population Survey, Asmara Infrastructure Development Study, 3,296 households interviewed), to 50 percent (June 2004 Household Survey, Asmara Infrastructure Development Study, 360 households interviewed).

⁴³ ‘Bond’ land is a special form of lease land. Access to Bond land is restricted to those who supported the Eritrean Government financially during the last war. The charges for this type of land are much higher than for ordinary lease land, and have to be paid in foreign currency. In 2005, the typical charge for a 500 m² plot in Asmara was USD 12,000. Because of this foreign currency requirement, bond land is typically available only to Eritreans in the diaspora.

Table 2.17: Lease land allocation by gender up to 2004

Zoba	For Male		For Female		Total allotted plots	
	#	%	#	%	#	%
Maekel	169	63.5	97	36.5	266	100.0
Bond housing	2,008	67.3	975	32.7	2,983	100.0
Debub	5,360	77.3	1,575	22.7	6,935	100.0
Northern Red Sea	2,890	80.2	714	19.8	3,604	100.0
Anseba	1,906	73.4	690	26.6	2,596	100.0
Gash Barka	2,725	64.8	1,483	35.2	4,208	100.0
Southern Red Sea	-	-	-	-	-	100.0
Total	20,592	73.1	5,534	26.9	20,592	100.0

Source: MoLWE, Department of Land

The MOLWE Prioritisation System

- 2.29 Since the demand for land is greater than its supply, the MOLWE prioritises land allocation, giving preference to those households that are most in need. Female-headed households, especially those with children, are given a high priority.
- 2.30 The prioritisation rules apply for all land allocations: for Tessa land, ordinary lease land, and Bond lease land.

Conclusions

- 2.31 The Eritrean law supports equal access to land for both males and females. There is some reluctance in villages to accept the law, but the Tessa land allocation figures show that there is gender equity in the allocation of this type of land.
- 2.32 Because female-headed households are relatively more likely to live in urban areas than their male counterparts are, it could be argued that female-headed households face *relatively more often than their male counterparts* the consequences of limited access to land for the average (low-income) *urban* household. This is especially the case for female-headed households living in Asmara.
- 2.33 Since female-headed households earn less, and are more dependent upon aid and remittances than their male counterparts are, they have reduced opportunities to participate in a housing finance scheme. Low-income households without stable income sources, and without collateral, are not likely to be eligible for housing loans according to current regulations (see chapter 6, §6.12).
- 2.34 There are no data available on the proportion of female clients within the group of clients that have accessed housing loans.

Box 2.3: The importance of disaggregating data by gender

To be able to make gender-sensitive policy decisions, it is necessary to monitor gender equity in practice. The practical situation of female-headed households with regard to land, tenure status and access to housing finance can only be monitored and assessed when data, disaggregated by gender, are available.

To promote gender equity, the desegregation of data by gender should be standard practice in institutions such as banks, the Housing Commission, and the MoLWE/Department of Land.

- 2.35 To sum up, female-headed households are in a much weaker position than their male counterparts are, in their current living circumstances, and in their chances to live in better housing conditions. Housing programmes will need to take into consideration the extra vulnerability of female-headed households. Without specific assistance for this group, housing projects run the risk of leaving out an important segment of Eritrean society.

The Environment

- 2.36 This section briefly examines the environment, with a focus on the existing institutional and regulatory framework. Environmental issues and how to respond to them is the subject of Chapter 15.
- 2.37 In 1995, an interim secretariat was set up to formulate a National Environmental Management Plan for Eritrea (NEMP-E). Following the adoption and publication of the NEMP-E, an Eritrean Agency for the Environment (EAE) was created as an autonomous body under the auspices of the Ministry of Local Government. After the Government's administrative restructuring in 1997, the Agency became the Department of Environment (DoE) within the then newly established Ministry of Land, Water and Environment (MOLWE).⁴⁴
- 2.38 The EAE immediately set to work on the preparation of the Eritrean Environment Act (EEA). By 1996, the task was completed with the assistance of The Environmental Law Centre of the World Conservation Union (IUCN). Although the EEA has not yet been formally enacted, some of its provisions have already been implemented.⁴⁵
- 2.39 The EEA consists of 72 articles divided into six sections, in addition to two schedules. The Act/Proclamation provides the framework for integrated regulation and management of Eritrea's environment.

⁴⁴ Gebremedhin, N. (2004) "Regional Workshop on Conflict Management and Sustainable Development" Eritrean Agency for the Environment, Asmara 12-16 February 1996, p.1.

⁴⁵ Ibid .pp. 2-13.

- 2.40 Section 1 spells out the principles of environmental protection and sustainable development. Sections 2 and 3 discuss institutions and basic instruments of environmental protection and sustainable development. Section 4 provides for environmental quality standards and natural resource management. Section five deals with monitoring, inspection, enforcement and with the relevant institutional set up. Section 6 provides for miscellaneous provisions.
- 2.41 The Proclamation contains two schedules: one spells out projects and activities to be considered for environmental impact assessment; and the other discusses issues to be considered in making environmental impact assessment.
- 2.42 In 1997, Eritrea adopted a modern constitution. Article 8 of the constitution emphasized the protection of the environment and the sustainable use of natural resources.
- 2.43 In 1999, the Department of Environment introduced the National Environmental Assessment Procedures and Guidelines.

Progressive Environmental Degradation

- 2.44 The agricultural sector in Eritrea is by far the most important provider of livelihood to the majority of the population both in rural and urban areas. With dependency on traditional rain-fed agriculture, agricultural productivity is low. The situation is compounded by environmental degradation emanating from the extravagant felling of trees for construction purposes and for fuel wood.
- 2.45 Government of Eritrea efforts to address constraints and improve agricultural productivity includes:
- Signing and ratifying the United Nations Convention to Combat Desertification in 1994.
 - New draft legislation for the protection of forests is in the making. The legislation promotes:
 - soil conservation to mitigate and control erosion;
 - production of fuel wood and construction materials in a sustainable fashion through community participation; and
 - rehabilitation of catchments by establishing permanent closures and reforestation;
 - Organizing by both Ministries of Education and Agriculture reforestation and soil and water conservation campaigns since 1994. This includes constructing hillside terraces and check dams on degraded catchments;
 - Searching for alternative energy sources;
 - Pending the enactment of the new legislation, the Ministry of Agriculture has produced provisional directives in 2004 and 2005 banning live tree cutting and use of wood for fuel. It also issued provisional directives about land use and agricultural land

management and about the practice of environmental impact assessment and the protection of wetland from reclamation for development.

Rural Housing

2.46 This section describes rural housing, providing the background for the analysis of rural housing issues, and how to respond to them, in Chapter 16.

2.47 The rural population, currently estimated at 2.55 million people, is projected to grow to 3.43 million by 2015. This population – in small towns, other population centres and villages – accounts for 75 percent of the national population (Table 2.18).

Table 2.18: Distribution of population by settlement category: 2005⁴⁶

Settlement category	Population size	#	Estimated population	% of total
URBAN				
Capital	450,000	1	450,000	13.2
Medium sized towns	20,000 – 100,000	11	400,000	11.8
Sub total urban			850,000	25.0
RURAL				
Small towns	8,000 – 20,000	10	125,000	3.7
Rural population centres	2,000 – 8,000	24	110,000	3.2
Villages	< 2,000	-	2,315,000	68.1
Sub total rural			2,550,000	75.0
TOTAL			3,400,000	100.0

Source: Estimate by the study team based on local sources

2.48 The rural economy provides 12 percent of the Gross Domestic Product⁴⁷. Levels of poverty in rural areas are high, with a proportion of 64.6 percent of inhabitants living below the poverty line.⁴⁸

Table 2.19: Levels of poverty in Eritrean settlements

Settlement category	Percentage of population by level of poverty	
	non-poor	poor
Asmara	44.2%	55.8%
Other urban areas	18.7%	81.3%
Rural areas	35.4%	64.6%
Overall	33.6%	66.4%

Source: Interim Poverty Reduction Strategy Paper, GOE, April 2004

⁴⁶ The population data for the major cities and towns is based on current estimates by the MOPW and the Zoba administrations. The 3.4 million estimate for the total population of Eritrea is based on a 2001 estimate by MOLG.

⁴⁷ World Bank (2004)

⁴⁸ Estimated in 2003 using a poverty line of 240 ERN/month/capita

- 2.49 There is no up-to-date and detailed information on housing conditions in the rural areas of the country to be able to describe accurately the housing situation there. But considerable information is available from the socio-economic and housing study conducted in March 2005.⁴⁹ The survey also included several small towns of less than 20,000 inhabitants, as these are more rural in character than urban.
- 2.50 Data obtained from the survey shows that the average household size is approximately 5.6 and 5.3 for small towns and villages, respectively, and that the median income is ERN 1,700 for small towns and ERN 1,183 for villages.
- 2.51 Overcrowding figures are a little higher in villages, with 3.6 persons per room, on average, than in small towns where the average is 3.4.
- 2.52 Close to 50 percent of the population in small towns and over 30 percent of the population in villages consume water obtained from trucks (Table 2.20) and that over 80 percent do not have access to any form of safe sanitation (Table 2.21). The survey also indicated that over 40 percent of the households in small towns and close to 60 percent of those in villages do not have access to electricity (Table 2.22). These services were given a high priority by those interviewed.

Table 2.20: Water supply in rural areas (percentage)

Settlement category	Tap in house	Tap on plot	Water from water truck	Water from public tap	Water from well or other	Total %	Water from truck, public tap or well	Total number of cases
Small towns	2	4	54	33	7	100	94	132
Villages	1	3	36	50	10	100	96	106

Table 2.21: Sanitation in rural areas (percentage)

Settlement type	Connection to network	Septic tank	None	Total %	Total number of cases
Small towns	-	2	98	100	132
Villages	⁵⁰ 6	⁵¹ 6	88	100	106

Table 2.22: Electricity supply in rural areas (percentage)

Settlement category	Private metre	Shared metre	Purchase from neighbour	No electricity, but kerosene or other	Total %	Total number of cases
Small towns	⁵² 29	10	17	44	100	132
Villages	19	13	11	57	100	106

- 2.53 The average floor area of the house in small towns and villages is 55 square metres. The proportion of ‘permanent’ house constructions is 85 percent in villages, compared to 91 percent in small towns. The house wall is generally made of bricks, blocks or stones with a corrugated iron sheet roof. Thatched roofs are more common in villages (43 percent) than in small towns (18 percent). The floor

⁴⁹ The villages in the study were Eden, Gahtelay, Tsaeda Christian, Mogolo, and Terra-Imni. These villages are more or less representative of villages located alongside the major inter-city roads rather than small hamlets in upcountry locations.

⁵⁰ All network connections were reported in Eden.

⁵¹ All septic tanks were reported in Terra-imni.

⁵² 4 cases in Thio, included within this figure, had a ‘fixed rate’ arrangement, private billing without metre

in village houses is generally unpaved with over 60 percent of the houses under this category; however, in small towns, the floor is unpaved in only 37 percent of the cases studied (Tables 2.23 and 2.24).

Table 2.23: Wall construction material and quality of construction in rural areas (percentage)

Settlement category	WALL CONSTRUCTION MATERIAL					DURABILITY OF CONSTRUCTION			Total number of cases
	Bricks or Blocks	Stone	Wood or metal	Mud bricks or chica	Total %	Temporary or semi permanent	Permanent	Total %	
Small towns	64	14	10	12	100	9	91	100	132
Villages	38	20	7	35	100	15	85	100	106

Table 2.24: Floor and roof material in rural areas (percentage)

Settlement category	FLOOR MATERIAL				ROOF MATERIAL				Total number of cases
	Paved	Mixed	Unpaved	Total %	Concrete slab	Corrugated metal	Thatch or hidmo	Total %	
Small towns	20	43	37	100	6	76	18	100	132
Villages	14	25	61	100	3	54	⁵³ 43	100	106

2.54 The survey also indicated that community representatives do not consult over 80 percent of the population in small towns and villages. Interestingly, over 70 percent of those interviewed know the community representative. Those who claimed membership of a community association were 34 percent of interviewees in small towns and 45 percent in villages.

Housing and public services

2.55 In rural Eritrea, the people continue to provide their own shelter through their own efforts by using skills, methods and techniques passed on from generation to generation. The materials are the traditional ones usually found within the locality. Housing designs and materials used vary with the three distinct climatic zones of the country. The climate ranges between cold and dry in the highlands to hot, dry, hot, and humid in the lowlands.

2.56 In the cold and dry zone in the highlands of the country, where there is an abundance of stone, a tradition of stone masonry has evolved and continues to be common in the villages. Stonewalls provide effective thermal insulation during the hot days and cold nights common in this part of the country. House construction in the highlands is a collective effort with community members working together to collect building material and build.

2.57 In the two lowlands of the country, where most inhabitants are nomadic pastoralists, standard construction methods using locally available materials have developed over the years. These construction materials are comprised of lightweight wooden structures covered with hand woven matting. Houses are designed to be easily erected and dismantled.

⁵³ 35 percent thatch, 8 percent hidmo

- 2.58 In comparison with the pressing housing needs in the urban areas and particularly that of the low-income households in Asmara, one cannot really speak of a housing shortage in the villages. The critical housing inputs, such as land and building materials are easily accessible and affordable to villagers, and the villagers themselves in a communal effort provide labour.
- 2.59 The next chapter, in Part 2, starts with an examination of governance and institutions.

Part 2:
Housing/Urban Development:
Policies and Achievements

Chapter 3

Governance and Institutions

3.1 UNDP defines governance as:

*The exercise of political, economic and administrative authority in the management of a country's affairs at all levels. It comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences.*⁵⁴

3.2 It is widely acknowledged that governance is not government. Governance as a concept recognizes that power exists inside and outside the formal authority and institutions of government. In many formulations, governance includes government, the private sector and civil society.⁵⁵ Second, governance recognizes that decisions are made based on complex relationships between many actors with different priorities.⁵⁶

3.3 This chapter starts with an overview of the evolution of the Eritrean central government. It then describes governance and the related institutions, with a focus on aspects relevant to urban development and housing. Of particular interest are (a) the structure and functions of local government, (b) the institutional and regulatory framework for housing and urban development and, (c) the operations of local government within an urban setting, using the Maekel Region as a case study. The chapter provides the basis for the analysis of urban governance issues in Chapter 8 and the formulation of strategies and recommendations.

Evolution of the Eritrean Central Government

3.4 At independence, in 1991, the Eritrean People's Liberation Front (EPLF) assumed the role of government, a move formalized through Proclamation 23/1992. This proclamation described the structure and functions of the Provisional Government of Eritrea (PGE). It established the legislative, executive and judicial branches of Government. Whilst the EPLF central committee was to constitute the legislature, the executive branch consisted of the Secretary General of EPLF, heads of 12 secretariats,⁵⁷ the administrators of the provinces, and the commanders of the

⁵⁴ UNDP (1997) Governance for Sustainable Human Development, New York, pp. 2-3.

⁵⁵ Civil society includes individuals and groups, organized or unorganized, who interact in the social, political and economic domains and who are regulated by formal and informal rules and laws. See UNDP 1997.

⁵⁶ UN-Habitat (2002) The Global Campaign on Urban Governance. Concept Paper, 2nd Edition.

⁵⁷ These were: justice, economic development and cooperation, internal affairs, foreign affairs, defense, industry, agriculture, finance, construction, education, health, and news and culture.

- armed services. The judicial branch was established as an independent body entrusted with the protection of legal rights.
- 3.5 Proclamation 37/1993, in the aftermath of the referendum on independence, established the Government of Eritrea. This proclamation repealed and replaced the earlier one. In the terms of the new proclamation, the National Assembly (*Baito*) became the legislative body, consisting of the EPLF's Central Committee and 60 other prominent citizens, including women and Eritreans in the Diaspora. The State Council was the executive branch consisting of the President, the ministries, commissions, authorities, and offices. The seventh National Assembly held on Nov. 2-3, 1995 decided that the executive branch should consist of 17 ministries, 2 commissions, and 1 Office. This proclamation went on to re-assert the independence of the judiciary.
- 3.6 On May 23, 1997, the Constitution of Eritrea was ratified, to establish a constitutional government with the three branches of government. According to this constitution, Eritrea is a unitary state divided into units of local government.⁵⁸
- 3.7 There are currently 2 Offices⁵⁹, 18 ministries,⁶⁰ and 5 commissions. There are six regional administrations (*Zobas*),⁶¹ each headed by a regional administrator (Governor), whose primary function is to implement central government policies and directives, and supervise their implementation. The Governor presides over all the line ministries in the region and oversees the implementation of sector policies at the regional level.

Structure and Functions of Local Government

- 3.8 Eritrea's local government, the main vehicle for decentralization, has a two-level structure consisting of the 6 regions already referred to and an estimated 1,484 village/area administrations. The sub-region administration, which existed prior to 2002 as a full-fledged level of administration between the region and the area/village level, has been abolished in some regions⁶². The chart below depicts a three-tier structure but the establishment of the Desk has not yet been legislated. The Desk is designed to serve as an intermediary office between the regional administration and the area/village administration. Thus, in the current administrative practice, there is supposed to be a direct working relationship between the village/area administration and regional administration. But it is clear that the structure of local government is in a state of flux and has yet to consolidate.

⁵⁸ The Constitution: Article 1 sub-article 5

⁵⁹ Office of the President and Office of the Auditor-General

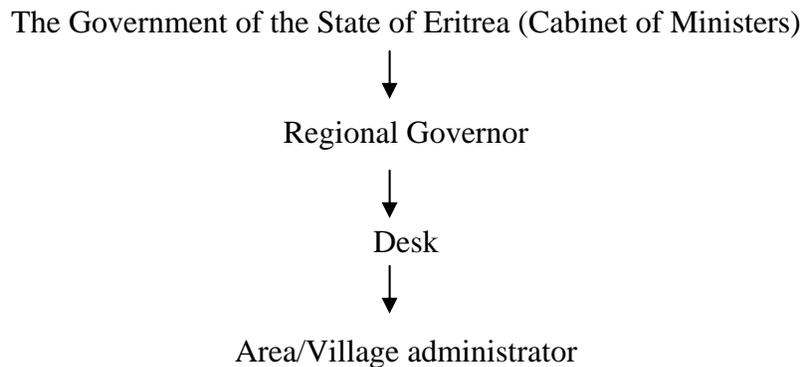
⁶⁰ Agriculture; Defence; Education; Energy and Mines; Finance; Fisheries; Foreign Affairs; Health; Information; Justice; Labour and Human Welfare; Land, Water and Environment, Local Government (now apparently a function under the Office of the President); National Development; Public Works; Trade and Industry; Transport and Communications; and Tourism.

⁶¹ *i.e.* Debubawi Keih Bahri; Seminawi Keih Bahri; Anseba; Gash Barka ; Debub; and, Maekel.

⁶² It has been retained in border regions because of the exigencies of administration in these areas.

- 3.9 The previous major restructuring of local government occurred in 1996 through Proclamation No. 86/1996, which replaced Proclamation No. 26/1992. One of the arguments for this change was that the older proclamation had encouraged parochial sentiments as its regions were based on the old colonial regions.

Formal Structure of Local Government



- 3.10 Proclamation No. 86/1996 remains the principal legal document on local government. Its objectives are:
- To strengthen the unity of the country;
 - To reduce the number of regions (*i.e.* from 10 to 6), and levels of administrative structure (*i.e.* from four to three);
 - To speed up the process of decentralized administration and devolution of authority; and,
 - To bolster economic growth.

- 3.11 The three branches of government - executive, legislature and judiciary⁶³ – are represented at the two substantive levels of government in the chart (region and village).

Regional level

- 3.12 At the regional level, the legislature (**Council**) and the **executive body** carry out functions with important implications for housing and urban development. These are described briefly.

⁶³ The judiciary has not been discussed in this report as it does not have direct consequences for urban development. But it has a role in the resolution of land rent disputes.

- 3.13 **Council:** The duties of the Council are to:
- prepare social development plans and pass resolutions that are in line with central government policies;
 - approve programmes, projects, and the related budgets as prepared by the governor, who is the regional administrator;
 - decide on local taxation and revenue laws within its jurisdiction, without violating government financial policies.
- 3.14 The Council is made up of elected members but the number varies from region to region. For instance, the Zoba Maekel has 64 members, Zoba Debub 63, whilst the lowest number, 28, is found in Seminawi Keih Bahri. Senior executive officers do not attend Council meetings except when there are evaluations or when they are required to make presentations to the Council. The chair and secretary are full-time employees of the regional council but the other elected council members may hold other public or private offices as full-time employees.
- 3.15 The Council carries out its functions through committees and sub-committees. The committees are:
- Economic Development Committee (18 members);
 - Social Services Committee (18 members);
 - Cultural Committee (14 members); and,
 - Justice and Order Committee (12 members)
- 3.16 Housing and infrastructure fall under one sub-committee of the Economic Development Committee and land under another sub-committee. Thus, these two sub-committees are critical to housing and urban development. Sub-committees of the Social Services Committee deal with other important urban development issues – education, health and the environment –.
- 3.17 **Executive body at the Regional Level:** The duties of the executive body are to:
- Deliver administrative services and prepare development projects in compliance with the policies of the central government;
 - Co-ordinate the functions of all line ministries and mobilize the resources, skills and efforts of the people in the region.
- 3.18 The Regional Governor, appointed by the President, heads the executive body of the region and is assisted by an executive director appointed by the Minister in charge of **local** government. According to Article 20 of Proclamation 86/1996, the governor develops programmes and policies for the region and implements them after the approval of the Minister in charge of Local Government. The governor can prepare these programmes independently of the council.

3.19 The executive body at the regional level is supported by three key departments, typically comprising⁶⁴:

- Department of Economic Development, responsible for agriculture, marine resources, land issues, trade and industry, energy and mining, tourism, finance, investment and trade licenses;
- Department of Social Services which includes education, health, labour and human rights, refugees and relief;
- Department of Infrastructure, which includes engineering, project management, transportation, communication, and water supply development.

3.20 The administrative relationship between the central government and the regional administration is depicted below.



3.21 To illustrate how some of these administrative linkages work out in practice, the budget preparation and approval process in Maekel Region is given in Box 3.1.

Box 3.1: Budget cycle

Budget preparation: Budget preparation in the Maekel region begins in July, with planning and priority setting for the coming fiscal year. The regional administration starts budget preparation after it receives a budget call from the Budget Department of the Ministry of Finance.

A separate unit for budgeting organizes a Budget Committee (BC) to prepare the budget. The BC is interdepartmental, bringing together the Heads of Administration, Finance and Accountancy. This type of composition allows the BC to determine priorities through direct negotiations among departments.

Budget authorization: In principle, the budget should be approved by the Regional Council, to whom it is submitted. In practice, the Council does not have the power to change or reject the budget, confining itself to comments and suggestions on how the budget could be modified. This illustrates the weak position of the Council relative to the Regional Commissioner (Governor).

⁶⁴ There are some variations across regions in the way departments are constituted. In some regions, the Department of Social Services is divided into two departments of Economic Development, and Infrastructure. In Zoba Maekel, there is a fourth department, the “Follow-up of Village Area Administration”.

Towns: classification and administration

- 3.22 Proclamation 86/1996 classifies towns into three categories:⁶⁵
- a. Those towns independently categorized as sub-region (Keren, Assab, and Massawa)
 - b. Those towns that include the villages/areas in their outskirts (Adikeyh, Mendefera, Akordat, Tessenai, and Barentu)
 - c. Those towns that serve as the centre of their sub-region (Dekemhare, Ghinda, Afabet, Nacfa, Segeneiti, Senafe, Adi-Quala, Dubarwa, and Hagaz)
- 3.23 This classification of towns has implications for their financial administration. The proclamation gives the towns the legal power to raise revenue from their jurisdictions and utilize such resources independently of the central government. However, towns in the last two categories encompass villages without urban characteristics and therefore no credible revenue base.
- 3.24 **Asmara** is a special case, as it is the capital city and encompasses several sub-regions.⁶⁶ Together with its satellite villages Asmara constitutes the Zoba Maekel, administered by a governor who is also the mayor of Asmara proper. Proclamation 26/1992 defined Asmara as a province by itself with a well defined territory. But Proclamation No 86/1996 does not define the city territory. Other towns have mayors (who are not governors), appointed by the central government.
- 3.25 The Maekel administration collects its own revenue from the residents of Asmara, in turn providing them with infrastructural, economic and social facilities. The other towns in the country take Asmara as a model and design their administrative functions and regulations accordingly.
- 3.26 The organization of Asmara, as part of the wider Maekel Regional administration, gives it room for physical expansion. This is because the regional administration has the power to allot land for industrial, agricultural and residential purposes, as land is legally the property of the government. However, being a part of the regional administration also means that city, which has a relatively strong revenue base, has to share some of its financial resources with its satellite villages. This practice dilutes the financial and administrative capacity of Asmara as a town.

Village/Area Administration

- 3.27 The village/area administration is the second level (after the region) in the formal hierarchy of local government. Either one or more villages form area administrations. The main structure of an area administration formed by only one

⁶⁵ Some towns are presently being re-classified.

⁶⁶ As pointed out earlier, the Desk, which is supposed to replace the sub-region, is not yet operational.

- village has the following structure: village council; administrator; and executive director.
- 3.28 The village council, which is the highest authority at that level, is made up of the residents of the village who are 18 years old or above and its duties are to:
- Determine the financial and other resources needed to administer the village;
 - Act within the administrative programmes of the village administrator and recommend changes as long as these do not contradict the policies of the central government and regional administration;
 - Decide on issues and activities pertaining to the village in keeping with the majority vote of its members;
 - Elect the administrator and the director in a democratic process.
- 3.29 The executive body in the village consists of 5 to 11 members headed by an administrator, elected for two years by the village council. The executive body consists of three permanent committees *i.e.* land committee, economic development committee, and social affairs committee. These committees carry out their duties and functions with the assistance of sub-committees, which focus on different aspects. For instance, the land committee has a sub-committee to deal with *Tessa* land (residential land), a second for agricultural land, and a third for conserved/grazing land.

The Institutional and Regulatory Framework for Urban Development

- 3.30 On the national and local levels, a number of institutions and programmes carry out a range of functions related to land, urban planning and housing. These are described here briefly by functional areas and, where necessary, in some detail in the chapters dealing with specific topics.
- 3.31 **Land:** The Ministry of Lands, Water and the Environment (MoLWE) has the following functions:
- Deciding on land use for various purposes;
 - Deciding on which site to be allocated for what purpose and to whom in consultation with the relevant ministry;
 - Approving the distribution of *Tessa* land.
- 3.32 The ministry is functionally related with the Ministry of Public Works (MoPW) and the Regional administration. As MoPW approves master plans, there is potential for conflict between its decisions and those of MoLWE, a subject discussed in Chapter 4. The relationship with the regional administration stems from the latter's duty to make the final decisions on local land use and allocate land to its users. Thus, issues of land use are discussed between the regional administration and the Department of Lands.

- 3.33 **Urban planning:** The Department of Urban Development (in the Ministry of Public works) is the national body responsible for urban planning, and actively provides technical assistance to towns either directly or through the use of private consultants. The department is overstretched, as it does not have an adequate number of staff.
- 3.34 **Housing:** A diverse range of public as well as private institutions is involved, directly or indirectly, in the delivery of housing: the Housing Commission; the Department of Urban Development; municipalities; the *Warsay Yekealo*⁶⁷ campaign; and the private sector.
- 3.35 Proclamation No. 16 /1991 established the Housing Commission in 1991. Besides its headquarters in Asmara it has branches in other regions of the country. The Commission is accountable directly to the Office of the President and has the main responsibility of returning nationalized dwellings to their owners (see Chapter 12 on rental housing). The Rental Administration registers private rental contracts in Asmara and maintains an inventory of state-owned buildings.
- 3.36 The housing function of the Department of Urban Development covers housing policy, as well as the regulation, coordination and monitoring of the housing sector. But DUD's Housing Division has not yet been staffed.
- 3.37 Municipalities, especially Asmara, have participated in housing development. Some, such as the municipal authority in Massawa, have been able to provide truly low-income rental housing, unlike many other local authorities in the country. Another example is Mendefera, which has successfully re-located the inhabitants of a downtown slum to a well-sited residential area.
- 3.38 Municipal authorities are also responsible for the provision of water and sanitation services. Development partners such as UNICEF assist them in this role, in some cases.
- 3.39 The *Warsay Yekealo* campaign, through government funding, has a large portfolio of housing projects, some ongoing and others at the planning stage (see Chapter 6). The Housing and Commerce Bank, owned by the party, provides housing finance and is described in some detail in Chapter 6. The private sector (both formal and informal), as well as households, plays a central role in the provision of housing, arranging for the procurement of land, labour and building materials during the construction process. There is also a substantial stock of privately rented housing (see Chapter 12).

⁶⁷ This campaign, funded by Government, mobilizes the youth for development projects in a diverse range of sectors, including housing and infrastructure.

Case Study of Maekel Regional Council

3.40 To illustrate the operation of local government within an urban setting, the Maekel Regional Council, which presides over Asmara, has been used as a case study (Box 3.2).

Box 3.2: Operations of the Zoba Maekel Council

The functions of the Zoba Maekel Council, like those of other councils, focus on the preparation of plans and programmes that are consistent with government policy. In particular, the Council publicizes its activities through seminars, newsletters and the mass media, and reports to the people after concluding its regular meetings, held at three-month intervals. Its reports describe accomplishments during the reporting period, highlighting the responses of the Regional Administrator and line ministries to requests for action.

At the beginning of each month, the Council members visit each area administration office and assemble comments, complaints and appeals from the residents within the jurisdiction of the area administration. These issues are classified into personal and public problems. Individuals with personal problems are asked to refer their cases to the appropriate government agency. Problems of public interest are referred to the relevant Council committee and are later forwarded for action to the regional administration or government line ministries. The following are among the most common problems of public interest put forward by residents:

- *Landlord-tenant relations;*
- *Shortage of residential houses;*
- *Shortage of water supply.*

In dealing with urban infrastructure and housing problems in Asmara and the satellite villages, the Council acts through its Housing and Infrastructure Sub-Committee, and Land Sub-Committee, which have four members each.

3.41 Discussions with the Maekel administration indicated that few people were aware of the use of formal meetings of the Council as a mechanism for consultation. Whilst it is not clear how efficiently the Council's formal consultative process works, it is evident that it is not participatory, an issue taken up in Chapter 8. That chapter also examines aspects of decentralization and capacity building in the context of urban governance. The next chapter discusses land for housing.

Appendix

Summary of Proclamations/Legal Notices and their main purpose

	Title	Purpose	Remarks
1	Proclamation No. 16/1991	Established the Housing Commission	Enables the Housing Commission to convey legal title of ownership to those whose properties were nationalized by the Derg
2	Proclamation No. 23/1991	Established the Provisional Government of Eritrea	
3	Proclamation No. 26/1992	Established the first local government in Eritrea	Repealed and replaced all administration-related proclamations that were in use during the armed struggle
4	Proclamation No. 37/1993	Established the transitional government of Eritrea	It was promulgated after Eritrea became a sovereign state through the 1993 referendum
5	Proclamation No. 58/1994	Issued to reform the system of land tenure in Eritrea and establish the Land Commission	Vested ownership of all land in government.
6	Proclamation No. 86/1996	Revised and replaced Proclamation No. 26/1992. Divided Eritrea into 6 regions, down from the 10 in the previous proclamation.	
7	Legal Notice No. 31/1997	Elaborates upon Proclamation No. 58/1994 in matters relating to land administration	

Chapter 4

Land

- 4.1 This chapter looks at land with a focus on land for housing. The purpose is to examine various aspects that have implications for land delivery for housing and urban development: the existing land legislation and regulations, particularly in terms of tenure and the land rights given to holders of land; land use standards and location; land taxation; the use of land as collateral; and land needs and the number of plots allocated.
- 4.2 In 1994, the government of Eritrea promulgated a new land proclamation that introduced a new system of land tenure and land use in the country¹. The proclamation provided that all the land is exclusively owned by the government and that the government can usufruct (Right of use) land by rent or other similar rights on land whenever necessary. The law gave every Eritrean over 18 years of age the right to usufruct on the land irrespective of sex, religion, tribe or region as it is a birth right on condition they have done the national duty. Exempted from the national duty, are those who are above 40 and the disabled. Women who passed marriage age, women fighters, and women who have done the national duty have access to land. The proclamation provided for two land tenure systems for housing purposes, Tessa and lease land.
- 4.3 The law gave all citizens who apply for Tessa land (or land for housing) in their home village, be they permanent residents of the particular village or others who live outside the village, priority to obtain Tessa land in their home villages. Plot size in Asmara is approximately 500 square metres⁶⁸. Land distributed for the construction of houses shall have equal measure, as much as possible, in all parts of the country⁶⁹. In Mendefera, Tessa plots of 300 square metres have been distributed. In Asmara, Tessa land standard is being reconsidered with the aim of lowering the size of the plot. According to the proclamation, land under this category, cannot be transferred unless it is developed. In this case, Tessa land will be converted into lease. Moreover, such land cannot be mortgaged, sold, exchanged, sub-leased, used as collateral nor be sub-divided. No land annual tax is levied nor is rent payment required. Immovable property on the Tessa land may be sold, exchanged, transferred and mortgaged⁷⁰. However, it seems that this practice has been discontinued recently.
- 4.4 The law also gave every Eritrean citizen the right to a leased land to build a house anywhere in the country. In addition, land can be leased to foreign nationals and organizations, which have legal personalities. Lease land is not transferable, sold, mortgaged or exchanged if undeveloped but immovable property on this land may

⁶⁸ According to the Department of Land

⁶⁹ Legal Notice No. 31/1997

⁷⁰ Ibid.

be transferred to third parties by way of sale, inheritance or donation. Land in this category cannot be sub-divided, sub-leased or used as collateral. Annual tax and a form of annual rent⁷¹ are paid and the lease period is up to 50 years extendable. Plot size may range between 250 to 500 square metres. A land preparation fee is charged once lease land is allocated. This fee varies according to the zone and location of the plot. The Land Department of the Ministry of Land, Water and Environment allocates plots according to a priority system and percentages among priority groups.

Table 4.1: Land Matrix

Land Tenure	Beneficiary ⁷²	User right	Subdivision	Transfer of user right	Land Delivery	Undeveloped Land as collateral	Tax payment	Annual rent	Mortgage, sale, exchange	Sub-leasing	Plot size
Tessa Land	Every Eritrean citizen who has performed national duties has the right in his home village	Immovable property ⁷³ on the land acquired may be sold, exchanged, transferred and mortgaged. ⁷⁴	Not allowed	Not transferable if undeveloped. If property on Tessa land transferred, Tessa land to be converted to lease (Article 4(5) of No. 95/1997	Demand outstrips supply	Not permitted	No tax payment	No annual rent payment	Not allowed, if undeveloped	Not allowed	Approximately 500m ² ⁷⁵ .
Lease Land	Eritreans, foreign nationals ⁷⁶ and organizations which have legal personalities	Immovable property on the land acquired may be transferred to third parties by way of sale, inheritance or donation.	Not allowed	Not transferable if undeveloped.	Demand outstrips supply	Not permitted	Annual tax is paid	Annual rent is paid on lease land. Lease period may be 50 years extendable	Not allowed if undeveloped.	Not allowed	Variable 250-500

4.5 The Land Proclamation of 1994 has had an important impact on the pace of national urbanization and settlement patterns in Eritrea since independence especially in Asmara area. The distribution of Tessa land and the associated location decisions have created expectations for imminent provision of urban services and provided households with the opportunity and incentive to construct their housing.

4.6 In its efforts to provide services to the newly urbanized areas especially in Asmara, the government follows two approaches to finance its infrastructural investments. In the first case the government plans and services village Tessa land, redistributes portions of the now higher-valued land to the beneficiaries and keeps a piece for itself as compensation⁷⁷. In the second approach the government

⁷¹ Investigations indicated that Zoba Maekel is collecting land rent, which they refer to as land tax, in accordance with a recent circular by the Department of Land.

⁷² Every Eritrean shall have a usufruct right over land, the usufructuary shall use the land for his life time (Article 12 of the proclamation). Legal notice 31/1997 provides that only Eritreans who live in the villages and whose livelihood depends on land allocated for agricultural purposes shall have the right to acquire Tessa land. It seems as if practice deviates from the law on the points of 'living in the village' and 'livelihood depending upon agriculture'.

⁷³ According to the Law a construction can be sold after obtaining a habitation permit. However, the practice now is that the immovable cannot be sold, exchanged, transferred or mortgaged.

⁷⁴ The Housing and Commerce Bank of Eritrea is reluctant and not any more in favour of accepting even the immovable property of Tessa land as collateral.

⁷⁵ Currently (June 2005), reduction in Tessa plot size is being considered.

⁷⁶ With special permission

⁷⁷ According to the Department of Land

recovers the infrastructure cost fully or partially⁷⁸ through a land preparation fee paid up-front to the Ministry of Finance upon allocation of the leased plot to the user. The payment in this case varies with the variation in the location and zone. This suggests more of a reflection of a market value than the cost of infrastructure. Plots in and around Asmara are leased primarily to applicants who can afford to pay as much as USD 10,000 for a plot. A parcel of 500 square metres could even fetch up to USD 12,000 and must be paid in foreign currency. The Government objective is to earn badly needed hard currency. It is no wonder that the main beneficiaries of this land are wealthy Eritreans in the Diaspora.

Land delivery for housing

- 4.7 Tessa land distribution has been taking place over the last decade since the implementation of the 1994 land proclamation and to a lesser degree before that. Although there is no indication on the level of demand in the outlying villages, demand near Asmara and other secondary towns appears to be high and outstrips the supply capacity.
- 4.8 As indicated earlier, every Eritrean has also the right to apply for a lease land. The supply of lease land in Asmara and other urban centres has not been matching demand and the imbalance is reflected in a long waiting list. It has been reported that only between 50 to 60 percent of the demand is being met in localities other than Asmara. In Dekemhare, a town situated 40kms south of Asmara, there are 9000 applications on the waiting list while only 1600 parcels are available for distribution. The demand has primarily come from people in the Diaspora. In Asmara itself, the demand is for 10,000 plots and only 3000 plots have been leased. It is reported that another 6000 plots will be distributed within the coming three months.

Land taxation

- 4.9 In developing countries in general, land value is an important fraction of total national wealth. Land taxation policy may be one of the most effective ways to implement redistribution of income and wealth policies. In some countries, urban land taxation has been used as an attempt to control land speculation or promote efficient use of land.
- 4.10 No form of any rent or tax is collected from users of Tessa land. However, lease land beneficiaries pay a site preparation fee prior to the issuance of the certificate of lease and an annual rent determined in accordance with the lease contract. The rate of rent is dependent on the location of the leased plot, its intended use and the kind and extensiveness of the intended investment. Rent rates differ between urban and rural areas. For example rent rate of land leased for residential purposes may range between ERN 0.10 to ERN 0.25 cents per square metre per annum,

⁷⁸ In some areas like Massawa the service delivery is subsidized.

while rent rate of land leased for organizations may range between ERN 0.20 to ERN 0.25 cents per square metre per annum. According to legal notice no. 31/1997⁷⁹, other rent rates have been provided for land leased for commercial agricultural purposes. A lessee of an agricultural plot pays a tax not a land rent.

Housing land as collateral

- 4.11 There are legal restrictions against using land as collateral to borrow for housing. The Land Proclamation has specifically prohibited the use of undeveloped Tessa and leased land as collateral. This may have acted as one of the disincentives to the development of a mortgage finance system based on the use of undeveloped urban land to provide housing.
- 4.12 While the Land Proclamation as a legally binding document has provided that immovable property on Tessa land can be mortgaged, the Housing and Commerce Bank is reluctant and not any more in favour of accepting even the immovable property on Tessa land as collateral⁸⁰.
- 4.13 On the other hand, developed leased land can be used as collateral for housing loans.

Land Proclamation impact on housing and urban development

- 4.14 The Tessa land programme could be interpreted as a government initiative to house low-income households. However, the lack of affordability and inability to use such land as collateral may have denied some households the opportunity to make full use of the programme.
- 4.15 A sizable number of Tessa plots have been planned, serviced and allocated around Eritrea since 1994 providing an important incentive to households to build their houses. The number of plots that have been allotted until the end of 2004 reached 24,283 plots. Of the allocated plots around 66 percent went to Zoba Maekel , 8.6 percent to the Southern Zoba, 13.7 percent to the Northern Red Sea Zoba, 6.3 percent to the Anseba Zoba, and 5.2 percent to the Gash Barka Zoba. Of the plots allocated 26.16 percent went to women. (See Table 4.2)

⁷⁹ Other rates are being experimented with although Legal Notice No. 31/1997 has not been repealed or amended yet.

⁸⁰ This has come as a reaction to political statements banning sale of Tessa plots and the immovable property thereon by some households.

Table 4.2: Tessa plot allocation by Zoba

Region	Allotted Plots	Male	Female	% Male	% Female
Maekel	16,153	11,506	4,528	71.77	28.23
Debub	2,091	1,543	548	73.80	26.20
Northern Red Sea	3,331	2,612	719	78.42	21.58
Anseba	1,543	1,272	271	82.44	17.56
Gash Barka	1,284	997	287	76.65	23.35
Southern Red Sea	X	X	X	X	X
Total	24,283	17,930	6,353	73.84	26.16

Source: MoLWE, Department of Land

- 4.16 However, the development of Tessa land might be dependent on socio-economic factors including proximity of the plot to a major urban centre where the beneficiary household might be engaged in a gainful urban employment and on its present housing arrangement. Thus an urban household which has been allocated a Tessa plot in a village far from its urban based employment would have to consider the trade-offs involved in its decision to relocate to an ancestral village.
- 4.17 With regard to the allocation and development of lease plots, the applicant for a lease must sometimes be prepared to make a substantial payment upfront to qualify for a plot, which implies willingness to construct a house. However, we have no data on the percentage of houses constructed out of the plots that have been leased since the enforcement of the Land Proclamation. Total lease plots allotted until the end of 2004 reached 20,592 plots. No allocations have been made in Gash Barka and Southern Red Sea regions. Of the allotted plots 26.87 percent women.(Table 4.3)

Table 4.3: Lease land allocation by Zoba

Region	Allotted Plots	Male	Female	Male %	Female %
Maekel Lease	266	169	97	63.54	36.46
Maekel Bond Housing	2,983	2,008	975	67.32	32.68
Debub	6,935	5,360	1,575	77.29	22.71
Northern Red Sea	3,604	2,890	714	80.19	19.81
Anseba	2,596	1,906	690	73.43	26.57
Gash Barka	4,208	2,725	1,483	65.0	35.0
Southern Red Sea	X	X	X	X	X
Total	20,592	15,058	5,534	73.13	26.87

Source: MoLWE, Department of Land

- 4.18 The planning and distribution of Tessa and lease land has meant public incurrence or commitment to incur major capital investment on off-site infrastructure and public services around the country, which brings about public health benefits. Where these projects are large, it is also possible to achieve economies of scale. Servicing of Tessa land for example, is provided by the government in a form of a land re-adjustment scheme especially in Asmara. The question is whether the government has been able, through this arrangement, to recover its cost and sustain its capacity to deliver the service to all planned Tessa areas. On the other hand, government is charging lease landholders a fee -sometimes in foreign currency- that is presumably meant to compensate for site preparation and servicing cost.

4.19 Besides the overall positive contribution of Tessa and lease land delivery on housing construction in the country, one would wonder about the impact of the location decisions on urbanization and settlement patterns. In Asmara area for example Tessa plots have been planned and distributed among 13 villages that have been recently incorporated in the city adding another more than 2000 hectares to the city boundaries.

Moreover, about 3000 lease plots have been distributed around Asmara and more than 6000 plots will be allocated within the next three months. Given the fact that some of the new Tessa developments or planned ones are located at long distances from the city, this may act as a disincentive for potential builders to relocate from the city to an outlying village. In this situation, a household may opt for a rented house close to employment than commuting daily to work. In terms of the public economic cost, it is more cost-efficient to extend the infrastructure network at the periphery of the city rather than expanding the network beyond that to sprawling urban settlements.

Urban Land availability and need

4.20 Urban land “availability” is a much more complicated issue than simply the existence of vacant land in or near a city. To answer the question of how much land is available for urban development, one must inquire:

- For what purpose and for who is the land supposed to be available?
- At what price must it be available?
- Where should the land be?
- What physical characteristics must the land have?
- What tenure status should the land have?
- Is the land capable of being serviced with adequate infrastructure?

4.21 The main purpose of estimating the amount of land available for urban development is to determine whether this land can accommodate projected growth in population given current policies and development patterns. If available land is insufficient, then policy changes are needed.

4.22 The estimation of urban land need is essentially concerned with determining whether available land can accommodate future population growth. The point here is to find out whether significant changes may be needed in land policy, planning, or development control in order to make certain types of land more available or to alter urban growth patterns to use already available land more efficiently.

4.23 We will use a projection period not more than 10 years ahead. We will use Asmara as an example due to the scale of the housing and urban development issues facing the city. The first step is to estimate the amount of undeveloped

land in and around Asmara, which may be available for horizontal urban expansion. The procedure consists of identifying the undeveloped land within the built-up area of the city (infill land) and on the outskirts area.

4.24 Besides making a rough estimate of the total amount of undeveloped land in and around Asmara which may be available for horizontal urban expansion, it is also important to present rough estimates of the amounts of undeveloped land which may be considered available according to its:

- Accessibility to major employment centres
- Physical suitability for urban use in terms of engineering and environmental standards
- Accessibility to existing or planned roads and water lines.
- Availability for lower-income residential development with no constraints posed by zoning or other land use control regulations.

4.25 To complete the estimation of land available for urban development, it is necessary to include already urbanized land, which may be developed at a higher density than its current use. This is important for land policy formulation because it identifies the extent to which future growth can be accommodated more or less within the existing urban boundary rather than through greater peripheral expansion.

Table 4.4: Estimation of future urban land needs for Asmara (2005 – 2015)

Total population to be housed (2005-2015) A	Population that could be accommodated by densification B	Population to be accommodated on undeveloped land C=A-B	Density standard for new to allocate areas for housing D	Land needed E=C/D	Land available F	Surplus G
219,000 ⁸¹ people	118,000 ⁸² people	101,000 people	300 p/ha ⁸³	337 ha	517 ha ⁸⁴	180 ha ⁸⁵

⁸¹ Figure made up of 155,000 people due to population growth and 64,000 people due to decongestion of dense existing neighbourhoods. The 155,000 increase in population is derived from a population growth rate of 3% over the next ten years.

⁸² 15,000 inside Asmara Proper and 103,000 on the Tessa and Bond lands.

⁸³ Popular neighbourhoods in Asmara, excluding the unplanned areas; population densities between 300 to 700 p/ha. (Source: Asmara Infrastructure Development Study). The 6 proposals for affordable housing made for the December 2004 Asmara Housing Workshop came up with average planned population densities of about 300 p/hectare for the planned housing fabric (housing including neighbourhood roads and public spaces within the housing fabric). These proposals provided a variety of plot sizes, ranging from 400 m² plots to 160 m² plots to 80 m² plots, and some plot sharing options.

⁸⁴ Allocated for housing in the May 2005 Strategic Development Plan for the Greater Asmara Area. This amount of land is reserved for housing needs over the next 20 years. The 517 hectares allocated are especially intended to meet the suppressed demand for housing affordable by low- and middle-income households. For other housing needs the 2,300 ha already provided as Tessa land, and the 1,030 ha already provided as lease land are sufficient at (low) population densities of 85-90 p/ha and 42p/ha. Estimates are derived from the Asmara Infrastructure Development Study.

⁸⁵ Caution should be taken not to underestimate housing needs (See the larger increase in population projected for the same period in the Asmara Infrastructure Development Study). According to this projection, the population increase would be 194,000 people, and 140,000 people would need to be housed on undeveloped land within the next ten years. This would leave a surplus of only 50 hectares.

Source: Adapted from the Strategic Urban Development Plan for Asmara ⁸⁶

4.26 Table 4.4 shows that land available will be able to accommodate population growth for the next ten years.

4.27 The next chapter turns to the financing of urban infrastructure.

⁸⁶ BCEOM-Groupe Huit-Optima (2005) “Asmara Infrastructure Development Study 2004-2005”

Chapter 5

Financing urban infrastructure

5.1 Urban infrastructure services have already been discussed in Chapter 2, with a focus on access by households and the level of provision. To complement that discussion, this chapter examines the financing of urban infrastructure by Government, *Zobas* and other stakeholders. The chapter starts by outlining the financing of urban infrastructure at the national level, giving examples of projects funded by Government. Using Asmara as a case study, the chapter then looks at the delivery of water and sanitation, two services that are critical to housing delivery. The accent is on the funding of these services and the recovery of costs. Asmara has been selected for this purpose because the availability of data is far better than for other towns, and because the town accounts for about 50 percent of the entire urban population in the country.

Financing urban infrastructure

5.2 Government finances the major urban infrastructure works in the country, usually through external grants and loans. Examples of these projects and the sources of funds (grants and loans) are given in Tables 5.1 and 5.2.

Table 5.1: Examples of Government investments in urban infrastructure

Project	Timeline	Amount (ERN: millions)	Remarks
New Roads in Zoba Maekel	1993-2004	1200.0	Estimated Lump sum
Maintenance of Roads in Zoba Maekel	1993-2004	160.0	Estimated Lump sum
Culverts and sewer lines in Asmara	1995-2004	32.8	Maintenance of sewer lines is not included
Rehabilitation & extension of water networks in Asmara and its vicinity	1996-2004	85.0	-
Toker Dam	1996-2000	23.6	Water Supply for Asmara
Sembel II Road	2002-2005	274.5	Road, drainage, water supply, sanitary works
Keren City road	2001-2004	87.4	Rehabilitation & maintenance
Keren water supply	2004-2005	2.7	Feasibility Study
Keren water supply	Programmed to start soon	92.2	Planning stage
Ghindae water supply	2001- 2004	15.0	New
Upper Mereb Project	Feasibility study ongoing	1.0	Feasibility Study: water supply for Mendefera, Dekemhare, Terra'emni and Dubarwa
Upper Mereb Project	2003-2009	131.5	Planning stage
Total		2105.7	Including planned projects totaling ERN 223.7 million

Source: Reports from Department of Infrastructure, Ministry of Public Works; Water Resource Department of the Ministry of Lands, Water and the Environment; Zoba Maekel (Department of Infrastructure, and Water Supply Department).

Table 5.2: Examples of grant and loan sources for urban infrastructure

Grants	Project	Timeline	Amount (ERN: millions)	Financing source
	New Road in Zoba Maekel (25 kms)	-	104.0	Norway
	Rehabilitation of pump stations & extension of water network in Asmara	1995-1996; 2001-2002	113.2	France
	Massawa causeway	2004-2005	47.9	Italy through World Bank
	Ghindae Water and sanitation project	1997-2003	14.7	UNICEF
	Adi Quala water and sanitation system	2003-2003	0.65	ICRC ⁸⁷
	Total		280.5	
Loans	Toker Dam (water supply for Asmara)	1996-2000	201.4	BADEA ⁸⁸ 10.6%, KUWAIT 60%, OPEC ⁸⁹ 18.9% of the total
	Keren water supply	2004-04	35.2	Feasibility Study financed by BADEA
	Keren water supply	Will start soon	843.8	BADEA
	Upper Mereb Project	2003-2009	1202.9	The loan source is not known
	Total		1,080.4	Does not include for Upper Mereb

5.3 Outside the framework outlined above for financing major capital works in urban areas, municipalities use two approaches to open up land for residential use and other developments (See Chapter 4 for more information):

- For leased land, allottees are asked to pay land preparation costs, an upfront charge meant to cover part of the costs of basic infrastructure⁹⁰. In Asmara, leased land is commonly sold to Eritreans in the Diaspora in foreign currency at prices sufficient to recover the costs of infrastructure;
- For *Tessa* land, in Asmara, a land adjustment approach is adopted whereby villagers get services in exchange for land. The land “transferred” to the municipality is then put to whatever use the municipality decides subject to the city’s physical development strategy. This approach does not appear to be common in towns other than Asmara, and is certainly not in use in Massawa and Dekemhare.⁹¹

Financing of water and sanitation in Asmara

5.4 **Water:** Whilst the responsibility of financing major urban infrastructure projects falls on Government, Asmara municipality is responsible for minor works as well as operations and maintenance. In particular, the municipality is responsible for service reticulation within the city, including network extensions to new residential areas. Support has also come from UNICEF and UNDP, which have

⁸⁷ International Committee of the Red Cross

⁸⁸ Arab Bank for Economic Development in Africa

⁸⁹ Organization of Petroleum Exporting Countries

⁹⁰ Massawa municipality reported that it recovers only a part of the costs, and the remainder is a subsidy. This subsidization is assumed to be common to other municipalities as it stems from the inability of allottees to pay for infrastructure costs because of poverty.

⁹¹ Discussion with officials of the two towns.

given assistance to the villages in Asmara through a current commitment of about ERN 15 million for water boreholes in these settlements;⁹² and French aid has financed the building and renovation of pumping stations.⁹³

- 5.5 Water operations in Asmara are managed by the Department of Water, which is semi-autonomous, unlike other departments within the municipality. Departmental revenues are ring-fenced from the rest of the city budget to ensure that they are not used for purposes unrelated to water.
- 5.6 Water is the main source of revenue for the Department and the tariffs charged, for those connected to the network, are given in Table 5.3.

Table 5.3: Asmara: Tariff structure for water (ERN)

Fixed charges and charges per m ³	Residential consumers			Commercial consumers
	Zone1 ⁹⁴	Zone 2	Zone 3	
Metre charge per month	5.00	5.00	5.00	10.00
Fixed monthly charge	50.00	40.00	30.00	50.00
1-10 m ³	5.00	4.00	3.00	15.00
11-20 m ³	7.50	5.00	4.00	20.00
21-30 m ³	10.00	7.50	5.00	20.00
31-50 m ³	15.00	10.00	7.50	20.00
> 51m ³	20.00	15.00	10.00	20.00

- 5.7 The Department reported that its tariffs generally meet the more pressing costs of operations and maintenance but are not high enough to meet the costs of rehabilitating the network. Lower income households, who typically buy their water from private trucks licensed by the municipal authority, pay far much more for their water (ERN 20 per m³)⁹⁵ than consumers with piped connections (ERN 3-5 per m³ for basic consumption – see Table 5.3). The use of private truckers is a temporary arrangement, necessitated by the limited supply of water in Asmara⁹⁶. Nonetheless, the excessive charges increase the burden on the budgets of lower income households in addition to reducing their ability to purchase adequate water. Nearly 25 percent of households interviewed in Asmara reported obtaining their water from water vendors but in other primary cities this proportion rises to around 63 percent⁹⁷.

⁹² Discussion with the Department of Water on 17 May, 2005

⁹³ Although rural areas remain their focus, UNICEF has financed urban water in Keren, Mendefera and Ghinda.

⁹⁴ The city is divided into different zones: the 1st zone represents the central core, whilst the 2nd and 3rd zones are further out.

⁹⁵ The official price is ERN 4 per barrel of 200 litres but private truckers charge “non-official” prices of ERN 6-7 per barrel, equivalent to ERN 30-35 per m³

⁹⁶ Department of Water official at the workshop on housing/urban development policy, 7-8 July, 2005.

⁹⁷ 2005 household survey.

- 5.8 **Sanitation (liquid waste):** The Department of Water is also responsible for the disposal of liquid waste but only a small area of the town is served by a sewerage system, part of which is quite old and in need of rehabilitation. Septic tanks are common in the more affluent parts of the city that have no sewer connection whilst poor neighbourhoods rely on pit latrines (private or shared), and on public toilets. Some households do not have access to any form of safe sanitation at all and dispose of their excreta on open ground (See Chapter 2).
- 5.9 There is no recurrent charge for households connected to the sewer, but there is a one-time connection fee. Another department, the Sanitation Unit, provides exhauster services for septic tanks and pit latrines for which there is a charge of ERN 150 each time the service is used.
- 5.10 With regard to the country as a whole, there has been limited public investment in sanitation.⁹⁸ In the absence of such investments, the local communities in such areas as Aba Shawel, an informal settlement in Asmara, have made financial and labour contributions towards the maintenance of public toilets. Data from the household survey show that, on average, around 42.6 percent of urban households do not have any form of safe sanitation; in the primary cities, this proportion is lower, at 21.5 percent.
- 5.11 **Sanitation (solid waste):** The city generates about 5,000 tonnes of garbage a month, which is collected by municipal trucks from 280 skips around the city. There is a garbage collection fee for this service, paid once a year by the household as part of the land taxation system for leased land. Solid waste is disposed off at a landfill outside the city. As there is no system of separating different types of solid waste, all waste (including hospital waste) is dumped at this landfill. In the outer parts of the city, crude dumping occurs on vacant land where no collection service is provided by Asmara municipality.

Financial position of the Department of Water

- 5.12 Revenues and expenditures for 2003 and 2004, given in Table 5.4, show that the Department of Water incurred a small deficit (ERN 239,000) in 2003 but realized a surplus in 2004 (ERN 10.6 million). The Department has pointed out that the expenditures for both years are understated, as they do not take depreciation of fixed assets into account.

⁹⁸ Draft Common Country Assessment, Vol 1, p. 30, and 2005 survey results.

Table 5.4 Asmara: Revenues and expenditures of the Department of Water

Revenue	2004 (ERN: thousands)	2003 (ERN: thousands)
Water and sewerage	41,089	24,101
Other income	95	11
Total revenue	41,184	24,112
Revenues and allowances surrendered	(580)	-
Net revenue	40,604	24112
Expenditures		
Payroll	4,774	4,506
Salaries and allowances returned	14	-
Net salaries (payroll)	4,760	4,506
Other operating expenditures	25,261	19,845
Total expenditures,	30,021	24,351
Surplus (Deficit)	10,583	(239)

Financial position of Asmara municipality

- 5.13 The ability of municipalities to deliver services depends upon the state of their finances and it is therefore important to examine the financial position of Asmara municipality. As pointed out in Chapter 8, the country does not have a well-established framework for central-local fiscal relations and there is no system of central government grants to the *Zobas*. However, municipalities have been given the power to mobilize local resources through taxation and user charges, to enable them provide local services. The financing of major capital works, as pointed out earlier, and indeed the servicing of the related debt, is the responsibility of the central government.
- 5.14 Table 5.5 presents the income statement of Asmara municipality for 2003 through 2005, setting out the income and recurrent expenditures for these years. The main income items are:
- 5.15 **Taxes and charges:** The municipality levies a wide range of taxes but the most important (2004 revenue shown in brackets) are industrial and commercial taxes (ERN 114.6 million), land rent⁹⁹ and house tax (ERN 20.2 million), and income tax on rent (19.7 million).
- 5.16 **Income from services:** This is income derived from services provided by the municipality to its residents e.g. garbage collection charges, cess pit emptying charges, abattoir fees and technical services fees.
- 5.17 **Income from properties:** This is rental income from the many properties owned by the municipality.
- 5.18 **Income from donations:** A relatively minor source that consists of donations from NGOs and other institutions.

⁹⁹ This is really not a tax but it is labeled as such by the municipality. Land rent is a charge to the lessor for the use of Government land.

5.19 Over the years, the municipality has deliberately shifted its revenue base from services and property income, to taxation. In 1995, for instance, the sources of revenue, in order of their size were: services, property revenue, tax, other revenue¹⁰⁰. As Table 5.5 demonstrates, taxes have become the dominant source of revenue in recent years.

Table 5.5: Asmara municipality: income and expenditure statement (ERN: thousands)

Income	2003	2004¹⁰¹	2005¹⁰²
Taxes	97,069	177,270	190,700
Income from services	46,525	57,226	71,385
Income from properties	5,350	4,566	4,800
Income from donations	447	99	1,580
Other income	24,223	31,658	34,161
Total income	173,614	270,819	302,626
Expenditures			
Salaries and employment benefits	24,251	27,091	34,908
Taxes and charges	22	40	63
Professional expenses	12	0	160
Financial expenses	12	11	25
General expenses	25,613	23,345	44,000
Total recurrent budget	49,910	50,487	79,156
Net income (deficit)	123,704	220,332	223,470

Source: Budget report of Asmara municipality

5.20 The financial position of Asmara municipality has improved in recent years as a result of a more effective system of revenue collection, made possible by a recently introduced system of property registration and the linking of service provision to tax payment. This improvement is reflected in Table 5.5 which shows that that the municipality's surplus on its current account has grown from ERN 123.7 million in 2003 to ERN 220.3 million in 2004, and is projected to grow to ERN 223.5 million in 2005. These figures probably overstate the surplus that would be realized ordinarily, as some of the municipality staff are from the national service and therefore receive salaries below the market remuneration for public staff. Other staffs are on secondment and are paid by their parent ministries.¹⁰³ Still, the surplus demonstrates that the municipality is able to pay its way and that it has the potential to borrow for capital projects. It should be pointed out that audited accounts do not exist making it difficult to determine the accuracy of the figures in Table 5.5.

5.21 Traditionally, in other countries, municipal authorities use the surplus on their current account to service debt procured to finance capital projects, rather than directly finance such projects from their surplus. Although some municipalities in Eritrea have borrowed from commercial banks for this purpose, the lack of a

¹⁰⁰ BCEOM et al. (2004) "Urban Profile and Projections Report" Asmara Infrastructure Development Study.

¹⁰¹ Aggregate of actual amounts for 9 months and estimated amounts for the remaining 3 months

¹⁰² Estimate

¹⁰³ BCEOM et al. (2004) "Urban Profile and Projections Report" Asmara Infrastructure Development Study.

national municipal fund limits their access to debt finance for capital projects. Indeed, Asmara municipality reported that it had not borrowed from commercial banks for capital projects.¹⁰⁴ Issues surrounding municipal borrowing and the creation of a municipal fund are discussed in Chapter 10. Asmara's capital budget for 2004 and 2005 is presented in Table 5.6. Buildings, and equipment and furniture constitute the largest capital items.

Table 5.6: Asmara municipality: Capital budget (ERN: thousands)

Capital item	¹⁰⁵ 2004	¹⁰⁶ 2005
Buildings	27,076	64,000
Plant and machinery	0	9,000
Motor vehicles	1,032	5,000
Equipment and furniture	70,946	145,470
Total	99,054	¹⁰⁷ 223,470

Source: Budget report of Asmara municipality

- 5.22 The next chapter looks at housing finance, exploring the financial sector and how households finance their housing.

¹⁰⁴ Discussion with Asmara municipality, 10 May, 2005

¹⁰⁵ Aggregate of actual amounts for 9 months and estimated amounts for the remaining 3 months

¹⁰⁶ Estimate

¹⁰⁷ The capital budget appears deliberately to have been made equal to the projected current account surplus in Table 5.5.

Chapter 6

Housing Finance

- 6.1 This chapter looks at housing finance in Eritrea with a focus on both conventional and non-conventional financial channels. Conventional finance refers to the financial services and facilities offered by formal institutions, such as commercial banks, which typically secure their loans by means of mortgages on property. Direct financing by Government, *Zobas* (regional administrations) and other organizations is also examined under this category. Non-conventional finance includes micro-finance for housing and the finance sourced from personal savings, housing cooperatives as well as by informal bodies such as rotating savings and credit associations at community level (*Ukubs*). Loans from non-conventional sources are commonly issued without a demand for collateral in the form of land and immovable property¹⁰⁸.
- 6.2 The chapter starts with an overview of the financial sector in order to set out the wider context for housing finance.

Financial sector

- 6.3 Eritrea has a small formal financial sector consisting of the Bank of Eritrea (central bank), the Housing and Commerce Bank of Eritrea (HCBE), the Commercial Bank of Eritrea (CBE) and the Eritrean Development and Investment Bank (EDIB). The other important financial institutions are the National Insurance Corporation of Eritrea (NICE), and about 30 licensed foreign exchange bureaus, dominated by the party-owned Himbol¹⁰⁹. Only three of these formal institutions have been discussed here because of their actual (HCBE) and potential (CBE and NICE) roles in finance for housing and infrastructure. The other institutions have been given no further attention in this report.
- 6.4 The Bank of Eritrea (BOE) regulates the financial sector through “Proclamation 94/1977: Financial Institutions Proclamation”. Five types of financial institutions are defined in that proclamation:
- “Depository financial institutions” which are authorized to collect deposits from the public;
 - “Non-depository financial institutions”, which do not collect deposits from the public;
 - “Non-depository financial institutions - public funds” meaning any authorized financial institution which does not collect deposits from the public but which collect funds from the public in some form for its operations. Examples include insurance companies, pension funds,

¹⁰⁸ The assumption, proven by experience, is that low income borrowers do service their loans efficiently and do not pose an unusual credit risk to the lender. It is customary to ask borrowers to accumulate savings in advance of borrowing, and such savings then act as collateral.

¹⁰⁹ IMF (2003) “Eritrea: Selected Issues and Statistical Appendix”

investment funds as well as others, which may be designated by the central bank.

- “Non-depository financial institutions - non-public funds” meaning any authorized financial institution which does not collect either deposits or funds from the public, but engages in one or more specialized financial activities such as foreign exchange dealerships, factoring and leasing companies, venture capital firms, and credit card companies.

- 6.5 BOE supervises and regulates the financial sector through a range of measures:
- Determining the functions of financial institutions;
 - Licensing;
 - Prudential supervision to create and maintain a legal and regulatory environment that ensures that financial risks are properly managed and that the interests of depositors and other stakeholders are protected;
 - Ensuring that financial institutions have an adequate capital base;
 - Ensuring that financial institutions maintain proper accounts and that these are subjected to independent audit.
- 6.6 Interest rates are set administratively by BOE and the annual rate on savings deposits is presently 4 percent while the lending rate ranges from eight to 12 percent, with the actual rate determined by commercial banks based on the underlying lending risk. The yield on Treasury Bills is 2.5 percent.
- 6.7 BOE presently does not regulate micro-finance institutions, as the scale of their operations is relatively low. But if their operations increased substantially, these institutions would be brought under the regulatory remit of BOE.¹¹⁰

Conventional finance and financial institutions

- 6.8 **Housing and Commerce Bank of Eritrea.** HCBE, established in 1994 with a capital base of ERN 13.4 million, is the only formal housing finance institution in the country. The People’s Front of Democracy and Justice, the ruling party, which holds 95 percent of the bank’s shares, whilst the remaining 5 percent is owned by individual shareholders, own it. By 2004, the bank had grown substantially, both in terms of its capital (ERN 129 million) and its branch network which consisted of 10 branches in the main towns: Asmara (3 branches); Massawa, Assab, Ghinda, Mendefera, Keren, Barentu and Tessenei.
- 6.9 Deposits¹¹¹ are the bank’s main source of funds and by 2003, the number of account holders exceeded 75,000, having grown at an average rate of over 40 percent a year during 1994-2003. Nominal interest rates on savings deposits, 8 percent in 1996, were reduced to 6.5 percent in 1997, upon the direction of the

¹¹⁰ The actual scale that triggers supervision has not been defined but as the central bank put it “this point will be reached if micro-finance institutions start to have an impact on the economy”.

¹¹¹ There are three types of deposit accounts: savings accounts, fixed time deposits, and demand deposits (checking accounts).

central bank. They were reduced further to 5 percent in April 2000, and to 4 percent in May 2000, a response to growing liquidity and little demand for credit. HCBE has managed to reduce its excess liquidity by lending to construction companies for real estate development.

- 6.10 HCBE has traditionally focused on mortgage lending for housing, and its standard mortgage loans presently carry an annual interest rate of between 8.5 and 9.5 percent for periods of up to 25 years.¹¹² It also makes house extension/renovation loans on similar terms for periods of up to 15 years, and lends for business as well. Until recently, the bank acted as a developer in addition to providing banking services, financing some of the large housing complexes in Asmara, Massawa and Keren¹¹³. These projects catered for high-income groups.¹¹⁴ HCBE has now withdrawn from property development upon the instructions of the central bank.
- 6.11 HCBE reported that it does not have the capacity to open a window for micro-finance. Its critical areas for capacity building are credit analysis and marketing.
- 6.12 Applicants for mortgage loans must meet a number of conditions, summarized in Box 6.1, most of which favour high-income groups.

Box 6.1: Lending Conditions: Mortgage Finance at HCBE

- *Originals of certificate of title or certificate of land user right;*
- *Proof of a stable income: this can be salary or income from commercial sources;*
- *Employment letter indicating gross salary and, for in-country applicants, undertaking by the employer to remit payroll deductions to the bank. For Eritreans in the Diaspora, income must be authenticated by the nearest Eritrean Embassy or Consulate;*
- *1/3 of household income is assumed to be the maximum amount available for mortgage repayments;*
- *Marital status certificate from an authorized institution;*
- *For owner-builders, originals of certificate of architectural plans, duly approved by an authorized institution. If the building is G+1, approved structural plans also to be submitted;*
- *Copy of construction permit from an authorized institution;*
- *Detailed specification and cost breakdown of project prepared by an engineer or quantity surveyor;*
- *20 percent of the house value as a down payment, either in cash or actual construction;*
- *An appraisal and administration fee of 2 percent of the loan amount.*

Source: HCBE

- 6.13 Total outstanding loans for real estate have grown steadily over the years, and while this trend was interrupted briefly by the 1998-2000 war, business picked up again afterwards; still, the annual volume of loans, even in nominal terms,¹¹⁵ has not yet reached the peak pre-war level (Table 6.1). In addition, arrears have grown

¹¹² Variations in respect of other loans are as follows: commercial buildings, 12 percent; purchase of existing houses for re-sale, 12percent.

¹¹³ Examples include the Sembel Housing Complex (Asmara), Massawa Housing Complex and Mai Temenai Housing Project (Asmara).

¹¹⁴ HCBE

¹¹⁵ i.e. not adjusted for inflation.

as a result of the impact of the war and the current difficult economic climate, and currently stand at about 15 percent of the mortgage portfolio.¹¹⁶ In some locations, especially Assab, Government has discouraged foreclosure¹¹⁷ in view of the impoverishment of households by the recent war. But the bank has managed to break even in spite of these setbacks, helped in particular by the good repayment record of Government, the major borrower.

Table 6.1: HCBE: Total Outstanding Loans and Advances for Real Estate (Amounts in million ERN)

Year	No. of borrowers (cumulative)	Outstanding amount (ERN)	Nominal annual growth rate of lending (%)
1994	537	104,525,000	-
1995	813	207,150,000	98.1
1996	1,064	519,228,000	150.7
1997	1,814	634,490,092	22.2
1998	2,095	746,911,795	17.7
1999	1,974	380,941,913	(-) 49.0
2000	2,034	374,373,504	(-) 1.7
2001	2,266	401,507,554	7.2
2002	2,244	410,539,200	2.2
2003	2,266	591,996,136	44.2
2004	2,062	683,971,202	15.5

Source: Housing and Commerce Bank of Eritrea.

6.14 The geographical distribution of HCBE loans, as represented by the outstanding loan balances at the end of March 2005, and the number of borrowers, is given in Table 6.2.

Table 6.2: Total outstanding real estate loans by region (31 March, 2005)

Region	Outstanding loan amount (ERN)		Number of borrowers	
	Value	%	No.	%
Maekel	399,717,539	50.2	1,184	54.0
Anseba	94,727,385	11.9	189	8.6
Debu	75,685,540	9.5	588	26.8
Gash Barka	112,020,170	14.1	135	6.2
North Red Sea	113,421,020	14.2	92	4.2
South Red Sea	801,470	0.1	5	0.2
Total	796,373,124	100.0	2,193	100.0

Source: HCBE

6.15 As one would expect, Asmara accounts for the bulk of both the outstanding loan balances (50.2 percent) and the number of borrowers (54 percent). Interestingly, the proportion of Asmara loan balances corresponds to the share of the city in the country's urban population. In many developing countries with a market-driven housing finance sector, the proportion of outstanding loans in the capital city is usually much higher. This suggests that in its lending programme, HCBE does take into account non-market considerations. In other words, the bank has been

¹¹⁶ Discussion with HCBE on 7 June, 2005.

¹¹⁷ This is the legal process whereby the lender repossesses the property in default (i.e. on which the loan is secured) and re-sells it to recover the outstanding principal, unpaid interest charges and foreclosure costs.

willing to lend even in towns where a robust housing market does not exist, thus raising the risk of not being able to foreclose successfully should the need arise.

- 6.16 Table 6.3 sets out the distribution of loans by size, outstanding loan amount and number of borrowers.

Table 6.3: Distribution of loans by size, outstanding loan amount and number of borrowers (31 March, 2005)

Loan size (ERN)	Outstanding loan amount (ERN)		Number of borrowers ¹¹⁸	
	Value	%	No.	%
Greater or equal to 1,000,000	465,603,630	60.8	32	1.5
500,001 - 1,000,000	101,200,080	13.2	160	7.5
100,001 - 500,000	139,056,111	18.1	608	28.3
50,001 - 100,000	34,953,070	4.6	507	23.7
25,001 - 50,000	19,596,229	2.6	478	22.3
10,001 - 25,000	4,541,948	0.6	212	9.9
Less than 10,000	761,602	.1	146	6.8
Total	765,712,671	100.0	2,143	100.0

Source: HCBE

- 6.17 Loans in the category ERN 1,000,000 and more account for by far the highest share of any one loan bracket (60.8 percent), followed by those in the ERN 100,001 – 500,000 bracket (18.1 percent) and ERN 5001 – 1,000,000 (13.2 percent). This distribution of loans, as one would expect of a traditional housing finance institution, is skewed in favour of high-income groups. But it is interesting to note that HCBE does lend small loans in the brackets ERN 10,001 – 100,000 (7.8 percent).
- 6.18 **Commercial Bank of Eritrea.** CBE, a government-owned bank, is by far the bigger of the two deposit-taking commercial banks, commanding a market share of more than 80 percent. It has a capital base of ERN 400 million, 16 branches throughout the country and 230,000 savers. Although it presently does not lend for housing, it used to before independence when it was part of a savings and mortgage bank with headquarters in Ethiopia; it hopes to go back into mortgage lending in the future. Domestic credit, import finance and agriculture are its most active areas of lending but housing developers also obtain short-term loans. Lending interest rates range from 8-12 percent per annum, with the actual rate based on the term of the loan and the underlying risk.
- 6.19 Before the war, there was a proposal by the IMF to privatize the bank by restructuring it into two or three privately owned banks, but this plan was not followed through. Driven by social concerns, the bank's preference was to outsource management services to an international bank, arguing that outright privatization would compel CBE to pull back from rural lending. This alternative plan did not materialize either.

¹¹⁸ Borrowers in foreign currency (3No.) are not included in the total for this column. There is an unaccounted for difference (47) relative to the total number of borrowers in Table 3. This difference is too small to affect inferences based on the data.

- 6.20 Following the 1998-2000 war, drought, and the downturn of the economy, bad debts have climbed to 40 percent of the loan portfolio, up from 6 percent before the war.
- 6.21 **National Insurance Corporation of Eritrea.** Established in 1992, NICE provides the typical range of insurance services by such companies, including life, motor vehicle, fire and accident insurance. Notably, it provides hazard insurance to those who take out mortgage loans from HCBE. But HCBE homebuyers are not required to obtain life cover, which increases the risk of heirs losing the mortgaged property should the homebuyer die before the loan is redeemed.
- 6.22 NICE has invested its surplus funds in commercial and industrial developments, treasury bills, regional re-insurance corporations and domestic financial institutions. It manages, on behalf of government, a recently established pension scheme for civil servants, besides its own staff provident fund.
- 6.23 NICE is now privatized, attracting subscriptions from 1,700 Eritrean. Government's ownership of 40 percent of the corporation's shares will eventually be phased out.
- 6.24 **Direct financing by Government.** Through the *Warsay Yekealo* campaign, Government is directly financing from its own budget a large housing programme.¹¹⁹ Site planning, house design and contract documentation are carried out by the Ministry of Public Works, which then hands over the construction responsibility to the Ministry of Defence. Since the end of 2002, 10 projects (in Massawa, Ghinda, Assab, Tio, Dekemhare, Mendefera, Dubarwa, Tessenei, Barentu and Agordat) have been designed and handed over to the implementation units of the Ministry of Defence, whilst others are in the pipeline. Ongoing and planned *Warsay Yekealo* projects are listed in Table 6.4.

¹¹⁹ Technically speaking, what Government (and the Zobas, see next sub-section) is doing is providing construction finance from its budget. The houses are then offered for sale but it is not clear how many are sold outright and how many through HCBE mortgage loans.

Table 6.4: Ongoing and planned Warsay Yekealo projects

Ongoing projects	Location	No. of dwelling units	Cost in ERN (million)
	Agordat	189	135.6
	Barentu	168	120.8
	Dekemhare	146	81.5
	Massawa	524	248.3
	Ma-Hutsa (Asmara)	538	478.0
	Total	1565	1064.2
Planned Projects	Halibet	686	
	Villagio Genio	992	
	Mai-Temenai	1,570	
	Mendefera	149	
	Dubarwa	140	
	Tessenei	144	
	Gindae	133	
	Tio	194	
	Assab	86	
	Total	4,094	¹²⁰ 3,600

Source: Ministry of Public Works

6.25 **Direct financing by Zobas (Municipalities).** Municipalities have also financed housing projects from their own budgets, with Zoba Maekel being the most active (Table 6.5).

Table 6.5: Housing Developments by Zobas

Location	Project	No. of units	Selling price
Zoba Anseba	Megarh Housing	136	USD 56,086-86,007
Zoba Maekel	Wina Development (1996)	53	ERN 74,000
Zoba Maekel	Wina Development (1997)	57	ERN 203,000-412,000
Zoba Maekel	Sembel "Low Cost" Housing Project	200	ERN 500,000

Source: HCBE and Zoba Maekel (Infrastructure Department)

6.26 **Direct financing by private employers.** Company-financed housing is rare. In one reported case, Melotti factory advanced housing loans to its best employees, with repayments deducted from the salary. The employees were able to build houses and repaid their loans over a period of about 10 years.

6.27 **Direct financing by development partners and NGOs.** Development partners and international NGOs have not been involved in financing housing, with the exception of shelter for Internally Displaced Persons (IDPs) and returnees from other countries.¹²¹

¹²⁰ Rough estimate of the total cost of the planned projects. An accurate breakdown of the total cost is not available.

¹²¹ For instance, UNDP's PoWER programme, implemented via NGOs, has built and rehabilitated shelter and related services (water supply, schools and clinics) for IDPs and expellees. The amount spent so far under this programme on shelter and water is USD 5.8 million and USD 1.6 million, respectively.

Non-conventional finance

- 6.28 **Savings and Micro-Credit Programme.** The Savings and Micro-Credit Programme (SMCP), an arm of the Ministry of National Development (MOND), is one of the main providers of micro-finance in the country. The Programme was established in 1996 with financial support from the World Bank initially consisting of US\$ 4 million through a rehabilitation project. In the recent past, another US\$ 7 million has been made available for micro-credit from the same source.
- 6.29 SMCP was initially part of the Eritrean Community Development Fund but was later hived off. Its operations are overseen by a steering committee made up of MOND (Chair), one women's representative, and other members including the Commercial Bank of Eritrea. Although the Programme operates as a government department, there is a commitment to give it greater autonomy within the next two years by converting it into an association. Plans are well advanced to hire a consultant to investigate the proposed institutional change. The long-term outlook is for the association to evolve into a bank.
- 6.30 SMCP has established a countrywide network of village banks through which low-income borrowers obtain micro-loans for business. The Programme covers all six regions of the country, and the 235 village banks in operation presently serve 635 villages. It has around 19,000 beneficiaries, consisting primarily of those who do not have access to the formal banking system.
- 6.31 Borrowers are required to have saved with the Programme prior to qualifying for a loan. As SMCP is not authorized to accept deposits, savings by its beneficiaries are held at the Commercial Bank of Eritrea, amounting to ERN 12 million.
- 6.32 There are two tiers of loans on offer. Tier 1 loans are made to persons who are members of a solidarity group, a mechanism meant to exert peer pressure on those in default and thus reduce the risk of lending (credit risk). Tier 2 loans, typically larger and without the "member of a solidarity group" condition, are generally meant for small entrepreneurs. In all cases, the approach is for an applicant to be offered a small starter loan, with bigger loans following in subsequent lending cycles subject to the borrower's repayment record. Micro-loans range from ERN 3,000 to 40,000, and loans to small entrepreneurs from ERN 40,000 to 150,000. Loans are advanced for income generating activities only and are of short maturity – 3 months up to 3 years. Simple interest is charged (currently 16 percent per year) on a declining balance basis¹²².
- 6.33 **Acord-Eritrea.** Acord, an international consortium of NGOs, is the other major provider of micro-credit in the country besides SMCP. It started its operations in 1994 and has over the years focused on supporting rural grassroots organizations, although extension of activities into urban Asmara is envisaged.

¹²² That is, interest is charged only on the principal outstanding from time to time.

- 6.34 Acord-Eritrea presently covers three *zobas* in the country: Maekel, Debub and Anseba. Since its establishment, it has extended loans to 76,000 people, disbursing more than ERN 140 million (USD 9.3 million). The sectoral distribution of its micro-credit is as follows: agriculture, 65.8 percent; trade, 29.5 percent; services, 4.0 percent; and production, 0.7 percent.
- 6.35 As in the case of SMCP, applicants are first offered a small starter loan of short maturity, with bigger loans following in subsequent lending cycles. The first cycle is for amounts of up to ERN 5,000 whilst the fifth and last cycle ranges from ERN 10,001 to 12,500. Loans carry an annual interest rate of 16 percent, on a declining balance basis. A loan recovery rate of 99.5 percent and over has been achieved, matching best practice for micro-finance around the world.
- 6.36 All applicants must build up their savings (the equivalent of collateral) before they are eligible for a loan – initially, the level of savings was pegged at 25 percent of the loan amount but this has now been reduced to 5 percent to make entry into the programme easier. Savings amounting to around ERN 10 million have been mobilized so far. These, together with other resources,¹²³ have been utilized in Acord-Eritrea's lending programme.
- 6.37 The main strategy of Acord-Eritrea is to promote the creation of village banks and 31 of these have already been established. The long-term strategy is to federate village banks as a means of strengthening them and thus improve their access to financial resources from the formal banking sector. As part of its continuing effort to promote social security for the poor, Acord-Eritrea has recently introduced a life insurance scheme for borrowers and their livestock, with insurance cover provided by NICE.
- 6.38 Between 1995 and 1997 Acord-Eritrea financed 1,250 dwellings for returnees in Gash Barka, through self-help construction and own production of local building materials. Maintenance of these dwellings has apparently been neglected and some of them have collapsed. There have been no other housing interventions since then.
- 6.39 **Savings and credit associations.** Employee-based savings and credit associations, such as those at the Ministry of Finance and the Ministry of Labour and Human Welfare, also act as channels of micro-credit. So far, they have not been active in financing housing.

¹²³ E.g. USD 545,000 from Acord and Euro 1 million from the European Union.

Box 6.2: Savings and Credit Association of Employees of the Ministry Finance

The saving and credit association of the employees of the Ministry of Finance is a voluntary association. It was established in 1986 with the following objectives:

- *To encourage members to save;*
- *To teach members about proper money management;*
- *To provide members with convenient and easy access to loans;*
- *To protect members from money lenders' exploitation;*
- *To provide members with banking services.*

The association has 513 members. Every month, each member is required to save at least 2 percent of his/her gross monthly income. So far, the association has a pooled fund of ERN 3,107,000. The money is deposited at the Commercial Bank of Eritrea in the name of the association and bears interest. Members have the option of either withdrawing the annual interest on their savings or deposit it back.

There has been an ongoing discussion as to how to invest the resources of the association. A few of the areas considered include a bakery, buses, a gas distribution centre, and house building/purchase for rental purposes. However, members have not yet made a final decision.

To be eligible for a loan, an employee has to be a member for at least six months. When a member wants to borrow from the association, he/she has to identify another member as a guarantor. The size of the loan depends on a member's savings. The maximum is ERN 20,000 for a period of not more than five years. The rule is to charge a monthly interest of 1 percent on a declining balance basis. But in practice, the association charges 6.5 percent interest per annum on the total loan.

Source: Savings and Credit Association of Employees of the Ministry Finance

6.40 **Housing cooperatives.** Housing cooperatives, which are essentially specialized savings and credit associations, have financed housing in the country, although on a modest scale. Before independence, teachers' housing was financed on this basis in Mai Temenai and Mihram Chira. Since independence, the housing developments promoted by housing cooperatives in Asmara include Jakaranda, Sewit, Housing '96, Wagner, Eritro-German, Fair View and Michel Tedros.

6.41 **Informal channels:** Informal channels of micro-loans exist (*Ukubs*) although these are not well documented. *Ukubs* typically operate at the community level, taking members' regular self-enforced savings and distributing them according to set rules. The level of loans is generally much lower than that required for long-term housing finance but elements of the system, if linked to formal micro-finance, could be used to finance house construction.

Box 6.3: Profile of an Ukub

One Ukub selected as a case study is made up of 11 working men and women. Each member contributes ERN 300 every month and the total amount collected is handed over to one member, selected through drawing of lots. Altogether, the beneficiary gets ERN 3,300 including his/her own contribution.

Last year, the members used their credit to finance a wide range of items: building materials for incremental house building; house painting; durable household goods (TV, washing machine, refrigerator); and social functions.

- 6.42 **Personal savings:** 70 percent of households reported to have used personal savings to finance their housing, pointing to the central role of this type of finance for housing¹²⁴.
- 6.43 The next chapter turns to the housing construction industry, with a focus on building materials and construction labour.

¹²⁴ 2005 household survey

Chapter 7

Construction Industry

7.1 The large import component of construction materials and the scarcity and high cost of labour contribute to the deteriorating housing conditions and escalation of rental and housing prices in urban areas. In view of this, this chapter focuses on construction materials and labour, and the actions needed to respond to the various constraints.

Construction Materials

7.2 Cement and reinforcement steel are primary construction materials that are in very short supply due to import limitations. A year ago, builders could import materials directly after acquiring an importation permit from the government. Nowadays materials can only be imported by the government and solely used for its projects, which consume the biggest volume of the materials. When materials are available at government distribution points, payment has to be made in foreign currency. Under these circumstances, builders who have the financial capacity may acquire the materials from the black market, in hard currency and at exorbitant prices. The price of one ton of cement has gone up from USD 80 to USD 105. One could safely say that demand for building materials is very high. The prices of lumber, cement, reinforcement bars and structure steel have been rising. The prices have risen by 60 percent, 37 percent, 188 percent and 100 percent respectively between 2002 and 2004.

7.3 The country also imports other construction materials including wood, which is mainly used for the manufacturing of furniture with construction using 45 percent¹²⁵. Eritrea has a significant wood deficit problem. Sanitary ware and finishing material is also imported.

7.4 The cement produced locally does not satisfy demand. Local production capacity of cement is limited to one factory at the Red Sea coast near Massawa. The annual production capacity of the factory is estimated at 50,000 tons with an average annual output of 45,000 tons compared with an annual consumption of 250,000 to 300,000 tons¹²⁶. This means that it supplies only about 20 percent of the country's annual requirements. The price of importing the material constitutes a drain on badly needed foreign currency that could be used for financing capital equipment needed for agricultural and industrial production.

7.5 The government is planning to build a new cement factory within the next two years. It is evaluating two offers, one for a factory with an annual production

¹²⁵ Manderstam Consulting Services (1998) "Building Materials" Draft Final Report, Volume 3.

¹²⁶ Ministry of Industry and Trade

- capacity of 300,000 to 400,000 tons and the other of a capacity of 600,000 tons with a margin for exportation¹²⁷.
- 7.6 There is a high demand for tiles. Wall and floor tiles materials are mostly imported. There are a few available local products but the quality needs some improvement. The Investment Law provides tax incentives to encourage local materials production.
- 7.7 There is also high demand for steel products at present. All steel is imported either as scrap or as finished product. Imported steel is used mainly for building purposes. The country has a small government-owned metal manufacturing plant that is very dependent on imported galvanized steel rolls. It produces metal frames, mainly for large span trusses and beams by cutting and forming from imported metal coils and from metal sheets.
- 7.8 There is also high demand for bricks and ceramic tiles. The local production capacity of ceramic tiles is low. Some of the quality of bricks produced locally is below standard.
- 7.9 The above are some examples of the building materials that are in high demand and are imported from neighbouring countries as well as from South East Asia and Europe. It is estimated that the value of construction material import is 70 percent to 80 percent. In constructing the Sembel Housing Complex (1995-1997) by the Korean Keangnam PLC, 98.2 percent of the construction material used was imported¹²⁸.
- 7.10 Local construction materials include sand, stone and gravel. Their prices have been sharply increasing. Between 2002 and 2004, the price of sand has risen by 100 percent from ERN 150 to ERN 300 per m³. Stone prices have gone up by 114 percent from ERN 140 in 2002 to ERN 300 per m³ in 2004 and gravel from ERN 180 to ERN 350 per m³ registering a rise by 94 percent. The price of a litter of petrol has increased by 187 percent and diesel by 119 percent in the same period, substantially raising the cost of producing and transporting materials.
- 7.11 The above situation has been a result of a combination of factors including the collapse of industries, shortage of raw materials, obsolete machinery, shortage of expertise and capital, expensive energy and the reluctance to liberalize the sector.
- 7.12 Urban standard housing construction materials include bricks, hollow cement blocks and stones for walls, concrete flooring covered with different types of tiles such as cement, terrazzo or ceramic tiles and sometimes marble or granite.

¹²⁷ Ministry of Industry and Trade

¹²⁸ Manderstam Consulting Services, op. cit.

- 7.13 Modern bricks were most probably introduced or made popular by the Italians who widely used it in their housing construction. They produced high quality facing bricks at that time.
- 7.14 In spite of the high price of bricks, there is increasing demand for it. Estimates put the price of a one square metre of brick wall at over ERN 600, twice as much of that of cement blocks. In response to the demand, the production of bricks has been expanding over the last few years. It went up from 9.8 million bricks a year in 1999 to 29 million in 2003, tripling the output in four years.
- 7.15 Supply of bricks has not been matching demand for a long time, resulting in construction delays and price speculation. The recent production expansion of the Ghinda brick factory is expected to increase the daily output from 75,000 to 200,000 bricks and contribute to alleviate some of the unmet demand.
- 7.16 The present bricks production meets about 30 percent of the demand only, a situation requiring increasing the output capacity of existing factories and establishing new ones. Some of the existing smaller brick factories in and around Asmara have outdated production facilities, which use the scarce firewood for the firing of the bricks. In the case of others, shortage of fuel limits their production capacity.
- 7.17 The quality of cement blocks has improved overtime, and the demand for them has dramatically increased over the last few years. Cement block production has gone-up from 608,000 blocks in 1999 to 1.1 million blocks in 2003 increasing by 180 percent during this period. The high demand could be attributed to the price advantage of the cement blocks over bricks, its availability, improved quality and wide spread and experience in its use. Compared to bricks, production of cement blocks is simpler, requires little skill, and production equipment is not very expensive.
- 7.18 Various types of stones are found throughout the country. This includes lateralized stone of various hues and colours, sandstone, limestone, basalt, marble and granite. Basalt is used, whenever possible, for foundation walls while sandstone, limestone and other lateralized stone are used for elevation walls, according to their availability. Marble and granite are used in high-income housing for flooring, as cladding material and for windowsills and stairs. There are a number of workshops that cut and polish marble, and a few that can process granite. Demand for marble outstrips its supply and irrespective of its high cost, there is a waiting period.
- 7.19 Flooring materials consist of cement tiles, terrazzo, terrazzo tiles, marble chips, and, occasionally, marble and granite. Good quality floor tiles are produced locally, but some builders use imported ceramic tiles at higher cost.

- 7.20 Roofing material consist either of concrete slab treated with asphalt for impermeableness, or of corrugated iron sheets resting on wooden trusses and purlins. Some builders' use the more expensive imported coloured tiles. A couple of plants produce roofing sheets from imported galvanized iron rolls. There is high demand and waiting list for roofing sheets.
- 7.21 Cement tiles for roofing have been sometimes attempted as a cheaper alternative to iron sheets. When the production quality is good, their price competitiveness is negated by the additional cost of the supporting trusses and purlins.
- 7.22 Most sanitary ware is imported. However, locally produced fibreglass sanitary fittings, have not proven their competitiveness against imported ceramic products.

Rural Housing Construction Materials

- 7.23 There are primarily two types of rural houses, which use local materials, methods and skills. In the rural highlands, there is abundance of building stones, which are used in building houses and fences. House construction in the villages is often a communal effort. The traditional house, "Hidmo" is typically built in stone, with wooden posts supporting wooden rafters and joists, and covered with branches and earth for a roof. "Hidmos" consume a lot of wood for the roof and supporting structure.
- 7.24 In the rural lowlands of Gash Barka and Northern Red Sea areas, two types of houses are common. The "Agnets", a simple, round, light weight wooden structure covered with matting, which is easy to put up and remove for the frequent moving of nomads and pastoralists. For settled villagers, the houses called "Agudo", are round in shape and may be built in stone, or split wooden posts, sometimes covered with mud. The roof is often thatched on wooden rafters. Communal participation is also common in these areas.
- 7.25 In the Southern Red Sea area, which is mostly inhabited by sedentary people, houses are similar to "Agnets".

Labour

- 7.26 The Italians following their occupation of the country brought in most modern housing construction techniques. In the early stages, house designers and builders were predominantly Italians with unskilled labour provided by Eritreans. With the passing of time, Eritreans acquired the building skills including masonry, carpentry and finishing work, and gradually became skilled building subcontractors while the Italians providing the design and supervision services.
- 7.27 Eritrean engineers and architects began to enter the housing construction market in the early 60s with the arrival of first graduates from the building and engineering colleges in Ethiopia, from the Italian-run school in Asmara and from

- universities overseas. Except for some foreign consulting firms, Eritreans handle most housing and architectural work today.
- 7.28 There was an abundance of building skills in Eritrea during the Italian colonial rule. The acquired skills were not passed to the younger generation. The decline in the construction activity under the Ethiopian rule resulted in labour out-migration especially to Ethiopia. Moreover, many joined the liberation movement or simply abandoned the job due to reduced demand.
- 7.29 After independence in 1991, the construction labour shortage was critical to the extent that skilled labour was brought from Ethiopia. Large-scale housing projects implemented in the following years especially the Sembel housing complex, provided Eritreans with on-the-job training opportunity in modern building technology and skills.
- 7.30 Labour market information is not available. Labour shortage is however attributed to the no-war-no-peace situation with Ethiopia and the subsequent mobilization of the youth.
- 7.31 Due to the construction labour shortage, high school students, who attend half day classes and wish to supplement their households' incomes, join the workforce first as unskilled daily workers and eventually as masons and plasterers. Even youth on leave from the national service who have acquired some skills from the on-the-job-training with public construction companies, are on demand as masons, carpenters, plasterers, tillers, bar benders and plumbers.
- 7.32 There are few formal building trade schools in Eritrea including the Asmara, Don Bosco and Pavoni, which do not have enough capacity to respond to market demand. The Ministry of Education also runs vocational training programmes for a number of construction trades but also with limited production capacity. Most of those who complete their training have to join the national service for a long time. The army is currently implementing large-scale housing projects that entail a training component for the Eritrean youth who are doing their national duties.
- 7.33 Labour cost in Eritrea is expensive. This has raised the overall cost of production in the construction industry. There is scarcity of labour now of skilled semi skilled and unskilled labour due to their mobilization in the national service. There is especially high demand for skilled labour such as masons and carpenters. In fact, one contractor indicated that he is training his own labour and in the process, he is making a cost saving of 10 to 15 percent¹²⁹. He said that labour cost of total house construction cost -including 5 percent sales tax on labour cost- ranges between 27 to 35 percent. Another Asmara contractor provided the following information¹³⁰:

- ERN 100-110 is the daily wage for skilled labour;

¹²⁹ Meeting with a contractor on 03/05/05

¹³⁰ Meeting with a contractor on 10/05/05

- ERN 40-45 is the daily wage for unskilled labour;
- ERN 3500 the average labour cost per square metre;
- ERN Square metre cost of both labour and materials is about 8000.

7.34 Another contractor mentioned that his contracts with clients cover only labour- mostly preferred by clients- and that he subcontracts plumbing and electrical works and hires rest of the labour. Labour rates, according to him, as follows¹³¹:

- ERN 50-60 daily wage in Asmara for unskilled labour;
- ERN 35-40 daily wage for unskilled labour in the rest of the country;
- ERN 3000-4000 for each of plumber and electrician for the whole job;
- For skilled labour other than plumber and electrician daily, wage 80-100 Nakfa.

7.35 The Government of Eritrea is currently pursuing a demobilization programme that will release some of the badly needed construction labour into the market. Moreover, the increasingly mechanized and capital-intensive construction industry will partly mitigate and compensate for the labour shortage and contribute to reducing the high labour cost.

7.36 The next chapter, in Part III, pulls together the main issues of urban governance and recommends strategies to address them.

¹³¹ Meeting with a contractor on 12/05/05

Part 3:
Housing/Urban Development:
Strategies for Change

Chapter 8

Improving Urban Governance

8.1 Chapter 3 described Eritrea's governance system with a focus on the structure of local government, and the institutional and regulatory framework for housing and urban development. This chapter pulls together the main issues of urban governance and recommends strategies to address them. The chapter starts with a critique of decentralization in the country, on a general level in the first instance, but moving on to focus on fiscal decentralization (*i.e.* devolving taxation and spending powers to the local level). The other issues discussed are (a) the limited level of participatory planning in urban development, and (b) the capacity limitations of central and local government institutions in the housing and urban development sector.

Decentralization

8.2 **Decentralization in general:** In a truly decentralized governmental system local governments are granted political and administrative autonomy, as well as access to financial resources commensurate with their functions. But few countries achieve this goal. In Eritrea, although a framework for decentralization exists (Chapter 3), several indicators point to the limited autonomy of local governments. First, the central government appoints the executives of local governments: the President appoints the regional governor whilst the Minister in charge of local government appoints the chief executive of the sub-region. The powers of these centrally appointed officials tend to override those of the elected local councils. One analyst has argued that this could be the result of the uneven development of branches of government during the armed struggle¹³².

8.3 Second, because of their limited capacity, local governments depend heavily on central government personnel for the implementation of major socio-economic programmes and projects.

8.4 Third, in accordance with Proclamation No. 86/1996, local governments cannot prepare development programmes and projects independently of the central government. The Proclamation acts as the main instrument of central government control. Government rarely uses financial instruments of control, such as grants-in-aid, as there is no established system of central-local fiscal relations.

8.5 Although there is a devolution of ministry functions to the regional level, this arrangement requires regional sector heads to be accountable to both their headquarters and to the regional governor, raising the prospects of conflict.

¹³² Tesfai, A. (1999) "Issues of Governance in the Eritrean Context" in Doornbos, Martin and Tesfai, Alemseged (eds.) *Post-conflict Eritrea: Prospects for reconstruction and development.* pp239-323

Government's solution to this issue has been to limit the functions of ministries at the regional level to the provision of backstopping services in policymaking, setting of technical performance standards, and regulation.¹³³

- 8.6 **Fiscal decentralization:** No assessment has been conducted of the share of local government expenditure in total public sector expenditure. Even so, fiscal decentralization appears to have advanced ahead of political and administrative decentralization.¹³⁴ Local governments have various sources of revenue as they are legally empowered to levy taxes, fees and charges on their residents. Besides, they have the power to allocate their financial resources although they are required to have their budgets approved by the central government. Most of the revenue in Asmara comes from service charges, property revenue, and various taxes but the main sources of revenue in the other towns are unclear (Chapter 5). The government finances the major infrastructure works within towns thus partly compensating for the lack of a system of central government grants to local government.
- 8.7 Compared to the villages, the towns have greater fiscal autonomy because of their powers to tax and their more substantial revenue base. But for those towns with the status of a sub-region -- Keren, Assab, and Massawa -- this autonomy is diluted by the need to seek taxation and budgetary approvals from the regional administrator and from the council. This approval is necessary because the sub-region does not have a legislative body to approve local financial decisions (Chapter 5). The lack of direct taxation powers also tends to reduce taxpayer compliance, potentially weakening the financial position of towns with the status of sub-regions.
- 8.8 In spite of their relatively high degree of fiscal autonomy, towns have seen their financial health undermined by a weak economy, the poor financial base of most towns, and the limited capacity to collect revenue.¹³⁵ Moreover, the lack of a system of central-local grants (transfers) denies the central government the use of important financial levers¹³⁶ to influence local government behaviour and to ensure financial equity among towns.

Limited Participatory Planning

¹³³ Government of Eritrea (2001) "Country Presentation by the Government of Eritrea" Report to the Third United Nations Conference on the Less Developed Countries, Brussels, 14-20 May 2001.

¹³⁴ The asymmetry between political/administrative decentralization, on the one hand, and fiscal decentralization, on the other hand, has been noted in the literature – see for instance UN-Habitat (2005) Financing Shelter and Urban Development. Draft Global Report on Human Settlements.

¹³⁵ No specific investigation of this aspect has been conducted. But severe capacity constraints in all areas of municipal operations were reported during fieldwork.

¹³⁶ For instance, as happens in some countries, grants could be made conditional upon a local government improving its financial performance as well as introducing participatory planning.

- 8.9 Although field consultations indicated that urban communities are involved in urban management, the system for doing so is highly formalized, and appears top-down and re-active, as the case study of Maekel Region illustrates (Chapter 5). Survey data shows that only a community representative had consulted a small proportion of the respondents in the primary towns (19 percent) in the preceding year whilst more than a half of them (56 percent) knew their community representative at the local government level. Moreover, less than a half of the respondents (49 percent) were members or representatives of a community-level committee or association. The case study of Maekel region also showed that few people were aware of the use of formal meetings of the Council as a mechanism for consultation.
- 8.10 There is a clear need for a framework to promote participatory planning to ensure that local communities engage effectively with local governments in (a) determining local priorities and (b) responding to such priorities.

Capacity constraints

- 8.11 There are serious capacity constraints within both central government and local government departments. A particularly pressing problem for most departments is the serious deficit in human resources, in both numbers and quality of staff. There is also a general lack of facilities and financial resources to support the activities assigned to both government and local government bodies. Notably, Councils do not have any financial capacity and depend on the regional administration (executive branch) for financial support, further reducing their powers to act.
- 8.12 The Department of Urban Development, which is severely understaffed, is not able to respond adequately to the urban planning needs of municipal authorities. Moreover, although a Housing Division exists, it has no staff, making it difficult for DUD to develop and maintain an up-to-date database on housing, and to regulate and monitor the housing sector. Capacity constraints were also reported at the Department of Lands seriously eroding the national capacity for land delivery.
- 8.13 At the town level, municipal authorities are poorly equipped to manage urban development, although there is evidence of creative responses to this problem. In Keren, consultations with officials revealed that the lack of a master plan had made it extremely difficult to allocate land for development. In contrast, to overcome a similar problem, Mendefera, had taken the initiative to use a private firm to provide urban planning services, enabling it to guide the development of the town and its satellite villages.
- 8.14 Municipal authorities are also financially weak and therefore have limited capacity to finance urban infrastructure projects, a topic discussed in Chapter 5.

Moreover, financial accounts are not subjected to external audit and public scrutiny.

Strategies for Change

8.15 To improve urban governance in the country, a number of measures are recommended:

- Build the capacity of municipal authorities to improve their capability for urban management, participatory planning, and financial management;
- Develop a framework for participatory planning in urban development;
- Build the capacity of the Department of Urban Development to deliver urban planning services and enable it, through an appropriately staffed Housing Division, to monitor housing policy implementation and maintain an updated data-base on housing;
- Build the capacity of the Department of Lands to make it more effective in the delivery of land;
- Introduce a system of central government grants to local government. This would enable government to (a) use financial levers to influence local government behaviour and (b) improve financial equity among towns;
- Improve municipal access to funding through a Municipal Infrastructure Fund, discussed in some detail in Chapter 10;
- Grant Councils legal powers to approve or reject proposals of the executive body;
- Create a legislative body within towns that still have a sub-region status to improve their local decision-making.

8.16 The next chapter looks at how to address the existing land constraints to accelerate land delivery. Aspects explored include land use standards and affordability, land delivery and location, and the use of land as collateral.

Chapter 9

Accelerating Land Delivery and Improving Security of Tenure

9.1 This chapter addresses the issues surrounding land delivery as a basis for recommending appropriate strategies. The issues addressed include land development standards and affordability, land delivery and location, and the use of land as collateral.

Housing land issues

9.2 Land is a unique component of the housing production process. For a smooth housing delivery, it is important to ensure that land is made available when it is needed at the right location and at an affordable cost. From the preceding analysis a number of land delivery issues and constraints have emerged that have implications for the ability of low-income households to improve their housing conditions. These include land use standards and affordability, land delivery and location, and land as collateral.

Land Development Standards and Affordability

9.3 Land development standards have a direct effect on housing costs and affordability. This not only includes formal standards in laws and regulations but also standards in common usage by low-income urban dwellers. Lower-income residential areas are not developed according to official standards. The land use standards that prevail in illegal subdivisions reflect local needs and preferences that should be taken into account in planning.

9.4 Prevailing formal land development standards including plot sizes and dimensions are high and are unaffordable by the low-income households. An approximate Tessa plot size is 500 square metres. It is worth mentioning that the Tessa plot size of 500m² has not been fixed by the Land Proclamation but rather by an administrative practice. The Land Proclamation only indicated that Tessa plots should have equal measure, as much as possible, in all parts of the country. Analysis has revealed that land development standards have an impact on the affordability of low-cost shelter solutions. Such analysis tests the effect of alternative plot sizes, circulation areas or street dimensions, densities, and other standards on the final price of shelter solutions and ultimately on households' affordability.

Land Delivery and Location

- 9.5 In Eritrea, demand for housing land exceeds its supply. The need for land in the rest of the country is not as severe as in Asmara where more than 13 percent of the population lives. However, the speed by which housing land should be delivered when it is needed is a reflection of the institutional capacity to do so. Failure to respond with adequate speed to the pressure for land will lead to public interventions lagging behind lower-income housing development and sometimes even behind middle- and upper-income residential or commercial development.
- 9.6 There is need to assess the capacity of urban development institutions in terms of authority, technical ability, and financial capacity to strengthen their capability to deliver land on time when it is required.
- 9.7 The issue of the location/access of housing land has implications for individual household's housing decisions. Factors such as proximity to employment and social services and amenities, transport facilities and availability of other housing solutions such as rental housing and affordability will influence a household's decision to construct a house on a plot that is located further away from its present and more convenient housing arrangement. Residential land must be located close enough to employment areas and markets, or be sufficiently served by public transport, to make travel to work and shopping affordable and relatively convenient. Numerous lower-income shelter projects around the world have failed because they have been located on remote sites.
- 9.8 In the city of Asmara and some other urban centres, a substantial number of poor people cannot afford to purchase through market mechanisms a quantity and quality of housing adequate to sustain a decent standard of living. The inability to afford a regular housing unit leads the poor to find unconventional solutions to their housing problems, and some of these solutions are even illegal in certain contexts. First, many of these people occupy land without permit or due process of subdivision. Second, the variety of building materials and physical structures the poor adapt to housing. Renting and multiple occupancy are the third important aspect of accommodation for the poor.
- 9.9 One of the traditional housing policies have attempted to eradicate slum and informal settlements and only sometimes providing a site for relocation. The logic behind the eradication policy is the physical removal of slum and informal settlements would reduce their number in urban areas.
- 9.10 Eradication of slum and informal settlements destroys units that the poor have built and removes people from areas where they have established income generating activities and social networks. Millennium Development Goal 7 "Ensure Environmental Sustainability" Target 11 provides that countries "Have

achieved by 2020 a significant improvement in the lives of at least 100 million people”.

Land for Housing as Collateral

- 9.11 Security of title is a major prerequisite for the provision of mortgage finance for housing and services for low-income groups. The Housing and Commerce Bank of Eritrea has a mortgage finance system that provides loans with both land and the immovable property on it as security. This only applies now to lease not Tessa land. Land alone cannot be used as collateral under any circumstances whether it is lease or Tessa land. Loan repayment can go up to twenty-five years for new construction and five to fifteen years for extension and maintenance loans. The Bank has the legal power to foreclose and has occasionally done so in practice. The inability to use land as collateral denies landholders the opportunities to make full use of their property rights and of the available mortgage finance facilities and the ultimate benefit of improving their housing situation.
- 9.12 Though the provisions of the Land Proclamation No. 58/1994 has in principle provided the opportunity for every Eritrean citizen to have access to a plot of land for housing, a number of issues need to be addressed to ensure that the full benefits intended by the proclamation are attained.

Land Development Standards and Affordability

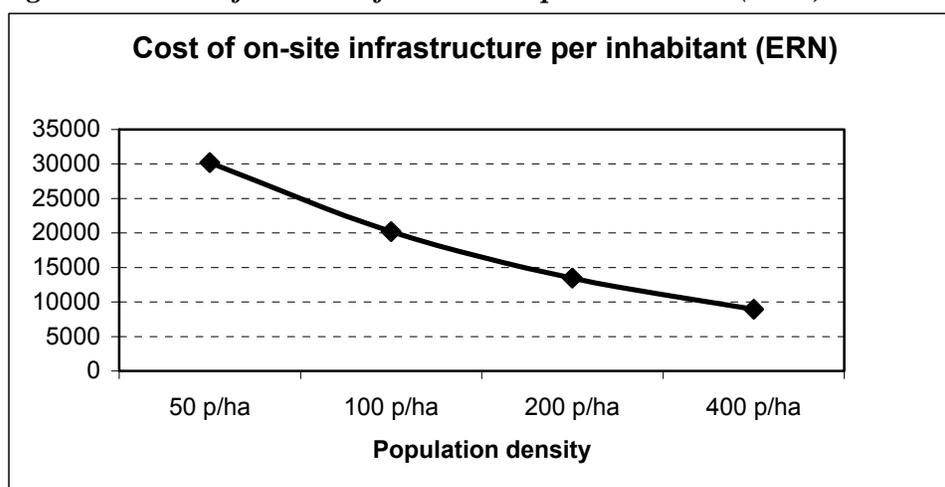
- 9.13 In order to optimize the use of land as a vital and unique resource and enhance affordability, land development standards including plot sizes have to be adjusted. Therefore,
- For future Tessa land allocations plot sizes should be reduced from 500sqm to at least 250sqm, to reduce development cost and increase the number of beneficiaries. It is estimated that about one-third reduction in development cost will be achieved in lowering the plot size by 50 percent. The Tessa land plot size has to be adjusted along the same line with affordability, availability of land and climatic condition of the location. For low-income households, plots could be allocated between 100-120 square metres such as in Mai Temenai, Mihram Chira, Godaif and Gheza Berhanu.
 - For those who have been allotted 500sqm plots be allowed to subdivide and sublease their plots to enhance their incomes and improve their housing (Table 9.1). In this case consideration should be given to impact of this on the technical and social infrastructure and implications on cadastral registration.

Table 9.1: On-site infrastructure costs per m2 developed residential area (15 ERN = 1 USD)¹³⁷

Population density	Related plot size ¹³⁸ (±)	Cost per m2	Hectares needed for 1000 inhabitants	Cost per 1000 inhabitants (ERN)	Cost per 1000 inhabitants (USD)	% reduction in cost by halving the plot size
50 p/ha	500 m2	151 ERN	20.0	30,200,000 ERN	2,013,333 USD	33%
100 p/ha	250 m2	202 ERN	10.0	20,200,000 ERN	1,346,667 USD	
150 p/ha	200 m2	239 ERN	6.7	15,933,333 ERN	1,062,222 USD	
200 p/ha	125 m2	269 ERN	5.0	13,450,000 ERN	896,667 USD	
300 p/ha	100 m2	318 ERN	3.3	10,494,000 ERN	699,600 USD	
400 p/ha	65 m2	358 ERN	2.5	8,950,000 ERN	596,667 USD	The same percentage is found for 400 to 200m2 and 300 to 150m2 reductions

Source: Project team on the basis of MoPW data

Figure 9.1: Cost of on-site infrastructure per inhabitant (ERN)



Land Delivery and Location

9.14 No information is available on the socio-economic structure of households, which have been allocated land in and around Asmara. One thing is clear that lease land distribution have gone only to the wealthy Eritreans in the Diaspora who are capable of paying the site preparation fee in foreign currency. This situation automatically excludes lower- and perhaps middle- and higher-income Eritrean households in the country from access to land.

9.15 Income figures indicate that more than 65 percent of the population of Eritrea is below the poverty line. Our housing affordability analysis has shown that nearly 60 percent of Asmara’s population cannot afford a one-room unit of 24sqm where also almost 25 percent of the city dwellers live in overcrowded housing conditions in slum and informal neighbourhoods. Given the high population growth, the

¹³⁷ The unit costs are provided by the MoPW, and reflect a complete package of infrastructure (asphalt roads, side walks, water supply network, sewerage network, underground power grid).

¹³⁸ Assumption: each household has 5 members, and one household occupies one plot. Other means such as (planned) plot sharing can be applied to arrive at the same population densities with other plot sizes.

housing shortage and affordability constraints, low-income households are faced with extremely limited shelter solutions. Newly formed households are left with no option but either to further crowd in already crowded housing situation in low-income areas or squat in and around the city as close as possible to employment and income generating activities and social networks. Therefore,

- Land should be made available for urban lower-income shelter;
- Legal tenure should be provided to lower-income urban dwellers through establishment of tenure “regularization” and slum upgrading programmes with minimum dislocation of residents through large scale land preparation (site planning and servicing). Those who are dislocated should be secured affordable options either accessible land or house.
- Improving land use planning and monitoring through,
 - Institutional development of agencies responsible for planning, zoning, land registration, subdivisions, land taxation, and land management. This could be achieved through technical assistance, training and management reform;
 - Establishment of interagency coordination mechanism;
 - Creation of land development information systems, including among others aerial photos and land registration data;
- Development of vacant urban land “infill” should be encouraged;
- Encouragement of vertical rather than horizontal housing development whenever possible;
- Development of ecologically sensitive land should be prevented. Legally designated areas should be protected with strict enforcement;
- Preventing urbanization of agricultural land through legally designating agricultural land to be protected with strict enforcement.
- Controlling the density of future urban development (i.e. limiting “sprawl”) through,
 - Limiting new infrastructure extensions on peripheral land;
 - Stricter enforcement of prohibitions on development in certain areas;
- Channelling urban development into certain areas or in certain directions through,
 - Establishment of flexible land use plans;
 - Improving enforcement of land development controls;
 - Channelling extensions of infrastructure in desired directions;
 - Establish a negotiation mechanism between the regional administrations and villagers prior to allocation of land for development;

- Introduction of an urbanization tax to encourage development of vacant urban land.
- Introduction of competitive bidding and public auction for prime land to be leased for commercial and industrial purposes.

Land for Housing as Collateral

- 9.16 In order to facilitate the development of housing land and make use of the existing mortgage finance mechanisms in the country, landholders should be able to use the land allocated to them as security for the loan. We recommend amending the Land Proclamation of 1994 to allow landholders use land as collateral for borrowing from financial institutions. In the meantime and until the amendment takes place, we recommend that in the short run a Tessa landholder would be able to exercise his right in the proclamation and use the immovable property on his plot as collateral.
- 9.17 The next chapter assesses the issues surrounding finance for infrastructure and how to reform the present system to respond to the financing needs of municipalities.

Chapter 10

Creating a New System of Finance for Urban Infrastructure

- 10.1 Chapter 5 described how urban infrastructure is financed with a focus on water and sanitation in Asmara. Based on the Asmara experience, this chapter draws out policy issues of national importance and recommends strategies to address them.
- 10.2 The delivery of water and sanitation services raises a number of financing and equity issues for which specific strategies need to be formulated. The most critical of these have to do with (a) the lack of capacity, at municipal level, to generate funds for capital projects and (b) the lack of equity in the pricing of urban services. Financial issues relating to projects managed by urban water committees, typically financed by UNICEF, have not been discussed, as data are not readily available.

Limited municipal access to capital funds

- 10.3 As pointed out in Chapter 5, municipalities have limited access to capital funds and thus rely on the central government to finance their major infrastructure projects. Although some municipalities have obtained loans from commercial banks, for instance Massawa,¹³⁹ three factors constrain this type of borrowing. First, municipalities tend to have a weak financial position thus posing a high credit risk in the eyes of commercial lenders. Asmara is atypical in this regard because it is the largest city and its substantial revenue base, relative to the other towns, has enabled it consistently to realize a current account surplus. But in spite of this financial advantage, the municipality has not borrowed from the commercial banks for urban infrastructure. Mendefera,¹⁴⁰ in contrast, a small town of 35,000 people, had a deficit on its current account in 2001 and 2002,¹⁴¹ thus facing poorer prospects of borrowing from commercial sources.
- 10.4 Second, loans from commercial banks tend to have short maturities whilst capital projects, typically “lumpy,” require long-term loans to ease the burden of debt service. Third, the size of some capital projects could be so large as to lie beyond the financing ability of either of the two commercial banks in the country. Although loan syndication¹⁴² by the two banks could help address this problem, the weak financial position of municipalities would remain the binding constraint except where borrowing is guaranteed by the central government.

¹³⁹ Massawa has borrowed from HCBE to finance septic tanks. Discussion with HCBE on 11 May, 2005.

¹⁴⁰ Regional centre of Zoba Dedub

¹⁴¹ Income statement from Mendefera.

¹⁴² Process whereby, to reduce risk, banks jointly finance a loan.

- 10.5 A municipal fund was mooted as far back as 1996, as part of a proposed programme of assistance by KFW¹⁴³, the German development bank. The aim was to provide a financing vehicle for urban infrastructure, from which municipalities could obtain long-term loans. The need for such a fund remains as valid today as it was then, and one of the recommendations below builds on the 1996 proposal.

Pricing of infrastructure services, social equity and cost recovery

- 10.6 It is important to examine the delivery of infrastructure services from the standpoint of social equity and cost recovery, particularly to (a) highlight the implications of pricing for access by the poor, (b) assess whether low-income consumers are treated fairly relative to others, and (c) determine if the prices charged enable municipalities to recover the costs of provision.
- 10.7 Two dimensions of social equity are worth emphasizing. One is horizontal equity, which requires that households on the same income level be treated equally. The second is vertical equity, which argues that subsidies should be progressive, with households lower on the income ladder receiving progressively more subsidy than those that are better off.¹⁴⁴ These concepts are useful in looking at the social equity concerns that surround urban infrastructure pricing.
- 10.8 Besides equity concerns, cost recovery is an important aspect, especially in view of the need to generate revenue to cover costs of provision. In principle, the emphasis should be on meeting both operations and maintenance costs (O&M), and the capital or replacement costs (at least in part) of infrastructure systems. In practice, many cities around the world are only able to meet O&M costs.
- 10.9 The examination of water tariffs in Asmara (See Chapter 5, paragraph 5.7) showed that prices for water and sewerage are not equitable. With regard to water, the poor pay at least four times more for a litre of water than non-poor households connected to the city network. Field experience confirmed the lack of vertical equity in Mendefera as well and there is no reason to believe that the situation is different in the other towns, especially given that nearly 63 percent of households in other primary cities buy their water from water vendors¹⁴⁵.
- 10.10 As for sanitation, there is no charge (other than an initial connection fee) for those connected to the sewer system in Asmara, generally households from higher income groups. The poor typically do not have any means of safe sanitation and where they use pit latrines, they must pay for exhauster services when these are needed.

¹⁴³ Kreditanstalt für Wiederaufbau

¹⁴⁴ The reverse is the case for taxation, so that those in higher income groups should pay progressively more tax.

¹⁴⁵ 2005 household survey.

10.11 No detailed analysis of cost recovery has been conducted but the limited information available suggests that charges typically meet only the main costs of O&M. This was confirmed to be the case by the Department of Water in Asmara.

Strategies for change

10.12 Previous sections have elaborated upon the main issues surrounding the financing of urban infrastructure. This section lays out the recommended strategies for change, with a view to (a) improving municipal access to capital funds for urban infrastructure and (b) improving social equity through pricing and (c) improving cost recovery performance.

10.13 The main recommended strategies are:

- To establish a Municipal Infrastructure Fund (MIF) to provide long-term loans to local authorities for purposes of financing urban infrastructure;
- To reform prices for water and sanitation to make them more equitable;
- To introduce a more coherent approach to cost recovery.

Creating the Municipal Fund for Infrastructure

10.14 A feasibility study should be carried out to determine the viability of the MIF and how to establish it. The main functions of MIF will be to:

- Provide long-term loans to eligible municipal authorities to finance urban infrastructure with a focus on water, sanitation, and town roads;
- Accept and manage funds from the public budget, from donors and from borrowers (loan repayments) for purposes of financing urban infrastructure;
- Report to the Minister responsible for local government affairs in accordance with MIF's founding charter;
- Develop lending criteria for municipal infrastructure projects;
- appraise, for purposes of lending, project proposals from municipal authorities;
- Provide technical assistance to municipal authorities to facilitate project preparation, borrowing and loan management.

10.15 It is recommended that the level of the fund be fixed initially at about ERN 150 million (USD 10 million)¹⁴⁶, but that this amount be raised as additional resources become available. This initial capital could be mobilized from donors and the public budget.

10.16 It is recommended, furthermore, that Government and MIF enter into an agreement committing Government to budgetary support whenever needed, for instance by automatically topping up if MIF fund falls below a specified

¹⁴⁶ It is difficult to determine the level at which the fund should start. This amount is proposed as a guide and will need to be adjusted in light of the availability of funds for this purpose, both from Government and development partners. The key idea is to start with a relatively small fund and grow over time.

minimum. However, it is unlikely that Government will be able to commit itself to such an undertaking unless the current economic environment improves.

10.17 MIF will set eligibility conditions for municipalities that will include audited accounts, and the undertaking to repay promptly all project loans. MIF will appraise each loan application to ensure that these conditions are met.

10.18 **Institutional Form and Structure:** It is recommended that MIF be created as an independent Fund with members of the board drawn from the key stakeholder groups -- Government Ministries responsible for local government affairs, public works, housing, and finance; municipal authorities; the commercial banks; and the Chamber of Commerce. The Board would have an independent chair nominated by its members and approved by the Ministers in charge of local government affairs and finance. Day-to-day operations would be entrusted to a managing director supported by a small operational secretariat staffed largely by persons with financial, engineering, and legal skills. This operational staff, to be remunerated at market levels, could be drawn from public and private sectors but should be competitively selected and hired; they would be employed by the Board and answerable to the managing director. Technical assistance to help set up MIF and support its operations in the early years could be sought from development partners, such as UN-HABITAT.

10.19 **Operation of the MIF:** For purposes of starting its lending operations MIF could, once established, proceed as follows:

- Develop detailed guidelines for municipal authorities to follow in preparing urban infrastructure project proposals for funding;
- Hold workshops with municipalities in order to familiarize them with project preparation, loan appraisal and lending procedures;
- Appraise loan applications from municipalities and lend for qualifying projects.

10.20 The following additional guidelines for managing MIF are proposed:

- Borrowers will be required to meet at least 10 percent of the project cost from their own resources, or such other proportion as the Board shall decide;
- A lending ceiling will be established from time to time by the Board, having regard to the availability of funds;
- All loans shall be guaranteed by Government via a guarantee agreement with MIF;
- Should the borrower fail to service the loan, MIF will call the guarantee and request for compensation from Government in accordance with the provisions of the guarantee agreement.

10.21 **Main activities leading to the Creation of MIF:** The Ministry in charge of local government affairs will need to take the following action for purposes of creating MIF:

- Appoint a broad-based task force to draft a legal instrument creating MIF. The task force should include persons from different government ministries (including Government Ministries responsible for local government affairs, public works, housing, and finance); municipal authorities; the commercial banks; and the Chamber of Commerce;
- Agree upon the stakeholders to be represented on the Board;
- Obtain Cabinet approval and arrange for the necessary Proclamation establishing MIF;
- Secure initial capital for MIF in accordance with its charter.

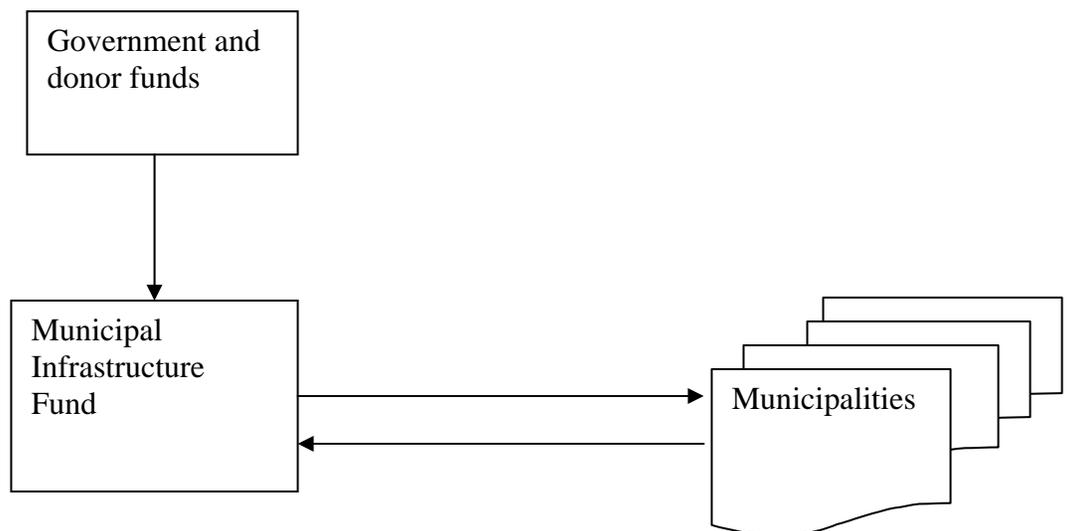
10.22 Once appointed, the Board will be expected to:

- Nominate one of its members as chair (to be approved by the Ministers in charge of local government affairs and finance);
- Determine the qualifications of core staff of the MIF secretariat and a process of recruitment;
- Recruit a managing director and other members of the secretariat;
- Oversee the preparation of a work plan by the managing director and then approve the commencement of operations;
- Seek technical assistance from development partners, such as UN-Habitat, on how to operationalize MIF.

Depicting the proposed infrastructure financing system

10.23 The chart below depicts the proposed system of financing urban infrastructure.

Figure 10.1: Proposed Municipal Infrastructure Fund



Reforming the prices of urban services

- 10.24 Tariffs for urban services, primarily water and sanitation, should be reformed to make them socially equitable and ensure that they provide an adequate basis for cost recovery. Towards this end, a study should be undertaken, covering the principal towns, to determine the appropriate tariff structures. Assistance for this purpose could be sought from development partners.
- 10.25 The next chapter sets out proposals on how to create a new system of housing finance, with a focus on the needs of low-income groups.

Chapter 11

Creating a New System of Housing Finance

11.1 This chapter first examines the issues surrounding the wider financial sector before turning to issues specific to housing finance, both conventional and non-conventional. The chapter then proposes recommendations on how to expand access to housing finance for the majority, with a focus on the creation of a Housing Loan Guarantee Fund.

11.2 A range of problems, which have constrained its further development and influenced negatively on housing finance, both conventional and non-conventional, has beset the financial sector. Inflation has risen in recent years and according to the IMF,

“Inflation, which had remained manageable during the four years following independence, has been consistently high since 1998, mainly reflecting the war, drought conditions, monetary expansion for deficit financing, and the depreciation of the Nakfa since 1998.”¹⁴⁷

11.3 Official figures show that annual inflation is presently around 21 percent, up from less than 14 percent in 2001 and 15 percent in 2002. Other economic indicators, such as the growth of the gross domestic product (GDP) have performed poorly (Table 11.1).

Table 11.1: Key Macroeconomic Indicators (1998-2002)

Indicators	1998	1999	2000	2001	¹⁴⁸ 2002
GDP growth (%)	4.0	0.3	-12.0	9.0	-.04
Inflation (%)	16.6	8.2	20.8	13.5	¹⁴⁹ 15.0
Budget deficit (% of GDP, including grants)	33.6	52.2	43.4	38.1	29
Foreign reserves in months	5	2	2	1	1
External public debt (% of GDP)	18	37	50	60	77
Domestic public debt (% of GDP)	56	90	123	104	120

Source: Government of Eritrea, Bank of Eritrea ¹⁵⁰

11.4 The poor economic environment depicted in Table 11.1 has had a negative impact on the entire financial sector. First, the high rate of inflation (21 per cent), in a setting with low nominal interest rates on savings deposits (4 per cent) has meant that the real rate of interest is substantially negative (-17 per cent). In principle,

¹⁴⁷ IMF (2003) “Eritrea: Selected Issues and Statistical Appendix”

¹⁴⁸ Estimates.

¹⁴⁹ IMF (2003) quotes an inflation rate of 20.8 at the end of 2003.

¹⁵⁰ Cited in the 2004 Interim Poverty Reduction Strategy Paper

the incentive to save is suppressed.¹⁵¹ Second, the ability of borrowers to service debt has been impaired, a point emphasized by both the Commercial Bank of Eritrea and the Savings and Micro-Credit Programme. At the former institution, the level of non-performing loans has risen substantially,¹⁵² compelling the bank to increase its provisioning for bad debts. At SMCP, the repayment rate fell to just below 80 percent in 2003 and 2004, down from over 92 percent between 1996 and 2002.

- 11.5 Third, the poor business climate has drastically reduced trading and investment opportunities, sharply eroding the demand for credit. In the recent past, this has led to excess liquidity in the banking sector. As a result, banks have had no alternative but to invest in Treasury bills in spite of their relatively low yield (2.5 percent per year), compared to the interest rate on savings deposits (4 percent) and the much higher level of inflation (21 percent). The purchase of Treasury bills has certainly been a better alternative to holding idle funds. The Bank of Eritrea confirmed that as there was no longer excess liquidity in the banking system, the yield on Treasury bills would be raised to sustain commercial bank purchases of government paper, one way of financing public sector budgetary deficits.
- 11.6 Although applications for bank licenses have been lodged with the Bank of Eritrea, no commercial banks have been licensed in the recent past, probably reflecting the unfavourable economic environment and the small size of the economy. As a result, the level of competition in the sector is likely to remain low for some time, suppressing innovation and the creation of new financial products. To promote innovation, the Bank of Eritrea has asked banks to move away from collateral-based lending to risk-based lending. Still, enquiries at one of the commercial banks as to whether it would be ready to open a micro-finance window to target low-income borrowers were received with little enthusiasm, largely on the grounds that funds for such an undertaking are not available. Another disincentive is that commercial banks may not have the expertise to manage micro-credit, a specialized area of lending.

Housing Finance

- 11.7 **Conventional housing finance:** Conventional housing finance in the country, primarily through the Housing and Commerce Bank, has had little impact on the housing needs of low-income households (Chapter 6). But its spread of loans by geographical area outperforms the norm for many developing countries in Sub-Saharan Africa (Chapter 6, Table 6.2).

¹⁵¹ Discussion with financial institutions suggested that in spite of the high negative real interest rate, households were still willing to save, probably as a result of the overriding concern for the security of their money.

¹⁵² The Bank indicated, as already pointed out, that before the 1998-2000 war, only about 5-6 percent the loan portfolio was non-performing but this has increased to 40 percent post war.

- 11.8 The limited role of mortgage finance, common in most developing countries, reflects: (a) the perception by formal financial institutions that the risk of lending increases as income falls; (b) the high transaction costs of processing and managing small loans; and (c) the lack of collateral, typically land and property, among all income groups except the highest. As most households (including high income Eritreans living in the country) have severely limited access to *leased* land, they have little prospect of obtaining loans from formal institutions. Additionally, Tessa land, which in principle is available to all eligible persons irrespective of their income level (see the discussion of land in Chapter 4), can no longer be pledged as collateral, ruling out its use to secure loans from HCBE¹⁵³ and the other commercial bank. Taken together, these limitations on (a) access to leased land, and (b) the use of developed Tessa land as collateral, severely restrict access to formal housing finance for the vast majority of in-country Eritreans irrespective of their income.
- 11.9 For the two commercial banks to extend mortgage loans to households within the lower-middle to the upper middle-income range, the perceived risk of such loans must be dealt with. Two measures could help address this problem, both of which aim to enhance the credit rating of households in these income groups. The first is to ensure that foreclosure can be accomplished quickly and at little cost. HCBE indicated that foreclosure is not problematic in Asmara, but that it is an issue in smaller towns, especially in zones of high insecurity. At any rate, reliable data is difficult to assemble in view of the limited volume of mortgage lending in the country. In the circumstance, it is necessary to take a conservative view and assume that foreclosure would be protracted and expensive, as is the case in many other countries with a similar financial environment. The second measure is to guarantee loans to households within a defined income range. The Housing Loan Guarantee Fund proposed below (paragraph 11.17) is meant to meet this objective.
- 11.10 **The potential role of insurance and pension funds:** Investment of insurance funds in housing finance institutions is a widely accepted practice in many countries. Where such funds have been placed as long-term deposits, they have helped housing finance institutions deal with some of the problems that arise from using short-term deposits to lend long. But in Eritrea, the excess liquidity in the banking system has suppressed the demand for additional funding from insurance sources. In particular, HCBE has found it unattractive to solicit for investment funds from NICE, ruling out the use of insurance funds for housing finance.
- 11.11 The last chapter pointed out that NICE manages a recently introduced pension scheme for civil servants. Experience from other countries shows that pension schemes can play an important role in housing finance. In most cases this role is indirect through the placement of pension funds with housing finance institutions,

¹⁵³ HCBE pointed out that a few years back Tessa land could be mortgaged. But the subsequent official ban on the selling of Tessa land rules out foreclosure, with the result that such land can no longer act as collateral.

for the purpose of investing surplus funds. The funds so invested are then used for mortgage lending, although without any direct targeting of the members of the pension scheme. Direct use of pension funds for housing is also possible, though rare, by placing such funds with financial institutions with the express instruction to make housing loans to members of the pension scheme. Whilst these financing options are not immediately viable in Eritrea, as the civil servant' pension scheme managed by NICE is still new, their potential role in housing finance will need to be explored in the future. The Ministry of Labour and Human Welfare accepts, in principle, that pension funds can be invested in housing finance institutions but that the decision to do so should be left to the board of the pension scheme, once it is established.

11.12 **Micro-finance for housing:** The discussion of micro-finance in the previous chapter highlighted the success of micro-finance in the country. Several indicators of success provide local evidence that the poor are “bankable”. First, the largest micro-finance programme, run by SMCP, has been able to disburse a substantial volume of small loans to low-income beneficiaries (ERN 270 million during the last 9 years), whilst at the same time achieving a high loan repayment record. Between 1996 and 2002, the repayment rate exceeded 92 percent, falling back to just below 80 percent in 2003 and 2004. SMCP attributes this drop to the difficult economic environment and drought.¹⁵⁴ Second, SMCP has been able to sustain its operations, covering its operating expenses since the year 2000¹⁵⁵. Third, the SMCP programme has shown that the poor are willing and able to save, especially when saving is linked to credit. But since the Programme is not a deposit-taking institution, its saving mobilization efforts have been limited, with savings by beneficiaries currently amounting to ERN 12 million. For its part, Acord-Eritrea has demonstrated that micro-finance for income generating activities is feasible and has achieved an even higher loan recovery record than SMCP (at least 99.5 percent). Its volume of loans disbursed has also been substantial (ERN 140 million) as has been the mobilization of savings (ERN 10 million).

11.13 Whilst micro-credit for enterprises has been successful, this type of financing has been confined to income-generating enterprises, primarily in the rural areas, with practically no support for house construction or purchase. Three factors account for this bias. The first is the deliberate design of micro-credit programmes to target enterprises in the rural sector. This is consistent with micro-finance practice around the world.¹⁵⁶ Second, housing constitutes a substantial investment relative to household income and is difficult to finance with loans of short maturity, such as those offered by micro-finance programmes. In contrast, micro-enterprises typically need small amounts of working capital for short periods. Third, micro-credit in urban areas has been constrained by an unfavourable regulatory

¹⁵⁴ Discussion with SMCP

¹⁵⁵ For full sustainability to be achieved, the interest rate and other income should cover operational costs, loan losses and inflation.

¹⁵⁶ UN-Habitat (2005) *Financing Shelter and Urban Development*. Draft Global Report on Human Settlements.

environment and has therefore been shunned by micro-finance institutions. In particular, the stiff licensing requirements of municipal authorities make it difficult for micro-enterprises to prosper in urban areas.¹⁵⁷

11.14 In the immediate future, micro-finance is unlikely to offer a feasible mechanism for financing low-income housing. This is because it takes time for institutions to innovate and re-orient their activities to include new business. Moreover, as in many other developing countries, there is practically no in-country experience on micro-finance for housing. In the particular case of the SMCP, its operational strategy requires it to focus on income generating activities, which so far have not been interpreted to include either urban or rural housing¹⁵⁸. However, in the short to medium-term (say within the next 2- 5 years), micro-finance lending could be re-engineered to provide loans of not less than 5years maturity, with which beneficiaries could build at least one room on a new plot, or renovate/extend existing houses. Such loans could be generated by the existing commercial banks and channelled either through the SMCP and other micro-finance intermediaries, or directly to the borrowers themselves¹⁵⁹. Indeed, HCBE offers house renovation/extension loans but these must be secured on property and are therefore only available to the relatively well off. The Housing Loan Guarantee Fund (paragraph 11.17) could be used to guarantee such loans and thus reduce the perceived high risk of loans for low-income housing.

11.15 **Informal loans:** Informal loans derived from personal savings play an important role in financial mobilization since many low-income people do not bank with formal financial institutions. Still, the high prevalence of poverty has suppressed the level of savings even through other channels. Data from a 1996 survey showed that only 9 percent of those interviewed had savings, mainly in a bank, a half of whom lived in Asmara.¹⁶⁰ Only 7 percent of respondents, on average, had loan experience, this proportion varying with the poverty level: in Agordat it was a high 12 percent, declining to 3 percent in the poorer town of Ghinda. The survey conducted for this report is consistent with the earlier study, even suggesting that borrowing from the formal banking sector had declined, as proxied by loans for housing: for instance, only 3.6 percent of respondents in Asmara had a formal sector housing loan but this proportion went up to 14.5 percent for other primary towns and was about the same for secondary towns (3.5 percent). In all cases, there was practically no formal borrowing for housing by the poorest households. The majority of the people had financed their housing from personal savings (56.4 percent in Asmara, 62.5 percent in other primary towns, and 76.4 percent in secondary towns), whilst a small proportion had utilized family loans (8.2 percent in Asmara, 7.0 percent in other primary towns and 7.6 percent in secondary towns). Informal sector loans were practically non-existent, strong evidence that

¹⁵⁷ Discussion with SMCP.

¹⁵⁸ Urban housing, unlike rural housing, generates income when sublet.

¹⁵⁹ As the transaction costs of small loans are relatively high, financing institutions are likely to favour lending via intermediaries such as SMCP, Acord and housing cooperatives.

¹⁶⁰ SUM-Empirica (1996) "Report on the Housing needs and potential Survey: March-April 1996" Report prepared for KFW.

Ukubs have not been used as financing channels for housing. This is not surprising since *Ukubs* are able to extend only small loans of short duration to their members whilst housing requires larger loans for long periods.

Strategies for change

11.16 Previous sections have fleshed out the main issues surrounding the financial sector as well as housing finance, both conventional and non-conventional. This section elaborates upon the recommended strategies for change, with a view to improving access to housing finance for all income groups, but especially for the lower-income categories.

11.17 The main recommended strategies are:

- To establish a Housing Loan Guarantee Fund (HLGF) to provide guarantees in respect of:
 - Construction loans to eligible households (especially those within the 2nd and 3rd income quintiles)¹⁶¹ to build at least one room on new plots or to extend/renovate existing houses;
 - Mortgage loans, secured on property, to eligible households (primarily those within the 4th income quintile) for house construction or purchase of an existing house.
- To provide technical assistance to both HCBE and the Commercial Bank of Eritrea to enable them generate (a) unsecured construction loans for wholesaling through micro-finance institutions (such as SMCP and Acord-Eritrea) and housing cooperatives (b) mortgage loans for households within the 4th income quintile;
- To provide technical assistance to financial intermediaries (such as SMCP, Acord-Eritrea and housing cooperatives) to enable them manage micro-loans for construction and renovation/extension of low-income urban housing;
- To shift towards a market-driven financial sector, as soon as conditions allow, to foster competition and innovation and thus diversify and deepen the housing finance sector. This will also include phasing out the direct construction of houses by Government;
- To establish an efficient, well-targeted and equitable system of subsidies for those with low incomes.

11.18 The next sub-sections elaborate upon these strategies.

¹⁶¹ See Annex 2 for income quintiles.

Creating the Housing Loan Guarantee Fund

11.19 A feasibility study should be carried out to determine the viability of the HLGf and how to establish it. The main functions of the Fund will be to:

- Provide guarantees to eligible applicants to enhance their credit rating and thus enable them to borrow funds from the commercial banks for house purchase or construction (including house extension and renovation of existing houses);
- Accept and manage funds from the public budget (as well as from the private sector) for purposes of financing the HLGf;
- Report to the Minister responsible for housing in accordance with an agreement between the two parties and within the framework of official housing policy;
- Enter into agreements with financial institutions for purposes of guaranteeing mortgage loans;
- Maintain an up-to-date register of all beneficiaries of HGLF to ensure that households do not obtain more support than they are entitled to under this scheme.

11.20 HLGf will provide partial guarantees for housing loans made by financial institutions (*i.e.* commercial banks and micro-finance intermediaries) to reduce, but not eliminate, the risk of lending. It is proposed that loans, which meet HLGf criteria, be eligible for a guarantee of not more than 70 per cent of the loan outstanding at any one time. This partial guarantee would encourage financiers to be prudent in their loan appraisal and ensure sound loan management¹⁶². The level of guarantee could be increased for loans to poorer households and reduced for those able to borrow on mortgage terms.

11.21 By establishing HLGf, Government would provide a basis for leveraging substantial (non-budgetary) financial resources for housing from the banking sector. This is because the loan guarantee would cover only a part the principal outstanding at any one time, and only a fraction of the loans would go bad and thus place a financial claim on the guarantee fund¹⁶³.

¹⁶² The well-known economic problem of ‘moral hazard’ is familiar to financial regulators and commercial banks: if a guarantee removes too much risk from the lender, that lender will tend to relax normal financial discipline, often with disastrous results; hence, no guarantee system should leave the lender without a significant share of the risk. In the absence of robust empirical data on defaulting on mortgages and other loans in Eritrea, it is difficult to determine what proportion of the outstanding principal should be covered by the guarantee. An actuarial study of loan defaulting would help determine what level is reasonable.

¹⁶³ Assume 3,000 loans per year (1,500 of them secured on property via a mortgage), an average outstanding loan principal of ERN50,000, and a guarantee cover of 70percent of this amount. If 10 percent of the 1,500 borrowers default, making it necessary to call the guarantee, the gross payout for the year by HLGf would be $ERN 1,500 \times 50,000 \times 0.7 \times 0.1 = ERN 5.25$ million. The net amount paid out can be contained through efficient foreclosure. When the subject property is sold, following default, the proceeds would redeem the outstanding principal, and meet the costs of unpaid interest and the administrative and legal costs of foreclosure. Any surplus would be payable to the mortgagor (borrower). HGLF would have facilitated the borrowing of much more than ERN 75 million during the

- 11.22 It is recommended that the level of the fund be fixed initially at about ERN 300 million (USD 20 million), with the proviso that it be increased as the portfolio of guaranteed loans grows. Government could easily finance this amount by re-allocating a **relatively small** part of the ERN 3,600 (USD 240 million) that it plans to spend on direct house construction through the *Warsay Yekealo* campaign (See Chapter 6, Table 6.4). Such an action would demonstrate its determination to guarantee housing loans to the majority of urban households, excluding those in the highest income group. Donor resources to supplement the fund could also be sought.
- 11.23 It is recommended, furthermore, that Government and HGLF enter into an agreement committing Government to budgetary support whenever needed, for instance by automatically topping up if the guarantee fund falls below a specified minimum. Such an arrangement would give additional comfort to financial institutions as it would demonstrate that the fund is backed by Government's full faith and credit. However, it is unlikely that Government will be able to commit itself to such an undertaking unless the current economic environment improves.
- 11.24 The initial capital would need to be added to annually as the value of outstanding loans increases, and as actuarial data is built up on actual experience of losses arising from mortgage and construction loans¹⁶⁴. In other countries, additional funding for guarantee schemes has come from:
- The guarantor's share¹⁶⁵ of surplus arising from the sale of properties for which guarantees have been called and settled; this will not be an important income source unless the difficulties which surround foreclosure are overcome;
 - Premiums paid by homebuyers/borrowers as a charge for the guarantee. This would be a small amount in relative terms, typically not exceeding 0.5 to 1.0 percent of the loan value. To make it affordable, the premium would be recovered over the term of the loan.
- 11.25 Individuals and intermediaries such as NGOs will be eligible to apply for loan guarantees from HGLF. Intermediaries will apply for such guarantees to cover wholesale loans from commercial banks, subsequently to be on lent to qualifying

year from the banking sector. This is the product of the 1,500 mortgage borrowers and ERN 50,000, the average outstanding principal per borrower and thus a conservative estimate of the average amount borrowed. But the remainder of the loans (1,500) would be unsecured and therefore not the subject of foreclosure. These would need to be managed efficiently to minimize losses.

¹⁶⁴ Although it would grow in absolute terms, the guarantee fund would progressively fall in relative terms as the mortgage portfolio grows, because it is essentially an assurance scheme whereby the probability of loss declines because of the pooling of risks which occurs as the scheme expands. It is assumed that there is no systemic risk as would be the case during a sharp increase in interest rates, which in turn would probably lead to wide-scale defaulting on loans and substantial loss for lenders.

¹⁶⁵ This is the difference between what the property fetches upon sale at foreclosure and the amount due to the financier, which is equal (in this case) to 70 percent of the outstanding principal (because this is the amount guaranteed), plus interest charges accruing as a result of defaulting, plus the legal and administrative costs of foreclosing incurred by the financier.

- low-income households. Such intermediaries will be eligible for successive cycles of guarantee to cover their additional needs for lending to qualifying individuals. In contrast, those applying as individuals will be entitled to only one guarantee.
- 11.26 HLGf will set eligibility conditions for intermediaries that will include audited accounts, bank references, and the agreement to submit beneficiary data to HGLF for purposes of creating a centralized database of all beneficiaries. This database will be used to monitor programme performance besides ensuring that individual beneficiaries do not receive more than one guarantee.
- 11.27 For those individuals who apply directly to HLGf or to an intermediary institution, eligibility will depend on meeting one or more of the following conditions, and additional conditions as determined from time to time:
- Be a head of household above the qualifying age set by HLGf;
 - Have a monthly household income not exceeding an amount determined by HLGf;
 - Have lived for at least three years in the town where the house or plot in question is located.
- 11.28 Loan appraisal will be the responsibility of the lender (i.e. HCBE, CBE, or other intermediary such as SMCP), who might require the applicant (intermediary institution or individual) to meet additional conditions. HGLF will discuss such additional criteria with lenders to ensure that they do not unnecessarily constrain access to mortgage and construction loans.
- 11.29 It is important to emphasize that the proposed HLGf will not work well as long as the difficult economic environment persists. As reported above, defaulting on loans has increased in recent years, both in conventional lending and micro-credit. As long as the reported high levels of defaulting continue, financiers will not feel that they are adequately protected and will be reluctant to lend. Equally, guarantees will not work properly unless foreclosure is prompt and cost-effective.
- 11.30 **Institutional Form and Structure:** It is recommended that HLGf be created as an independent trust with members of the Board of Trustees drawn from the key stakeholder groups, such as Government (Ministries responsible for housing, finance, and social affairs), the financial sector, SMCP, Acord-Eritrea and other micro-finance organizations. The Board would have an independent chair nominated by its members and approved by the Minister in charge of housing. Day-to-day operations would be entrusted to a managing director supported by a small operational secretariat staffed largely by persons with financial, legal, social and IT skills. This operational staff could be drawn from public and private sectors but should be competitively selected and hired; they would be employed by the Board and answerable to the managing director. Technical assistance to help set up HLGf and support its operations in the early years should be sought from development partners, such as UN-HABITAT.

11.31 **Operation of the HGLF:** For purposes of operationalizing the loan guarantee scheme, HLGf, once established, could proceed as follows:

- Negotiate with the two commercial banks the conditions that would govern the Guarantee Fund such as the guarantee agreement, lending conditions (income criteria for eligibility, level of the down payment, lending interest rate, duration of the loan etc.);
- Announce the HLGf in the media (newspapers, television) and in a public information campaign, to ensure a wide understanding of the scheme, particularly the eligibility conditions and procedures for guarantee application, as well as the commercial banks in the scheme;
- Acting as the first stop for all applications for guarantee support, HLGf (and intermediaries acting on its behalf) would disqualify those who already own a house. Applicants who pass this first test would be means-tested to assess their income, determine which type and level of assistance they qualify for and, if the loan application is for construction, establish whether they already own a plot (leased or Tessa). HGLF would then use the type of eligibility criteria already described to select applicants.
- Refer qualifying applicants to a participating commercial bank or other intermediary such as SMCP and other micro-finance organizations. On the strength of their loan guarantee, applicants would be able to apply for a mortgage or construction loan on terms and conditions set by the lending institution.

11.32 The following additional guidelines for managing HGLF are proposed:

- Lending banks would vet applicants (including intermediaries) to ensure that they meet lending criteria, bearing in mind the availability of loan guarantees as set out in letters of referral by HLGf;
- Applicants for construction loans, but who are of limited means as established through means-testing, will be required to make a down-payment of not more than 5 percent of the loan amount applied for. A savings programme to encourage potential borrowers to build up savings for this purpose will be agreed between HLGf and the lending institutions.
- Applicants for mortgage loans will typically be required to raise a deposit of at least 10 percent of the loan amount, lower than the 20 percent presently required by HCBE.
- Following loan appraisal by the lending institution and finalization of the mortgage or construction loan agreement, a guarantee agreement will be signed between HLGf and the lending bank guaranteeing the agreed share of the outstanding loan.
- Should the borrower fail to service the loan, the lending bank will inform the HGLF of the event and start to foreclose on the loan but only after the failure of attempts to avoid defaulting¹⁶⁶. In the circumstance, the lender will call (*i.e.* invoke) the guarantee as provided for in the guarantee

¹⁶⁶ It is normal practice that considerable effort is made, in cooperation with the borrower, to find ways of avoiding defaulting, for example by assisting the borrower with re-structuring the loan, allowing a temporary grace period free of repayments, contacting employers for support, etc.

agreement and request for compensation from the lender in accordance with the provisions of the guarantee agreement.

11.33 Main activities leading to the Creation of HLGf: The Ministry in charge of housing will need to take the following action for purposes of creating HLGf:

- Appoint a broad-based task force to prepare a legal instrument (e.g. a memorandum and articles of association) setting up the HLGf Trust. The task force should include persons from different government ministries (including the Ministry in charge of housing, Ministry of Finance, Ministry of Labour and Human Welfare, Ministry of National Development), the two commercial banks, micro-finance institutions, and the private sector;
- Agree upon the stakeholders to be represented on the Board of Trustees;
- Obtain Cabinet approval and arrange for the necessary Proclamation establishing HLGf;
- Secure initial capital for the HGLF in accordance with its charter;
- Invite stakeholder groups to nominate Trustees (who would be confirmed by the Minister in charge of housing on behalf of Government).

11.34 Once appointed, the Board of Trustees will be expected to:

- Nominate one of its members as chair (to be approved by the Minister for housing);
- Determine the qualifications of core staff of the HLGf secretariat and a process of recruitment;
- Recruit a managing director and other members of the secretariat;
- Oversee the preparation of a work plan by the managing director and then approve the commencement of operations.

Technical assistance to HCBE and CBE

11.35 These organizations do not have the capacity and expertise to originate non-secured loans for housing, especially those that target low-income households. It will therefore be critical to build their capacity, if the proposed HLGf is to succeed. Technical assistance should focus on several aspects, such as:

- A review and amendment (where necessary) of the legal and administrative mandates and procedures of these organizations (charters, operations manuals *etc.*) to ensure that: (a) they allow and facilitate collaboration with the proposed HGLF and its proposed method of operation, and that (b) they do not rule out loans for low-income housing;
- Reviewing current methods of foreclosure and reforming them to ensure they are cost-efficient and not time-consuming;
- Strengthening, through training and development of new procedures, methods of loan appraisal, lending, loan management, and foreclosing;
- Data assembly for purposes of reporting, monitoring and evaluation.

Technical assistance to non-conventional financial intermediaries

11.36 Non-conventional financial intermediaries, such as SMCP and Acord-Eritrea, need technical assistance to help them expand into micro-finance for housing. This could be a new and challenging business area for them, as they have no current experience of packaging small construction loans for housing. Although there is little experience around the world on this type of lending, it is clear that finance for low-income housing is shifting in this direction, following the failure of mortgage finance to address the housing needs of the poor. Equally, it will be necessary to build the capacity of housing cooperatives and similar associations in the country to enable them access construction loans for their members.

Shift from a public-led to a market-driven housing finance sector

11.37 With little exception, Government and the ruling party presently own financial institutions. This means that the two commercial banks do not face the penalties and sanctions that confront firms in a competitive market, such as failure and liquidation because of inefficiency and the inability to innovate in a changing market. In the short-run, it is unlikely that this situation will change, meaning that the financial sector will continue to be dominated by the public sector. In the longer term, however, there is a need for a shift towards a market-driven housing finance system in which new commercial banks and institutions can readily enter the financial sector and compete for business.

11.38 It is important to stress the benefits, which flow from housing in a market-based system. Since it acts as a secure and profitable investment, housing benefits the financial market in several ways. **First**, it readily attracts private resources especially where a market return on investment is assured. **Second**, the prospect of owning a house encourages households to save with financial institutions thus promoting savings mobilisation and investment. Having equity¹⁶⁷ in a house stimulates households to use that accumulated value for other economic and financial purposes, providing a further stimulus to national economic development. **Third**, a market-based financial system would reduce the current and projected future burden on the public budget by leveraging substantial resources from the banking sector, especially through the proposed HLGf. This is a critical consideration since the public budget will never be able to meet the demand for housing. **Fourth**, a market-driven housing finance sector, supported by loan guarantees, would respond more sensitively and flexibly to consumer and investor preferences, and thus promote efficiency in the housing market. In particular, households would enjoy the following benefits which are presently not available:

- Accumulation of equity for a wider population – and therefore of personal wealth – during the repayment of either the mortgage or construction loan,

¹⁶⁷ This represents the homebuyers' share of the house value. This share increases as the mortgage loan is paid off.

an opportunity not offered to many people, especially among the poor, by the present system of housing finance;

- Access to an efficient and flexible system of finance which facilitates buying and selling of houses to match household preferences over time;¹⁶⁸
- Choice of location and of housing design and type.

Making subsidies efficient and equitable

11.39 It is unlikely that any country can address the housing problems of low-income households solely using market mechanisms. There is therefore a strong social case for public subsidies, which target households with limited incomes and aim to improve access to adequate housing.

11.40 To be broadly consistent with commonly accepted norms, only households with limited means should be targeted. In addition, subsidies should be transparent, easy to quantify and easy to withdraw once a household no longer qualifies for assistance. A widely used approach is to use upfront capital grants (*e.g.* discounts on infrastructure costs), channelled directly to homebuilders and buyers thus enabling them to choose dwellings which best meet their needs and resources. Capital grants ensure that subsidies are separated from housing finance, whether publicly or privately supplied. In that way, subsidies do not affect adversely on the rate of return on finance.

11.41 There are two types of subsidy that are generally considered harmful to the housing sector and that should therefore be avoided: subsidized interest rates on housing finance; and subsidies via controlled rents.

11.42 Interest rate subsidies erode the ability of the housing sector to compete for resources with other investment channels and are therefore economically inefficient and counterproductive. Indeed, micro-finance experience in Eritrea shows that interest rates higher than those in commercial bank lending do not discourage low-income groups from borrowing. For instance, **the poor** are able afford micro-credit under the Acord-Eritrea programme although the interest rate, 16 percent per annum, is higher than the 8-10 percent interest by commercial banks.¹⁶⁹ There is no case therefore, even on grounds of social equity, to provide subsidized housing finance.

11.43 Rent control has a number of negative effects: it suppresses new investments in housing; it encourages owners to avoid house maintenance which tends to reduce the life of the dwelling; and it discourages household mobility as the subsidy is tied to the dwelling and not to the family - in other words, a family in a rent-

¹⁶⁸ At present there is very little buying and selling of houses.

¹⁶⁹ Two qualifications should be made: (a) micro-credit is typically for income generating activities which, in the Eritrean situation, yield a higher return than urban housing, making such credit more affordable than housing loans; and (b) the lower commercial bank rate understates the cost of borrowing as banks also levy substantial non-interest charges.

controlled dwelling will be discouraged from moving if no other rent-controlled dwelling is available in the alternative location.

11.44 Current subsidies through the public housing system are primarily of two kinds: those which come through rent control, discussed in some detail in the next section; and those, which flow from the nominal charge for the use of land, as the land rent on leased land probably does not reflect the full economic value of land. It is recommended that rent control be phased out in order to avoid the distortions referred to above. But rent control for dwellings occupied by the poor should be retained in the short run to give the housing sector adequate time to gear up for a higher level of housing production. The aim of such a transitional arrangement is to reduce pressure on rents.

11.45 Table 11.2 lays out the recommended types of subsidy and loan guarantee, and the different income groups that will be entitled to these forms of assistance.

Table 11.2: Eligibility for Subsidies and Loan Guarantees, by Income Group

	Income Category of Households:				
	Lowest income households (1 st quintile)	Lower-middle income households (2 nd quintile)	Middle income households (3 rd quintile)	Upper-middle income households (4 th quintile)	High income households (5 th quintile)
Rent subsidy through controlled house rents	YES ¹⁷⁰	YES ¹⁷¹	NO	NO	NO
Land subsidy through nominal land rent	YES	YES	YES	NO	NO
Infrastructure subsidy	YES (But indirect) ¹⁷²	YES	YES	NO	NO
Home purchase loan guarantee	NOT FEASIBLE	NOT FEASIBLE	NOT FEASIBLE	YES	NO
Owner-builder (including extensions/renovations) loan guarantee	NOT FEASIBLE	YES	YES	YES	NO

¹⁷⁰ Only in the short run as the market gears up for a higher level of house production

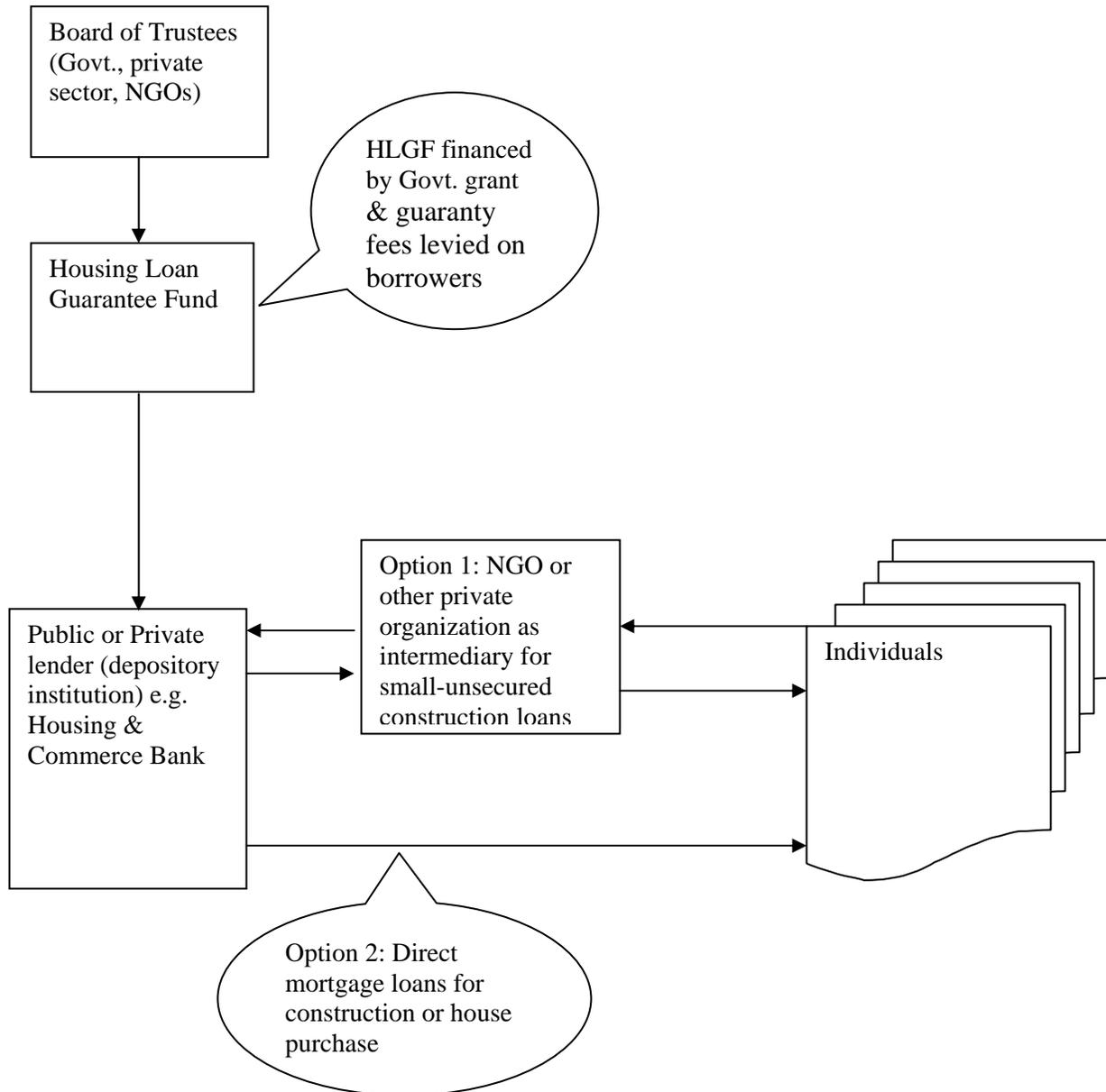
¹⁷¹ Ibid.

¹⁷² Indirect because the bottom quintile (20 percent) of households are assumed to be renters who will most likely not be able to build. Strictly speaking, the extent to which tenants will be able to benefit from infrastructure subsidies (passed on to them by plot/house owners) will depend on the efficiency of the housing market. In the extreme case where the market is very inefficient, the infrastructure subsidy will be retained by plot/house owners.

Depicting the new housing system

11.46 The chart below depicts the new system of housing finance for mortgage and construction loan. The next chapter examines proposals on how to reform the rental housing sector.

Figure 11.1: Proposed housing finance system: mortgage and construction loans



Chapter 12

Reforming Rental Housing

12.1 As in most housing markets, rental dwellings in Eritrea's towns play an important role, an aspect that was highlighted in Chapter 2 using data from the 2005 socio-economic survey conducted for this study. In Asmara and the other towns, the rental housing stock comprises both formal (public and private) and informal private dwellings. This chapter examines these categories of rental housing, looks at the evolution of government policies towards rental housing and its management, and discusses the recently introduced rent control in Asmara. It concludes with strategies for reform. Thus, the chapter is organised into five sections:

- Formal rental housing stock;
- Informal rental housing stock;
- Evolution of policies towards rental housing;
- Rent control;
- Strategies for reform.

12.2 There are no comprehensive data on the urban housing stock, as no housing census has been carried out in the country. The analysis of rental housing is therefore based on sample survey data from the 2004¹⁷³ and 2005 socio-economic surveys, on data and other information from the housing administration, and on site visits to selected towns (Asmara, Massawa, Mendefera, and Keren).

Formal rental housing stock

12.3 The formal rental housing stock comprises both private and public dwellings. Survey data show that private rental dwellings comprise by far the larger proportion of this stock, a conclusion confirmed by discussions with the housing administration. Data provided by the Housing Commission/Rental Contracts Registration indicate that the number of private rental contracts registered in Asmara within one year (April 2004 to April 2005) reached 29,966 contracts. According to the same source, this figure constitutes 75 percent of all private rental contracts in the city meaning by extension that the total number of all private contracts is nearly 40,000. Average rent reportedly paid by tenants is ERN 392.26 and median rent ERN 247.

12.4 On the other hand, the number of public rental contracts registered within the same year amounted to 5,083 contracts constituting 60 percent of all public rentals

¹⁷³ BCEOM-Groupe Huit-Optima (2005) "Asmara Infrastructure Development Study 2004-2005"

in Asmara. Again, by extension the total number of public rentals in Asmara is estimated at nearly 8,500 contracts¹⁷⁴.

- 12.5 If we assume that, the number of households living in Asmara is 90,000¹⁷⁵. Households and if we also assume that the number of contracts (private and public) is equivalent to the number of households then we could say that more than 53 percent of Asmara households are tenants. This proportion is below but close to the 58 percent indicated in the June 2004 and March 2005 Household Surveys. The lower ratio of 53 percent could be explained by under-estimation of the unregistered contracts. In a survey conducted in 1996, the percentage of tenants was 46 percent. The increase in renters since 1996 can be explained by the difficulty in obtaining land and the decline in affordability.
- 12.6 In contrast, the percentage of house renters in the rest of the country shows a significant drop. For example, in medium towns it is 22.2 percent (both private and public), in small towns 16.7 percent and in villages 10.4 percent. There are only 483 rental contracts in foreign currency.
- 12.7 No information is available on the volume of rentals in the rest of the country. But one could safely say that house renting has provided an affordable option for many households in urban and semi urban areas given the constraints households face in obtaining a house to buy or constructing their housing.

Informal rental housing stock

- 12.8 This section refers to house renting taking place in unplanned settlements around the country. Although both landlord and tenant are required to register their rental agreement at the Housing Commission/Rental Contracts Registration, not all contracts are being reported which makes it difficult to estimate with confidence the number of rentals in unplanned areas.
- 12.9 As indicated earlier, rental units in poor urban neighbourhoods has been providing a suitable housing solution to low income urban dwellers. In Asmara, for example it is estimated that 76 percent of unplanned settlements dwellers are renters. In unplanned neighbourhoods where electricity network is available, households are obliged to register their rent contracts in order to connect to the network. However, where services are not available, households do not feel obliged to do so. Registration of rental contracts also means that landlords have to pay a rental tax, which may reach up to 40 percent of rent value. It is another reason, which discourages landlords from registering their rental contracts.

¹⁷⁴ 10,000 public rental units is a figure given by the Housing Administration.

¹⁷⁵ We assume the total population of Asmara 450,000 and household size 5 persons.

Evolution of policies towards rental housing

- 12.10 Before the arrival of the Derg regime in 1975, the rental market was functioning freely without rent controls. Supply and demand were adjusting themselves in response to market forces.
- 12.11 With the arrival of the Derg in 1975, all urban houses were nationalized, making government the sole landlord¹⁷⁶. During the Derg time, people were not willing to invest in housing because of nationalization.
- 12.12 The Derg opened a file for every house containing the property's legal documents and rent paid by the sitting tenant. The rents declared by the landlord may have not been always the real rents received from the tenant. However, these files formed the basis for rents paid during the 1975-1991 period. According to the rents which were declared, a system of reduction was established as follows:
- Rents of 300 BIR and more were reduced by 30 percent
 - Rents of 200 BIR and more were reduced by 20 percent
 - Rents of 100 BIR and more were reduced by 10 percent
- 12.13 The result had been very low rents up to the year 1991.
- 12.14 In 1981, the Ethiopian authorities then agreed with the Italian government to compensate Italians who had lost their properties in the nationalization. These properties were subsequently retained by the Eritrean Government and are now rented out to the public.
- 12.15 Upon taking office in 1991, the independent government set up the Housing Commission by Proclamation No. 16/1991 as a vehicle for de-nationalizing housing. Property valuation was conducted and in determining rents, a return of about 5 percent per annum was used. The programme launched then to give back houses to their original owners or their heirs is now almost complete.
- 12.16 Besides its housing de-nationalization activities and collecting rent from public housing tenants, the Housing Commission also registers all private rent contracts. These contracts show details regarding the property and the tenant. The Commission also manages rent controls in Asmara. Nationally the Commission issues ownership titles. It is represented in 15 towns where nationalization took place and its representatives work under regional administrations.
- 12.17 At the time, the new government assumed power in 1991 there was a severe housing shortage and the rents of public housing were low compared with private rentals, which were very high especially in Asmara. Additional pressure on the

¹⁷⁶ Those who owned several houses retained one whilst the extra units were nationalized

housing market came from people returning from the Diaspora. The Housing Commission decided in 1993 to raise public rentals as follows:

- Service quarters rents were multiplied by three
- Villas rents by five
- Business buildings by seven

12.18 These arrangements remained in force until the year 2004. While private housing rents continued their upward trend between 1993 and 2004, public housing rentals remained the same. Given the housing shortage in Asmara and the predominance of private rental houses in the rental market, the government decided to introduce a balance between very high private and too low public rents. Subsequently Legal Notice No. 94/2004 “Regulations to Control Private Residential House Rent in Zoba Maekel” was introduced.

Rent control

12.19 The regulations are intended to for application to private rents for residential housing in and around Asmara. The main sections of the Legal Notice include:

- A schedule for rent determination of residential houses. The schedule sets out house rent determination rates based on size per square metre and categorizes areas into four rental zones. A certain amount will be added every month for every square metre of empty land.
- Criteria for measuring the size of the rooms and empty land by agreement between both the lessor and the lessee and conflict resolution procedures.
- Procedure to determine rent in accordance with the rent schedule by the lessor together with the lessee.
- Contract of lease and its registration. Contracts should conform with the form provided and be registered with the Housing Administration which has the power of rejecting contracts that violate the provisions of the regulations.
- Provisions for regulating rent contracts for foreign lessees.
- Provisions for implementation of the regulations. The regulations suspended for up to two years the eviction of a lessee from a residential house he has let. In accordance with the adjusted rent, each lessee is required to enter into a new contract of lease.
- Provision for possibility of extending the duration of the lease of a residential house being for two years by agreement between the lessor and the lessee.

Implementation of the rent control regulations

- 12.20 As indicated earlier, the rent control regulations have been introduced to remove imbalances in amounts of rent paid for public housing and those paid for private housing.
- 12.21 The rent control regulations also put a ceiling on rents per square metre in a progressive manner meaning that those lessees who occupy more space have to pay more rent. This is intended to support low-income households who generally spend a disproportionate share of their income on food items and tend to pay more for housing than higher income groups.
- 12.22 There are no surveys on the impact of the rent control on individual tenants, but there is no doubt that it must have benefited many low-income households. However, in a very tight housing situation, the experience of many countries is that in a rent controlled environment, a second rental market will emerge which reflects the actual market forces. We do not know to what extent the rents indicated in the lease contracts are reflecting the actual rent paid by the tenants.
- 12.23 Moreover, rent controls have a negative impact on investment in rental housing. Investors are discouraged to invest in rental housing if they cannot ensure an adequate rate of return on their investment. Rent control also discourages owners from maintaining rented dwellings, thus reducing dwelling quality and possibly the life of the dwelling.
- 12.24 Limiting the duration of the lease to two years may put the tenant in a weaker bargaining position vis-à-vis the landlord if it is believed that the rent control will be lifted after the expiry of the lease. The landlord may from the start dictate a higher rent than the provisions of the regulation by threatening to evict the tenant at the end of the two years if the lower rent is applied.

Strategies for reform

Private Rental Housing

- 12.25 Rental housing has always provided a viable housing solution for many families. A household may opt for a rented house for several reasons. The household may not have enough financial resources to own a house or is residing in a temporary place with plans to move to a permanent location in the future. For migrants from rural areas and other low-income households, rental units in unplanned neighbourhoods provide the only option. The fact is that there is always demand for rental housing units though in varying degrees such as in Asmara on the one hand and the rest of the country on the other.
- 12.26 The production of housing in general and rental housing in particular is constrained by market irregularities arising from shortages in housing factor

inputs e.g. land for housing, building materials, finance and labour. On the other hand, the need for shelter units is growing at a large scale. The result is a mismatch between the supply and demand especially for low-income housing. The question is whether the existing rental housing strategies are conducive to streamlining the production of and investment in rental housing. The answer is no. In order to facilitate the rental market it is recommended that:

- The rental market should be liberalized as soon as possible to encourage private investors to enter the market by ensuring them sufficient return on their investment.
- The production of rental housing be encouraged and facilitated including housing finance for households who want to expand their units for rental purposes.
- The delivery of housing production inputs should be streamlined including land, building materials, finance and labour.
- The building up of the institutional capacity and coordination among delivery institutions.

Public Rental Housing

12.27 We do not know the total number of public rental housing units in Eritrea and their geographical distribution. Nonetheless, we know their number in Asmara, which is estimated at 10,000. Under any circumstances, this substantial figure requires a commensurate amount of resources and management time.

12.28 One important aspect of public rental housing is the physical quality of the stock and the extent and frequency of maintenance. We also do not know if there has been an inventory of the stock and its physical quality. We however understand that the quality of some of the stock is inadequate and needs major repairs.

12.29 Given the above considerations, we recommend that the Government should consider divesting its public rental housing stock to the private sector with priority to its occupants. This entails:

- Carrying out an inventory of the public rental housing stock in terms of numbers, type, physical quality and distribution, and determining whether it is possible to prepare separate titles for the different units;
- Carrying out an assessment of the market value of the stock;
- Carrying out a socio-economic survey of sitting tenants to determine their household characteristics and economic situation;
- Facilitating a finance-lending programme for sitting tenants who wish to borrow for purchasing the unit, perhaps in collaboration with the Housing and Commerce Bank. Where tenants do not wish buy, offers should be made to other households after a transitional period which allows the tenant to find alternative accommodation;

- Making all necessary arrangements for public housing tenants who are not able to purchase and maintain the units to be relocated on land with basic infrastructure facilities, so that the public housing can be sold to those who can afford it, and enable the state to get the real value for its housing stock. This would enable the state to reinvest in the delivery of infrastructure facilities for other housing projects.

12.30 The next chapter looks at how to reform the construction sector.

Chapter 13

Reforming the Construction Industry

13.1 This chapter investigates how to reform the housing construction sector, with a focus on building materials and construction labour.

Housing Construction Materials

13.2 The choice of building materials for housing has important economic implications. Since the cost of building materials is a major component of housing construction cost, any reduction in their cost will contribute to the reduction of housing cost.

13.3 Effective utilization of local building materials will not only reduce construction cost and improve affordability levels, but will also generate income and employment.

13.4 The building materials situation in Eritrea can be summarized as follows:

- The import component of building materials far exceeds that of the locally produced materials used in urban and semi-urban housing construction.
- There is severe supply shortage of imported construction materials. Import restrictions coupled with priority given to public construction projects contribute to the scarcity of materials for individual housing projects. Black market prices are exorbitant and unaffordable.
- Due to the mismatch between the demand and supply of locally produced construction materials, their prices have been increasing rendering them unaffordable for the majority of households.
- The local production capacity of cement is insufficient and only meets 20 percent of the demand.
- Bricks are in short supply and their prices are high. Reasons for this include outdated equipment, shortage of skills and raw materials and expensive energy. This situation applies to most industries producing local materials.
- Experimentation with the production of alternative construction materials is still limited and unable to penetrate the market yet. Stabilized soil blocks are still in the experimental stage.
- Majority of households in the rural areas continue to use local building materials such as stone, wood, thatch and mud/earth. Some of the traditional houses consume a lot of wood, which has contributed to the deforestation of the country and have negatively affected the environment.

- Cement blocks have proven their competitiveness in terms of ease of production and price compared with bricks.
- Stabilized soil blocks are still in the experimental stage and have not entered the market yet.
- Imported iron sheets continue to be most widely used roofing material. Cement roofing tiles are yet to prove itself as a cheaper alternative to the corrugated iron sheets.

13.5 In the face of the increasing pressure for housing units and the concomitant demand for building materials, there is need to address the bottlenecks with the objective of streamlining the delivery of building materials at affordable prices. The following measures are recommended:

- Explore every possibility to reduce the country's dependence on imported construction materials;
- Intensify and accelerate the efforts to establish a new cement factory to meet the growing and high demand;
- Study options to use locally available building materials in a cost-effective manner;
- While importing through public enterprises is intended to stabilize the price of building materials, private dealers should be permitted to import, preferably directly from manufacturers, to increase the supply and create competition;
- Support local building materials industries through tax incentives to encourage them modernize their equipment and production techniques and enhance staff capacity;
- Implement strict quality control of imported building materials to meet minimum national and international standards;
- Ensure that imported building materials are not locally produced or are not produced in sufficient quantities;
- Implement strict quality control of locally produced building materials;
- Introduce modern design standards for housing construction to meet safety and economy requirements.

Labour

13.6 The housing construction industry requires manpower at various levels of skills ranging from skilled, semi-skilled to unskilled labour. The construction labour situation can be summarized as follows:

- There is scarcity of labour at all levels with felt implications on high labour cost;
- No statistics on construction labour are available to facilitate identification of labour issues and formulation of labour policies;
- The existing construction labour training facilities have limited capacity to respond to the increasing demand for construction labour;

- Mobilization is holding off skilled and semi skilled labour from the market;
- Limited training is conducted in the production, marketing and building of selected local materials.

13.7 In order to mitigate the labour shortages and increase labour supply in the housing market, the following measures are proposed:

- During the mobilization programme, priority needs to be given to the assignment of qualified technicians into the building industry;
- Introduce specialization of construction activities for greater efficiency and economy;
- Ensure that foreign contractors use as much of the local labour as possible to provide on the job training possibilities;
- Assess and strengthen the capacity of existing training facilities to make them more responsive to the labour market needs;
- Give priority to the establishment of vocational training facilities for building trades to meet minimum local and international standards;
- Establish a labour statistics unit at the Ministry of Labour and Human Welfare to collect data and monitor the labour market situation.
- Incorporate in the formal and informal training curricula skills in the production of selected local materials and in small scale entrepreneurship in marketing and building of these materials;
- Provide the possibility for the introduction of labour saving technology in the building industry.

13.8 The next chapter looks at how to incorporate gender concerns into policies for housing and urban development.

Chapter 14

Incorporating Gender Concerns

14.1.1 Access to housing is in large defined by the financial position of the household, and its access to land. Female-headed households experience extra difficulty in meeting these two conditions. First, they are in general poorer than their male counterparts, with less stable income sources are. Second, while the Eritrean law ensures equal access to land for both men and women, long waiting lists in urban areas severely constrain access to land when it is needed. Housing problems such as overcrowding are most serious in urban areas, with the worst conditions in *unplanned* settlements. About 37 percent of households in unplanned urban areas are female-headed, with 47 percent female-headed households in unplanned areas in Asmara. These aspects were looked at in Chapter 2, using statistics from the 2005 household survey and other secondary data. This chapter draws out the main issues and sets out recommendations to address the main gender concerns.

14.2 There are several positive aspects to consider with regard to women and access to improved housing:

- The traditional role of women of being mainly occupied in and around the house, boosts their commitment to home improvement schemes;
- Traditionally, women have always participated in community based house construction;
- Women can be expected to play an important role in the improvement of local infrastructure, since, next to their housework, they are the ones who are daily involved in the *managing and operating of the neighbourhood* (it is the women and children who fetch water where there is no piped water in the house);
- Women are known for being ‘good savers’, and they are often used to managing (tight) household budgets;
- Women play an important role in establishing and maintaining the (informal) social networks, which are so important in the culture of ‘helping each other out’.

Issues

14.3 The main issues are summarized below:

Housing conditions

- Female-headed households are relatively *over-represented* in (low income) urban areas, meaning that they more often live in unfavourable housing conditions than their male counterparts;

- The relatively higher proportion of sharers among female-headed households points to a higher dependency rate than that of their male counterparts.

Income

- Female-headed households are in general poorer than their male counterparts, with less stable income sources;
- Women are still much less involved than men in income generation;

Access to land

- There exists some reluctance in villages to abide by the 1994 Land Proclamation which provides for equal access to land for both men and women;
- Fewer plots are allocated to female applicants than they deserve having regard to their proportion in the overall number of households. This is especially so in urban areas.

Construction related experience

- Female-headed households have less construction-related experience than male-headed households;
- Traditionally, women have always participated in the collaborative effort of housing construction, but this practice is not common in urban areas.

Women's empowerment

- Households headed by women are relatively less represented in community organisations;

Recommendations

14.4 To address these issues, the following actions are recommended:

- Start savings groups and open micro credit schemes for women to improve their financial position;
- Support income generating activities for female household heads;
- Provide security of tenure for low-income urban households including female heads of households;
- Ensure access to land for low-income urban households, with special emphasis on female-headed households;

- Promote equal participation of women in the labour market, and support ‘equal pay for equal work’;
- Strengthen women’s participation in community organisations;
- Involve women in protecting the natural environment of their neighbourhoods;
- Design aided self-help housing projects for women especially female-headed households;
- Support women participation in the making of decisions affecting their communities;
- Apply the practice of rural community participation in house construction to the urban context to assist house construction by female-headed households.

Box 14.1: An ‘enabling’ project context

Government policy is clear on the role of the government in housing provision: it should be a facilitating role. But facilitation should include practical measures that help women implement affordable housing projects. These include:

- *Promoting savings and credit groups to prepare households for housing loans;*
- *Providing micro-credit for housing to improve access to housing loans;*
- *Improving access to land targeted at low-income (urban) households;*
- *Providing (cross) subsidies on-site infrastructure;*
- *Providing technical assistance, including project management and supervision, during project planning and implementation, with a focus on the use of self-help construction methods;*
- *Assistance towards procuring low cost materials (with quality monitoring);*
- *Capacity building in the production of building materials on site;*
- *Support for income generation to ensure income sustainability.*

14.5 The next chapter looks at how to incorporate environmental concerns into housing/urban development policy

Chapter 15

Incorporating Environmental Concerns

15.1 This chapter examines the environmental concerns, which have implications for housing and urban development, and proposes recommendations to respond to such concerns.

Environmental Protection Issues

15.2 Eritrea faces a number of environmental issues including:

- Deplorable condition of the urban environment, particularly in the slum and unplanned settlements which lack safe drinking water and adequate sanitation facilities (See Chapter 2 on Existing Housing Conditions);
- Resource constraints including land and building materials for urban low income housing;
- Progressive environmental degradation resulting from excessive use of fuel wood and tree cutting for construction purposes. This contributes to soil erosion and the subsequent decline of the water table;
- Increasing levels of urban air and water pollution and inadequate management of solid waste disposal;
- Inadequate institutional capacity to enforce environmental protection measures;
- Development encroachment on green areas and open spaces;
- Coastal areas are developed without environmental considerations;
- Polluting industries are located in the inner cities.

15.3 The implications of these issues for environmental protection and conservation are examined here, especially in respect to urban areas.

Deplorable Condition of the Urban Environment

15.4 The housing situation in poor urban neighbourhoods particularly in Asmara is characterized by overcrowded living conditions with room densities that reach as high as seven persons per sleeping room do. Clean drinking water is in short supply and sanitation facilities are poor or non-existent. Poorly ventilated shelters combined with high room densities have serious implications for the health, well being, and productivity of the inhabitants.

15.5 The situation is exacerbated by the severe shortage of low-income housing units. Thus, in the absence of affordable housing options, newly formed low-income households are faced with very limited housing solutions. Rental units in poor neighbourhoods provide the only option.

Resource Constraints for Urban Low-Income Housing

15.6 Inaccessibility to housing land especially by the urban poor and the lack of affordable building materials have hampered the provision of shelter for the low income urban households and resulted in the congested living conditions in the unplanned neighbourhoods and the subsequent deterioration of the urban living environment.

Inadequate Institutional Capacity

15.7 Effective protection and conservation of the environment in urban areas needs to have:

- A legal and regulatory framework;
- An institutional set up with adequate expertise and equipment;
- A monitoring and enforcement mechanism and;
- A coordination mechanism

15.8 The legal framework for environmental protection namely the EEA is still waiting to be enacted and implemented. Therefore, the Ministry of Land, Water and Environment is placed in a weak position to fully enforce national environment protection and conservation policies. Other laws which have direct bearing on the environment include:

- Land Proclamation No. 58/1994;
- Mining Proclamation No. 68/1995;
- Eritrean Water Resources Law No. 5/1997 (Draft);
- Legal Notice No. 31/1997 for the Distribution and Administration of Land; and,
- Building Regulations, Municipality of Asmara, 1939. Draft building regulations have been prepared and are being discussed.

15.9 In terms of urban development and land use there are no land use laws or regulations that are designed to accomplish environmental protection goals. These may include:

- Land acquisition for preservation of open space or ecologically sensitive areas;
- Subdivision regulations that include provisions on erosion control, water pollution prevention, or other sustainable environmental issues;
- Zoning regulations limiting development on sensitive lands; and
- Special laws setting aside certain lands for their ecological or natural resource value.

15.10 Although the institutional set up at both policy and implementation levels have been in place in Eritrea, their activities have been constrained by:

- Weak monitoring and enforcement capacity;
- Shortage of expertise;
- Inadequate equipment and machinery; and
- Absence of a coordination mechanism among environment policy, protection and conservation agencies.

Increasing Levels of Pollution and Inadequate Management of Solid Waste

15.11 Urbanization and growth of cities transform the natural landscape. The resulting changes can have serious impacts such as encroaching on prime agricultural land, degrading areas with valuable ecological functions and producing all types of wastes and pollutants. Hence, a sound environmental management is required for sustainable development.

15.12 In Eritrea, there are no heavy industries causing air pollution that result in concentration of pollutants in the soil. Nonetheless, air pollution is quite significant in both Asmara and Massawa where most of the factories, which emit pollutants, are located. These factories include:

- Asmara pickling and Keih Bahri tannery, the untanned skins, fleshing trims and sludge emit odours which are very strong affecting the nearby residential area of Mai Temenai;
- Asmara Lime plant in Gejeret is producing heavy dust of carbon dioxide causing health problems for nearby residential areas;
- Brick factories in Akria use the sold waste trimmings of untanned hides and trimmings of limed bristles as source of energy from the tannery factory which are polluting nearby settlements;
- Massawa Cement Factory environmental impact in terms of soil and air pollution.

15.13 Although water pollution at the national level is not a serious problem for Eritrea, extreme cases are being observed in Asmara environs. Untreated and hazardous effluents from industries are being drained with the domestic waste into the combined sewer system and drain into both Sembel and Mai Bella streams and used for irrigation. The Department of Water Resources indicates that the wells along the Maibela sewage system in Asmara are polluted. In addition, excessive and uncontrolled water pumping along the coastal urban areas is creating saline seawater intrusion in coastal aquifers.

15.14 There is absence of water pollution control and conservation regulations. The Toker dam is being exposed to pollution and silt problems. The flower farm around Mai Sirwa, which is in the main catchments, may have a negative impact and requires environmental impact assessment.

- 15.15 Solid waste disposal is the responsibility of the Sanitation Unit of the relevant municipality. They are responsible to collect, dispose, and manage solid waste. An earlier practice of engaging a private contractor to undertake the service had been discontinued during the Derg regime.
- 15.16 No scientifically designed landfills exist throughout the country. Solid wastes are being disposed off in open field dumping sites. In Asmara, while the collection of solid waste from the city is efficiently carried out, the ensuing disposing and management processes need improvement. Solid waste generated from industries, hospitals and domestic waste is disposed off in one dumping site without any discrimination. The impact is damaging for both the environment and human health of the surrounding areas. It has polluting effects on the soil, surface and ground water and on air. Farmers thus polluting the farmland with non-organic solid waste intensively use compost from the dumping site as manure, and the metal could cause severe damage to the soil, plants, animals and human beings. In the absence of landfill management, solid waste burning is causing environmental pollution problems.
- 15.17 Furthermore, solid waste from factories is dumped in or a little further from factory compound resulting in air pollution by noxious smells to the neighbouring residential areas.
- 15.18 In a 1997 survey conducted by the Department of Environment all the solid waste in the coastal towns was being dumped into the sea.
- 15.19 Operations of solid waste management units around the country seem to be hampered by:
- Lack of solid waste management policy to support integrated waste management and recycling;
 - Lack of standardized regulations and guidelines for solid waste management;
 - Solid Waste is not separated neither during collection nor afterwards;
 - Shortage of personnel renders monitoring solid waste containers ineffective resulting in bins contents remaining uncollected for several days;
 - Solid waste management suffers from shortage of collection trucks, old machinery, limited containers and poor landfills.
 - The major polluting factories have no effluent treatment facilities.

Strategies for Change

- 15.20 Given the fragility of Eritrea's environment and in order to ensure compatibility between development requirements and environmental resources, it is imperative

to integrate the principles of sustainable development into housing and urban development policies and programmes.

Deplorable Condition of the Urban Environment

15.21 There is need to improve the housing and living conditions of low income urban dwellers through:

- Upgrading unplanned urban settlements through site planning and security of tenure;
- Reducing over crowding and ensuring sustainable access to clean water and provision of sanitation facilities;
- Streamlining land delivery;
- Ensuring affordable construction materials and access to housing finance;
- Protecting green areas and open spaces from encroachment;
- Creating public awareness regarding neighbourhood based garbage cleaning and setting up community based solid waste collection;
- Privatising solid waste collection in big cities and towns;

Resource Constraints for Urban Low Income Housing

15.22 Government role should focus on facilitating the delivery of housing inputs for low income urban households in a sustainable manner including land, building materials, labour and finance. This includes:

- Increasing access to land at appropriate and sustainable standards;
- Increasing access to building materials and encouraging the use of local materials in a sustainable manner;
- Utilizing self help labour and ensuring supply of skilled and semi skilled construction labour in a consistent fashion; and
- Setting up a sustainable housing finance facility.

Progressive Environmental Degradation

15.23 Rural development and resettlement entail the implementation of programmes that infringe on the utilization of local environmental resources. The success of these activities requires sound management of natural resources including land, forest, and water. Strategies to achieve the required balance between sustainability of resources and development needs include:

- Accelerating enactment of environmental legal and regulatory framework for protection and management of water and forest resources.
- Finding alternative sources of energy in rural areas to replace firewood including rural electrification and solar energy.

- Finding alternative building materials to reduce dependence on wood as a source for house construction in rural areas.
- Train women as educators and agents for improving the natural environment. Women are users of natural resources, managers of households and important players in environmental management both in the country and cities;
- Specify adequate setbacks for coastal development activities;
- Develop coastal area management guideline and zoning plan.

Inadequate Institutional Capacity

15.24 In order to strengthen the capacity of the environmental policy implementation and enforcement institutions, certain measures need to be taken including:

- Accelerating the enactment and enforcement of the legal and regulatory framework including the EEA and building and planning regulations.
- Building the monitoring and enforcement capacity with qualified manpower, equipment and resources at both national and local levels;
- Establishing an environmental coordination unit to coordinate among policy and implementation agencies;
- Establishing a statistical unit at the Department of Environment to collect and disseminate environmental information and to assist in monitoring implementation of policies and programmes.

Increasing Levels of Pollution and Inadequate Management of Solid Waste

15.25 There is need to strengthen the capacity of the relevant departments to efficiently address environmental problems resulting from industrial pollutants and solid waste including:

- Empowering the Department of Industry with the legal and regulatory framework to carry out its environment protection activities;
- Incorporating environmental protection considerations including undertaking of environmental impact assessment in industrial development policies and strategies;
- Installing effluent treatment facilities in major polluting factories;
- Site selection of new industrial plants should be done in coordination and approval of the Department of Environment;
- Mines and quarries including extraction of sand from streambeds for construction should be conducted in an environmentally safe way;
- Accelerating the enactment of the Eritrean Water Resources Law No. 5/1997 to enforce water conservation measures and to protect sources of water from pollution;
- Building the capacity of the Department of Water with equipment, skilled manpower and resources;

- A legal framework is required to regulate and standardize solid waste management nationwide including separation of solid waste by type at origin and destination;
- The need to address the issue of unscientifically designated solid waste landfills throughout the country;
- Relocate pollutant industries to peripheral areas of cities.

15.26 The next chapter focuses on the issues surrounding rural housing and how to respond to them.

Chapter 16

Improving Rural Housing

16.1 In Chapter 2, rural housing conditions were examined in some detail. This chapter focuses on the main issues facing rural housing and recommends measures to improve rural livelihoods and housing.

Rural housing and development issues

16.2 Compared with the severe housing shortages in most urban areas, especially for low-income groups in Asmara, the housing situation in the traditional villages does not seem to be very critical in contrast with the situation in urban areas, which requires immediate attention at the policy, strategy and implementation levels. The main issues of the housing conditions in these areas include:

- Traditional houses are basically of poor quality and mostly constructed from temporary materials;
- Traditional houses lack basic utility services, such as clean drinking water, sanitary facilities, electricity and roads. Social infrastructure such as health and educational facilities are also inadequate;
- The traditional scattered settlement patterns make the provision of services very expensive;
- High incidence level of dependency and poverty in the villages and small towns;
- Lack of comprehensive data on the housing conditions in rural areas.

Recommendations

16.3 The housing problem facing the rural populace does not seem to be as pressing for action as it is in the densely populated low income unplanned urban neighbourhoods. Poverty along with other basic needs requires more immediate attention.

16.4 It is believed that in order to address poverty, housing and infrastructure and other issues in rural areas, a broader approach needs to be employed that focuses on the overall sustainable development requirements in rural areas.

16.5 Urban and rural areas should be considered as part of the same interdependent space with some economic activities like agriculture, which is more rural, and others like services or industry as urban. This integrated approach takes into account that people in both urban and rural areas deserve the benefits of an increased and sustainable development process. Providing the necessary development infrastructure and capacities will facilitate the take-off of the rural

economy, attract resources and retain labour and revenues in small towns and villages. The following measures are recommended:

Governance:

- The local councils should deal with housing and services issues and should be integrated with adequate mechanisms of participation in the respective sub-regions;
- The local councils should have adequate delegation of authority and increasing responsibilities towards economic autonomy to deal with housing, services and infrastructure development.
- Gender mainstreaming with the active participation of women in the local councils seems a priority that needs to be dealt with at the local level. Capacity building and training should be conducted to empower women;
- The local councils should communicate and coordinate horizontally with other councils in neighbouring small towns and villages and vertically with the respective sub-region;
- Central Government should promote, facilitate, support and, most importantly, empower local councils for project identification planning and implementation.

Services, infrastructure and employment:

- At sub-region level, an intermediary body (such as the Desk) should be reinforced to facilitate technical, social and economic interactions between the central government and the local councils. This body, on the one hand, should watch over the local interests and, on the other, provide inputs to the Government to facilitate its assistance for all sorts of grassroots development activities in a sustained manner.
- The intermediary body should also facilitate the flow of information in a two-way direction, enabling horizontal and vertical links, thus connecting rural areas with urban areas and motivating rural-urban integration in an equitable way;
- The intermediary body should be assisted with technical committees, which, depending on the vocational activity in the area, can be permanent or *ad hoc*. These technical committees should stimulate and attend to technical demands from the different small towns and villages. Their function should be directed to satisfying local needs, such as improvement of rural housing, agricultural practices and other economic activities, services, infrastructure, environmental improvement, governance, transformation of products, gender mainstreaming and other locally identified priorities;
- The technical committees in coordination with the local councils should plan and deliver services and infrastructure tailored to the specific rural characteristics, with a focus on water and sanitation. Such process should help to stabilize the population, diversifying and enlarging its

social and economic base, centering these improvements on the people and their local needs.

- Develop the rural transport and communication network to facilitate the continuous flow of goods and information among villages, towns and urban centres;
- Promote secondary and tertiary activities (transformation of products and services) because they play a key role in village and small town development diverting some members of the community to economic activities other than agriculture.

Rural housing:

- Promote the production of improved local building materials;
- Local authorities should develop a statistical database on the housing and service conditions in their respective areas, with special emphasis on women, orphans, the disabled and other disadvantaged community groups.

Capacity building and institutional reinforcement:

- Special attention should be given to capacity-building programmes addressing technical and managerial capacity of the sub-region and the local councils strengthening them through formal and informal training and workshops;
- Prioritize the introduction of at least sketch plans for areas where no such plans exist;
- Training of men and women in local building materials production should be followed up to raise their living standards and to introduce new skills.

End Note

End Note

A Draft Housing/Urban Development Policy and an accompanying Housing Policy Implementation Plan have been issued as a separate document. The Draft Policy will be finalized by the Department of Urban Development in consultation with other stakeholders and, after official approval, issued as a formal policy document.

Annexes

Annex 1

Estimate of Housing Needs

A1.1 This annex estimates housing needs for Eritrea for the period 2005-2015. The estimates draw a distinction between urban and rural areas, as the scale and nature of housing needs in these localities are different, as are the housing policy responses required of the public sector and other stakeholders. Estimates of housing needs are useful as they provide a rough guide as to the number of dwellings and residential plots required over time¹⁷⁷. In other words, housing needs enable countries to assess the scope of the housing problem. But the concept of housing need, unless complemented by assessments of housing demand has its limitations. At worst, such needs could act as a mere wish list unrelated to the resources available to households, government and the private sector, and therefore unsustainable. For this reason, this annex should be read together with Annex 2 in which a housing affordability analysis has been set out for urban housing. No such analysis has been conducted for rural areas where traditional construction prevails and only a weak housing market exists, if any (Chapter 16).

Methodology

A1.2 The methodology employed to estimate needs is kept simple as the available data, on both population and the current housing conditions, are quite rough. Yet these are the two main “variables” which influence the computation of housing needs. With regard to population, the last census was conducted in 1968 and there are no accurate figures for both urban and rural populations. Nor are there accurate figures on population growth rates. Whilst there are no census-based figures on household size there are good estimates based on the sample surveys conducted in 2004¹⁷⁸ and 2005, the latter for this study. The Eritrea Demographic and Health Survey (2002) is yet another source. As for housing conditions, sample data are available on room densities, making it possible to estimate the number of habitable rooms needed to reduce densities to not more than 2.5 persons per room, a norm used internationally.

A1.3 The outcome of this assessment of housing needs, although approximate, gives an indication of the likely scale of the volume of housing that is required to be provided.

A1.4 The methodology used consists of the following steps:

¹⁷⁷ Note that the number of plots needed is not equivalent to the total housing needs, as some of the needs will be met through the improvement of existing dwellings.

¹⁷⁸ BCEOM-Groupe Huit-Optima (2005) “Asmara Infrastructure Development Study 2004-2005”

1. Separate projections are made of the increases in (a) the urban and rural populations and (b) the urban and rural households for the period 2005-2015. Estimates for Asmara are shown separately because of the importance of the capital city and because it accounts for roughly two-thirds of the total urban population. The number of households formed over this period represents the number of housing units to meet housing needs from demographic growth. A note on the sources of population data is attached as Appendix 1;
2. For urban areas, an estimate is then made of the number of rooms that will be needed each year to decongest the existing urban housing stock over the ten-year projection period. These estimates are then added to the needs arising from demographic growth, after adjusting the number of rooms into “housing unit” equivalents. It is assumed that each housing unit has at least 2 habitable rooms, and the number of housing units is therefore obtained by dividing the number of rooms by two. For rural areas, where traditional construction is the norm, similar estimates are not necessary, as households are able quickly to adjust their living space to meet their needs, poor as the quality of construction might be.

A1.5 In the literature, an adjustment is usually made to take account of the replacement of obsolescent housing stock. In developing country contexts, such an adjustment appears irrelevant, as the overriding concern is to increase the housing stock, through upgrading of slum areas and conserving older housing. The housing stock also tends to be quite young, unlike in cities of the north. For these reasons, no such adjustment has been made in the estimates. At any rate, the data available do not make such an adjustment feasible; no housing census has been conducted and thus no information is available on the quality of the housing stock, except for relatively small samples that are not representative of the entire stock.

A1.6 Previous armed conflicts have wrought serious damage on Eritrea’s housing stock, primarily in the rural areas. Although rehabilitation and re-building of this stock has occurred, the extent to which the damage has been reversed is not clear. As a rough estimate, a figure of 50,000 units has been added to the rural housing needs to cater for this housing deficit¹⁷⁹. It is assumed that these units will be built/rehabilitated during the first 5 years of the projection period i.e. 2006-2010, largely through aided self-help.

¹⁷⁹ At a 2004 UNDP seminar on recovery it was estimated that 100,000 rural dwellings needed to be rehabilitated or re-built as a result of damage during the 1998-2000 war. Of this number, 14,000 had been rebuilt under a UNDP-coordinated recovery programme. To this should be added an unknown number of dwellings re-built by rural people without outside assistance. The rounded number of 50,000 gives an order of magnitude for the current deficit.

Housing Needs: Summary Table

Population and Housing Needs	Urban Areas			Small Townships and Rural Areas
	Asmara	Medium Sized Towns (including other Regional Centres)	Total Urban	
Population growth 2005-2015 ¹⁸⁰	154,762	137,567	292,329	876,987
Growth of the number of households 2005-2015 ¹⁸¹	34,392	29,270	63,662	178,977
Number of dwelling units needed to reduce over-crowding ¹⁸²	19,200	19,990	39,190	
Need arising from war-damage				50,000
Total housing needs over the period 2005-2015	53,592	49,260	102,852	228,977
Average annual housing need over the period 2005-2015	5,359	4,926	10,285	22,898

¹⁸⁰ See Appendix 1 for population sources and assumptions regarding growth rates.

¹⁸¹ See Appendix 2 for year-on-year changes.

¹⁸² Computations are made on the basis of the number of rooms needed to bring densities down to 2.5 people per room or lower. Existing density figures were obtained from the 2005 household sample survey carried out for this study and the 2004 survey by BCEOM, already referred to.

Appendix 1 Sources of Population Data

Population

- A1.7 In the absence of census data, the Ministry of Local Government (MLG) derives the base population figures used in the analysis of housing needs from the registration of people. There are many other estimates, some higher and others lower than the MLG figures. The general approach has been to use what is considered a middle-of-the-range estimate, and not the outlying figures from other sources. The figure commonly cited is 3.4 million people for the country as a whole, growing at a rate of 3 percent per annum. UN agencies and other bodies typically use this population figure.
- A1.8 The urban population is estimated to be roughly 25 percent (850,000 people) of the national population, with over half (450,000 people) of this number in Asmara alone. The populations of Asmara and medium-sized towns are based on registration figures from the Zobas. The population of Asmara and the other towns is assumed to be growing at 3% per cent a year.
- A1.9 Household size: An average household size of 4.5 persons is assumed for Asmara, 4.7 persons for the medium-sized towns, and 4.9 for small towns and rural areas. The latter two figures are from the 2002 Demographic and Health Survey.

Appendix 2 Housing Needs Projections

YEAR ON YEAR HOUSING NEEDS PROJECTION

YEAR	ASMARA					MEDIUM SIZED TOWNS					TOWNSHIPS and VILLAGES					TOTAL	
	Population 3.0% growth rate average	Households HH size 4.5	Annual increase in number of HH	Number of units to reduce overcrowding	Total	Population 3.0% growth rate average	Households 4.7 (EDHS)	Annual increase in number of HH	Number of units to reduce overcrowding	Total	Population 3.0% growth rate average	Households 4.9 (EDHS)	Annual increase in number of HH	Number of units to reduce overcrowding	Rehabilitation of war damaged houses		Total
2005	450000	100000	-	-	-	400000	85106	-	-	-	2550000	520408	-	-	-	-	
2006	463500	103000	3000	1920	4920	412000	87660	2554	1999	4553	2626500	536020	15612	-	10000	25612	35085
2007	477405	106090	3090	1920	5010	424360	90289	2629	1999	4628	2705295	552101	16081	-	10000	26081	35719
2008	491727	109273	3183	1920	5103	437091	92998	2709	1999	4708	2786454	568664	16563	-	10000	26563	36374
2009	506479	112551	3279	1920	5198	450204	95788	2790	1999	4789	2870047	585724	17060	-	10000	27060	37047
2010	521673	115927	3377	1920	5297	463710	98662	2874	1999	4873	2956149	603296	17572	-	10000	27572	37742
2011	537323	119405	3478	1920	5398	477621	101621	2959	1999	4958	3044833	621395	18099	-	-	18099	28455
2012	553443	122987	3582	1920	5502	491950	104670	3049	1999	5048	3136178	640036	18642	-	-	18642	29192
2013	570046	126677	3690	1920	5610	506708	107810	3140	1999	5139	3230264	659238	19201	-	-	19201	29950
2014	587147	130477	3800	1920	5720	521909	111044	3234	1999	5233	3327172	679015	19777	-	-	19777	30730
2015	604762	134392	3914	1920	5834	537567	114376	3332	1999	5331	3426987	699385	20370	-	-	20370	31535
TOTAL			34392	19200	53592			29270	19990	49260			178977	-	50000	228977	331829

Annex 2

Affordability analysis

- A2.1 Housing policy must take account of the ability of households to pay for their housing, especially in developing countries where resources to support subsidies are severely limited. For this reason, it is important to examine the factors that determine affordability. There are several relevant factors: household income and the proportion of income that households are willing to spend on housing either for house purchase or rent; financing terms, as these determine the amount of money that must be paid back every month by those who borrow to finance their housing; and, finally, the house construction cost.
- A2.2 This annex conducts an affordability analysis of urban housing in Eritrea, using a number of related steps.
- The first is a review of urban household income data with a focus on data sources and household income distribution;
 - The second step is to establish the amount of housing loan affordable by different income groups, given (a) the proportion of income that households are willing and able to spend on housing and (b) the available financing terms;
 - The third step is to work out the capital costs of affordable houses for different income groups (*i.e.* loan amount plus down payment) and determine whether or not such capital costs translate into feasible housing solutions, having regard to the use of cost-effective designs, local materials and building methods.
- A2.3 The analysis of affordability is then examined in the context of housing needs with a view to establishing the affordable housing options over the next ten years. After discussing the key assumptions that underlie the analysis, the chapter closes with a number of conclusions and policy recommendations.

Household income

- A2.4 **Data sources:** Two recent surveys provide data on urban incomes in the country. The first is the socio-economic survey conducted for this study in early 2005. That survey grouped urban areas into two categories (a) primary cities, these being the regional centres of the 6 *Zobas*, and (b) secondary towns, with one representative town drawn from each *Zoba*. The size of the urban sample was 325 households in the primary cities (117 in Asmara) and 369 households in the secondary towns.¹⁸³

¹⁸³ 106 village households were also interviewed and the data collected has been used, not here, but in the analysis of rural housing (see Chapters 2 and 16).

A2.5 The second source was a survey conducted in 2004 for the Ministry of Public Works as part of the Strategic Urban Development Plan for Asmara¹⁸⁴. The Asmara sample in that survey (360 households) was bigger than that in the 2005 survey, in addition to being more representative of low-income people in the city. Overall, this source gives lower estimates of income for Asmara, and probably better conveys the severity of the housing affordability problem in the city. Estimates of affordability for Asmara have therefore been based on this more conservative source. Although the data are about one year old, they are considered adequately current for policy analysis. Besides, no adjustments of salaries and wages have occurred since then.¹⁸⁵

A2.6 For the other towns, the 2005 survey is the only source of recent income data.

A2.7 **Income distribution:** The urban income distribution from the two sources of data is given in Table A2.1, with more details shown for Asmara because of its importance and the availability of robust data at the neighbourhood level. The income quintiles (Q1-Q5) divide the household sample into 5 equal groups (**each containing 20 percent of the sample**)¹⁸⁶. In every case, the income figure shown is the upper bound (ceiling) of each income quintile. The minimum value for the lowest quintile (Q1) is also given.

Table A2.1: Urban household income distribution (ERN per month)

Income Decile	Asmara: 2004 Survey					2005 Survey		
	Mixed residential neighbourhoods	Popular planned neighbourhoods	Traditional spontaneous neighbourhoods	Traditional village neighbourhoods	Asmara	Asmara	Other Primary Cities	Secondary Towns
Minimum value of Q1	250	250	210	300	210	500	500	280
Q1 (20%)	1,200	877	466	600	762	1,120	986	900
Q2 (20%)	1,700	1,200	750	734	1,080	1,750	1,500	1,250
Q3 (20%)	2,027	1,650	857	1,008	1,500	2,800	2,080	1,789
Q4 (20%)	3,220	2,507	1,000	1,389	2,348	4,300	3,330	2,500
Q5 (20%)	6,200	10,800	2,500	2,700	10,800	12,560	25,833	25,833
Sample size	59	205	44	44	352	117	208	369

Source: BCEOM-Groupe Huit-Optima (2005)

Affordable loan amounts and capital costs

A2.8 For Asmara Table A2.2 sets out:

- the maximum loan affordable for each income quintile;
- the maximum capital cost affordable for each income quintile, assuming:
 - (a) that 25 percent of household income is spent on housing;
 - (b) a loan

¹⁸⁴ BCEOM-Groupe Huit-Optima (2005) “Asmara Infrastructure Development Study 2004-2005”

¹⁸⁵ Remittances from the diaspora are an important source of income but there is no evidence to suggest that their size has changed over the past year and should therefore be factored into the analysis.

¹⁸⁶ Income quintiles divide the population into 5 income groups (from lowest income to highest income) such that 20% of the population is in each group.

repayment period of 25 years, equivalent to the term for loans by the Housing and Commerce Bank of Eritrea; (c) an annual loan interest of 9 percent equivalent to the rate typically charged by HCBE; (d) a down-payment of 20 percent of the house cost, the deposit normally required by HCBE, and (e) self-help construction for the majority of households.

Table A2.2: Asmara: Affordable house costs (amounts in ERN)

Income quintiles (upper income limit shown in ERN/month)	Monthly repayment at 25 percent of household income	Maximum affordable loan amount	20% Down payment.	Maximum affordable capital cost.	Feasible House Type ¹⁸⁷	
Col a	Col b	Col c	Col d	Col e = c+d	Col f	
Q1 (20% of households)	762	191	22,454	5,613	28,067	None. Households would share rental accommodation in upgraded and non-upgraded spontaneous settlements
Q2 (20% of households)	1,080	270	31,825	7,956	39,781	None. Households would likely rent accommodation in upgraded settlements.
Q3 (20% of households)	1,500	375	44,201	11,050	55,251	To afford the basic unit of 24 square metres built through self-help. These households would need to pre-save around 30% as a down payment (cost includes the cost of materials and provision for hiring some skilled labour). Land and infrastructure costs excluded.
Q4 (20% of households)	2,348	587	69,190	17,297	86,487	Larger unit (than 24 m ²) built through self help. Land and infrastructure costs excluded.
Q5 (20% of households)	> 2,348	>587	>69,190	>17,297	>86,487	Larger unit (than 24 m ²) built via a contractor. Land and infrastructure costs excluded.

A2.9 Table A2.2 indicates that households in the two lowest income quintiles (bottom 40 percent on the income distribution) cannot afford to build a basic housing unit of 24 square metres, which currently costs about ERN 55,000¹⁸⁸. Indeed, only households at the top of the third income quintile are able to do so, unless a higher down payment is assumed; in other words, nearly **60 percent** of households cannot afford the basic housing unit. As Table A2.2 points out, the households in the bottom 20 percent are only likely to afford rented housing in non-upgraded spontaneous neighbourhoods. Those in the second quintile would likely rent in upgraded settlements, as would some of those in the third quintile; unless a higher down, payment is assumed.

A2.10 The affordability analysis set out here for Asmara uses aggregate data for the town as a whole and therefore conceals the relative differences among different neighbourhoods: for instance, far fewer households in traditional spontaneous neighbourhoods are able to afford a basic housing unit as their incomes are quite

¹⁸⁷ See attached appendix for the costing of 24 square metres of habitable space built to different standards.

¹⁸⁸ See attached appendix. This is a self-help dwelling unit of basic specifications built of conventional materials (hollow concrete blocks for walls and a corrugated iron roof) and connected to septic tank.

low, substantially lower than incomes in other areas such as the mixed residential neighbourhoods (Table A2.1). Households in spontaneous settlements are concentrated in the two lowest income quintiles.

A2.11 Household incomes in the other primary cities and secondary towns are even lower than in Asmara, as reflected in the 2005 data (Table A2.1). This means that, in relative terms, fewer households in these other towns would be able to afford the basic housing unit of 24 square metres referred to above.

Affordability and Housing Needs

A2.12 It is important to bring together the affordability analysis set out here and estimates of housing needs. The purpose is to establish, in approximate terms, the total number of households that could afford different housing options over the next 10 years¹⁸⁹. Such estimates are useful because (a) they give a rough indication of the required volume of housing production per year, by income category, either in the form of new housing or upgrading of existing dwellings and (b) they take account of the ability of households to pay for housing (*i.e.* effective housing demand). If housing demand is not taken into account, then housing needs become just a wish list that serves little purpose. Estimates have been worked out for Asmara only but the housing needs in the other towns are assumed to be of the same scale, except that the levels of affordability are lower.

A2.13 In the coming 10 years, over 53,000 households in **Asmara** will need to be housed. This need is made up of new households (34,000) as a result of population growth whilst the remainder (19,000) stems from the recommended de-congestion of the currently overcrowded housing, primarily in the traditional spontaneous neighbourhoods.¹⁹⁰ On average, therefore, over 5,000 new dwelling units a year will be required in Asmara alone over the next 10 years in contrast to the average of only 1,500 building permits issued each year.¹⁹¹ These figures point to a substantial and growing deficit of formal housing production in Asmara and the need to look to upgraded settlements for complementary housing solutions.

A2.14 In order to determine how to distribute housing needs by income group, the following procedure has been followed. First, the housing needs arising from population growth are distributed equally among the five income quintiles (Col. b of Table A2.3). The underlying assumption is that the formation of new households within each quintile will be equal over the next ten years. Second, it is assumed that the housing needs stemming from de-congestion are generated

¹⁸⁹ This planning horizon, specified in the terms of reference, is a reasonable duration over which to estimate housing needs.

¹⁹⁰ See Annex 1 for an estimation of housing needs.

¹⁹¹ The number of building permits overstates the number of dwellings built each year because (a) it includes permits for non-residential construction, and (b) not everyone who obtains a building permit actually builds.

primarily by the households in the bottom two income quintiles (40 percent of households), as these are the people who typically live in traditional spontaneous neighbourhoods. These housing needs have been split equally between the two lowest quintiles (Col. c). The outcomes show clearly that, in terms of numbers, housing needs are greatest between the two lowest income groups.

Table A2.3: Asmara: Distribution of housing needs by income quintile

Income quintile (current upper income limit) ERN per month ¹⁹²	Estimate of housing needs over next 10 years (Based on population growth)	Estimate of housing needs over next 10 years (Based on the need to decongest existing housing)	Total housing need	Feasible house type	
Col. a	Col. b	Col. c	Col. d	Col. e	
Q1 (20% of households)	762	6,800	9,500	16,300	New housing is not feasible. Housing delivery mainly through upgrading of existing settlements
Q2 (20% of households)	1,080	6,800	9,500	16,300	New housing is not feasible. Housing delivery mainly through upgrading of existing settlements
Q3 (20% of households)	1,500	6,800	0	6,800	Basic unit of 24 square metres built through self-help (cost of materials and allowance for hiring some skilled labour). Land and infrastructure costs excluded.
Q4 (20% of households)	2,348	6,800	0	6,800	Larger unit built through self help. Land and infrastructure costs excluded.
Q5 (20% of households)	> 2348	6,800	0	6,800	Larger unit built via a contractor. Land and infrastructure costs excluded.
Total	-	34,000	19,000	53,000	-

Qualifying the outcomes of analysis

A2.15 A number of assumptions have been made in the affordability analysis in this chapter. These will now be examined in order to draw out their implications for the analysis.

A2.16 **Affordable housing solutions:** The structuring of affordability in Table A2.2 is meant to provide a rough guide as to the types of affordable and feasible housing solutions for different income groups. In practice, the housing market will not work in such a straightforward and stylized fashion. For instance, some households in the two lowest income quintiles might be able to attract additional income from the Diaspora if there are good prospects of acquiring a residential plot. Others will be prepared to spend much more than the 25 percent of household income assumed in the analysis and pre-save more than the 20 percent down payment assumed in the calculations. Yet others will see their incomes

¹⁹² The absolute income figures and costs have not been adjusted for inflation.

grow, in real terms, as their economic circumstances change thus enabling them to afford better accommodation. Moreover, if the building industry were to be liberalized as proposed in Chapter 13, building costs should fall (in real terms), thus improving affordability.

- A2.17 **Proportion of household income spent on housing:** The analysis above assumes that households will spend 25 percent of their incomes on housing. This is the norm that is used in many countries although the literature provides strong evidence that this proportion falls as income rises.¹⁹³ The average of 25 percent is a good approximation for purposes of this analysis, particularly in view of (a) the assumptions made by local financial institutions as to what households can afford to set aside for housing and (b) survey data on what households are willing to pay.
- A2.18 In Asmara, the 2005 survey indicated that households are willing to spend up to 33 percent, on average, of their incomes to repay housing loans but this proportion falls to 23 percent for other primary cities and 24 percent for secondary towns. Expenditures on rent tend to be lower and were given as 24 percent of income in the 2004 survey (tenants in private housing) and 3 percent (tenants in public housing). Whilst it is difficult to read too much into these differences, given the small size of the Asmara sample in the 2005 survey, the data suggest that (a) households would be willing to spend more on housing if it were for purchase and not for rental and (b) that 25 percent of household income is a reasonable proportion to assume for determining affordability. This proportion excludes the cost of utilities, primarily water, sanitation and electricity.
- A2.19 **Loan terms:** The assumed loan terms are realistic as they are consistent with what is currently on offer at HCBE, although primarily for high-income groups. If micro-finance for housing were to be promoted in the country, as recommended in Chapter 11, higher interest rates would most likely be charged and loan repayment periods would be shorter than the 25 years assumed in this analysis.
- A2.20 **Land and Infrastructure costs:** Land costs have been disregarded as government without a direct charge, except for a nominal land rent every year, gives out land. Infrastructure costs have also been disregarded, the assumption being that the majority of those in the two lowest income quintiles (bottom 40 percent) will not be able to build and will therefore not pay for infrastructure costs directly. Households in this category will be mainly tenants and will therefore pay for infrastructure costs indirectly as part of their rent (where such infrastructure exists). Infrastructure costs could also be recovered from cross-subsidies (from higher-income groups) and from user charges if tariffs are adjusted to recover both operations and maintenance, and capital costs (see Chapter 10). It is assumed that once a reformed system of financing urban infrastructure is introduced, the current system of demanding upfront financial contributions to meet land

¹⁹³ See for instance Mayo, K. M. et al. (1986) "Shelter strategies for the urban poor in developing countries". World Bank

preparation and infrastructure costs will be phased out. No other subsidies will be available to households.

A2.21 **Basic housing unit:** The cost of the basic dwelling assumed here could be reduced somewhat by replacing the septic tank with an ecological dry toilet. Such a toilet also costs less in recurrent terms as it does not use water.

Main conclusions

A2.22 The main conclusions of the affordability analysis are:

- Close to 60 percent of households in **Asmara and other towns** will not be able to build a basic housing unit of 24 square metres but this proportion would fall if households pre-saved more than the 20 percent assumed in the analysis. The majority of these households will likely be renters, the poorest in non-upgraded settlements and the rest in upgraded neighbourhoods;
- In the coming 10 years, over 53,000 households in **Asmara** will need to be housed. This need is made up of new households (34,000) as a result of population growth whilst the remainder (19,000) stems from the recommended de-congestion of the currently overcrowded housing, primarily in the traditional spontaneous neighbourhoods. On average, over 5,000 new dwelling units a year will be required in Asmara during the next ten years;
- The total housing needs in all the other towns put together will be of the same scale as for Asmara, bringing the entire urban needs countrywide to around 10,000 dwellings a year;
- There is a large and growing deficit of formal housing production in Asmara, and probably in other towns as well.

Policy Recommendations

- Focus on the upgrading of spontaneous settlements as a key strategy for delivering housing affordable by the poor;
- Through the Housing Loan Guarantee Fund proposed in Chapter 11, generate small loans for house building, and renovation/extension in spontaneous neighbourhoods;
- Design and implement a pilot project to demonstrate cost-reducing technologies and approaches including self-help construction, utilization of alternative local building materials, use of ecological toilets, and the generation and administration of construction loans for low-income housing.

Appendix

Asmara: Estimated costs of 24 square metres of habitable space built to different standards (2005 prices)

24 m2 habitable space	Cost of building materials	Cost of building materials and some hired skilled labour	Cost of building materials and all labour hired	Cost of materials, all labour, and management, except for material supply management	Cost of materials, all labour, all management
<p>Using alternative material (compressed soil blocks, possibly stabilized soil blocks) or alternative sanitary system (ecological dry toilet, to avoid the construction of a septic tank)</p>	<p>1,750 ERN/m2 42,000 ERN N.B. More cost reduction might be possible. Capacity building and technical assistance required</p>	<p>2,000 ERN/m2 48,000 ERN</p>	<p>Not recommended given the attempt to reduce costs</p>	<p>Not recommended given the attempt to reduce costs</p>	<p>Not recommended given the attempt to reduce costs</p>
<p>Using 'Low Cost' design, with conventional material and (shared) conventional sanitary systems (hollow block, brick, septic tank)</p>	<p>2,000 ERN/m2 48,000 ERN</p>	<p>2,300 ERN/m2 55,000 ERN</p>	<p>2,900 ERN/m2 70,000 ERN</p>		
<p>Using a conventional design on ground floor (G)</p>	<p>Possible</p>	<p>2,900 ERN/m2 70,000 ERN</p>	<p>3,900 ERN/m2 94,000 ERN</p>	<p>4,700 ERN/m2 113,000 ERN</p>	<p>5,500 ERN/m2 132,000 ERN</p>
<p>Using a conventional G+1 'villa' design N.B.: typology does not facilitate small units (with a concrete floor slab, and reinforced columns and beams)</p>	<p>Not encouraged</p>	<p>Not encouraged</p>	<p>Not encouraged</p>	<p>6,600 ERN/m2 160,000 ERN</p>	<p>8,800 ERN/m2 215,000 ERN</p>
<p>Using a conventional apartment block (G+3-4-5) (with a concrete floor slab, reinforced columns and beams; 40m2 of built area assumed)</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>8,000 ERN/m2 320,000 ERN</p>

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