ZAMBIA

URBAN HOUSING SECTOR PROFILE

UN-HABITAT
FOR A BETTER URBAN FUTURE

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FOREWORD

In November 2011, I had the pleasure to present a guide for conducting one of the most successful and practical tools UN-Habitat has helped produce in recent years: the national housing profiles. As I stated then, a national Housing Profile can be the first step to inform and engage policy and decision-makers, and provide them with the evidence needed to design their choices and support critical decisions.

Indeed, developing a Housing Profile needs to be seen as the basis for a broad housing sector reform that aims to improve its overall performance. Clearly, the performance of a nation's housing sector, its impact on cities and towns, and the living conditions of poor households is a key concern not only of national public policy, but it is also central to the agenda and international mandate of UN-Habitat.

It is a reality that providing adequate housing to millions of low income households globally and particularly in urban centres is one of the greatest challenges facing society. The scale of the housing challenge is immense, with a new dwelling required every two minutes of the working day until 2030 to meet urban housing demand. In addition to new housing provision, the profile highlights the need to upgrading existing informal settlements; improve access to serviced land, as well as to develop a new national housing policy that reflects the need for housing provision which is affordable to the majority.

To address these challenges, UN-Habitat has welcomed the initiative of the Government of Zambia to join other countries such as Uganda, Ghana, Tanzania, Malawi or Tunisia on the review of the housing sector using the UN-Habitat's housing profiling tool.

I am confident that the Zambia Housing Profile will be a useful tool for all housing sector stakeholders striving towards improving access to adequate housing for the Zambian population. In view of the pivotal importance of the housing sector to the wider economy, I am confident that the profile will serve as an important tool for sustainable urban development and poverty reduction efforts in Zambia.

I wish to express my appreciation and gratitude to all those who have contributed to this report, and my recognition for the commitment of the Government of Zambia to improving access to adequate housing for its citizens.

UN-Habitat welcomes the commitment of the Government of Zambia to facilitating the improvement of the housing conditions of its citizens.

Dr. Joan Clos

Under-Secretary General of the United Nations,

UN-Habitat Executive Director

MINISTER'S MESSAGE

The vision of the Government of the Republic of Zambia in the housing sector is, "to have planned settlements with adequate, affordable and quality housing by 2030". The government recognizes that affordable housing is a basic human need which can lead to improvements in society's welfare and consequently contribute to wider social and economic development. This is clearly articulated in the Sixth National Development Plan (SNDP 2011 – 2015). Government is fully aware of the fundamental role that the housing sector can play when taken as an economic investment and not only viewed as a social service. It is common knowledge that housing inadequacy can have adverse impacts on the health, and general well being of society as well as on the environment.

It is therefore important to remember that the availability of decent, affordable and adequate housing is an important pre-requisite to national economic development. Any shortfall in the housing sector could trigger severe negative impacts on social welfare, the environment and on the general performance of the national economy.

As identified in the SNDP, the inadequate availability of affordable and decent housing in Zambia is one of the major challenges that the Government is facing in its quest to provide municipal services to all its people. This is exacerbated by the fact that the actual shortfall remains unclear and government has to rely on very rough estimates in order to plan the necessary interventions. It is therefore gratifying to note that, with the support of UN-Habitat the first Zambia Urban Sector Housing Profile has been completed.

This profile has put together a comprehensive understanding of the functioning of the urban housing sector that will serve as a reliable reference tool for all actors in the sector.

The profile will therefore be utilized as an analytical tool to support a comprehensive assessment of housing delivery systems, the challenges of access to land, housing finance, basic infrastructure/services, building materials and technology options, amongst other issues hindering the housing sector from functioning efficiently. The Profile will contribute to the creation of a framework that will support government and its partner's efforts in the provision of adequate and affordable housing for all income levels.

It is anticipated that the profile will assist government in reviewing and improving the various laws and policies, key among them, the National Housing Policy of 1996, to set the stage for achieving the 2030 vision in this sector.

It is also anticipated that this profile will be the first step towards the development of the first Urban Policy that will strengthen Central and Local government efforts in incorporating informal and unplanned settlements into comprehensive country-wide urban development strategies.

Finally, I wish to urge all readers to send comments to the Ministry in order that we may continue to improve on our products and services.

Professor Nkandu Luo, MP
Minister of Local Government and Housing
February 2012

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ADB	AFRICAN DEVELOPMENT BANK
AHC MMS	ASSET HOLDING COMPANY - MINING MUNICIPAL SERVICES
AHF	AFRICAN HOUSING FUND
AMIZ	ASSOCIATION OF MICROFINANCE INSTITUTIONS OF ZAMBIA
BNB	BASIC NEEDS BASKET
BOZ	BANK OF ZAMBIA
CBO	COMMUNITY-BASED ORGANISATION
CBU	COPPERBELT UNIVERSITY
CDF	CONSTITUENCY DEVELOPMENT FUND
CEDAW	CONVENTION ON THE ELIMINATION OF
ALL	FORMS OF DISCRIMINATION AGAINST WOMEN
CESCR	COVENANT ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS
CFHH	CIVIC FORUM ON HOUSING AND HABITAT
CHAZ	CHURCHES HEALTH ASSOCIATION OF ZAMBIA
CLIP	COPPERBELT LIVELIHOODS IMPROVEMENTS PROJECT
COMESA	COMMON MARKET FOR EASTERN AND SOUTHERN AFRICA
CUM	CUBIC METRE
DANIDA	DANISH INTERNATIONAL DEVELOPMENT AGENCY
DBSA	DEVELOPMENT BANK OF SOUTHERN AFRICA
DBZ	DEVELOPMENT BANK OF ZAMBIA
DCI	IRISH AID (NOW DEVELOPMENT COOPERATION IRELAND)
DDCC	DISTRICT DEVELOPMENT COORDINATING COMMITTEE
DISS	DEPARTMENT OF INFRASTRUCTURE SERVICES
DPPH	DEPARTMENT OF PHYSICAL PLANNING AND HOUSING
DRC	DEMOCRATIC REPUBLIC OF CONGO (FORMERLY ZAIRE)
ECR	EXPANDED CHURCH RESPONSE
EIA	ENGINEERING INSTITUTE OF ZAMBIA
FBS	FINANCE BUILDING SOCIETY
FBZ	FINANCE BANK OF ZAMBIA
FNDP OR **FINDP**	FIRST NATIONAL DEVELOPMENT PLAN
FONDP	FOURTH NATIONAL DEVELOPMENT PLAN
FSDP	FINANCIAL SECTOR DEVELOPMENT PLAN
GDP	GROSS DOMESTIC PRODUCT
GRZ	GOVERNMENT OF THE REPUBLIC OF ZAMBIA
GTZ NOW **GIZ**	GESELLSCHAFT FÜR (TECHNISCHE) INTERNATIONALE ZUSAMMENARBEIT
HA	HECTARE (10,000 SQUARE METRES)

ACRONYMS

HFH	HABITAT FOR HUMANITY
HIPC	HIGHLY INDEBTED POOR COUNTRY
HSIA	HOUSING (STATUTORY AND IMPROVEMENT AREAS) ACT
HUZA	HUMAN SETTLEMENTS OF ZAMBIA
IDPS	INTEGRATED DEVELOPMENT PLANS
IZB	INDO ZAMBIA BANK
JCTR	JESUIT CENTRE FOR THEOLOGICAL REFLECTION
JICA	JAPAN INTERNATIONAL CO-OPERATION AGENCY (JAPANESE AID)
KCC	KITWE CITY COUNCIL
KCM	KONKOLA COPPER MINES
LASF	LOCAL AUTHORITIES SUPERANNUATION FUND
LCZ	LAFARGE CEMENT ZAMBIA PLC
LDF	LAND DEVELOPMENT FUND
LUSE	LUSAKA STOCK EXCHANGE
LWSC	LUSAKA WATER AND SEWERAGE COMPANY
MCDMCH	MINISTRY OF COMMUNITY DEVELOPMENT, MOTHER AND CHILD HEALTH
MLEWD	MINISTRY OF LANDS, ENERGY AND WATER DEVELOPMENT
MLGH	MINISTRY OF LOCAL GOVERNMENT AND HOUSING
MLGEEEP	MINISTRY OF LOCAL GOVERNMENT AND HOUSING, EARLY EDUCATION AND ENVIRONMENTAL PROTECTION (CHANGED BACK TO MLGH)
MMD	MOVEMENT FOR MULTI-PARTY DEMOCRACY
MSMES	MEDIUM, SMALL AND MICRO ENTERPRISES
NAC	NATIONAL AIDS COUNCIL
NAPSA	NATIONAL PENSIONS SCHEME AUTHORITY
NAWASCO	NATIONAL WATER SUPPLY AND SANITATION COUNCIL
NBFIS	NON-BANK FINANCIAL INSTITUTIONS
NBFISD	NON-BANKING FINANCIAL INSTITUTIONS SUPERVISION DEPARTMENT OF THE BANK OF ZAMBIA
NCC	NATIONAL COUNCIL FOR CONSTRUCTION
NERP	NEW ECONOMIC RECOVERY PROGRAMME
NHA	NATIONAL HOUSING AUTHORITY
NHP	NATIONAL HOUSING POLICY
NHTB	NATIONAL HOUSING BOND TRUST
NPCI	NATIONAL POLICY ON THE CONSTRUCTION INDUSTRY
NZP+	NETWORK OF PEOPLE LIVING WITH HIV

ACRONYMS

ODA	OVERSEAS DEVELOPMENT ADMINISTRATION OF THE BRITISH GOVERNMENT (NOW DFID)
PABS	PAN AFRICAN BUILDING SOCIETY
PHI	PRESIDENTIAL HOUSING INITIATIVE
POCMUS	PROMOTION OF COMMUNITY MANAGED URBAN SERVICES
PPHPZ	PEOPLE'S PROCESS ON HOUSING AND POVERTY IN ZAMBIA
PPP	PUBLIC-PRIVATE PARTNERSHIP
PROSPECT	PROGRAMME OF SUPPORT FOR POVERTY ELIMINATION AND COMMUNITY TRANSFORMATION
PRSP	POVERTY REDUCTION STRATEGY PAPER
PSPF	PUBLIC SECTOR PENSION FUN D
PUSH	PROGRAMME FOR URBAN SELF-HELP
RDCS	RESIDENT DEVELOPMENT COMMITTEES
ROADSIP	ROAD SECTOR INVESTMENT PROGRAMME
ROSCA	ROTATING SAVINGS AND CREDIT ASSOCIATION
SA	SHELTER AFRIQUE
SADC	SOUTHERN AFRICA DEVELOPMENT COMMUNITY
SAP	STRUCTURAL ADJUSTMENT PROGRAMME
SCC	THE SWEDISH COOPERATIVE CENTRE
SCP	SUSTAINABLE CITIES PROGRAMME
SHEFA	SHELTER FOR ALL
SIDA	SWEDISH INTERNATIONAL DEVELOPMENT AID
SIZ	SURVEYORS INSTITUTE OF ZAMBIA
SLP	SUSTAINABLE LUSAKA PROGRAMME
SNDP	SECOND NATIONAL DEVELOPMENT PLAN
SOES	STATE OPERATED ENTERPRISES
TAP	TURNALL ASBESTOS PRODUCTS
TDAU	TECHNOLOGY DEVELOPMENT AND ADVISORY UNIT
TNDP	THIRD NATIONAL DEVELOPMENT PLAN
UNIP	UNITED NATIONAL INDEPENDENCE PARTY
UNZA	UNIVERSITY OF ZAMBIA
URWSP	URBAN RESTRUCTURING AND WATER SUPPLY PROJECT
USAID	UNITED STATE AGENCY FOR INTERNATIONAL DEVELOPMENT
VIP	VENTILATED INDIRECT PIT
WDC	WARD DEVELOPMENT COMMITTEES
WSC	WATER AND SEWERAGE COMPANY
WVI	WORLD VISION INTERNATIONAL
YWCA	YOUNG WOMEN'S CHRISTIAN ASSOCIATION

ACRONYMS

ZANACO	ZAMBIA NATIONAL COMMERCIAL BANK
ZCCM	ZAMBIA CONSOLIDATED COPPER MINES
ZHPPF	ZAMBIAN HOMELESS AND POOR PEOPLE'S FEDERATION
ZIA	ZAMBIA INSTITUTE OF ARCHITECTS
ZINGO	ZAMBIA INTERFAITH NETWORKING GROUP ON HIV AND AIDS
ZIP	ZAMBIA INSTITUTE OF PLANNERS
ZLA	ZAMBIA LAND ALLIANCE
ZNAN	ZAMBIA NATIONAL AIDS NETWORK
ZNBS	ZAMBIA NATIONAL BUILDING SOCIETY
ZNPF	ZAMBIA NATIONAL PROVIDENT FUND
ZSIC	ZAMBIA STATE INSURANCE CORPORATION

EXECUTIVE SUMMARY

Zambia is a relatively sparsely populated, land-locked country with almost a century of urbanisation linked to heavy extractive industries. Urban development in Zambia is concentrated along the line of rail from Livingstone to DR Congo, through Lusaka and the Copperbelt. During the early years of independence, there was a centrally-controlled, socialist economy but this was liberalised during the 1990s when most state controlled enterprises were sold off, with sometimes catastrophic effects on the economy.

Zambia's economy is very vulnerable to the international price of copper. Currently it is benefiting from the high metal prices prevailing worldwide. Though recently granted Lower-Middle Income Country status, Zambia is still plagued by high rates of poverty and inequality. The current rate of economic growth cannot support rapid population growth or the economic impacts of HIV/AIDS. Zambia is one of the worst-hit countries in the AIDS pandemic with about 16 per cent of its population aged between 15 and 49 (about 1 million people) HIV-positive. There are likely to be almost one million orphans by 2014.

As part of the profiling process, a sample survey of around 300 households were interviewed in three cities, Lusaka, Kitwe and Livingstone. Its results provided up-to-date information on income, expenditure, housing costs and many of the issues affecting housing in modern urban Zambia. From it, the estimates of housing affordability were made.

LEGAL AND REGULATORY FRAMEWORKS RELATED TO HOUSING

The most influential pieces of legislation and regulation for housing are the Housing (Statutory and Improvement Areas) Act of 1974 and the Town and Country Planning Act, 1962, and Amendment, 1997. The former was a very innovative measure in its time and opened the way for the informal settlements to be regularised and serviced at standards which were more affordable to their residents than the norms elsewhere in the urban areas. The latter provides a framework for planning and control of development in the main cities and towns, including the amount of land available for residential purposes, and plot sizes and the scale of development allowed upon them. The Urban and Regional Planning Bill, scheduled to become law in 2012, seeks to bring all areas within planning legislation. It will replace both the above acts.

Land legislation has also been very influential on housing supply, particularly the declaration of all statutory land as vested in the President and having no intrinsic value, in 1975. This stifled private development of housing for many years until after its replacement by The Land Act of 1995 which restored market conditions to statutory land.

The National Housing Policy of 1996 has resulted in the sale of institutional housing and the ill-fated Presidential Housing Initiative but the remainder of its enabling approach orthodoxy has not been implemented. The building regulations remain too expensive to fulfil for most Zambian households to follow them.

ACTORS IN THE HOUSING PROCESS

For half a century, from the 1930s until the 1980s, the industrial and commercial employers provided housing for their workers in urban areas. Their dominance as housing suppliers gradually declined as informal settlement increased to fill the growing gap between supply of and demand for urban housing. By the 1980s, virtually all new housing was provided in informal and peri-urban settlements. The formal housing stock was sold off to sitting tenants during the liberalisation of the 1990s by which time it was in a generally poor state of maintenance.

The formal institutions for housing provision and enablement; the Ministry of Local Government and Housing (MLGH) and the National Housing Authority (NHA), are both under-resourced and under-staffed to take on the huge task. The latter has declined from an effective housing provision and research organisation in the 1970s into the developer of a few dwellings per annum for the rich in partnership with private developers.

Local authorities have seen their housing function taken away. They retain development control, and recommendations for land allocation and Statutory or Improvement Areas remain. They are also responsible for dealings with informal areas through their social or community services departments. Their plan-preparation functions are fulfilled by some, often with help from bilateral agencies, but not by most. Thus, housing supply generally occurs informally outside local planning guidelines.

Although there are a few large private developers laying out plots and/or constructing dwellings for high- and medium-income clients, the main housing provision in urban Zambia is through households and their informal, small-scale contractors.

NGOs are very active in Zambia and some have important housing inputs. Chief among the housing suppliers at the bottom of the market are Habitat for Humanity and the People's Process on Housing and Poverty in Zambia, both of which are parts of international organisations or movements. The World Bank has been important in urban upgrading, as have several bilateral aid organisations including the Japanese International Cooperation Agency, Ireland Aid and GIZ.

HOUSING SUPPLY

The housing suppliers of the past are not the suppliers in the present and are unlikely to be in the future. During the twentieth century, employers, particularly the mines, and the local authorities were the major suppliers of housing for all. By law, housing was supplied as part of an employment contract. Following the liberalisation reforms of the 1990s, however, this link was broken and each household became responsible for its housing. Such a change required a major shift in policy and the locus of government interventions but these did not take place.

The small African Towns of the 1940s and the more extensive site and service schemes of the 1960s and 1970s had established some self-help and self-managed housing supply mechanisms. The main providers, the multiplicity of households and their informal sector builders, continued to work without government assistance.

Many of the owners of former institutional housing created new supply as they sold up or rented out their formal dwelling and moved into the informal sector. Most of those who remained could not afford to improve and so little of the transformation activity which might be expected has occurred. In addition, the squatter upgrading started in the 1970s petered out so increasing parts of the housing stock were informal and unserviced. The dwellings resulting are affordable to most households whereas the formal sector supply is only affordable to the wealthier few, even though they may be aimed at low-income households. Settlement upgrading has been dominated by NGO and international donor initiatives in the past 20 years.

It is hardly surprising, therefore, that much of the current housing stock is informal and poorly serviced. It is too heavily concentrated in the two and three room types. Despite the sale of institutional rented housing, renting is still an important tenure in urban Zambia, but from private, mostly small-scale, landlords.

HOUSING NEED AND DEMAND IN URBAN ZAMBIA

Reflecting Vision 2030,[1] the profile takes 2030 as the end-date for predictions of urban housing need. Using the latest reliable Zambian Government urban population estimates up to 2025, the shows that there will be a need for about 1.3 million new dwellings between 2011 and 2030, or one every two minutes of the working day for 19 years.

Assuming a house cost to income[2] ratio of 4:1, the profile estimates that most of the dwellings should be in the USD10-40,000 range. This range is reinforced by willingness to pay data from the profile sample survey for both ownership and renting.

LAND FOR HOUSING

Land in Zambia is divided between customary land (about 94 per cent) and statutory land (about 6 per cent and most of the urban areas). The co-existence of a customary system of land holding outside the urban areas maintains the important link between Zambians and the land. Within customary land, chiefs can allocate land and holders can gain a leasehold title. The chiefs, as custodians of customary land, are increasingly important to urban growth as some of it takes place on their land, beyond urban district boundaries. In statutory land, the allocation is all done centrally in a long and expensive process which includes a cadastral survey. Though this system is so good that land disputes are very rare in statutory areas, it is too expensive and time consuming for a process which must deliver a new dwelling every two minutes mostly for low-income clients. Moreover, the institutions involved do not have the capacity to cope with such growth.

The Housing (Statutory and Improvement Areas) Act, 1974, allows councils to provide households with less than cadastral surveys, i.e., those in former institutional estates and sites and service schemes (to be declared Statutory Areas) and those in informal areas (Improvement Areas), with secure tenure, under a council-held head-lease. There is, however, no way squatters outside either of these areas can gain reversionary title; they remain illegal.

During the 1970s and 1980s, all undeveloped land was vested in the President and held to have no value but this was changed in the liberalisation of the 1990s and land has become a commodity. Land is felt by most Zambians to be expensive now and to have recently risen in price more quickly than other commodities. There is only some truth in this but the price is higher than it needs to be partly because plots are generally so large by international standards. Minimum plot size in high-density areas is set at 288 square metres.

Plot size standards are likely to be very influential in the impact of 1.3 million new dwellings by 2030. In order to minimise sprawl, smaller plots and minimum densities might be considered. At 30 dwellings per hectare, another 48,000 hectares of land (62,000 international standard football pitches or two Lusakas) will be required by 2030. At the 15 dwellings per hectare recommended by the Fourth National Development Plan, 87,000 hectares (124,000 football pitches, almost four Lusakas) would be required, just for the residential land.

Women have few rights to land in the customary system and have, until recently, missed out on statutory land allocations, The SADC recommendation of 30 per cent of allocations being ring-fenced for women is now being implemented in urban Zambia. There is still an issue of property grabbing, relatives of the deceased husband denying widows of land occupied with their husbands, but this is attracting police and NGO attention with some success.

HOUSING FINANCE

There is a well-regulated banking sector in Zambia which is attracting international confidence. Housing finance, however, remains relatively undeveloped and mainly concentrated on mortgages for the well-to-do. Interest rates are typically quite high (above 20 per cent per annum) and a deposit of at least 10 per cent is required. Such loans are far out of the affordability of most Zambians. There is about USD600 million in pension funds that could be invested for housing. Some financing is being offered as part of a housing purchase package on specific estates, e.g., Lilayi in Lusaka, but they tend to be expensive and sometimes represent poor value for money.

Informal finance is commonly used in Zambia for small loans, especially through ROSCAs ('chilimba'). These are unlikely to provide housing finance. Microfinance is a growing industry in Zambia but few lend for housing. Although the Housing (Statutory and Improvement Areas) Act was intended to provide good enough tenure to borrow money for home-improvement, councils have been slow to allow borrowing within their head-lease areas. Innovations such as the Swalisano Urban Poor Fund allow members to access low-interest loans through special, and probably not generally replicable, sources of finance.

Most of the 1.3 million dwellings housing 'need' calculated in the profile is from households with limited or no formal employment, very low incomes and no social security safety net from the state. The scale of financial need for housing until 2030 (at 75 per cent of housing cost) is around USD616 million per annum, in loans between USD7,500 and USD30,000. Loans must take account of low life expectancy in an AIDS-ravaged clientele.

INFRASTRUCTURE FOR HOUSING IN ZAMBIA

Currently, infrastructure supply falls very far behind both need and demand. There is insufficient investment in infrastructure leading both to poor provision and grossly under-funded service providers. The cities of Zambia spread while the service providers struggle to maintain the status quo, let alone extend their operations. The government does not help this by maintaining high default levels for its own service use. The up-front costs of the network supply to plots appear to reduce demand for extensions to the formal supply.

Where the formal providers fail to fit services, the informal sector and community groups assisted by NGOs strive to fill the gaps but they cannot keep pace with informal development or catch up on the backlog. Where community groups have succeeded in providing potable water, drainage, sanitation, etc., they tend to do so outside the current dominant technologies. Indeed, some current technologies are unlikely to be capable of extension quickly enough and at sufficient scale to service the newly developing areas.

Water and sanitation services tend to be good in formal areas, subject to stoppages in supply, but almost non-existent in informal areas. Sanitation varies from high quality sewerage in old formal neighbourhoods to pit latrines in most of the informal areas. There is a problem of pits polluting the ground water on which so many residents of informal areas rely. The upgrading of some informal settlements has provided limited servicing there. Electric power is poorly provided and many households still rely on charcoal for cooking and heating and candles or paraffin for lighting. Surfaced roads are missing from large parts of Zambia's urban areas.

The dilemma facing service providers is to provide a service as cheaply as possible while instigating a system which pays for the supply and for network maintenance and extensions. In the long term, the balance between costs and sustainable provision must be struck if the current 640,000 and the future 1.3 million extra households in urban Zambia can be provided with infrastructure by 2030.

THE CONSTRUCTION INDUSTRY AND BUILDING MATERIALS

Though the formal construction industry has been growing very rapidly in the last few years, its role in housing supply is very limited as so few of the urban households can afford its products. As with other countries in Sub-Saharan Africa, there are few large companies involved in housing construction . Most of Zambia's housing is provided by informal construction firms and artisans in collaboration with prospective owners. The building regulations impose standards to which the majority of households can only aspire and so they are forced to build outside the formal permissions system. They are also shrouded in mystery as no-one approached by the profile team iin district councils could find a copy. Other regional and international regulations are used.

Building materials are in reasonable supply though many local resources in materials supply and manufacture could be exploited more fully. The focus of building technologies is currently on cement-based materials but there is much to gain from encouraging earth-based materials and technologies. A multiplicity of small-scale contractors in materials supply are central to future efficiencies in supply

The supply of skilled labour is constrained at present and is bound to be more so when much more activity is required to fulfil the need for over 60,000 dwellings per year. The issue of training and capacity building will be an important determinant of how easily urban

Zambia keeps pace with demand for housing. As much encouragement as possible should be directed at small-scale contractors, especially those using labour-intensive technologies. They should form the focus of interventions to increase the efficiency of housing supply for the majority.

THE HOUSING MARKET

Emerging from the ban on estate agents and zero land values until 1991, there are two markets in urban Zambia, a formal one, operated through formal estate agents and sometimes paying in US dollars, and an informal one operated by informal agents and little known outside its current customers. Most estate agents concentrate on selling land and renting dwellings. The sales market is fairly small at all levels.

Following the sale of institutional housing, there are many households who are 'house rich but cash poor'. Many have sold or rented out their newly-owned property and moved elsewhere on the proceeds, often into peri-urban areas. Some gentrification is occurring in well-located informal areas.

Serviced plot prices in Lusaka of between USD10 and USD20 per square metre and dwellings selling for medians of USD18,000 in both Lusaka and Kitwe since 1990 (at 2011 prices) do not offer any support for the commonly-held belief that serviced land and housing is expensive in Zambia. Rentals are also reasonable. In Lusaka, dwellings rent for USD33-56 per room per month in informal areas and USD200-600 per room per month in the medium cost neighbourhoods. Earnings are too low to afford them but the housing itself cannot be fairly said to be expensive.

Some NGOs, especially Habitat for Humanity and People's Process, are managing to build down to the low earnings in Zambia but it often involves some unsustainable practices such as subsidised land and interest rates. Their dwellings cost between USD2,400 and USD4,250 with 'sweat equity'.

Large developers are building estates on the edge of some urban areas for the rising middle class. They tend to attract attention but do little to solve the housing issues of the majority. Currently, such developers are the only ones benefiting from government subsidies through their partnerships with NHA.

RECOMMENDATIONS AND WAYS FORWARD

The need for new housing and for upgrading of the existing stock is so great that 'business as usual' is not an option. As the current National Housing Policy is being reviewed, the profile offers an opportunity to develop a new national housing policy based on the provision of 1.3 million new dwellings by 2030. It should give priority to upgrading informal and peri-urban neighbourhoods. Similarly, as the Housing (Statutory and Improvement Areas) Act and Planning Law are both being revised by the Urban and Regional Planning Bill, it is important to ensure that they support the housing need set out above, including the need for reduced planning and building standards.

A new ministry devoted to housing should be created and the roles of the NHA and district councils clarified. Housing rights should be enshrined in national legislation.

The need for land by 2030 is so considerable that major improvements must be made to land management, including revising the cadastral system and utilising land as a means of funding development. So much housing is needed that it is essential to increase residential densities. As much urban development is likely on customary land, chiefs must be involved in planning for peri-urban areas.

To fulfil the need for finance by 2030, the mortgage market has only a limited role. There is a ned for a change of approach to reach the poor, with an emphasis on micro-financing for housing. The pension / provident funds have a role to play but it is limited by their size compared with need. As renting will be a major tenure for many years to come, finance institutions should support the building of rental housing, especially by small-scale landlords.

The need for infrastructure by 2030, both for new housing and for existing unserviced neighbourhoods, requires a review of the standards of provision and major improvements in co-ordination among service providers. Community participation in infrastructure supply has shown great promise and should be encouraged and extended. Providers must be able to raise sustainable finance and set pricing mechanisms which ensure the survival, improvement and extension of the service. Providers should install the most effective infrastructure rather than just extending existing networks. New technologies may have much to offer, particularly non-water-borne sanitation systems.

The construction industry is vital in housing supply and must be supported, especially among the small-scale contractors and single artisans. Improving their efficiency is vital to the successful supply of 1.3 million new dwellings by 2030.

The building regulations must be revised to bring more affordable housing within their perview. To this end, standards should be performance-based rather than material-specific, to include local earth-based materials and innovative materials which currently have to be licensed by the NCC one by one.

Currently limited opportunities for local extracting and manufacture of building materials should be improved as should conditions, products and profitability in the informal sector materials supply industries. Improving employment in the supply of housing, and the economic linkages thereto, would assist in essential improvements in the ability of households to afford housing. This requires increases in training opportunities to improve construction skills and increase the supply of jobs.

The hidden subsidies within public-private-partnerships that do not reach the lowest income groups should be stopped. It is important to stress in policy that the problem is not that housing is too expensive but that earnings are too low. This will allow the interventions to be directed at income enhancement rather than trying to build down to too low a budget.

Figure 1. A stakeholder interview in Chaisa.
Photo © UN-Habitat/Daniel Phiri

01

INTRODUCTION

1.1 BRIEF HISTORY

Zambia is a land-locked country with most of its 753,000 sq km land area between 1,000 and 1,400 metres above sea-level. Formerly Northern Rhodesia, Zambia gained its Independence from Great Britain in October, 1964. Following a prosperous start, Zambia's economy was hit by its status as a 'Front Line State' in the struggle against apartheid, the Unilateral Declaration of Independence by Rhodesia, which prevented goods from being exported by rail, and by the simultaneous fall in the price of copper and rise in the price of oil during the 1970s and 1980s. During this time, the regime of founding President Kenneth Kaunda attempted to run a socialist economy with a strong state-run manufacturing and mining sector. Zambia was then and is now, one of the most industrialised countries in Africa. Many industries were privatised and the new owners failed to run them as going concerns. They opted to asset-strip them so many are now just shells. In the new century, there has been renewed energy to resusitate these industries but the process is slow.

Following this economic crisis, the World Bank imposed a Structural Adjustment Programme (SAP) on Zambia in the early 1980s as a prerequisite for borrowing. This required the elimination of many subsidies, reductions in government expenditure and 40 per cent devaluation of the Kwacha. In 1987, Zambia suspended the SAP and launched its own New Economic Recovery Programme (NERP) with similar objectives to SAP but different methods. It failed to improve the economy, however, and the Movement for Multi-Party Democracy (MMD) government, which came to power in 1991, abandoned it following its election victory. It removed many subsidies and privatised many state-owned enterprises, including the copper mines.[3]

SAP, NERC, the privatisation of industries, especially the copper mines, and continuing economic decline led to loss of employment and further suffering for many Zambian households. The recent economic recovery offers hope for improvement. In September 2011, the MMD government was voted out and a Patriotic Front government installed under President Sata.

Until recently, Zambia was classified as a "Highly-Indebted Country" with very high levels of poverty, low GDP per capita and declining conditions of urban living.[4] Following debt relief, the foreign debt of ZMK29.82 trillion in 2004 was reduced to ZMK2.1 trillion in 2005.[5] With a Gross National Income per capita of USD1,070,[6] it is now classified as "Lower-Middle Income Country".

Tembo provides a very helpful summary of the development of Zambia up until the adoption of the enabling approach to housing supply following the National Housing Plan of 1996.[7] This is shown, in a slightly amended form in table 1.

1.2 POPULATION: FACTS AND FIGURES

The population of Zambia in 2010 was 13.05 million, up from 9.9 million in 2000, of which 5.07 million (39 per cent) live in urban areas. In 2010, the number of households in Zambia was 2.64 million of which 1.03 million were in urban areas (table 2. and figure 2). Urban household numbers have increased in number by 643,207 since 2000,[9] representing an average of 64,000 new urban households every year.

Figure 2. Population of Zambia, 1990-2025

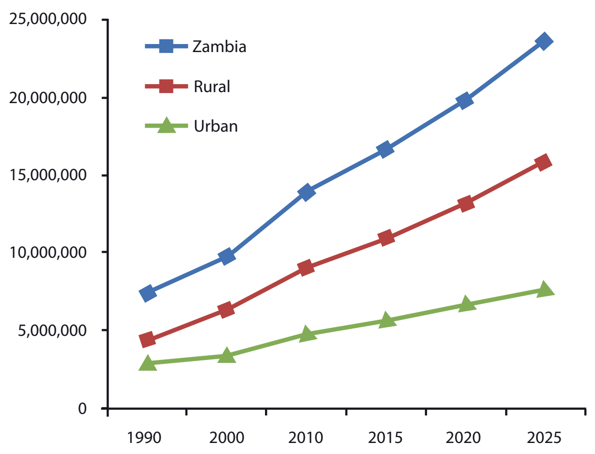


Table 1. Historical events leading to the adoption by the Zambian Government of the Enabling Shelter Strategy

Year	Event
1964	Independence – Government led by (UNIP) under the leadership of Dr. Kenneth Kaunda Free market economy
1968	Mulungushi Reforms. The state announces a programme to nationalise private-owned companies. Matero Reforms. The state announces measure to implement nationalisation of the mining companies.
1972	The promulgation of a One Party Participatory Democracy consolidated the socialist ideology of the UNIP Government.
1973-1984	State controlled economy In 1975, the Presidential Watershed speech abolished freehold titles to land, introduced leaseholds, and vested all land in the President. By 1980 the UNIP Government had established itself as a dominant player in the country with 80% of all companies publicly owned by this time.
1990	The collapse of the economy, which had started showing signs of decline in the 1970s, forced the UNIP government to undertake economic reform. Government briefly embarked on Structural Adjustment Programmes (SAPs) prescribed by both the World Bank and IMF, then chose to abandon them and take its own economic reform measures.
1990	UNIP government abolishes one-party state role and allows stage to be set for a multi-party democracy.
1991	Movement for Multi-Party Democracy wins national elections. Campaign strategy was focused on restoring the national economy (which at this time was in a serious state of decline) based on neo-liberal economic policies.
1992	A Presidential Decree was issued that led to empowerment of sitting tenants of Council and Government owned houses to purchase them at below market prices. Minister of Finance Budget Address – Government announced its intention to promote the private sector, remove itself from being actively involved in the state-owned companies and move *"expeditiously"* with the privatisation programme.
1997	224 companies out of a total of 275 had been privatised.

Source: Tembo [8] with additions by the Profile team.

Table 2. Population of Zambia, 1990-2025

Population	Zambia	Rural	Urban	Percentage Urban
1990	7,383,097	4,477,814	2,905,283	39.4
2000	9,791,981	6,391,186	3,400,797	34.7
2010	13,907,214	9,090,814	4,793,876	34.5
2015	16,586,666	10,914,495	5,638,505	34.0
2020	19,767,410	13,136,728	6,581,458	33.3
2025	23,616,174	15,878,448	7,672,638	32.5

Source: Population 1990-2025: Census 2000.[10]

1.3 INTRODUCTION TO THE ECONOMY

The Zambian economy is heavily dependent on copper which was discovered in the early years after World War I and currently provides two-thirds of Zambia's exports. The national economy has experienced modest growth this century. Real GDP growth in 2005-08 was between five and six per cent per year and four per cent in 2010.11 Although Zambia had a mixed economy before the Matero and Mulungushi Reforms of 1968 (table 1.).

The current mixed economy in Zambia only dates from the liberalisation of the 1990s when a largely centrally controlled economy was dismantled, sometimes by asset strippers and a liberal economy open to foreign trade was established. Recent increases in metal prices have been helpful in the growth in the mining sector and, consequently the construction sector. There has been new activity in the privatised copper mining industry which contrasts with the earlier years of retrenchment.

Table 3. Basic Development Indicators for Zambia

Parameter	Estimates (2011 unless otherwise specified)
GDP (USD)	USD16.2 billion (2010)[12]
GDP at PPP (Constant 2005 international USD)	USD18.1 billion (2010)[13]
GNI PPP per capita (USD) 2009	1,280
Consumer Price Inflation (annual average %)	8.3[14]
Interest rate (for money, annual average %)	19.0[15]
Population 2010 (millions)	13.9
Projected Population (Millions) mid 2025	24
Projected Population (Millions) mid 2050	45
Rate of Natural Increase (%)	3.1
2050 population as a multiple of 2011	3.3
Percentage Urban (2010)	34.5
Life Expectancy Both sexes (2009, years, M/F)	46/50[16]
Percentage of Population Ages <15	46
Percentage of Population Ages 65+	3
Births per 1000 population	46
Deaths per 1000 population	15
Net Migration Rate per 1,000	-1
Infant Mortality Rate (per 1,000 births)	84
Total Fertility Rate (2006, per woman)	6.3[17]
Proportion with Sufficient Living area[18]	75.5
Proportion of durable structures in Slums (2003)[19]	85
Per cent of Population with HIV/AIDS 15-49 (2000)	16.0
Per cent of Population with HIV/AIDS 15-49 (2009)	13.5
Percent Living on less than USD2/Day PPP (2000 to 2009)	82
Percent of Population with improved Water Supply (2008) rural	46
Percent of Population with improved Water Supply (2008) urban	87
Population per square kilometre	18

Source: CSO, 2011; Population Reference Bureau, 2009, Washington DC, and parts of this profile

1.4 THE CHALLENGE OF POVERTY IN ZAMBIA

According to the Economic Commission for Africa,[20] poverty is firmly embedded in Zambia though the poverty incidence was down from 78 per cent in 1996 to 67 per cent in 2003. There are two measures of poverty used in Zambia. Overall poverty includes those who can afford to meet basic nutritional needs but cannot afford their non-food needs). In 2006, 34 per cent of the urban population and 64 per cent of all Zambia fell into this category. Extreme poverty is defined as those whose standard of living is insufficient to meet their basic nutritional requirements even if they devote their entire consumption budget to food. These constitute 20 per cent of the urban population and 51 per cent of all Zambia.[21]

Though these figures are seriously high, they represent a significant reduction from their historical levels, especially in the early 1990s. Inequality is also fairly high but improving. The Gini coefficient[22] declined from 0.66 in 1998 to 0.57 in 2002.[23] In 2006, the national Gini coefficient had bounced back to 0.6 while the urban Gini coefficient was 0.66 (figure 3).

Figure 3. Gini co-efficients in 2006[24]

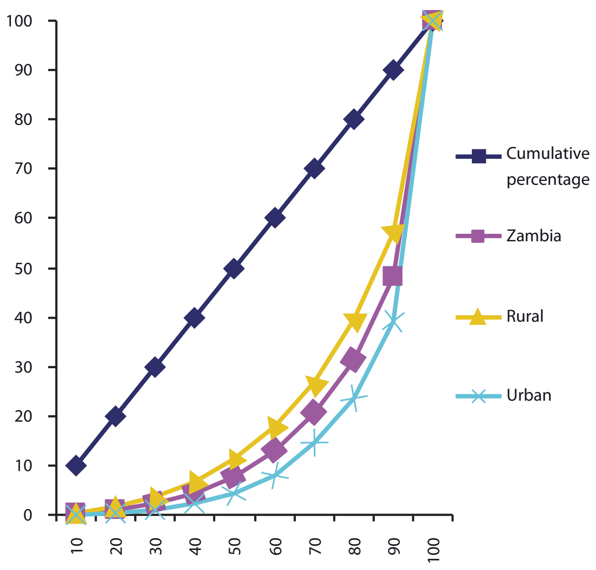


Table 4. JCTR's Basic Needs Basket for a family of six in Lusaka, May, 2011

Item	Total cost (Kwacha)
Food	804,350
Charcoal	223,400
Soap (Lifebuoy)	24,000
Washing soap (Boom)	16,000
Jelly (e.g., Vaseline)	9,600
Electricity (medium density)	130,000
Water and sanitation (med – fixed)	210,000
Housing (medium density)	1,500,000
Total	2,917,100
USD equivalent of total	USD588
Percentage on food	27.6
Percentage on housing	51.4

Source: JCTR[34]

Social indicators continue to decline, including measurements of life expectancy at birth (about 49 years) and maternal mortality (729 per 100,000 pregnancies).[25] Per capita annual incomes are below USD1,300, placing Zambia among the world's poorest nations.[26] There is no compulsory education in Zambia although the first seven years of education are free. Infant mortality rate is 84 per thousand live births.

The current rate of economic growth cannot support rapid population growth or the economic impacts of HIV/AIDS. A contributory factor to high levels of poverty is that only 10 per cent of the population is in formal employment following a major decline in both government and mining employment.[27] The formal sector probably only employs 550,000 workers; the remainder operates in the informal economy.

Zambia's Human Development Index was lower in 2010 than it was in 1970 (along with only two other, and neighbouring, countries, Democratic Republic of Congo and Zimbabwe). One of the major influences in Zambia's decline is life expectancy which has been seriously affected by the HIV/AIDS pandemic. Life expectancy in Zambia in 2006 was 46 (male) and 50 (female) years.[28]

The biennial Living Conditions Monitoring Survey for 2006 (LCMS V)[29] shows 62 per cent of urban households receiving ZMK800,000 (USD200)[30] or less per month and a mean monthly urban income of ZMK950,000 (USD190) in 2006.[31] Urban areas generate 59 per cent of total national income but only accommodate 35 per cent of the population.[32]

The Jesuit Centre for Theological Reflection (JCTR) calculates a Basic Needs Basket (BNB) monthly. In May, 2011, the BNB for Lusaka was calculated to be ZMK2,917,100 (USD588) per month, which includes ZMK1,500,000 (USD300) for housing rentals (medium density) (table 4.).[33] The rent element seems inappropriate as it is unlikely that any household which is restricted to ZMK800,000 a month for food will live in a medium cost dwelling. The Lusaka basis for the BNB gives a rather higher cost than is likely in other cities, especially in respect to housing costs..

Wages are still low for most workers in Zambia. The indicative salaries used by JCTR's BNB are shown in table 5.

It is noticeable from table 5. that only at the top of the nurses' pay-scale do payslips fulfil the Basic Needs

Table 5. Take home pay statistics used by JCTR (March, 2011)

	Monthly pay slip (Kwacha)
Teacher	1,300,300 – 2,200,600
Nurse	1,300,000 – 3,450,000
Guard with a security firm	250,000 – 850,000
Secretary in civil service	1,390,500 – 1,900,000
Average monthly income in urban low-cost areas from the CSO (Oct 04 – Jan 05)	(645,326) 1,400,000 indexed to 2011
Farm piece-worker	5,000 – 15,000 per day

Source: JCTR[35]

Basket. This conforms to the LCMS finding that 65 per cent of Zambian households cannot fulfil the BNB as it currently stands.36 Poverty levels are worse in informal settlements than in the formal areas.

1.5 COMMUNITY AND TRADITIONAL AUTHORITIES

Chiefs and traditional leaders are very important to Zambian life, especially outside the urban districts. Potentially, they can play a key in role development. The institution of traditional leadership embodies the culture, traditions, customs and values of local people. While traditional leaders had been largely left out in the local government system, save for their role of appointing a symbolic representative to the Local Council, a House of chiefs was re-established a few years ago and a Ministry for Chiefs and Traditional Affairs was set up after 20th September 2011. Within city boundaries, the chiefs are represented on appropriate committees of the local authority to allocate and develop land but, in the majority of the country (94 per cent of the land area), they carry out the land allocation.

Land is vitally important to Zambians so the traditional authorities' ability to ensure that all Zambians have land if they want is central to Zambian culture. Chiefs are responsible for, and play a significant role in, land allocation and development in peri-urban areas where customary tenure still holds, by consenting (or not) to applications for land. Their permission is a statutory requirement for anyone to be allocated land in a customary area. As a result of their role in land allocation, some Chiefs have succumbed to corrupt practices involving land speculators who want to acquire large tracts of land on the edges of the cities. There is no audit into how much land they have alienated for housing and other developments.

Customary powers are enshrined in the Constitution of Zambia but some pressure groups argue that chiefs are abusing their powers to alienate land to business ventures without consulting their people.37 The Constitution assumes supremacy over traditional leadership, including on matters related to land; it vests the final say in all dealings on land in the State or President who can reverse (or vet) some of the decisions of Chiefs.

1.6 URBANISATION IN ZAMBIA

In Zambian statistics, urban populations are those within districts which are classified as urban. Zambia has 73 districts and the census counts are normally made on them. The urban or city population is therefore part of the district population. Such population can only be estimated from city studies. The Zambian standard for a settlement to be classified as urban is that it should have a population of 5,000 or more people.

In the following discussions, unless otherwise stipulated, urban populations are those within the urban district boundaries. In many urban areas, very little development goes on beyond the district boundary but some, especially Lusaka, are expanding into the neighbouring districts (Chongwe, to the East, Kafue-Chilanga to the South and Chibombo to the north) which are classified as rural. Thus, the current and projected urban populations reflect the phenomenon that growth outside the district boundaries is not included.

Zambia is one of the most urbanised countries in Africa. In the pre-colonial period, there were no recorded towns in what is now Zambia. The country was occupied by indigenous people in kingdoms or village settlements under chiefs and traditional rulers. With the discovery of lead in Broken Hill (now Kabwe) and copper in Roan Antelope (Luanshya) and elsewhere nearby, and the construction of a railway to access them and export the products to Britain, the Line of Rail and Copperbelt towns were established. Lusaka was chosen as the new capital, superceding Livingstone on the southern border. Land was appropriated, mines were sunk, infrastructure was installed, malarial seasonal marshes (dambos) were drained, expatriate skilled labour and managers and local unskilled labour were recruited to the extractive and processing industries and to service the growing populations. Thus, soon after World War I, cities and towns grew up where there had been only bush.

Urban areas in Zambia reflect the Southern African colonial system of strongly segregated areas in which (then) Europeans were entitled to large dwellings on very generous plots, full services and healthy, convenient locations and Africans had to make do with small dwellings on smaller plots, poor levels of services and distant, and sometimes unhealthy, locations. These physical realities have a permanence which is difficult to alter. They were continued in Independent times except that, instead of skin colour being the qualifying criterion, income or formal employment status divided the people into those who have plenty and those who have little in the cities.38 Despite an attempt to integrate neighbourhoods in the 1970s, it is still customary to continue these divisions through the classification and development of areas as low-density, medium-density and high-density, meaning, in effect, high-income, medium-income and low-income; casting in the concrete and metal of urban development, the divisions within society. Resources are not allocated between these on criteria of need, but solely on income and place in society. Even though the poor may have many children, they are likely to have few bedrooms and little space for play or homework.

It is impossible to analyse, describe and make policy for Zambian cities without reference to the trifurcation of the urban realm in this way. Thus, this profile continues the custom for descriptive purposes but does not sub-divide the need for housing, land and services in the future in this way.

Figure 4 Map of Zambia showing urban centres

Source: KCC GIS Unit (2009)

1.7 MAJOR CITIES AND TOWNS

The country's urban population is unevenly distributed with only two provinces, Copperbelt and Lusaka, accounting for 69 per cent of the total urban population. The country has eight major towns – Lusaka, Kitwe, Ndola, Mufulira, Chingola, Kabwe, Livingstone and Kapiri Mposhi with populations in excess of 150,000; most of these are in the Copperbelt province. Provincial headquarters, such as Kasama, Mongu, Chipata and Mansa are large urban centres (municipalities) and some, such as Chipata, want to attain city status.

The remaining provinces are largely agricultural and do not attract large numbers of migrants. The influx of refugees from neighbouring countries which have experienced conflict, Congo, Angola, Rwanda and Burundi, has been followed by the repatriation of large numbers of refugees, often at great cost. A few large refugee camps have been converted into small permanent settlements, such as Mayukwayukwa which has a population in excess of 50,000 people. Zambia's economic decline has eroded many of the benefits of urban living. Poverty and HIV/AIDS have led to decreased urban growth rates in recent years of between 5 and 6 per cent.

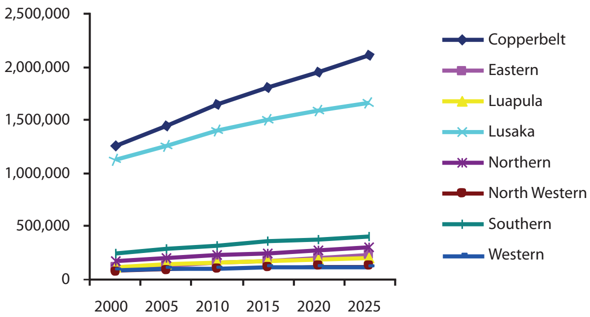
The following data shows the populations of urban districts rather than the area covered by a city or urban area which could be larger. Thus, Lusaka is shown as only 1.12 million in 2000 when its city population was calculated as 1.45 million in 2007. Its urban district population projection of 1.7 million in 2025 (table 6.) contrasts with a city population projection of 2.9 million in 2030[39]

Table 6. Urban population 2000-2025 by province

	2000	2010	2015	2020	2025
Copperbelt	1,254,935	1,641,364	1,804,447	1,954,961	2,105,765
Lusaka	1,120,428	1,404,412	1,501,299	1,586,218	1,668,156
Southern	252,702	325,007	354,222	379,025	403,560
Northern	168,713	224,148	249,956	275,783	303,870
Luapula	118,791	157,109	174,113	190,326	207,250
Eastern	115,457	153,037	176,139	203,362	235,441
Western	84,576	103,301	109,577	114,565	119,558
North Western	76,892	102,821	114,415	125,296	136,226

Source: Census 2000.[40]

Figure 5. Urban population 2000-2025, by province



Source: Census 2000[41]

The urban population of Zambia is heavily concentrated along the north-south line of rail from Livingstone on the Zimbabwe border to DR Congo, and particularly in the Copperbelt and the capital, Lusaka (figure 5).

Lusaka District has about one-quarter of the national urban population (table 7.) and the three major city districts have about 42 per cent between them. Their dominance is reducing, however, as the projections show a reducing proportion of all urban population in these three city districts. Livingstone has historically been an important city but it now has a relatively small urban district population.

The housing-related literature for Zambia is dominated by experiences in Lusaka, the capital, and Kitwe, the seat of the Copperbelt University's built environment disciplines. For reasons of data availability, therefore, this profile concentrates on those two cities but adds some current data from Livingstone.

Table 7. Population of Zambian urban districts, 2000-2025

Urban District	2010	2015	2020	2025
Lusaka	1,404,413	1,501,299	1,586,220	1,668,158
Kitwe	486,634	541,545	589,670	636,932
Ndola	483,057	534,537	583,151	630,748
Chipata	465,041	477,254	589,941	534,738
Mazabuka	275,353	315,486	359,741	410,320
Solwezi	273,124	312,929	357,069	406,768
KapiriMposhi	262,944	302,811	346,996	397,286
Mansa	251,374	292,842	340,564	397,773
Choma	249,969	269,963	287,310	301,018
Kasama	223,300	248,858	275,049	304,522
Kabwe	219,431	236,706	250,657	262,299
Mongu	204,324	228,375	254,516	285,236
Mufulira	197,808	228,508	259,736	291,978
Luanshya	185,412	216,679	245,010	274,029
Livingstone	127,134	135,813	140,762	144,224
Chingola	116,300	130,564	143,636	156,327
Chililabombe	96,507	112,968	130,472	149,700
Kalulushi	89,784	89,784	89,784	89,784
Total	5,611,909	6,176,921	6,830,284	7,341,840
Lusaka as %	25.0	24.3	23.2	22.7
Lusaka, Kitwe and Ndola as %	42.3	41.7	40.4	40.0

Source: Census 2000.[42]

Figure 6. Map of Lusaka

LUSAKA

Established in 1905 as a way station on the railway to the Copperbelt, Lusaka became the capital city, replacing Livingstone. The city covers an area of 375km2 (the total municipal area is approximately 423 square kilometres) but much of this area is underutilised. Over 20 square kilometres have not yet been urbanised. About 70 per cent of Lusaka's population live in informal unplanned settlements and site and service settlements, comprising 20 per cent of the city's residential land.[43]

Although the figures suggest that there is room for expansion within the municipal area, most stakeholders interviewed for this profile noted a complete lack of land available for residential development.

It is difficult to determine the urban population of Lusaka because a significant proportion of the residents live on the city's edge in other Districts, i.e., Chibombo, Chongwe and Chilanga-Kafue. There is rapid urban growth in these districts owing to the ease of obtaining land from the Rural District Councils. Greater Lusaka's population is now estimated at 2.2million.

One feature of Lusaka's site is the presence of dolomite outcrops in the south and west, which deter formal development as it is almost impossible to dig service trenches in the hard rock. As it was avoided by formal planning, it was left open for informal development in settlements such as Kanyama. Ironically, though it contains many of the most important aquifers for Lusaka's water supply, dolomite sub-strata encourage flooding during heavy rain. A second feature is that most of the vacant land suitable for development is owned by three families which suggests that they are likely to be central in determining much of the future shape of Lusaka.

KITWE

The City of Kitwe was established as a twin municipality to the Nkana mine township in 1923. It has always been an industrial and commercial city providing goods and services to the mining sector. Kitwe became a Municipality in 1954 and attained city status in 1967. The favourable economy and copper prices of the 1960s and 1970s saw a rapid increase in population through migration of younger people from the rural areas in search of jobs. At this time the mine and the city of Kitwe developed much of the current infrastructure and formal housing stock. The day time population of Kitwe is estimated at over 1.2million owing to the daily inflow of people from surrounding districts, especially Kalulushi which used to be joined in one district with Kitwe. The district population of Kitwe is under 700,000.

Figure 7. Map of Kitwe

Figure 8. Map of Ndola

NDOLA

Ndola is the third largest city in Zambia, with an estimated population of 441,624, and the only town on the Copperbelt that is not dominated by mining. It became an administrative centre in the 1920s, a Municipality in 1932 and a city in 1967. Owing to its centrality, good climate and resources Ndola was able to attract a number of commercial businesses and industries that gave the city a unique character as a major industrial and commercial centre; it has a small international airport. The major economic activities of Ndola include agriculture, forestry, mining and quarrying, manufacturing, construction, transportation, tourism, consumer and financial services. Most of the manufacturing activities, concentrated in the Skyways and Bwana Mkubwa industrial areas, have declined in recent years, especially following the privatisations in the 1990s that were mainly marked in Ndola by asset stripping. Commercial activities are concentrated in the city centre, Kansenshi and Northrise. Ndola has fertile agricultural land within reasonable distance, an attractive city environment, a favourable location as a distribution centre, and an under-used labour force in both the formal and informal sectors for economic regeneration. It has a locational advantage over other Copperbelt towns.

LIVINGSTONE

Livingstone is the tourist capital of Zambia and, potentially, one of the most important tourist destinations in Southern Africa. The Victoria Falls, one of the natural wonders of the world is close to the city but is more exploited by Zimbabwe. Amongst other tourist attractions, Livingstone City has a railway museum, a field museum, the Old Drift cemetery, Mukuni cultural village, a wildlife park and the opportunity for river cruises and white water rafting on the Zambezi River. There is no manufacturing base in the city.

The city currently has a high unemployment rate, poor social services such as education, health care and personal safety. Both housing and infrastructure are poorly supplied. The city has low income levels, high unemployment rate, food insecurity, and many of the problems related to poverty including a high prevalence of HIV/AIDS. The city has, however, a lower crime rate than other cities in Zambia.

Figure 9. Map of Livingstone

OTHER COPPERBELT AND 'LINE OF RAIL' TOWNS

Figure 10. Map of Copperbelt

The Copperbelt has several other large and medium sized towns, i.e., Luanshya, Mufulira, Chingola, Kalulushi, Chambeshi and Chililabombwe. Each is dominated by mining. Kabwe is located between Lusaka and the Copperbelt, was founded as a lead and zinc mining centre before Copper was discovered further north. The mining towns represent a critically vulnerable type of urban settlements in Zambia in that they have been subjected to the "booms and busts" in the global economy. For example, the economic collapse of the Zambian Copperbelt towns in the early 1980s and the labour retrenchments that followed the collapse in the price of copper in the 1970s and 1980s, demonstrate the vulnerability of households dependent on incomes from single resource settlements.

Other medium sized towns are the provincial administrative centres of Chipata, Kasama, Mansa, and Mongu and Kapiri Mposhi, which is a major transport hub where the Great North Road and the road from the Copperbelt join. It is also the break of bulk port for goods on the Tazara Railway to Dar-es-Salaam. Kapiri Glass was the other main industry there but it closed after privatisation. Other smaller towns are found on the Line of Rail and include Choma, Kalomo, Mazabuka and Monze in Southern Province, Kafue and Chilanga (which are industrial and satellite towns respectively) in Lusaka province.

The rest of the small towns, that are classified as urban in Zambia,44 are mainly agriculture-based and include towns Chibombo, Chisamba, Mkushi, Mumbwa, Serenje, Mpika, Samfya, Petauke, Nyimba, Kaoma, Katete, Senanga, Mwinilunga, Chongwe, and Luangwa. The type of housing found in provincial administrative centres and small towns is mainly former Government and Council housing (now privately owned), a small segment of private sector housing and large informal housing areas. In all Zambian towns a few Council and Government (and Parastatal) dwellings were not sold to sitting tenants but retained for use by senior government and Council officials.

1.8 SAMPLE SURVEY, 2011

As part of the Profile preparation, a sample survey was conducted in Lusaka, Kitwe and Livingstone in October 2011. Rapid Urban Sector Profiles for Sustainability (RUSPS) Studies had previously been conducted in these cities and so basic data would readily be available. Through the survey, the profile was able to collect primary data to complement secondary data sources and information from interviews with key stakeholders including on basic socio-economic data on urban households.

The questionnaire had 60 questions covering various thematic areas such as household characteristics, household size and occupancy rates, dwelling characteristics and condition, type of tenure and ownership, housing construction, housing market and financing, access to basic services and facilities and general perceptions on housing programmes and policies.

The three cities were selected for the survey because much of the existing housing research and studies had been conducted in Kitwe and Lusaka and all three cities had been involved in the UN-Habitat RUSP Study, which demonstrated the existence of good baseline information. Residential areas to be covered were then determined in order to ensure that the sample would be as representative as possible.

Approximately 300 questionnaires were administered, 100 for each city. The sampling unit is the Ward, or Zone,45 and a simple random sampling procedure was applied in which dwellings were selected at random. Five categories of areas were sampled; high- income, medium-income, low-income formal, low-income informal regularised, and low-income informal unregularised areas. The total number of dwellings sampled in each city was determined in the proportion to the housing types in Zambia cities. This was estimated at 10:10:8 0 for high, medium and low income areas respectively; the 80 low-income were subdivided into the three subsamples according to estimates of their numbers. The sample sizes are shown in table 8.

1.9 CONTEMPORARY ISSUES

HIV/AIDS

Zambia is one of the worst-hit countries in the AIDS pandemic. In 2000, about 16 per cent of the population aged between 15 and 49 were HIV-positive – about 1 million people, 600,000 of which were women. The pandemic has affected many more than this, including generating 600,000 orphans and a likelihood of almost one million orphans by 2014. More than 30,000 children per year are born HIV-positive and more than 20 per cent of Zambia's children have lost one or both parents.46 Grandparents are increasingly having to raise their grandchildren and female-headed households have a large role in caring for orphans.[47]

The demographic effect of AIDS is likely to be dramatic in the medium term. In the medium variant adopted by the Profile for estimates of urban Zambia by 2025, with AIDS the population would be 5.48 million and without AIDS the population would be 6.54 million, a difference of 1.06 million people; equivalent to about half the urban population of the Copperbelt in 2025. The effect on housing includes:

- As average life expectancies are low, mortgages become unworkable as death is likely before the maturity of the loan.
- The death of a 'breadwinner' threatens the economic viability of the household.
- The need for housing may drive widows, who have been infected by their late husbands, into re-marriage and spreading the infection.
- Poor housing conditions are inimical to efforts to lengthen life after infection as poor hygiene (from a mud floor, for example) and sanitation (affecting water quality and generating faecal dust) are dangerous accompaniments to reduced or disabled immunity.
- Loss of earnings and medical and funeral expenses can greatly stress a household's economic viability.

On the other hand, good housing, especially when security of tenure is in place, can make a significant contribution to the way households respond to an illness, care-giving and death cycle. If the home is secure, it is an asset which can ensure greater economic independence. Thus issues concerned with inheritance by a surviving spouse or children are very important in Zambian urban areas.

The Fifth National Development Plan 2006–2010

Table 8. Sample size for the survey, 2011

	Lusaka	Kitwe	Livingstone	Weighted Total	Weighted %
High cost	12	10	10	33.75	11.25
Med cost	8	5	10	22.97	7.66
Low cost formal	25	40	30	87.19	29.06
Low cost site and service (and regularised informal)	40	35	35	114.38	38.13
Low cost informal (unregularised)	15	10	15	41.72	13.91

has attributed the increase in HIV/AIDS cases to the increase in gender-based violence which has worsened owing to rates of poverty and dependency among women. HIV prevalence is considerably higher in urban areas than elsewhere. Lusaka has the highest rates among pregnant women.

"Hundreds of children are being abandoned due to stigma or simple lack of resources, while others run away because they have been mistreated by foster families. Many such children engage in begging, stealing, and prostitution to survive." [48]

An estimated 75,000 children live on the streets. About 50 per cent of children under five are affected by under-nutrition. Many suffer anemia, malaria and vitamin A deficiencies.[49]

District HIV and AIDS Task Forces have been established to operate as subcommittees of the local District Development Coordinating Committees and to assist in the decentralised strategic planning for HIV and AIDS. Central government issues guidelines for mainstreaming HIV and AIDS into the district development plans. In November 2002, the Zambian parliament passed an AIDS Act (No. 10 of 2002), which, among other things, set up the National AIDS Council (NAC). The Intestate Succession Act (1989) offers some protection to a surviving spouse and children from asset- and land-grabbing by other kinfolk.

ZAMBIA IS ONE OF THE WORST-HIT COUNTRIES IN THE AIDS PANDEMIC WITH ABOUT 16 PER CENT OF ITS POPULATION AGED BETWEEN 15 AND 49 (ABOUT 1 MILLION PEOPLE) HIV-POSITIVE.

GENDER AND VULNERABLE GROUPS

According to UN-Habitat,[50] Zambia is party to a number of United Nations, African Union and other international conventions and charters including the Universal Declaration of Human Rights, CESCR and CEDAW. Under the Millennium Development Goals the Zambian government has committed itself to all the gender instruments and conventions, including the Beijing Platform for Action and the SADC Declaration of 1997, and its addendum on Violence against Women. These commitments should be translated into local legal frameworks which give everyone a right to decent shelter and give women equal and legally-enforceable rights to property.

Although policy and government rhetoric establish equality between women and men, and speak against discrimination, the gender imbalance in social, economic, cultural, and political spheres is still quite evident. Furthermore, it militates against women and vulnerable people contributing effectively to and benefiting from development. Gender disparities are still marked in land and property ownership and it is likely to be many years before Zambia achieves the 30 per cent female representation in decision-making stipulated by the 1997 SADC Gender Declaration.[51]

ENDNOTES

1. Republic of Zambia (2006).
2. Using expenditure as a proxy.
3. UN-Habitat (2005).
4. World Bank (2002)
5. Republic of Zambia (2007).
6. Atlas method, current USD. http://data.worldbank.org/country/zambia.
7. Tembo (2007).
8. Tembo (2007).
9. Central Statistical Office (2011a).
10. Central Statistical Office (2003)
11. Hydroplan (2009).
12. Index Mundi: http://www.indexmundi.com/zambia
13. Index Mundi: http://www.indexmundi.com/zambia
14. Hydroplan (2009).
15. Hydroplan (2009).
16. http://www.who.int/countries/zmb/en/.
17. Central Statistical Office et al. (2009).
18. UN-Habitat (2004).
19. UN-Habitat (2004).
20. Economic Commission for Africa (2005).
21. Chibuye (2011).
22. In a perfectly equal society the curve of the cumulative distribution of wealth would follow the 45° diagonal in figure 3. Insofar as the reality differs from the diagonal, the distribution of wealth in society is shown to be unequal.
23. Economic Commission for Africa (2005).
24. Central Statistical Office (2011b: table 10.5).
25. Central Statistical Office (2011a).
26. Many commentators in Zambia have disputed the declaration of Zambia as a Middle Income Country because the social indicators remain the same. An economic indicator based on high copper earnings and, possibly, high FDI levels have been used to reclassify the country despite its continuing low GDP per capita.
27. Chibuye (2011). The decline of the mining sector from 16.5 per cent of GDP in 1994 to 8 per cent in 2002 caused great loss of direct and indirect employment on the Copperbelt.
28. Central Statistical Office et al. (2009). Early findings in the 2010 census suggest 53 years in 2010.
29. Central Statistical Office (2011b: table 14.6).
30. Unless otherwise stated, the conversion of Kwacha to US dollars is done at the rate current at the time, using the January 1st rate for each year.
31. Economic Commission for Africa (2005).
32. Economic Commission for Africa (2005).
33. This seems an excessive amount for housing amounting to 51 per cent of the basket value. Households which consume only ZMK804,000 on food are unlikely to live in medium-cost housing. In other cities, medium-cost housing is cheaper than in Lusaka. Indeeed, Chibuye (2011) raises these points from her position within JCTR.
34. Personal communication, Miniva Chibuye, also obtainable on http://www.jctr.org.zm/bnbasket.html..
35. http://www.jctr.org.zm/bnbasket.html accessed 16th June, 2011.
36. http://www.zamstats.gov.zm/lcm.php accessed 16th June, 2011.
37. Zambia Land Alliance (2011).
38. Kazimbaya-Senkwe and Guy (2007).
39. UN-Habitat (2007).
40. Central Statistical Office (2003) Medium variant with AIDS.
41. Central Statistical Office (2003) Medium variant with AIDS.
42. Central Statistical Office (2003) Medium variant with AIDS.
43. UN-Habitat (2007).
44. In Zambia an urban area is defined as an area with a population concentration of 5000 people or more.
45. In the Zambian context each residential area is divided into Wards or Zones, which are politically determined by a Local Authority and ratified by District Development Coordinating Committee (DDCC).

46. UN-Habitat (2007).
47. UN-Habitat (2005)
48. UN-Habitat (2007: 20).
49. UN-Habitat (2007).
50. UN-Habitat (2005).
51. UN-Habitat (2007).

02

LEGAL AND REGULATORY FRAMEWORKS RELATED TO HOUSING

2.1 INTRODUCTION

Since early colonial times, the Government in Zambia has had a very direct approach to housing supply and regulation. It has instituted much legislation about the supply of housing, the control of its quality and who should occupy it. Under the Employment of Natives Ordinance, 1929, all employers had to provide housing for their employees (but not their dependants) at their own expense. Following the Eccles Report[1], this was extended by the Urban African Housing Ordinance in 1948 to require all employers of more than 30 people and local authorities to supply, or cause to be supplied, housing for their African workers and their wives. The mines provision of housing was governed by the Mines and Sanitation Regulations.

According to the World Bank,[2] Zambia has

"a sufficient policy and legislative framework … regarding the legalisation of unplanned and informal settlements; additionally, both the central and local governments acknowledge the need to recognise and regularise such settlements. … However, there does not appear to be a clear policy and strategy as to how to deal with informal or unplanned settlements and much of the existing legislation needs to be modified and streamlined to ensure that it is relevant and enabling."

The main legislation governing urban housing is as follows:

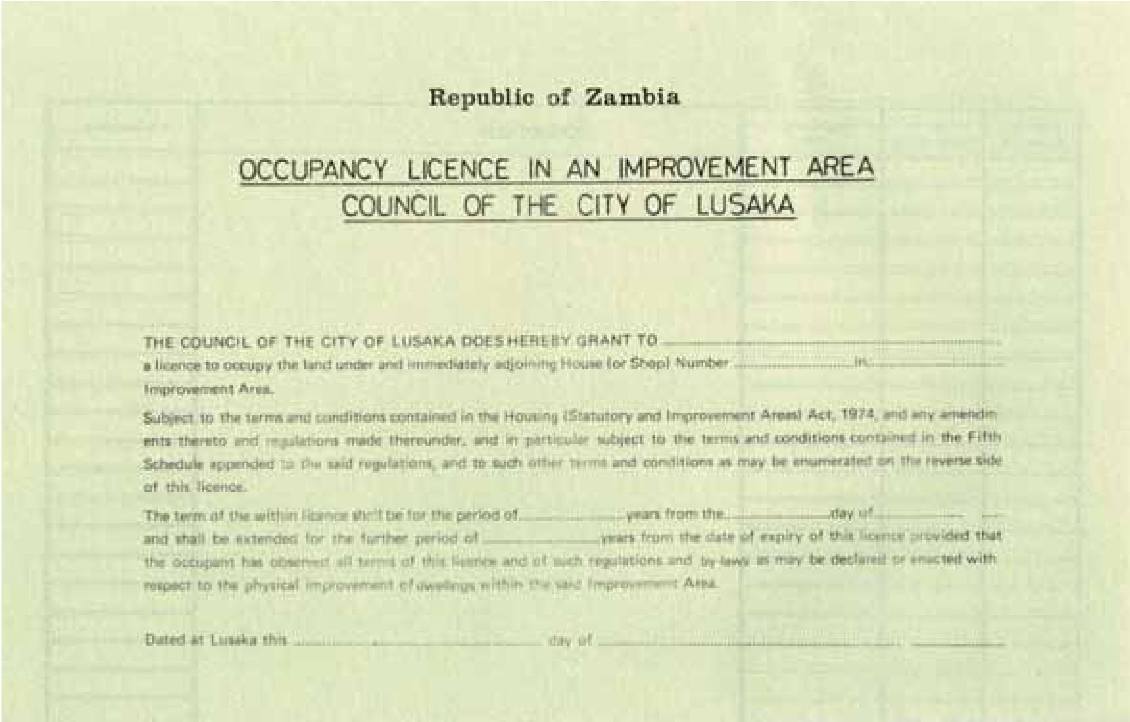
2.2 LEGISLATION WITH RESPECT TO HOUSING

The Housing (Statutory and Improvement Areas) Act, 1974

The Housing (Statutory and Improvement Areas) Act of 1974[3] is the main law governing housing in urban Zambia. It signalled a major turning point in councils' and government's attitudes to informal settlements. It gave councils the opportunity to declare areas of developed council land, such as site and service schemes, as Statutory Areas, and squatter settlements as Improvement Areas. This represented a switch from a policy to demolish informal areas to one in which they could be regularised and serviced.[4] In Statutory Areas, each occupant could apply for a certificate of title for 99 years which would be registered by the registrar of such titles. Statutory Areas are quite common. For example, Kitwe City Council had several and had issued 10,348 certificates of title within statutory housing areas by June 2002.[5]

An area is declared an Improvement Area under the HSIA but, since this is within a Town Planning Area and is now legal, it must be re-zoned under the Town and Country Planning Act, Cap. 283. The local authority concerned prepares a layout plan that shows the extent of the area being rezoned and submits it to the Surveyor General for approval. Once approved, it is declared an Improvement Area and the council is granted a head lease or block title for the whole area. This enables the local authority to enter the land to provide servicing. In most cases, however, some services will already have been provided by residents' own initiatives or through NGOs. The declaration as an Improvement Area allows service provision with the full blessing of government or council but it may be many years before the legalised areas are upgraded. Once the declaration is made, residents are issued with 30-year occupancy licences while the area goes through the process of upgrading. These can be later replaced by certificates of title, which carry the same effect as if the landowner were obtaining a direct lease of the land from the state.

Figure 11. The top half of an occupancy licence



Republic of Zambia

OCCUPANCY LICENCE IN AN IMPROVEMENT AREA
COUNCIL OF THE CITY OF LUSAKA

THE COUNCIL OF THE CITY OF LUSAKA DOES HEREBY GRANT TO ....
a licence to occupy the land under and immediately adjoining House (or Shop) Number .... in ....
Improvement Area.

Subject to the terms and conditions contained in the Housing (Statutory and Improvement Areas) Act, 1974, and any amendments thereto and regulations made thereunder, and in particular subject to the terms and conditions contained in the Fifth Schedule appended to the said regulations, and to such other terms and conditions as may be enumerated on the reverse side of this licence.

The term of the within licence shall be for the period of ____________ years from the ____________ day of ____________ and shall be extended for the further period of ____________ years from the date of expiry of this licence provided that the occupant has observed all terms of this licence and of such regulations and by-laws as may be declared or enacted with respect to the physical improvement of dwellings within the said Improvement Area.

Dated at Lusaka this .... day of ....

The individual holding is registered by drawing the boundary of the land used by the occupant on an aerial photograph[6] and issuing the holder with a certificate of title which looked very like the motor-car "log book" current at the time. Owners could transfer and the new owners register with the council. Owners are only allowed one property in an Improvement Area and no commercial residential activities are allowed.[7] Both Kitwe City Council (KCC) and the Zambia National Building Society (ZNBS) believed that financial institutions accept Certificates of Title (Occupancy Licences) and Land Record Cards in site and service areas as security for mortgages, but few mortgages have been granted since the sale of council houses began in 1996.

There is some doubt among stakeholders as to how many Statutory and Improvement Areas have been declared but the consensus is that there are 37 declared in Lusaka; 19 declared in Kitwe and 7 declared in Livingstone Just before the elections in September, 2011, the then-President, Rupiah Banda, held a ceremony granting such status to Ipusukilo in Kitwe and handing out many occupancy licences to residents.

In order to allow simpler processes and lower cost of development, the following acts do not apply in Statutory and Improvement Areas:

1. The Lands and Deeds Registry Act (Cap. 185)

2. The Land Survey Act (Cap. 188)

3. The Rent Act (Cap. 206)

4. The Town and Country Planning Act (Cap. 283)

Though it was instituted to enable the Lusaka Project for upgrading many squatter settlements, the HSIA did not provide a special building code or set of standards allowable in Statutory or Improvement Areas. Since it was instituted, the exemption from the Town and Country Planning Act has been rescinded but the building standards operating in urban areas are too expensive and cumbersome for use by the lower income majority.

The Department of Physical Planning and Housing has the following criteria for regularising an unplanned/informal settlement:

- At least 60 per cent of the land occupied by the settlement should be publicly owned;
- The settlement has existed since 1974;
- Development of the zoned use of the land is not imminent;
- At least 50 per cent of the structures are of conventional materials.[8]
- The following information should be included on the map:
- name and description of the area;
- existing roads;
- proposed roads to be constructed;
- existing areas of common user; proposed areas of common user;

- in Statutory Areas, area and dimension of existing plot identified by serial number;
- in Improvement Areas, location of each building identified by serial number.[9]

To qualify for mortgage assistance from the ZNBS, an applicant must be in formal employment and should be an account holder with the building society for at least six months. The cuts in mine jobs following privatisation have also reduced the numbers who could afford and access housing finance.[10]

THE URBAN AND REGIONAL PLANNING BILL, SCHEDULED TO BECOME LAW IN 2012, SEEKS TO BRING ALL AREAS WITHIN PLANNING LEGISLATION.

Table 9. Other legislation influencing housing in urban Zambia

Land (Conversion of Titles) Act of 1975	This was enacted following a Presidential Watershed speech in 1975, in which freehold titles were converted to leaseholds and vested (in perpetuity) in the President. Customary land was also vested in the state but administered through Chiefs and traditional authorities. It abolished the operation of estate agents and private dealings in land until 1995 when the Land Act relaxed some of its restrictive conditions. The Act also promoted the construction of better quality housing on state land than on customary land as it was mandatory to follow high building and planning standards on state land. It made local Councils agents of the State in land delivery for housing and they were given overall responsibility of providing serviced plots. There were a number of covenants and restrictive terms that bound the leaseholder including set time-frames in which to develop land (four years was the maximum). This Act was repealed by the Land Act Number 29 of 1995.
The Lands Acquisition Act, 1970[11]	This act enables any land to be acquired by the President. It gives the President the power to acquire any land in the public interest by compulsory acquisition. Holders of affected land can appeal against the decision and on the compensation to be paid. If paid, compensation is to be calculated at ruling market prices. This has often made it difficult for the government, which has insufficient funds, to acquire large tracts of prime land for development purposes.
The Land Act, 1995	This Act repealed a number of outmoded laws and made significant changes to the Land (Conversion of Titles) Act by removing some restrictive provisions, such as allowing the sale of land, re-introducing different forms of land tenure and offering protection for different modes of property ownership. The provision that all land was vested in the President was maintained. The Act included the key provision of setting up the Land Development Fund (LDF) to promote land acquisition and development mainly by local authorities. It also provided for transfer of land from the state to Local Authorities and to Ministries, and the transfer of customary land to leasehold. It revived the operation of estate agents. The Act established a Lands Tribunal through which land disputes can be decided in a cheaper, simpler and more efficient way than through the courts. The Tribunal has several shortcomings, however, in that it is only based in Lusaka, it has no jurisdiction over customary land and, thus, cannot help those who live in peripheral areas, most of whom are poor and disadvantaged.
The National Housing Authority Act, 1971	The National Housing Authority Act (Cap. 426) gives the NHA the sole responsibility for managing housing in Zambia.[12] The Act has been effectively used to implement government housing programmes such as the Presidential Housing Initiative. Working in collaboration with Local Authorities the NHA has used its mandate to build a number of low and medium cost houses in several towns. The Act also allows the NHA to enter into Public Private Partnerships for housing developments. The implementation of the Act has been largely driven by market conditions resulting in more expensive private housing units being built and less affordable public housing.

Local Government Act, No. 22 of 1991	The Act provides for the administrative structure in different types of local authorities, the establishment and the constitution of Councils, standing and occasional committees and management boards. The Act also describes the functions of local councils and the administrative requirements to carry out those functions. The imposition of levies, fees and other charges are also covered. The Second Schedule lists the functions of a Council including land use management, development control, implementation of plans and maintenance of infrastructure. Furthermore it requires that the Councils promote community participation and encourage public involvement. The Act maintains the Minister's overriding powers over Local Councils but leaves out the all important aspect of local government finance in terms of central government's contribution to local government coffers.
The Town and Country Planning Acts, 1962, and Amendment, 1997[13]	Dating from before Independence, the Act, along with the Local Government (Urban Building and Drainage) Regulations of 1968, provides a framework for planning and control of development in the main cities and towns. It requires planning authorities to prepare development plans every five years, control development and land subdivision, and gives them powers to enforce their decisions subject to appeals. It sets out regulations to govern the nature of development. The 1962 Act was amended in the 1997 Amendment Act to preparing structure plans[14] All cities and towns have delegated powers. The Act is undergoing a process of revision to be enacted in modified form as the Urban and Regional Planning Bill.
Urban and Regional Planning Bill	The URP Bill is in Parliament for passing into Law in 2012. It will fundamentally change the way urban planning has been conducted in Zambia. For example, all informal areas within planning boundaries will be considered as special treatment areas requiring special planning approaches with all applicable planning standards and codes, etc. The Bill aims to repeal both the Town and Country Planning Act and the Housing (Statutory and Improvement Areas) Act; to provide planning frameworks, a planning system and planning processes; to coordinate and integrate planning at the local and regional levels; and to manage the process by which development occurs. This Bill has been prepared following a SIDA-funded 'Revision of Legislation Related to Spatial Planning in Zambia' between 2004 and 2009. The new Bill introduces the concept of Integrated Development Plans (IDPs) which are already being prepared in Zambia, e.g., in Lusaka, Solwezi-Lumwana, Chongwe and in Mazabuka (supported by GIZ). One of its important provisions will be the co-ordination of development between the chiefs and the local authorities. The Bill will extend planning to all areas of Zambia and so it will empower the chiefs to participate directly in the formal planning system and the physical development in their areas. The Bill provides for a set of agreements to ensure coordination of development activities between Chiefs and Local Authorities.[66] The Bill will provide an opportunity for communities living under traditional leadership to participate in and benefit from formal planning and should translate into improved housing in the peri-urban settlements still under chiefs' rule. The Urban and Regional Planning Bill considers housing in terms of integrated development that includes social, economic, environmental, spatial, infrastructural, organisational and human resources, aimed at improving the quality of life of a community, especially the poor and other disadvantaged parties. Section 19 (4) (e) of the Act specifically includes housing delivery and informal settlement upgrading, social service provision and infrastructure development and maintenance. Housing should further be elaborated in Local Area Plans (in Section 21) which shall be the planning instrument used by Local Authorities to provide detailed proposals for the development of any area designated for development in an IDP.[16]

The Rent Act, 1972[17]	The Rent Act sets regulations on renting and makes provision for restricting rent increases. It sets standard monthly rents at 1.25 per cent of the cost of construction plus market value of the land. The maximum advance chargeable is two months. Thus, rents per annum should be about 15 per cent of the construction and land cost. The Act prohibits the payment of premiums over and above the standard rent (including key money or advances).[15] No-one in a Statutory or Improvement Area is allowed to deal in real property except at prices determined by the council. This attempts to prevent an informal renting sector forming. The Rent Act allows landlords to recover their premises if needed for their family or employees. They must give twelve months' notice, or three months' notice if the dwelling was his/her own place of residence previously.
The Rating Act, 1997	The Rating Act allows for the establishment of a Rating Authority for specific areas and the declaration of any area within council boundary as a rateable area and to charge annual rates provided that the land is serviced, properties are surveyed and Certificates of Title have been issued. This implies that Provisional Certificates, Council Certificate of Title and Occupancy Licenses do not suffice as a basis for rating.
Housing Consumer Protection Measures Act (1998)	This Act aims at protecting homeowners from inferior workmanship. Builders are responsible for design and material defects for three months, roof leaks for a year and structural defects for five years. The Zambia Consumer Association (ZCA) has been pivotal in bringing to the fore consumer grievances in Zambia but has not yet effectively dealt with housing consumer rights, especially for low income groups.

Effects of legislation on housing supply

The Land (Conversion of Titles) Act of 1975 stifled private sector housing development and property ownership in Zambia. There is no provision in any Act to recognise the rights of squatters to own land. Adverse possession is not recognised; thus, an occupier of land cannot apply for legal title even after many years' occupation. The Land Act of 1995 led to increased private sector participation in the provision of serviced land and housing construction, heralding the private estates and the growth in the construction sector that have followed it.[19] The National Housing Authority Act, 1971, implicitly and effectively took powers to provide housing away from any other organization than the NHA. This stifled private sector participation in the housing market for a long time whereas NHA had limited capacity to meet the growing demand for housing in urban areas. The Local Government Act (1991) is important in relation to housing as it has implications for the role of the local authorities and the responsibilities they carry for plan preparation, implementation of plans and provision of services. The Local Government Act, No. 22 of 1991 does not specifically identify housing as a Council responsibility, but implies the role of the Council in implementing development.

In the Town and Country Planning Act, the regulations on construction are based on materials rather than performance standards; they specify particular materials and minimum dimensions to be used. Even though different materials would be as good in performance, they would not be acceptable in the existing legal framework because they are not referred to by name. This not only limits the materials and methods that can be used, it also hinders future research and development of other materials and technologies that could satisfy the same health and safety requirements.[20] In addition, people have been openly flouting the law by using different but locally acceptable materials while local authorities have turned a blind eye. The regulations disallow, for example, the use of stabilised soil blocks and other local earth-based materials and they do not encourage participatory processes.[21] Although all structures in urban areas are required to conform to planning and building standards, the majority of dwellings in informal settlements do not conform to these standards.

The role of chiefs before the re-establishment of the house of chiefs had been one of reactive involvement. The Urban and Regional Planning Bill and the establishment of the Ministry of Chiefs' Affairs after the 2011 elections are expected to strengthen their involvement and make it more proactive. Chiefs currently exercise a rudimentary planning power over customary land but are required to consult and coordinate with District Councils, Planning Authorities and the Lands Department in all land alienation matters. Under the TCP Act, the 94 per cent of Zambia's surface which is customary land[22] is excluded from the formal planning system. Potential developers and real estate investors are reluctant to invest in customary areas where formal planning permission is not available.

Under the Rent Act, landlords' ability to recover their premises if needed for their family or employees is important as it encourages an owner to rent out rather than hold empty property against the day when his/her minor children might need it to live in. Sub-letting is allowed but not for more than the initial rent. The NHP, however, finds the Rent Act discourages renting as it is overly protective of the tenants against eviction.[23]

As land and property rates play a dominant role in local government tax revenues in Zambia, it is important that rates are applicable to most of the housing stock. Under the Rating Act, however, they are limited only to the formally registered and serviced properties. Apart from the limited numbers of rateable properties, there is considerable time allowed for property owners to avoid paying rates, e.g., the Provisional Certificates that are often issued are valid for more than ten years and after the issuing of a Certificate of Title two years must have elapsed before the property becomes rateable. Currently, both the HSIA and the Rating Act disqualify Improvement Areas from being rateable areas[24] despite the considerable investments likely to be made within them.

Following a 1992 Presidential Decree, all former Council and Government properties are ratable but the rates could not be levied until they were included on the Valuation Roll. The cost of preparation of Valuation Rolls was beyond most Council's financial capacities so Government introduced a "flat rate levy" as a Stop Gap measure. The valuation rolls are incomplete, owing to cost or just lack of will, and so grossly underestimate the number of rateable properties. This contributes to low revenue collections.

The Constitution

In the current Zambian Constitution, Economic, Social and Cultural (ESC) rights are not specifically mentioned; they are only covered as "Directive Principles of State Policy," where the government

"should endeavour to provide, inter alia, clean and safe water, equitable educational opportunities in all fields and at all levels; adequate medical and health facilities; decent shelter for all persons; and development of a person's culture, tradition, custom or language that is not inconsistent with the Constitution … [and] … Strive to provide a clean and healthy environment for all." (article 112, d and h, emphasis added).[25]

Through these provisions, the Zambian government is committed to pursuing policies that enable decent living conditions. The constitutional intentions have not led to action, however. The government has been increasingly constrained in offering subsidised health-care and in managing and maintaining environmental conditions in many urban neighbourhoods. Thus, most urban households have seen their living conditions worsen with, for example, past interruptions of anti-malarial spraying and garbage collection.[26] Crowded urban living conditions in poorly constructed dwellings have further exacerbated the ever-increasing levels of respiratory diseases and the HIV/AIDS pandemic.[27]

The Constitution prescribes the equal worth of men and women and Article 23 prohibits discrimination on basis of sex. In allowing for discrimination in personal law and customary law, by not recognising the right to land, housing or property, however, Article 23 discriminates against women. Furthermore, the Constitution does not recognise squatter's rights nor does it explicitly recognise the right to adequate housing.

Zambia has undergone a protracted Constitutional Review process with not less than three Constitutional Review Commissions in the last four decades. The constitution is under review again and major changes relating to housing are expected.

2.3 REGULATIONS AFFECTING INFORMAL HOUSING

Zambia has a sufficiently developed regulatory framework to deal positively with informal areas but there is no clear policy or strategy on how to deal with them.[28] The Department of Physical Planning and Housing within the MLGHMLGH started drawing up the Peri-Urban Strategy in 1999 and completed it in 2001. The working definition adopted for peri-urban area was:

"… informal or formal settlements, within the area of jurisdiction of a local authority, with high population density and high density low cost housing having inadequate or lacking basic services such as water supply, sewerage, roads, storm water drainage and solid waste disposal."[29]

UNDP-World Bank assistance was given for a Peri-Urban Water Supply and Sanitation Strategy, but other important peri-urban issues, such as access, drainage, solid waste management, community facilities, and land tenure still need to be considered.[30]

The standards that are imposed, project by project, tend to be too expensive for the residents involved and lean more towards achieving high-standard development than dealing appropriately with low-income housing and infrastructure priorities. This also means that maintenance and debt servicing are beyond residents' financial means so sustainability is not achieved. In addition, outside contractors are brought in to implement infrastructure projects, both precluding community participation and compromising sustainability owing to lack of community ownership.

The tenure provided in Improvement Areas (Occupancy licences for 30 years) has not proved sufficient to attract bank lending for housing improvement. Some financial institutions, e.g., ZNBS, recognise these documents but have problems because the council's are reluctant to register mortgages within their head-lease areas. In addition, most of the households with occupancy licences are too poor to meet the down-payments demanded by the financial institutions. City councils do not have the resources for the development of improvement areas even though they collect ground rent from occupants.

Upgrading also requires significant land for resettling those disturbed by the new infrastructure and councils are reluctant to finance this.[31]

In March, 2007, the Government adopted a policy to combat illegal land allocation and development. It empowers Government to demolish all illegal and unplanned settlements throughout the country. This would include all squatter settlements not declared as Improvement Areas under the Housing (Statutory and Improvement Areas) Act. The reasoning behind this is, as ever when evictions are contemplated to displace informal settlements, to restore some semblance of orderly planning. Such use of planning against people living in poverty has been severely criticised by Kamete as reaching their high point in the infamous Zimbabwean 'Operation Murambatsvina/ Restore Order' in 2005.[32] Unfortunately, displacements happen in Zambia, albeit smaller and less violent, and they have received widespread condemnation from affected residents, civil society and political opposition parties. Examples include Airport and Ng'ombe residents in Lusaka who were resettled at the Habitat for Humanity houses near SOS Village. Mining companies have displaced illegal settlers but provided them with alternative accommodation, e.g., residents of Kandabwe in Kitwe and Kakoso in Chililabombwe. Although Government claimed that they were starting a process of upgrading "illegal settlements" by providing basic social services to identified area, it is unlikely that there would be sufficient resources available and OHCHR[33] reckons that there is little political will to upgrade unplanned settlements in a sustained and comprehensive manner.

2.4 THE NATIONAL HOUSING POLICY (NHP), 1996

In 1996, the Ministry of Local Government and Housing prepared the National Housing Policy, following the best participative and innovative practice of its day. So much so that it won a UN-Habitat Scroll of Honour. Its stated aim was to provide a "comprehensive assessment of the housing situation in the country" and "a vision for the development of adequate affordable housing for all income groups in the country".[34] Its main goal was to provide adequate and affordable housing for all income groups in Zambia. The NHP promised 15 per cent of the government's annual budget for housing to pursue the following objectives:

- "to support a sustainable housing development programme;
- making serviced land available for housing development and streamlining the land allocation system;
- streamlining building standards, regulations, and other controls to meet the needs and capabilities of various segments of the population;
- encouraging the production and use of local and affordable building materials;
- helping the poor acquire decent shelter through alleviation of affordability problems;
- fostering housing areas that are functional, healthy, aesthetically pleasant, and environmentally friendly; and
- preparing a national housing implementation strategy."[35]

It was envisaged that housing and infrastructure supply can be instruments of income generation and redistribution, both of themselves and as resources for other economic activity. Thus, NHP would serve as a catalyst to resuscitating the moribund construction industry and the economy at large.[36]

NHP was predicated on the neo-liberal notion that housing is an investment; a major change from the welfare approach of the earlier years. Predictably for the period, it embodied a vision for the development of adequate housing for all. At that time, only 31 per cent of the nation's housing stock was in the formal sector.[37]

Presidential Housing Initiative (PHI)

Implementing the NHP started in 1998 with the Presidential Housing Initiative (PHI) which raised expectations as the beginning of the end to Zambia's housing problems. The PHI was set up as an implementation unit under the NHA to revive housing construction, undertake upgrading of unplanned settlements and to create employment in the building sector. It was to combine resources from local and external sources to create a housing revolving fund.[38] In practice, however, the PHI operated as a separate unit with its own management and tender procedures. After the 2001 elections the PHI was dissolved and its functions and assets passed to the NHA.[39]

Makasa[40] assesses the impact of the PHI against three of its objectives:

- To revive the dormant housing construction sector – Only Chainama, meant to be the showpiece of the scheme, was partly developed. Even then dwellings designated as low-cost were so expensive that middle-management civil servants could not afford to buy them;
- Upgrading of unplanned settlements – No interventions were made either to stem the proliferation of squatter settlements or to provide resources to upgrade existing ones; and
- Employment creation – It was expected that construction would create informal and formal jobs but the level of employment created was far lower than expected. One reason was that construction labourers were brought in from Malaysia.[41]

2.5 THE NATIONAL DECENTRALISATION POLICY (2003)

This policy aims for an improved system of governance based on the effective distribution of responsibilities between the different spheres of government. It seeks to devolve many functions to local authorities for which it would then pass on the resources to fulfil them. It also intended an increase in efficiency and transparency in local implementation of government policies by local authorities. Development should be done at local level through community organisations and, for some developments, communities would be expected to pay 25 per cent of the costs in either cash or labour.[42] The National Decentralisation Policy sets out to encourage local authorities initiatives in development planning, enhance local authorities in terms of capacity in service delivery, promote accountability, capacity building in terms of planning, financing, infrastructure development and maintenance.[43]

The Policy identifies measures necessary to support decentralisation including a new institutional structure comprising four levels; National, Provincial, District and Sub-district; and identifies the functions to be carried out at the different levels. The National Decentralisation Policy is assumed to be implemented over a ten-year period in a context of adequate funding to implement the policy.

The resources necessary tend not to be transferred from the centre, however, in the way that power, functions, authority, and responsibilities have been devolved. The efforts made so far are largely the deconcentration of central government responsibilities, through branch offices of ministries, rather than the devolution of functions and authority over national resources to local institutions such as district and sub-district councils.[44]

2.6 BUILDING REGULATIONS

The Building Regulations for urban Zambia are prescribed in the Public Health Act[45] and relate mainly to sanitation and housing. They apply mainly in formal housing areas, areas classified as Statutory Areas, or areas within an urban development plan[46] under the Town and Country Planning Act. The Regulations do not apply in informal unplanned areas or Improvement Areas. Where there are no suitable regulations, or in the absence of knowledge of them, SADC, COMESA or appropriate International Standards Organisation (ISO) standards are used. The mines use British Standards in their developments.

The Regulations cover issues such as land use; the construction, occupation and use of dwellings (and other buildings); zoning and basic urban services; and sanctions against breaches of the Regulations. They set a very high standard that most developers in Zambia fail to meet. Under Section 66, Local Authorities must prevent or remedy danger to health arising from unsuitable dwellings. Councils are supposed to closely monitor housing construction and usage (including overcrowding) to ensure that they comply with the Regulations.

Owing to inadequate institutional capacity, however, enforcement of the regulations is very weak in most cities and towns and offenders are not prosecuted or made accountable. The inability to enforce the regulations has led to uncontrolled developments, even in conventional areas. Rarely have local authorities issued closing orders or stop orders on, or demolished, unfit dwellings. The informal sector builders know the regulations but do not follow them because they increase the cost of building beyond what low- and middle-income people can afford.[47]

According to the NHP,[48] standards set for development are inappropriate to the needs of the majority which, because there is no formal finance for buildings which do not conform, greatly reduces activity in the housing sector. They involve restrictive construction requirements, inappropriate minimum development clauses and limiting the use of local materials.

2.7 BRIEF CONCLUSION

Despite having one of the most innovative laws at the time on transferring land tenure to squatters in 1974, Zambia has not built on it nor has it passed any law allowing for squatter to gain title through occupation for a period of time. Thus, unless an area is declared an Improvement Area, there is no hope for occupants to gain title. Under the current Urban and Regional Planning Bill, the areas affected by the Housing (Statutory and Improvement Areas) Act are likely to become subject to the full force of planning with all its attendant regulations. Unless there is some allowance made for residents of Improvement Areas who cannot afford to fulfil the planning laws, existing residents may be displaced by a process of gentrification and have to find somewhere to squat outside of control; starting their housing cycle at the bottom once again.

The National Housing Policy of 1996 has resulted in the sale of institutional housing and the ill-fated Presidential Housing Initiative but the remainder of its enabling approach orthodoxy has not been implemented. Despite its intention to increase national budget spending on housing-related interventions, the period since its adoption has seen a general decline in housing activity, only recently being reversed. The building regulations remain too expensive to fulfil for most Zambian households to follow them.

THE BUILDING REGULATIONS REMAIN TOO EXPENSIVE TO FULFIL FOR MOST ZAMBIAN HOUSEHOLDS TO FOLLOW THEM.

ENDNOTES

1. Government of Northern Rhodesia (1944).
2. World Bank (2002: 10).
3. Cap 194, vol. 12.
4. OHCHR (not dated).
5. UN-Habitat (2005).
6. Most of the existing aerial photos of informal settlements are outdated and do not reflect recent expansions. The huge cost of conducting aerial photography for this purpose has been a major reason why most have not been upgraded immediately upon legalisation.
7. Economic liberalization has meant that some people now own more than one property, in contravention of the law.
8. World Bank (2002: 10).
9. Matibini (2003).
10. UN-Habitat (2005).
11. Cap.189, 1970.
12. World Bank (2002).
13. Cap. 283.
14. Amendments under discussion in 2011 propose the replacement of Structure Plans with Integrated Development Plans.
15. Ministry of Local Government and Housing (2008).
16. Ministry of Local Government and Housing (2009).
17. Cap. 206.
18. UN-Habitat (2005).
19. The Finance Minister Budget Address 28th February 2005 recognised the Land Act's catalytic effect on residential development.
20. UN-Habitat (2005).
21. OHCHR (not dated).
22. See chapter 6. This figure may no longer be accurate as some customary land has been alienated and, so, converted to statutory land. Hence, there is a need for a nationwide Land Audit to determine how much is now statutory and how much still customary.
23. Republic of Zambia (1996).
24. Under the Urban and Regional Planning Bill, all these areas will be rateable.
25. OHCHR (not dated).
26. Recently, there have been renewed efforts at indoor residual spraying sponsored by the Ministry of Health in some places and by Mining Companies in the former mine townships.
27. UN-Habitat (2005).
28. World Bank (2002).
29. Ministry of Local Government and Housing (2001).
30. World Bank (2002).
31. UN-Habitat (2007). Councils now have access to the Land Development Fund and do have large tracts of "vacant land" if they wanted to resettle some households to facilitate upgrading. What is lacking is political will.
32. Kamete (2007).
33. OHCHR (not dated).
34. Republic of Zambia (1996).
35. World Bank (2002: 10-11)
36. Phiri (not dated: post 2008)
37. Makasa (2010).
38. Makasa (2003 cited in UN-Habitat, 2005).
39. UN-Habitat (2005).
40. Makasa (2003 cited in UN-Habitat, 2005).
41. UN-Habitat (2005). There is a perception that foreign bricklayers are much more productive than Zambians. In a direct contest, Zambians laid far fewer bricks in a day than their foreign competitors. Personal communication, Dr Francis Ndilila, 2011.
42. UN-Habitat (2005).
43. Republic of Zambia, Office of the President, Cabinet Office, November 2002, National Decentralisation Policy: Towards Empowering the People. Lusaka
44. UN-Habitat (2007).

45. Cap 295 Vol. 17 Part IX.
46. A Structure Plan or an Integrated Development Plan.
47. Mwango (2006).
48. Republic of Zambia (1996).

03

ACTORS IN THE HOUSING PROCESS

3. 1 INTRODUCTION

In this chapter, the various actors in the housing process are introduced. It is notable that many of the main ones, about whom most housing policy revolves, actually produce very little housing. In contrast, those for whom little is done either directly or through enabling, i.e., the informal contractors, build most of the housing in urban Zambia. Much of the recent formal activity has been instigated by NGOs and international agencies. Many of them are introduced in this chapter.

3.2 PUBLIC SECTOR

According to the NHP,

"Current institutional arrangements in the housing sector are fragmented, inconsistent and characterized by a lack of clearly defined roles and lines of accountability. Several administrative divisions of Government are responsible for housing."[1]

Ministry of Local Government and Housing, (MLGH)

The Ministry of Local Government and Housing, is responsible for assessing land for development and seeing that local authorities prepare structure and regional plans to guide development. The Ministry conducts consultations on land matters with chiefs and councils to ensure that land is made available for allocation while protecting customary rights. The Ministry is also responsible for administering the provisions of the HSIA[2] including declaring Statutory and Improvement Areas, when requested by councils.

Department of Physical Planning and Housing (DPPH)

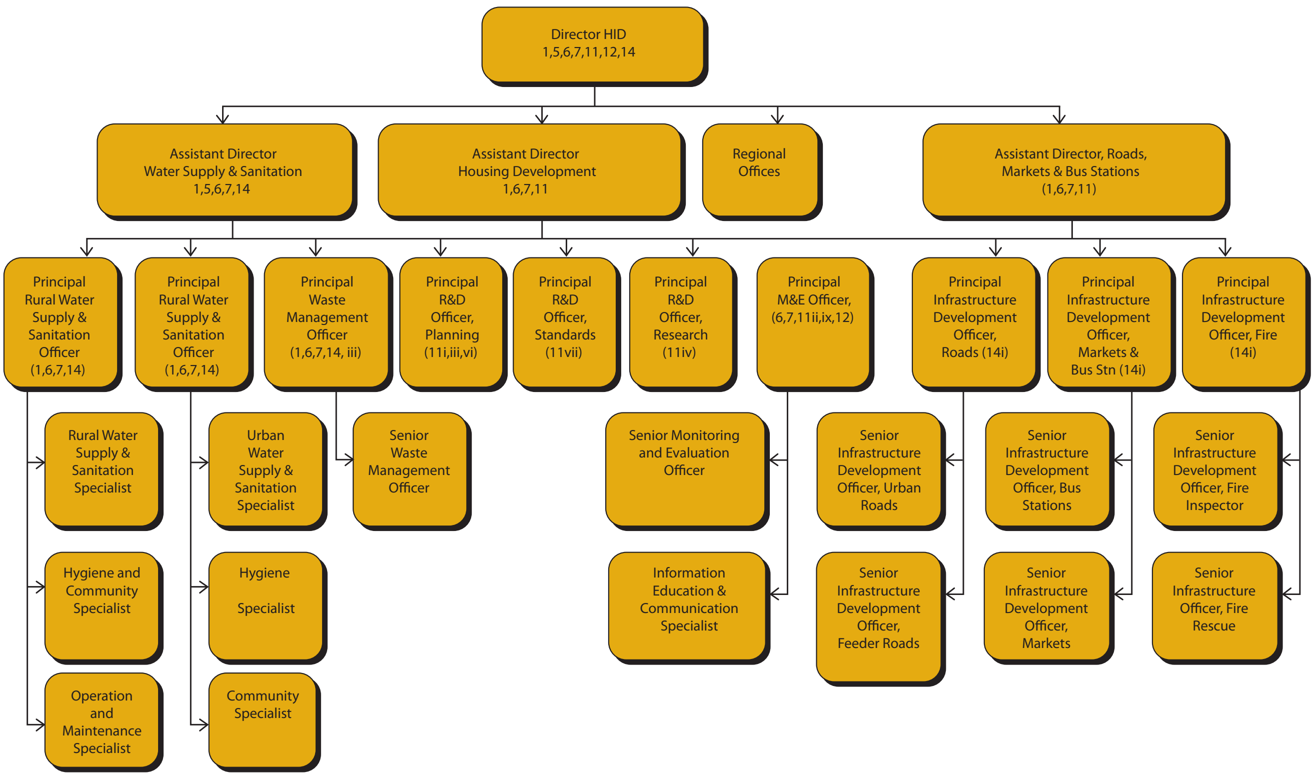
Within the MLGH, this department works with councils to develop district development plans. These plans set out the zoning patterns that have to be followed by each council in allocating land for housing. The department may rezone areas where priority needs are identified.[3] Indeed, the department must be consulted for any material change of use in any local authority. In preparing the National Housing Policy, the department appointed a Steering Committee of 25 experts in the field, chaired by the Town and Country Planning Commissioner.

Department of Housing and Infrastructure Development (DHID)

The housing function has been moved from DPPH to the Department of Housing and Infrastructure Development (DHID) within the MLGH. The lack of a clear definition and understanding of housing and where this function should be located within the MLGH is a challenge in itself, affecting housing planning and development at strategic policy level. The placing of housing as one of four major functions in a ministry demonstrates the low priority housing is given by government in Zambia.

Figure 12. MLGH Headquarters on Church Road, Lusaka.
Photo © UN-Habitat/Daniel Phiri

Figure 13. Organogram of the Department of Housing and Infrastructure and Development



Ministry of Transport, Works, Supply and Communications (Buildings Department)

The Buildings Department conducts the government's last remaining direct supply function for housing. Currently, for example, it is involved in the construction of 4,500-5,000 dwellings for Security and Defence personnel under the 'Zambia Housing Units Project'. The dwellings utilise a relatively new prefabricated technology through Sinomarch, a Chinese company. The department continues to build institutional houses for police, soldiers, health personnel and teachers.

Ministry of Community Development, Mother and Child Health (MCDMCH)

Among its responsibilities for poverty reduction, the MCDMCH assists poor people in peri-urban areas where it shares responsibilities with Local Authorities. The Ministry collaborates with NGOs and donors in promoting development and delivery of basic urban services. It is responsible for identifying and protecting the most vulnerable people and providing them with basic needs such as housing, food and clothing. In its policy document, the MCDMCH's principal goal of community development is to stimulate and enhance community participation in organisation, planning, implementation and management of community programmes aimed at alleviating poverty, reducing illiteracy and equipping communities with knowledge and skills necessary to improve the quality of life. MCDMCH also aims to empower women through entrepreneurship and leadership skills training

The National Housing Authority (NHA)

Despite its name, the NHA is no longer a major housing provider in Zambia. Formerly the African Housing Board, it was established by the National Housing Authority Act (Cap. 426) in 1971 as the only institution with powers to deal with housing matters on behalf of the government, including both direct building and upgrading substandard housing. This gave it predominance over the local authorities, whose duty had been to provide housing, but it no longer fulfils the hopes that it would be a major alternative supplier of housing. Despite quite a large staff, NHA now builds only a few relatively costly dwellings for high-income clients or partners with others in doing so.

NHA reports building 8,101 dwellings (13,938 if upgraded dwellings in 1977 are included) between its inception in 1971 and 2002, most of which are in Lusaka. The most ever built in a year was 1,488 back in 1977 while it has produced less than 100 each year since 1994 (table 10.). Perhaps, even more tellingly, it has serviced no site and service plots since 1984.

In 2004, NHA built three categories of low-income dwellings;

- a one bedroom dwelling of 46.6 square metres costing ZMK55million (about USD11,700),
- a two bedroom dwelling of 65.6 square metres costing ZMK71million (about USD15,100),
- a three bed room dwelling of 83.2 square metres costing between ZMK90 and 95 million (about USD19,200–USD20,300).

Buyers had to pay at least 50 per cent down-payment and then pay the rest within 12 months. Thus, it is not surprising that housing meant for the low-income groups was being bought by those in the middle- and high-income brackets who can afford not only the full cost but also the high initial down-payment. About half the purchasers have obtained loans. NHA is a government agency and is mandated to collaborate with Councils to identify and develop land for housing. There is currently some doubt about how much land NHA has in its trust and how much it is asking from Councils. Currently, the NHA is mainly involved in joint projects of high quality contractor-built housing for sale to the emerging middle class. Current projects include one in Ibex Hill with a Malaysian company MKP (figure 14) and with NAPSA at Leopard's Hill (figure 15).

Local authorities

There are 75 local authorities in Zambia, each run by an elected council.[5] Of the 73, four are City Councils, 14 are Municipal Councils and 55 are District Councils. City and Municipal Councils have Mayors, District Councils have Council Chairpersons, who are elected annually by their fellow councillors. Councils should receive money from central government to run services consisting of building and development control, fire and police services, road provision and maintenance, primary education and agricultural services.[6] In the acknowledged heyday of councils (1960 to 1972), they provided housing and relatively high levels of infrastructure, mainly using government money allocated to them for the purpose. Between 1973 and 1980, the housing grants were withdrawn and other grants gradually reduced. Property tax receipts after 1975 were undermined by the idea of land having no value. In 1980, the Local Administration Act decentralised many government functions to local authorities but did not assign resources for them to fulfil them. The Rating Act, 1997 significantly reduced the number of properties liable to pay rates and so further reduced the resources of local authorities.[7]

Local councils are not allowed to borrow or receive grants from foreign governments and organisations. Their sources of revenue are limited to licensing fees, some levies and charges, and property rates.[8] The nature and amounts of such levies, charges, and rates are subject to the approval of the MLGH. When Lusaka City Council recently applied to increase property rates, the Rates Tribunal at the MLGH halved the requested amounts before giving its approval. Central government is obliged by law to provide grants in lieu of rates on its property within councils' area of jurisdiction but it does so irregularly and not to the full amount owed.[9] In such circumstances, it is impossible for local authorities to operate effectively, especially in forward planning.

Local government resources are also reduced by an unwillingness by councils to adjust tariff levels in response to increasing service delivery costs. This, and poor management, leads to failure fully to recover even the money to which the council is entitled.[10] Their data

Table 10. NHA Performance, 1971 - 2002

Period	No. of units built	No. of serviced site and services plots	No. of towns
1971-75	2,649	15,615	Lusaka + 3
1976-80	2,303	132,295	Lusaka + 13 (plus 5,387 upgraded dwellings)
1981-85	1,602	92,717	Lusaka +5
1986-90	792	0	Lusaka + Kabwe
1991-95	530	0	Lusaka + Livingstone
1996-2000	254	0	Lusaka
2001	94	-	Lusaka + 6 others
2002	133	-	Lusaka and Ndola
Total to 2002	8,101	240,627	plus 5,387 upgraded dwellings

Source: Muchima.[4]

Figure 14. NHA and MKP housing at Ibex Hill, Lusaka. **Photo** © UN-Habitat

Figure 15. NHA and NAPSA housing at Leopard's Hill, Lusaka. **Photo** © UN-Habitat

are poor. In addition, residents' attitudes towards paying rates or fees are generally negative, as they do not see any resultant benefits.[11]

Years of central planning and provision has created a culture of citizens not wanting or expecting to pay for services. The Local Authorities have been charged with duties to provide services without the concomitant resources to provide them or to collect the expected revenues.[12]

Councils should prepare socio-economic Development Plans, working with DDCCs, and on the basis of District Situation Analyses. The District Development Plans feed into the Provincial Development Plans and then into the National Development Plans consolidated by the Ministry of Finance and National Planning. Councils should also prepare Urban Spatial Frameworks, e.g., Structure Plans or Integrated Development Plans for land use and zoning. The two types of plans (and the actors involved) are not well coordinated and tend to work separately, creating a dysfunctional planning system which does not augur well for effective housing planning and development in the future.

Local Authorities are responsible for the planning and supply of housing. They should set local delivery goals, supply land, infrastructure, and community facilities, enforce building regulations, control development and carry out upgrading and site and service schemes. They are also empowered to build housing to sell or rent at market rates.[13] While in the past they were expected to provide housing directly, since 1994 the government has left much of conventional supply to the private sector.[14]

City and municipal councils are responsible for recommending, to the Lands Department, applicants for land allocations.[15]

The city councils hold the head leases of Improvement Areas but even Lusaka has too little capacity to guide development in them. This role is played by the Ward Development Committees (WDCs, see below) and other CBOs and the city councils may work with the WDCs and CBOs in development. WDCs are vulnerable to political manipulation and need strengthening through legal instruments.[16]

In Lusaka, the local authority's housing responsibilities are divided between two directorates. One deals with building and renting conventional housing, the other (the Peri-Urban Housing Directorate) deals with all the informal housing. Other councils deal with informal housing through social services or community services departments. Local authorities also deal with provision of some infrastructure (roads, drainage and waste management) while water, sewerage and sewage treatment are now operated by separate companies partly or wholly owned by the councils but run independently.[17]

Most local planning authorities are still working with master plans rather than more modern, participatory and flexible methods of forward planning.[18] In Lusaka, an Integrated Development Plan[19] has been developed through Japanese and South African consultants and the legislation to make this universal is undergoing consultation.

Since the decentralisation programme, the operations of local authorities in Zambia are subject to central government control, through the Ministry of Local Government and Housing. The law requires central government to make specific grants to local authorities but the money provided is insufficient and usually sent very late so local authorities must rely mostly on their own resources. Thus, they find it impossible to fulfil all their obligations and have significant personnel capacity gaps in both its officers and elected leaders. At the lower income levels, however, they have more workers than they need.[20]

"The decentralisation efforts made so far are largely the deconcentration of central government responsibilities rather than the devolution of functions and authority over national resources to local levels."[21]

Despite their mandate of being responsible for service delivery, local authorities have not received much of their expected grants from central government and, thus, rely on their own sources of revenue which are generally inadequate or poorly tapped.[22] The sources of revenue include property rates, ground rents, trading licences, personal levies and billboard advertising.[23]

The Lusaka city council fails to deliver adequate services, even when residents pay service charges. Most local authorities are facing serious financial problems, owing to small resource bases, untapped potential for income generation, outdated policies, and lack of capacity to streamline revenue collection. These have been blamed for a lack of transparency, corruption and mismanagement of funds.[24] According to Mutale,[25] in 1998, the City of Lusaka had only eight staff in the planning department out of an establishment of 50 posts; only nine out of 40 building inspectorate posts were filled.

In Kitwe, the KCC, attempts to fulfil its mandate to control the growth of unplanned settlements and other illegal structures through its Department of Community and Environmental Services and its Sites and Services and Squatter Control Unit. The latter also regulates building construction in site and service schemes.[26] As in Lusaka, Kitwe City Council has serious financial shortfalls and staff had not been paid for two months when interviewed for the profile in September, 2011.

In Livingstone, the city council limits its involvement in service provision in informal settlements to solid waste management. Water, sanitation, and electricity generation are meant to be provided by the utility companies.[27] Livingstone City Council gives assistance to female-headed households to upgrade their dwellings and livelihoods by linking them to micro-finance institutions. Despite this, the poor households still find it difficult to access micro-finance because of lack of collateral, high interest rates, and their fear of the consequences of default. [28]

District Development Co-ordinating Committees (DDCC)

District Development Coordinating Committees (DDCC)[29] are meant to coordinate development in urban and rural areas and prepare development plans for submission to the council. Through them, councils should collaborate with local stakeholders on development issues affecting their areas. The District Commissioner, appointed by the President, is the Chairperson of the DDCC and so they have significant political relevance. Different members of DDCCs have their own budgets for the district and so they are intended to coordinate how resources from various institutions are utilised for development purposes in a district.

National Pension Scheme Authority (NAPSA) and other pension funds

Replacing the Zambia National Pension Fund in 2000, NAPSA is the Statutory Body responsible for administering the principal social security programme in Zambia. It is a statutory requirement that all employers, especially government and semi government, contribute to NAPSA or another pension scheme to safeguard pensions of employees. Pension funds administered a large portfolio of real estate development, including housing, most of which has now been privatised and sold to sitting tenants. There have been renewed efforts and initiatives for NAPSA to start housing development programmes to help meet the housing shortfall in Zambia. NAPSA is currently developing medium cost housing with NHA at Leopard's Hill (figure 15).

Zambia State Insurance Corporation (ZSIC)

ZSIC is the state run insurance company which, along with several private sector insurance companies, is responsible for insurance and re-insurance in Zambia. ZSIC has been a major actor in housing development in Zambia, especially in the pre-1991 era. Many housing estates that were sold to sitting tenants were owned, operated and maintained by ZSIC. With its long experience in housing development and management, ZSIC could still play a vital role in the sector.

Universities

The university education of town planners, real estate professionals, building scientists, quantity surveyors and architects is concentrated in Copperbelt University (CBU), Kitwe. Housing is taught as a course for most of these but the research base is now limited to undergraduate dissertations. The University has a special research fund but this is competed for by different faculties and is generally insufficient to support a dedicated housing research.[30] CBU had a specialised unit dealing with research and development of housing and other services in Zambia and has participated in informal settlement upgrading processes.[31] This is largely moribund now, however, as there is no funding from government or other research clients.

The University of Zambia (UNZA), Lusaka, also conducts research on housing related issues through the Geography Department and the Technology Development and Advisory Unit (TDAU), in the Engineering faculty, which develops appropriate machinery including a hand-operated press for making hydraform blocks (see chapter 9). TDAU products tend to be too costly for most low income developers and potential home-owners. There is a dearth of academic and action research on housing and related issues in Zambia, mainly owing to lack of funding. Much of the existing literature is focused on Kitwe and Lusaka.

3.3 THE FORMAL PRIVATE SECTOR

Professional Organisations

A number of professional organisations are interested and involved in housing research and development in Zambia. Notable among them are the Zambia Institute of Architects (ZIA), the Zambia Institute of Planners (ZIP), Surveyors Institute of Zambia (SIZ) and the Engineering Institute of Zambia (EIA). These organisations have been more effective in promoting their member's interests than as pressure groups to catalyse government policies and programmes in the housing sector. Nor have they been effective in contributing to the transformation of the sector to benefit low-income Zambians.

Employers

All formal employers in Zambia are bound by the Employment Act and Labour Laws to either provide housing or housing allowances to their employees. In the past, employers were the main urban housing provider but this changed in the 1990s when they had to sell their housing stocks to sitting tenants. The only workers housed by employers now are the higher executives and expatriates. The advent and spread of casual labour in Zambia has led to most employees not being paid housing allowances, which is an abrogation of both their fundamental rights and international labour laws as set out by the ILO.

Brokerage/ estate agents

The 1975 Presidential Watershed Speech on Land Alienation abolished all freeholds and the operation of estate agents and brokers in Zambia. All dealings in land and real estate were prohibited although an "illegal" land housing market flourished side by side with the state controlled housing market. Since the early 1990s, estate agency is now a legitimate business and flourishes at every level. This liberalisation has led to some unscrupulous agents whose operations distort the operation of the market. The Association of Real Estate Agents recently called for the Registration of all agents to ensure professionalism in the business. As the volume of house sales is quite low, most estate agency brokerage is in land, plots or for rental properties.

Property developers

There is a small cadre of property developers at the top of the market serving the growing middle class. Some are from outside Zambia, notably Malaysia and China. Many of them establish joint ventures with the National Housing Authority. Such projects as Meanwood, Northgate, Salama Park, Lilayi Housing Estates, etc., are developing serviced land for sale to those who wish to build or are building dwellings for sale. Though their rhetoric often includes such words as affordable, the cost of their plots or dwellings and the requirements for qualifying buyers indicate that these are high cost developments.

The development of 8,000 dwellings at Solwezi-Lumwana is being offered to private developers as a Public Private Partnership with Barrick Gold, the mine owners. The USD325 million allocated for housing indicates a mean cost of USD40,625 per dwelling. One of the accepted tenderers is Savenda.[32] First Quantum Minerals also plans to build an additional 3,500 houses for its Kansanshi Copper and Gold Mine.[33]

3.4 THE INFORMAL PRIVATE SECTOR

The urban poor themselves: households and informal sector contractors

As in most Sub-Saharan African cities, the majority of home-owners fend for themselves by finding land and a contractor to build their simple dwelling. Through Ward Development Committees (WDCs), residents of the poorest areas have some say if development initiatives are proposed for their neighbourhoods. WDCs tend to be non-partisan but there is a strong influence of local politicians, especially from the ruling party. They wield power and often command resources meant for poor residents, for example, politicians sometimes allocate plots and decide where services are to be located and hence who benefits.

Informal sector contractors operate outside of any assistance offered to other industrial concerns and are more likely to be harassed by officialdom than helped. Despite this, they are the major builder of housing in urban Zambia.

In the Lusaka Project, a great deal was made of the road walking process that allowed residents of squatter settlements to plan where roads would go and, therefore, whom should be displaced.[34] Similar means of community involvement have been practised in PUSH (see below) and similar programmes. Currently, however, the majority of the urban poor who live in unregularised settlements are ignored by local and national government and excluded from urban decision making.[35]

SINCE THE 1970s, VIRTUALLY ALL NEW HOUSING HAS BEEN PROVIDED IN INFORMAL AND PERI-URBAN SETTLEMENTS OUTSIDE LOCAL PLANNING GUIDELINES.

Ward Development Committees (WDCs) and other Community-based Organisations (CBOs)

During the one-party state (before 1991), neighbourhoods had UNIP sections of about 25 households which were gathered into Ward Development Committees (WDC). These community governance structures concentrated on UNIP political activities but also acted as gatekeepers for development initiatives. They had a great deal of say in what happened in their neighbourhood and were the unit served in basic servicing. The MMD government replaced them with Residents' Development Committees (RDCs) when community level institutions were required to make up for lack of government capacity to implement HSIA. Their title has recently been changed back to Ward Development Committees.

Local authorities routinely enter into partnerships with WDCs and other CBOs to identify service needs and implement projects, especially in peri-urban and informal neighbourhoods.[36]

They have tended to concentrate purely on the development needs of local residents especially in legalised unplanned settlements. The government has recognised the important contribution of WDCs in governance in the National Housing Policy and the National Decentralisation Policy to facilitate development and implement development projects in a settlement.[37] WDCs have been established in most settlements and the major city authorities make it their business to collaborate with them. They and other CBOs try to mobilise resources for upgrading projects in unplanned settlements from City Council revenues (generated from levies and rates), local and international donors, the Constituency Development Fund, the Ward Development Fund, and the local business community.[38] They co-operate with Tap Committees in the distribution of water in many informal settlements.

In some cases, however, political interference tends to disrupt their smooth functioning.[39] Some local councils, e.g., Livingstone, lack the capacity to coordinate WDCs and NGOs in their upgrading efforts and other developmental activities in unplanned settlements.[40]

Box1: Push and Subsequent Programmes

NGOs such as Programme for Urban Self-Help (PUSH), CARE International, and World Vision International have programmes running in some urban areas to enable the provision of basic services in unplanned settlements currently earmarked for upgrading. In Kitwe, the city council partners with NGOs such as Oxfam, CARE International, World Vision International, and PUSH, but there is a lack of institutional coordination and networking among those involved in urban upgrading programmes.[41] Local communities have constructed roads in Ipusukilo, Race Course, and Kamatipa. World Vision International is financing the construction of nurses' housing and boreholes in Zamtan. The Zambia Social Investment Fund financed several ongoing social infrastructure projects (schools, clinics, water supply, and sanitation) in both planned and unplanned settlements before its funds were transferred to appropriate government ministries for completion.[42] Box 1: PUSH and subsequent programmes

"The PUSH programme Food-for-Work, which is partly supported by CARE International and the World Food Programme, has involved the construction of access roads and drainage systems in several unplanned settlements in Kitwe and serves as a good example of a best practice in urban upgrading programmes in Kitwe. PUSH programmes not only serve to improve basic infrastructure, but also to alleviate poverty through the provision of food rations to the poor in the community. The programmes are labour intensive, with community residents providing much of the labour to open up access roads and improve drainage in their settlements. In Kitwe, PUSH programmes have been carried out in Itimpi, Zamtan, and Malembeka unplanned settlements."[43]

PUSH was a government-directed programme, largely top-down, but CARE managed the community input, called for and paid the labour. The call for labour attracted 80 per cent women, unexpectedly as it was for engineering works, but men were reluctant to work for food, preferring cash.

In 1994, PUSH was superseded by PUSH 2, sponsored by ODA (now DFID). This was a bottom-up programme of improvements driven by priorities decided by research and consultation. In addition to infrastructure improvements, attention was paid to livelihoods improvements and governance (under the multi-party administration). Though there was food for work CARE 2 also provided opportunities for paid work. It piloted community-managed water supply in Chipata, Lusaka. In 1998, further DFID money allowed PUSH 2 to be scaled-up to another ten settlements in Lusaka.

Also in 1998, CARE began its PROSPECT programme (to 2004) which focused on institution-building, microfinance directed to the poor, and infrastructure improvement. As a sub-component of the last, there was a focus on environmental health. Many of the beneficiaries of PROSPECT were veterans from the Food for Work programme. The project also helped women to resist rape, child abuse, domestic violence and land-grabbing when their husbands died, working with the police VSUs. Other issues addressed were vandalism of water standpipes and establishing sustainable governance systems in peri-urban areas.

Table 11. NGOs involved in housing (in alphabetical order)

CARE Zambia	Operating in Zambia since 1992, CARE operates programmes of infrastructure improvements in peri-urban areas partnering GRZ in the PUSH programme (see box 3). CARE has pioneered community water supplies, employing management and maintenance workers from the communities, and improved sanitation and health awareness, through local Water Trusts. They have provided toilets near markets.
Civic Forum on Housing and Habitat	CFHH is a network that advocates for decent, affordable and adequate housing for poor and marginalized people in Zambia. The network creates space for participation of organised low income communities to access adequate housing in a sustainable way. It also expects to conduct dialogue with governments and local authorities to address housing in innovative ways. CFHH does not provide finance for house construction.[44] CFHH claim a lobbying victory to restore housing to the Sixth NDP after it had been dropped in the preparation process.
Habitat for Humanity (HfH)	Founded on Christian principles, Habitat for Humanity works world-wide to champion decent housing as a human right and to mobilise and support communities to overcome barriers to safe, decent and appropriate housing. Founded in 1984 and working first in Kafue, HfH supplies urban housing mainly in Lusaka (figure 17), Ndola and Kasama, HfH Zambia assists people to build their own housing to a set pattern and assists incremental builders with loans. It has built over 2,000 dwellings in Zambia. The approach adopted in Zambia is to encourage people from all walks of life regardless of faith, ethnicity, gender, etc., work together in partnership to help to build their own housing, to a standard pattern, through sweat equity or through small contractors, and to provide finance for most of the cost to be paid back over 5 years (formerly 10 years). In addition to new dwellings, HfH Zambia assists renovation and rehabilitation of existing housing. While, in the past, the unit of payment was the monetary equivalent of two bags of cement per month, this has now been changed into fixed payments on a loan. The home owners contribute labour on the dwelling, “sweat equity”, and building materials in order to reduce the loan amount. The 40 square metre HfH house in Ndola costs ZMK15 million (USD3,000) in materials, in Lusaka it costs ZMK21 million (USD4,250). Ten per cent of the materials cost must be paid as a deposit. So far, HfH Zambia has built 2,150 dwellings. Participants can build on their own land or HfH has projects on land donated by councils for the purpose. HfH Zambia also has a Vulnerable Groups housing programme, initially funded by USAID and Irish Aid, in which it builds about 100 dwellings a year, 100 per cent subsidized, for vulnerable households particularly AIDS orphans and grandparents looking after small children. For them, HfH Zambia builds simple dwellings and, through partners, conducts training in inheritance rights and HIV/AIDS prevention. They also offer, through partners, specialised services, such as dietary advice, psycho-social counselling, education, water and sanitation. The dwellings are 35 square metres in area. So far, 300 have been built in Lusaka and Ndola.
Human Settlements of Zambia (HUZA)	Human Settlements of Zambia (HUZA) a national NGO has been working in upgrading urban settlements in Zambia since 1971. HUZA’s major areas of activities have included construction, appropriate technologies, environmental conservation, education, food security, health education, income generation and micro credit. HUZA uses a participatory approach that seeks to establish a self managed, democratically controlled, and self sustaining area. In this regard HUZA has been providing training to community based Ward Development Committees develop the skills necessary to carry out their tasks in a democratic and efficient manner.
Internally Displaced Peoples’ Voice (Zambia)	Promotes the rights of vulnerable people such as victims of demolitions, women and children.[45]
Oxfam	Oxfam supports the Copperbelt Livelihoods Improvements Project (CLIP) based in Kitwe. Among others activities, it advises on land rights, especially for women in poor peri-urban communities.[46]

People's Process on Housing and Poverty in Zambia (PPHPZ) and the Zambian Homeless and Poor People's Federation (ZHPPF)	This is a partnership between a non-profit making organisation (PPHPZ) and a community based movement of people living informal settlements who have constituted themselves into the housing saving schemes own as a Zambia Homeless People's Poor Federation (ZHPPF). Affiliated to Slum/Shack Dwellers' International, the PPHPZ/ZHPPF work with low-income households, assisting each other through groups of women in self-enumeration, establishing savings and offering microfinancial services and empowerment. A small savings fund contributed by the federation members on a daily basis is used to assist group members with soft loans as well as to build social cohesion. Groups meet regularly to discuss their challenges and ways to address these. They operate the Swalisano Urban Poor Fund (see chapter 7). PPHPZ provides technical support, mobilizes resources to augment their savings and links them to partners in development. Exchanges locally, regionally and world-wide bring groups of women together and form them into effective groups. Men are not excluded. With the NGO's support, dwellings are developed by the groups at the very bottom of the market. In Kitwe, Choma, Kalulushi, Livingstone, Mongu and Ndola, PPHPZ/ZHPPF have supported the construction of housing. Land is obtained from the local authority at its intrinsic value (e.g., ZMK150,000 per plot in Livingstone in 2009). In Kamatipa, Kitwe (figure 16), the groups were supported with a hydraform machine to make and use the interlocking blocks (see chapter 9). The housing also has flush toilets and shower units; water is from shared standpipes though some have added private connections. In Livingstone, the dwellings cost ZMK8 million (USD1,600) for one room and ZMK12 million (USD2,400) for two rooms. Participants must pay 25 per cent of the cost of the dwelling up front. They, therefore, need to be able to raise about ZMK3 million (USD150) in cash to participate. Currently, repayments on the loans to construct are ZMK200,000 (USD40) per month in Livingstone but this is acknowledged to be beyond most households' ability to afford. The Kitwe households pay USD100,000 (USD20) per month. PPHPZ/ZHPPF assist about 120 households per year in their housing provision.
Shelter for All (SHEFA)	Shelter for All is an NGO promoting low cost and affordable housing based on partnerships and participatory strategies involving the beneficiaries and other players involved in human settlements development. The key strategies SHEFA uses include expand and supply of affordable housing through promotion of locally available, affordable, appropriate and environmentally sound construction methods and technologies, establishing small scale local building materials production centres, thereby increasing accessibility to local building materials and promoting increased women's participation in legal home ownership through skills training and education.
World Vision International (WVI)	World Vision International (WVI) has been supporting urban development projects and the STEPS Project for orphans and vulnerable children in housing in Lusaka and other areas, since 1991, with the overall goal of improving the social, economic and environmental conditions of the communities. The key areas of WVI intervention have included community organisation and advocacy, water supply systems, improved sanitation and hygiene, small enterprise development and community capacity building. WVI have been supporting residents of Zamtan informal settlement in Kitwe in basic services such as water and sanitation.
Young Women's Christian Association (YWCA) and others	The YWCA helps women to resist eviction when they are widowed, using the Intestate Succession Act to persuade relatives that the widow has a right to remain in the marital home against the more traditional family claims.[47] Other organisations involved in protecting widows from eviction include 'Justice for Widows and Orphans Project' and 'Women for Change' in Lusaka.
Zambia Land Alliance (ZLA)	Set up in 1997 as a response to the land reforms of the early 1990s, the ZLA is a network of NGOs championing pro-poor policy in land and long-term changes in administration of land in Zambia. It has called for a review of the Land Act, 1995 which it considers too narrow and full of loopholes to allow public officers to abuse their power.[48]

Figure 16. People's Process dwellings, Kamatipa, Kitwe. **Photo** © UN-Habitat

3.5 INTERNATIONAL DONORS

World Bank – Lusaka Squatter Upgrading and Sites and Services Project (1974-1981)

The major components of the World Bank-financed Lusaka Squatter Upgrading and Sites and Services Project (1974 – 1981) were physical improvement of unplanned informal settlements, demarcation and development of plots, distribution of material loans to families, installation of basic infrastructure, and provision of basic community services. The project provided more than 30,000 new and improved shelter sites in informal settlements in the city in one of the first upgrading scheme in Sub-Saharan Africa. Legal status was granted to the participating settlements through the specially framed Housing (Statutory and Improvement Areas) Act, which enabled them to improve their levels of economic activity. In the days of large projects, achieving financially sustainable operations was secondary to the exemplary effect such projects were meant to have on similar problems elsewhere.

Urban Restructuring and Water Supply Project (URWSP)(2002-2004)

Having learned lessons from the Lusaka Upgrading Scheme and other donor and NGO projects, the World Bank implemented the URWSP in all major urban centres. This project emphasised community participation as an important element of sustainability of community infrastructure. The project had demonstration components with the aim of developing sustainable water systems in low income urban communities (e.g. commercialisation through Water Kiosks) and strengthening institutional capacity and linkages within and between Councils and participating communities. The third goal was developing Structure Plans[49] to provide the overall framework for urban upgrading efforts in Zambia. Under this project, the World Bank financed the preparation of the Lusaka, Livingstone, Ndola, Mazabuka and Luanshya Structure Plans. These plans should provide the future basis for housing upgrading and development programmes in their areas.

Japan (JICA)

The Japan International Cooperation Agency (JICA) has been active in urban development and infrastructure services projects in Zambia since the early 1990s. Some of the major projects have included a study of environmental improvement on unplanned urban settlements in Lusaka (2001)[50], the Chibolya Urban Renewal and Regeneration Project and, more recently, the study for a comprehensive urban development plan for the City of Lusaka or the LUSEED (2007-2009). The last project was implemented in cooperation with MLGHEEP and Lusaka City Council. The Urban Planning and Living Environment component focuses on issues of housing in planned and unplanned urban settlements.

Ireland Aid

Irish Aid (now Development Cooperation Ireland (DCI)) supported a Community Upgrading Programme (1991-1997) in urban communities and councils in Lusaka and Northern Province. It also implemented the Promotion of Community Managed Urban Services (POCMUS) on the basis of earlier interventions. The POCMUS project aimed to strengthen community management through increasing the responsibility and contribution of communities in the operation and maintenance of services, in fostering group and individual enterprise, and increasing self-reliance and ensuring that participation brings net benefits to all residents. Its Community Empowerment Fund is intended to empower communities to improve their housing and living conditions.

Figure 17. Habitat for Humanity Housing, Lusaka. **Photo** © UN-Habitat/Matthew French

German Aid: GIZ (formerly GTZ)

GIZ has been active in urban development projects starting with support of the Kalingalinga Integrated Upgrading Project (1979-1986) which developed as a direct outgrowth of the World Bank-supported Lusaka Upgrading Scheme. GIZ support focused on the provision of community facilities, installation of basic utility infrastructure (water stand pipes, access roads etc), provision of house improvement loans through a community-based revolving funds, promotion of economic activities and income generation, experimentation with low cost housing construction materials and techniques, and alternative sanitation methods. GIZ now focus on support for decentralised planning in medium-sized urban centres, such as Mazabuka and Kalomo.

The Swedish Co-operative Centre (SCC)

This is an International NGO working in four countries in Southern Africa with its regional office in Lusaka. SCC's broad development includes housing and habitat as one of its three areas of priority. Working with other co-operating partners, SCC seeks to promote adequate housing among marginalised groups.[51] The approach is to work through partners with a bias towards member based or member managed organisations such as housing co-operatives.

SCC's interventions in housing in Zambia started in 2006 with some exploratory work on the housing situation including establishing who the key players are in the sector. The Civic Forum on Housing and Habitat (CFHH) was set up as a result, starting in earnest in 2009.

African Housing Fund

Under the auspices of UN-Habitat and Shelter Afrique, the African Housing Fund supplements government and other international development funding for improvements in housing, water, sanitation and energy supplies, and housing microfinance. It gives building loans in the form of materials for construction or improvement of dwellings.[52] A number of demonstration low cost houses were built and sold in Linda (Lusaka), Kasama and other provincial towns in Zambia. The cost of dwellings and the stringent requirements to access the housing loans limited the number of low income earners who benefited from the AHF and there were calls to review and streamline it in line with the Housing Policy requirements.

Sustainable Lusaka Programme (SLP)

The SLP was implemented as part of the UN-Habitat Sustainable Cities Programme (SCP) (1996-2000) to strengthen and improve planning and management capacities in municipal authorities and their partners in the public, private and community sectors. One of the major components was dedicated to capacity building with the goal of building system-wide capacity by working with a wide range of participants. This programme was a catalyst to many follow-up urban projects and new urban initiatives such as the Sustainable Kitwe Project, the Lusaka Waste Management Project supported by DANIDA, Land Tenure Initiative by SIDA and a number of Studies and Legislative Reforms.

3.6 A BRIEF HISTORY OF HOUSING POLICY IN ZAMBIA

A brief history of the provision of housing under the then current policies is given in the next chapter. At this stage, it is enough to summarise the main directions of policy. In the colonial era, urban development only took place to service industries and mining so employer housing was the norm. Continuing into the early Independence era, slow growth in urban areas and relatively large urban housing budgets allowed local authorities to be a main supplier of housing alongside employers.

The rapid increase in urban population in the 1960s and 1970s led to large numbers of squatters and economic straitening reduced councils' ability to provide completed housing. The former led to an innovative squatter upgrading project in Lusaka which, at the time, was one of the largest in the world. The need for economies in housing provision led to self-help programmes in site and service schemes, again as one of the pioneers in the world. Following the collapse in the economy during the 1980s, little housing provision occurred except in the informal sector and the small (in number) but extensive (in land-take) formal high- and medium-cost sectors. Indeed, investment in housing dropped from 30 per cent of GDP in 1969 to 0.5 per cent in 1992.[53]

The cuts in public-sector employment in the 1980s and privatisation (and subsequent asset stripping) of state-owned enterprise in the 1990s stripped the economy of many formal sector jobs. The sale of institutional and employer housing in the 1990s recognised their inability to continue to maintain a highly subsidised stock. It led to even more rapid increase of informal areas as now unemployed owners realised they could rent out or sell on their dwellings and move into informal housing. Former major suppliers, such as the National Housing Authority now only work in the medium- and high-cost sectors in partnership with other investors. More detail on the history of housing supply can be found in the following chapter.

Table 12. Post-Independence National Development Plans, approaches and objectives related to housing

National Development Plan	Period	Main Approach	Main objective(s)
Transitional NDP	1965 to 1966	Modernisation and urban growth	Physical planning and production of shelter by public agencies through central planning
First NDP (FNDP or FiNDP)	1966 to 1972	Redistribution with growth	Promoting self-help efforts on a project by project basis using state support
Second NDP (SNDP)	1972 to 1976	Basic needs	Recognition of the informal sector, promotion of squatter upgrading, site and service schemes and state subsidies to land and housing
Third and Fourth NDPs (TNDP and FoNDP)	1979 to 1983 and 1989 to 1993	Shift from socialist to capitalist approaches	Attaining minimum shelter standards The Fourth Plan was abandoned in 1991
Poverty Reduction Strategy Papers (PRSP) and Transitional National Development Plan (TNDP)	2002-2005	Transition period from one state command economy to liberalised free market economy	Rapid expansion of mining and construction sector; privatisation recapitalisation of mines & buoyant world commodity markets. Rapid growth in construction sector as a result of private construction activities, especially in residential housing in the main urban centres
Fifth National Development Plan	(2006-2010)	Broad based wealth- and job-creation through citizen- participation and technological advancement	To ensure that 1.5 million people are adequately housed by 2011 and to provide adequate affordable housing for all income groups in Zambia.
Sixth National Development Plan	(2011-2015)	Sustained economic growth and poverty reduction	GRZ plans to "create an enabling environment to provide affordable, quality and adequate housing to the majority of Zambians" through fostering Public-Private Partnerships (PPPs) for housing development and construction of ancillary facilities. One strategy of the Plan is to "construct 150,000 Housing units every year (100,000 low cost, 40,000 medium cost and 10,000 high cost houses) in ten districts".[54]
Vision 2030	(2006- – 2030)	Creating a prosperous Middle- Income country by the year 2030.	The Vision aims at achieving 75 per cent of people in planned resettlement with adequate, affordable and good quality housing neighbourhoods by 2030…" and increasing the number of people with access to planned urban and rural settlement to 50 per cent of the population by 2015 and 75 per cent by 2030. It further aims to "develop; an appropriate, affordable and accessible mortgage system by 2015 and put in place efficient; and transparent procedures for securing title deeds by 2015".[55]

Source: Mwango,[56] Vision 2030[57] and stakeholder interviews

3.7 CONCLUSION

There are many actors in the urban housing process but many of them are ineffectual in supplying housing which the majority can afford. The NGOs are providing new approaches and pro-poor options that deserve encouragement but may not be able to scale-up sufficiently to make major inroads into the housing supply for ordinary Zambians. The major provider, since institutional provision stopped in the early 1970s has been, and continues to be, the multiplicity of individuals in relationships with small contractors who build informal settlements. Unless government can act decisively on improving their enabling approach, the informal sector will continue to develop urban Zambia in an uncontrolled way.

ENDNOTES

1. Republic of Zambia (1996: 31).
2. UN-Habitat (2005).
3. UN-Habitat (2005). Indeed, all material changes of land use must pass through the ministry.
4. Muchima (2004: 113).
5. Which includes the MPs, two representatives appointed by the chiefs, and the elected councillors. This includes the recently formed Mafinga District in Northern Province. It should also be noted that the new government has proposed a tenth Province for Zambia and has created two new Districts which will have implications on future housing supply and developments in the new areas.
6. UN-Habitat (2005).
7. UN-Habitat (2005).
8. Many potential sources of income have been completely or partially taken way from Councils leaving them with a very thin revenue base
9. Interviews with senior officers at LCC.
10. UN-Habitat (2007). Indeed, the MMD government even prohibited councils from evicting defaulter tenants or house purchasers (UN-Habitat, 2005). The Town Clerk of Lusaka denied that revenue collection is poor in 2010/11, citing greater efforts and willingness to send out the bailiffs.
11. UN-Habitat (2009c).
12. World Bank (2002).
13. World Bank (2002).
14. UN-Habitat (2009a).
15. UN-Habitat (2005).
16. UN-Habitat (2007).
17. World Bank (2002).
18. OHCHR (not dated).
19. Which should be called a 'Structure Plan' until the URP Bill is passed into law.
20. UN-Habitat (2009a).
21. UN-Habitat (2007).
22. UN-Habitat (2009a).
23. UN-Habitat (2007).
24. UN-Habitat (2009a)
25. Mutale (2004) citing the Times of Zambia, 28th February, 1998.
26. UN-Habitat (2009b).
27. UN-Habitat (2009c).
28. UN-Habitat (2009c).
29. Created under Cabinet Circular No.1 of 1995.
30. Interview with Mr Mwango and Mr Mushimfwa, Copperbelt University, November, 2011.
31. Indeed, the declaration of Ipusukilo as an Improvement Area (see chapter 4) was partly influenced by research done at CBU.
32. http://www.postzambia.com/post-read_article.php?articleId=22479, accessed 12th December, 2011
33. Post Newspaper, December 2011
34. Martin (1983).
35. UN-Habitat (2009a).
36. UN-Habitat (2007).
37. UN-Habitat (2007).
38. UN-Habitat (2009c). The CDF is allocated by government to Parliamentarians at a current rate of USD120,000 per constituency with proposals to increase it to USD1million. The Ward Development Fund is allocated to Councillors by the Council as part of the implementation of the District Development Plan. Both funds have been subjected to abuse, misappropriation, misapplication and corruption and hence never fully benefited the residents.
39. UN-Habitat (2009a).
40. UN-Habitat (2009c).
41. UN-Habitat (2009b).
42. UN-Habitat (2009b).
43. UN-Habitat (2009b).
44. Personal communication, Barbra Kohlo.
45. OHCHR (not dated).
46. UN-Habitat (2005).
47. UN-Habitat (2005).
48. OHCHR (not dated).
49. 49 Personal communication, Grace Mtonga.
50. Nippon Koei Co. and Global Link Management Inc. (2001).
51. Personal communication, Grace Mtonga, Civic Forum on Housing and Habitat.
52. UN-Habitat (2005).
53. Mushota (2000 cited in Mwango, 2006). (Mwango, 2006)
54. Republic of Zambia (2011).
55. Republic of Zambia (2006: 18).
56. Mwango (2006: table 4.1).
57. Republic of Zambia (2006).

04

HOUSING SUPPLY

4.1 INTRODUCTION

Housing supply in Zambia is dominated by single-storey detached (and occasionally semi-detached) dwellings on relatively spacious plots. There are very few apartments (multi-storey blocks containing several single-storey dwellings) but small (usually two-roomed) terraced dwellings are called 'flats'[1] in Zambia. When Zambians talk about their housing choices, almost the only type mentioned is the detached dwelling on a large plot; in talk of rights to housing, it is to such housing that they aver. One of the most important issues faced in this profile is the sustainability of this dominant house form in the face of rapidly increasing need for new housing in urban areas.

4.2 HISTORICAL SUPPLIERS OF HOUSING

In any assessment of housing supply in urban Zambia, it is important to understand how housing has been supplied in the past. At the turn of the twentieth century, there were no settlements in Zambia larger than large villages. Urban areas developed in response to colonial industrialisation, chiefly for extractive industries, for lead mining at Broken Hill (Kabwe) and the Copperbelt, and the capital city functions, first in Livingstone and then in Lusaka, mainly in the years after the First World War.

In the mining towns, the mines established townships on land which they owned and controlled. They had their own regulatory frameworks and services. When the need for non-mining functions and housing arose, development outside the mining area led to the establishment of municipal councils which developed to their own standards. Thus, for example, alongside Nkana mining town, the City of Kitwe grew. The two were conjoined but largely separate in funding, service lines, regulations and priorities. In the Copperbelt, only Ndola did not have a twin mining town.

Europeans were provided with housing in low-density suburbs, where plot sizes were typically 1,600 to 2,400 square metres,[2] and each plot was fully serviced with water supply and water-borne sanitation, electricity, road access and a drive-over culvert into the plot (figures 18 and 19). By contrast, housing for Africans was typically in small dwellings on land which was either un-demarcated into plots[3] (figure 20) or sub-divided into plots of 250 square metres or so (figure 21). Before 1940, two-roomed dwellings of 20 square metres, with communal water supply, showers and toilets were the norm but, after the war, three-roomed dwellings (25 to 55 square metres) with internal services were standard.[4]

After Independence, the differences continued to be stark between low-density, high-cost areas and high-density, low-cost areas.[5] Residential densities in Lusaka demonstrate this great difference; they range from five to 14,000 persons per hectare.[6] As the commercial activities tended to be run by South Asian business-people, small Asian residential enclaves were also demarcated. These became medium-density areas after Independence.

As formal urban housing supply fell behind the need for shelter, households began to occupy land without official authorisation and squatter settlements appeared, first mainly on former contractors compounds (e.g., John Laing) and neglected farms (e.g., Chaisa in Emmasdale-a farm belonging to a woman called Emma) within the town boundaries; but later after independence on any public (and even private) vacant land people could find suitable This formal-informal split has persisted and

Figure 18. Mine high cost housing, Nkana West, Kitwe. Photo © UN-Habitat

Figure 19. Aerial view of mine high cost housing, Nkana West, Kitwe. Photo © Google Earth

Figure 20. Aerial view of mine low cost housing, Wusakile, Nkana/Kitwe. Photo © Google Earth

grown in importance since Independence as the informal sector became the dominant development agency and political parties became involved in the development of informal settlements, giving the occupants at least the perception of security.

The mining companies

Right from the beginning of urban development, the Employment of Natives Ordinance (1929) and, later, the Urban African Housing Ordinance, state that anyone employing more than 30 workers must provide housing for their African workers and their wives, directly or indirectly, or pay housing allowance.

The mining companies built extensive estates of low-density, high standard housing for their expatriate skilled workforce, close to the mines and, therefore, often on prime land which is now close to city centres. In 1996, the mining companies owned 40 per cent of all housing in Kitwe but 51 per cent of the high-cost housing.[7] By 1991, there were about 48,000 mine-owned dwellings on the Copperbelt.[8]

At the other end of the pay scale, unskilled labour working on a temporary basis was housed in small, poorly serviced dwellings, provided as ‘single quarters’. In response to major strikes and their subsequent

THE CHANGE FROM EMPLOYERS PROVIDING MOST HOUSING REQUIRED A MAJOR SHIFT IN POLICY AND THE LOCUS OF GOVERNMENT INTERVENTIONS BUT THESE DID NOT TAKE PLACE

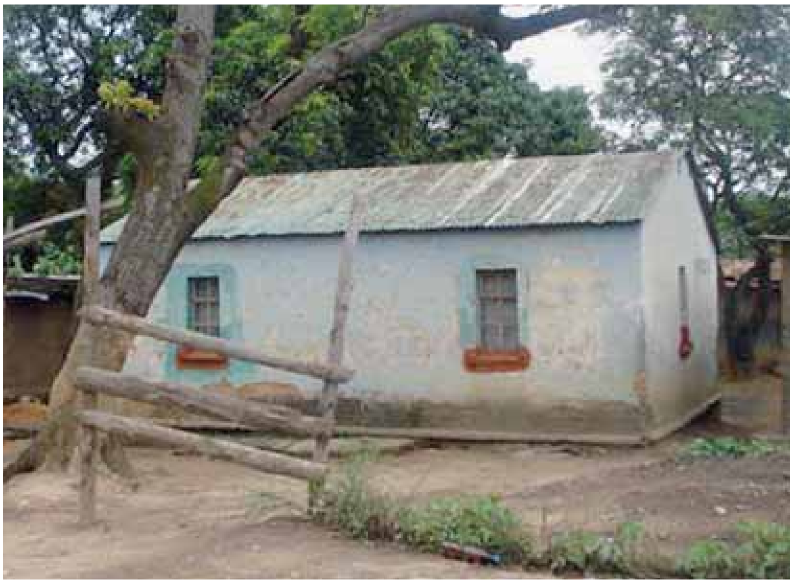


Figure 21. Post-war public housing, Buchi, Kitwe. Photo © UN-Habitat

Figure 22. Mine middle quality housing, 1950s, Chamboli, Nkana/Kitwe. Photo © UN-Habitat

Figure 23. Mine better quality housing after Independence, Chachacha, Nkana/Kitwe Other employers. **Photo** © UN-Habitat

enquiries,[9] the mines started building housing suited to nuclear families and of higher standards, 36 to 55 square metres in area,[10] with three rooms, full servicing and demarcated plots (figures 22 and 23). Mine housing tends to be both worse at the lower end and better at the upper end than council housing.

Government departments, the police, the armed forces, and many private companies built staff compounds, often providing only 'single quarters' with minimal services[11] The railway company built large residential estates for their expatriate staff. Kabwe and Livingstone, which were railway headquarters, still have large low density areas meant for railway employees Other employers rented blocks of council housing as their workers' housing. Civil servants and council officers paid 12.5 per cent of their monthly pay as rent for housing tied to their jobs, deducted at source. Those not housed were given a housing allowance of 30 per cent of their salary.[12]

Building contractors tended to start their jobs by allowing their workers time and materials to build simple shelters close to the construction site. Many of these became the core around which squatter settlements grew (see below).

Private organisations were much more important in Lusaka while parastatals (chiefly the mining companies) were more important in the Copperbelt (table 13.). On the other hand, local authority housing was a much smaller proportion of the stock in Lusaka than it was in the Copperbelt.

There were two initiatives to help civil servants who had not benefited from the sale of institutional housing. The Presidential Housing Initiative (PHI) was presented as a way for all Zambians to buy affordable housing but, as usual when such rhetoric is used, the few resulting dwellings were very expensive. In addition, ZMK3 billion (about USD2.5 million) was lent through ZNBS to civil servants who had not benefited from the sell-off for their better housing.

Councils

Through colonial times and into the 1970s, local councils built housing for low-income workers not directly housed by their employers, or for employers to rent on to their employees, or for the councils' own workers. After 1945, two- and three-room dwellings were built in 'townships' on council-owned land and let at subsidised rents (figures 21, 24, 25, 26, 27 and 28).

Figure 24. Early council housing, Libuyu, Livingstone. **Photo** © UN-Habitat/Matthew French

Table 13. Dwellings provided by employers, Lusaka and Copperbelt Provinces, up to 2000

Province	Total	Dwelling provider (per cent)			
		Central government	District council	Parastatal	Private organisation
Copperbelt	38,295	3.7	19.0	40.4	36.8
Lusaka	50,928	2.2	9.1	31.2	57.6

Source. 2000 Census.[13]

Figure 25. Aerial view of council housing in Kwacha, Kitwe. **Photo** © UN-Habitat

Figure 27. Council housing in Matero, Lusaka. **Photo** © UN-Habitat

Figure 26. Council housing in Kwacha, Kitwe. **Photo** © UN-Habitat

Figure 28. Note the low density of 1950s council housing. This is in Buchi, Kitwe. **Photo** © UN-Habitat

The City of Kitwe standardised densities to 24-37 dwellings per hectare for low-cost, 10-24 for medium cost and less than ten for high-cost. Except for Buchi and Chimwemwe, all existing council and private low-cost housing conforms to these densities.[14]

Mutale[15] shows that, in 1970, at the peak of annual council provision, the council housing stock in Lusaka and Kitwe were both around 13,500 dwellings. But, this was too little, too late as much of the shortfall from demand had been taken up by squatting; informal housing constituted almost half of the stock in Lusaka though rather less in Kitwe because of the large mine and council stocks. There were 46 squatter settlements in Kitwe[16] and housing for 34,000 households in Lusaka,[17] and the waiting lists for council housing were very long. In Ndola, stock and waiting list were both around 15,000 (table 14.).

Council-built housing was intended to be let at subsidised rates to formal-sector workers for as long as they required them and could pay the rent. A survey in Kitwe in 1972[20] found that council tenants had income 64 per cent higher than squatters and they were paying about 13 per cent of their income on rent. Mines housing was even more elitist with mean household income 61 per cent higher than council tenants in 1972.[21] Furthermore, larger dwellings were allocated to workers with higher incomes rather than larger households.

As council housing tenancies would pass to children on the death of the tenant, there were few opportunities for new households to obtain a council house. Another effect of the subsidised rents was the reluctance of many urban residents to enter home-ownership. Most residents could work out that their subsidised rent was

Table 14. Council housing stock, waiting list and informal housing in the three largest cities in the early 1970s

	Lusaka	Kitwe	Ndola
Council Housing Stock	13,532	13,726	15,113
Waiting List	21,454	21,479	15,078
Percentage informal housing	46	14*	No data

Source: Mutale[18]. Note * Informal sector population as a percentage of total population.[19]

too good to relinquish for the attractions of home-ownership.[22]

Over the years, Councils ran up huge deficits on their housing budgets despite reduced levels of new-build and the subsidy received from the liquor undertaking. According to Mutale,[23] Kitwe City Council's housing account was in deficit by about ZMK750 million (USD1.1 million) in March 1995.

In Lusaka, before 1945, most Africans lived in servants' quarters at the rear of the plots of their European employers.[24] In schemes such as Mapoloto, in Chilenje, however, Africans had been allowed to lease land and build on it since the 1930s.The council built some early African townships at Kabwata (1935) and Kamwala (1936) followed by Old Chilenje (1945) and Chinika (1947, demolished in the1970s). All had rondavels for the dwellings (figure 29). Post-1945 council estates were developed with small, semi-detached 'married quarters', the largest of which is Matero, but the Lusaka city authorities fell very far behind the need for housing for low-income workers.

The "African Towns"

Councils also assisted low-income households to construct their own housing through the African Towns. These were developed outside the cities soon after 1945 as part of the stabilisation of the workforce desired by the mining companies to keep workers who had acquired skills. Towns were set up where Africans could lease land from the council and build their own dwellings to relaxed building standards[25] (see table 15.).

Figure 29. Old Kabwata dwellings restored to original condition. **Photo** © UN-Habitat

Site and service housing

As directly building enough housing for all low-income households became impossible, councils started providing serviced plots for those who would build by self-help. These "site and service schemes" became a familiar part of housing in developing countries in the 1970s but Zambia was an early starter with the 1967 scheme at Bulangililo (meaning 'showpiece') in Kitwe. The council offered fast-track planning permissions, a detailed building plan, help with marking out and casting slabs, and subsidised building materials. The qualification criteria; the 380 square metres, fully serviced plots costing ZMK400 (about USD300); and the prospect of owning a dwelling all attracted middle-income households. The same issues arose in developing Kaunda Square in Lusaka; a scheme initially for low-income workers moved up-market as the council insisted on high qualification criteria and standards of development. At the height of enthusiasm for sites and services, 63,410 dwellings were provided nationally (1966-1970), four times as many as the directly built council housing in the same period.[27]

In the FNDP (1966-72) there was a policy to resettle squatters but it was recognized that site and service schemes were too expensive for them. In order to reduce both plot and building costs, basic site and service schemes were developed, in which services were of a lower and construction could be in Kimberley (sun-dried mud) bricks[28] instead of concrete blocks.

Integrated housing (1968)

Under FNDP, housing was to be integrated so that different income groups shared the same neighbourhoods. There were many practical problems over the implementation of this idea and it did not outlast the FNDP years. A few estates were built, such as Chakunkula in Lusaka and Eileen Brittel in Livingstone (figures 31 and 32). The proportions of dwellings tended to be about 65 per cent low-cost and 32 per cent medium cost. Some of the estates had to be

Table 15. African Towns and similar schemes implemented before Independence

Location	No. of plots
Chibuluma, Kitwe	1,062
Fisenge, Luanshya	220
Kansuswa, Mufulira	403
Kasompe, Chingola	447
Twapia, Ndola	2,114
Lusaka:	
Mapoloto	24
Chibolya	337
New Kanyama	720
Malota, Livingstone	463
Mukobeko, Kabwe	250
Total plots	6,040

Source, NHA.[26]

abandoned unfinished as Zambians proved resistant to the idea.

National Housing Authority

During the 1970s, the NHA was given predominance in housing supply over councils. There was an early surge of National Housing Authority direct housing development under the Second National Development Plan SNDP when around 5,000 dwellings were built by NHA, almost wholly in Lusaka. At the same time, its production of site and service plots was very significant, 240,000 being developed by the mid-1980s, again, mainly in Lusaka. Later, however, its annual production levels fell steadily to only a few hundred units per decade and it now only develops high-cost housing for sale.

Informal development by individual households

Urban Zambia has large numbers of unplanned settlements which are now home to about 60-70 per cent of the total urban population. Most of the urban growth is absorbed into them as formal housing supply languishes. Unplanned settlements are characterised by very low-cost dwellings, poor services and inadequate waste management.

There were informal settlements in or around all the major cities by the time of Independence but they were relatively small. In response to the shortage of cheap housing in Lusaka, some white landlords let out small plots of land for low-income workers to build on. Other low-income workers settled on private (white) land or Crown land without permission.

The political uncertainty over the independence period encouraged people to settle in them and, after Independence, the strong UNIP presence gave the settlements a perceived legitimacy.[29] UNIP leaders were known to 'sell' plots in newly developing settlements to prospective settlers.[30]

Contractors' compounds have formed the core of many later informal settlements and still bear the name of

Figure 30. Aerial photograph of Chibuluma. Photo © Google Earth

Figure 31. Low cost house type in Eileen Brittel Integrated Housing, Livingstone. Photo © UN-Habitat

Figure 32. High cost house type in Eileen Brittel Integrated Housing, Livingstone. **Photo** © UN-Habitat

Figure 33. NHA bedsitters. **Photo** © UN-Habitat

the contractor, e.g., Roberts and MacKenzie in Kitwe. Other work-based squatter settlements grew up close to industrial installations, e.g., George and John Laing in Lusaka, or ZamTan in Kitwe.

By 1964, 21 per cent of Lusaka's population lived in unauthorised settlements[31] and they were growing fast; Schlyter reports a population growth from 20,000 in 1963 to 64,800 in 1966.[32] By the mid-1970s, informal housing constituted 46 per cent in Lusaka, 42 per cent in Kabwe, and 32 per cent on the Copperbelt.[33] Thirty per cent of all urban housing was provided by squatters by 1974. The number and visibility of squatters increased markedly after Independence and, during this period, settlements grew up all round cities.

Upgrading and basic service provision for the poor

The Second NDP (1972 – 1976) accepted that squatter settlements represented financial and social assets which should not be lightly over-thrown. It provided for a limited number of squatter settlements to be upgraded but only ZMK5 million (USD3.6 million) was allocated against ZMK35 million (USD25 million) for site and service schemes[34] and ZMK106 million (USD76 million) for housing overall. The performance was even less impressive as, according to Mulenga,[35] poor organisation, low personnel, financial and legal capacity, and reluctance of officials to accept the value of self-help, all mitigated against successful upgrading exercises. The Housing (Statutory and Improvement Areas) Act, 1974 (HSIA) provided means by which squatters could be given occupancy licences, providing them with 30 years' security and, thereby, enabling occupiers to invest more in their dwellings. At that time, squatters in Kitwe were spending about one month's income (a mean of ZMK50 – USD100) on building their dwellings. At the same time, squatters in Mwaziona (George) in Lusaka were spending about ZMK120 (USD240).[36]

Figure 34. Nyumba Yanga NHA housing. **Photo** © UN-Habitat

Figure 35. Chilenji South NHA housing built under the Second NDP. **Photo** © UN-Habitat

Unfortunately, even the innovative Housing (Statutory and Improvement Areas) Act could not convince local authority staff. They were much quicker to declare site and service schemes to be Statutory Areas than they were to declare squatter settlements Improvement Areas.

Zambia embarked on an ambitious upgrading programme in the World Bank Lusaka Project which provided secure tenure, roads, water supply, improved saniation and storm-water drainage to many large squatter settlements in the capital and relocated any whose housing had to be demolished to fit in the services required. The project covered the largest settlements in Lusaka; Chawama, George,Kalingalinga and Chipata; benefiting about 40 per cent of Lusaka's population. Services were taken to 17,000 households in squatter settlements, 7,600 overspill plots were serviced and 4,400 site and service plots provided.[37]

The process of upgrading in Lusaka involved settlements being divided into squares containing 25 households (a UNIP political section) and each of these being supplied with running water at a central standpipe. Around six squares and bordering another ten squares, a loop road would be routed (figure 39) through a participatory process involving residents going on a walk through the areas to decide the best route. Those whose dwellings needed to be demolished would be compensated with a plot of land nearby. This servicing with road access and water supply to blocks of 25 households became known as 'basic servicing'. It was intended to be rolled out across urban Zambia as the solution to upgrading the large number of squatter settlements.

In Kitwe, just south of Chibuluma, an area for resettlement of charcoal burners from the forest reserve was laid out and serviced as basic servicing. Named 'Chibote' (peace) by the settlers, it was quickly and cheaply developed; water standpoints and gravel roads (including a bridge) were provided for the 1,230 dwellings that were built by the squatters at a servicing cost of ZMK130,000 (USD93,000); equating to ZMK106 (USD76) per dwelling.[38] In the same period, in Kitwe, 60,000 squatters were serviced with water supply, at least to one standpipe in the settlement, while 22,000 were in settlements upgraded to basic services standards.[39]

In this period, Zambia was a world leader in authorising and upgrading squatter settlements, at least in Lusaka, and documenting the process to promote its use elsewhere. Unfortunately, it did not spread elsewhere and was not to last. Those households who benefited from the Lusaka Project showed a great reluctance to pay for the services or for monthly ground rent on plots so that the improved services could not be maintained in the long run or replicated elsewhere.[41]

In 1976, rather than rolling-out the Lusaka Project to the other cities, the NHA advised councils to rationalise

Figure 36. Chaisa informal settlement, Lusaka.
Photo © UN-Habitat

Figure 37. Soil-cement block house in Kamatipa informal settlement, Kitwe. **Photo** © UN-Habitat

Figure 38. Density is quite low in many informal settlements. **Photo** © UN-Habitat

squatters into a few large settlements suitable for upgrading to basic servicing levels.[42] Unfortunately, squatters did not trust councillors to deliver and councils did not trust squatters to move to a relocation area without also renting out their previous home and making it just as difficult as before to clear the unwanted settlements.

The Third National Development Plan, 1979-1983 (TNDP) was even more favourable to squatters in the rhetoric but implementation was poor. ZMK10 million (USD7 million) – one tenth of the housing budget — was set aside for upgrading squatter settlements to basic servicing standards in recognition that anyone earning less than ZMK100 (USD71) per month could not afford formal serviced housing. Only 13,000 dwellings were serviced against the 110,900 planned for.

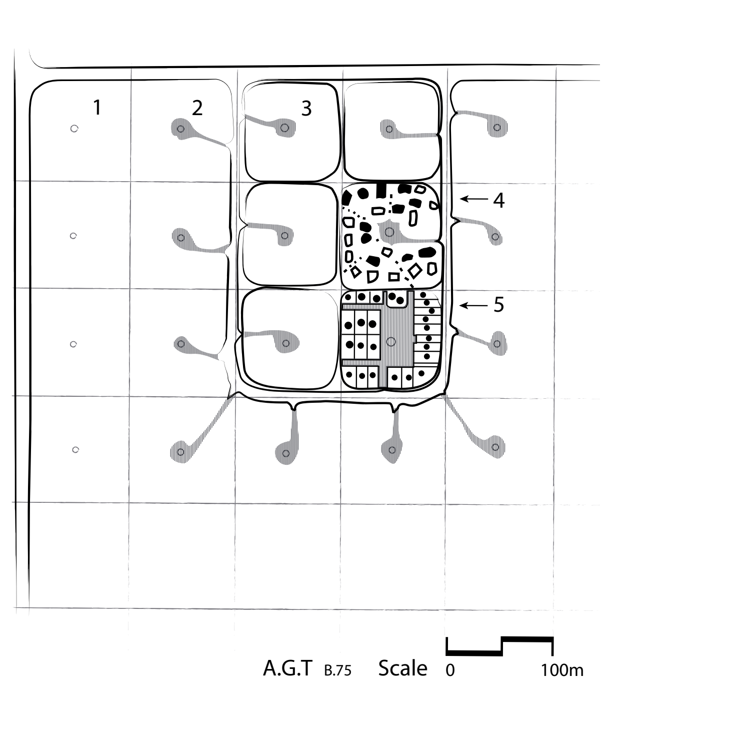
Following this, in the 1980s, policy favoured demolition and relocation; any 'upgrading' was actually converting the land to fully serviced SNDP plots (12m x 27m). Plans for the largest settlements in Kitwe made in 1981 clearly show the intent to turn them into basic site and service schemes with relatively few plots compared with the number of dwellings extant. The message behind the plans is clearly that squatter settlements will be replaced by site and service schemes even though everyone knew that the current squatters could not afford to take part.[43]

In the multi-party political period beginning in 1991, squatters were once again assisted by party officials. There were several successful resistance efforts against evictions in 1997 with MMD involvement; for example MMD party officials made 100 land allocations in Kalikiliki, Lusaka, at a costs ranging from ZMK2,000 to ZMK90,000 (USD1430 to USD64,300) per plot in 1994.[44]

4.3 THE CONTEMPORARY HOUSING SUPPLY: THE DOMINANCE OF INFORMAL LOW-INCOME HOUSING

Vision 2030 recognises that Zambia faces a major housing challenge; its housing delivery system cannot keep pace with rapid urban population growth. It recognises that a lack of adequate finance, poor land delivery systems, and poverty are central to the problem. It also points out the failure of Zambia's practice of the enabling approach and the consequent lack of private sector participation in low-cost housing supply.[45]

Figure 39. Basic servicing as planned for Chibote, near Chibuluma. Photo © UN-Habitat



Source: Tipple.[40]

The colonial European/African divide has continued into the independence period with only a few changes. The integrated housing discussed above was not a success and was soon abandoned after affecting only a few areas developed. Instead, housing areas tend to follow the former division (with a small medium-cost sector joining the high-cost sector) but divided on income rather than racial lines.

According to the LCMS V, however, the low cost housing sector accommodates 81 per cent of all

Table 16. Distribution of Households, 2006

Residence		Number of household	Percentage Share
All Zambia		2,283,211	**100.0**
Urban		799,694	35.0
Of which:	*Low cost*	*648,994*	*81.1*
	Medium cost	*86,092*	*10.8*
	High cost	*64,598*	*8.1*

Source: LCMS V[46]

households. Moreover, it seems to be growing as it was only 72 per cent of the 2002 households (table 16.). Currently, about 70 per cent of Lusaka's population live in squatter settlements.[47]

In 2002, there were 18 squatter settlements in Kitwe housing a total of 136,000 people. The largest six settlements accommodated 82 per cent of the squatters in Kitwe. Average densities are 28.6 dwellings and 211 persons per hectare. Many workers who lost employment through retrenchment have moved to informal settlements, a situation that has worsened the problem of unplanned settlements. The council has a policy of regularising and upgrading the recognised settlements, subject to availability of funds. The other informal settlements are regarded as illegal and can be demolished at any time; their residents have no security of tenure.Despite this, there has been no large-scale urban upgrading programme outside Lusaka for a long time but the need remains and continues to be urgent.

According to the World Bank,[48] informal settlements grow at 12 per cent per annum in Lusaka. When asked about improvements, 65 per cent of households preferred upgrading and only 30 per cent preferred relocation but only on condition that they were provided with a fully serviced plot with a dwelling already built.

The plan for regularising settlements by declaring them Improvement Areas is in the hands of the Ministry of Local Government, Housing, Early Education and Environment Protection. Progress has been hampered by financial and human resource issues at both national and local levels but also by inappropriate standards being imposed.[49]

The city of Livingstone has relatively few squatter settlements, compared to other cities in the country. Livingstone City Council currently recognises five settlements as Improvement Areas: Mwandi, Nakatindi, Zambezi Sawmills, Malota, and Libuyu.

The process of informal sector housing supply[50]

From fieldwork in 2005/06, Mwango describes the process of building informal housing in Kamatipa, a settlement in the north east of Kitwe. It is remarkably similar to the process in Malawi[51] and Ghana.[52] After securing some land through the local political leader, the prospective owner approaches a builder with an idea for a house, perhaps one they have seen built by someone else in the locality or from neighbouring formal housing areas; they may even have sketched it out. Sometimes they just explain to the builder what their requirements are. Informal sector builders do not usually draw up plans or submit them to the council for approval because:

- They know that the council will not accept the materials they use.

THE MAIN PROVIDERS OF URBAN HOUSING, THE MULTIPLICITY OF HOUSEHOLDS AND THEIR INFORMAL SECTOR BUILDERS, CONTINUE TO WORK WITHOUT GOVERNMENT ASSISTANCE.

- It involves paying a scrutiny fee before they can approve or reject it.
- It takes a long time.

The design is rule-of-thumb governed by the safe span of poles, the size of roofing sheets and the furniture to fit into the rooms.[53] It is common to start construction with two rooms; a bedroom and a sitting room, which is also used for sleeping in. Cost is often the major consideration in planning room sizes; the smaller the rooms and openings, the cheaper it is to build. Builders will prompt clients about matters such as how many roofing sheets they will use or how high the walls should be because all these affect the cost.

The builders start by clearing the site of any grass or shrubs. They then measure out the plan on the ground accordingly and build. Then they dig shallow trenches, about the height of a block in depth, and lay one course of blocks for the foundations. Usually, particularly hard blocks or bricks are used for this. The walls are built of clay blocks or burnt bricks; the builders lay four to five courses at a time and leave them to dry before adding the next four to five courses until they have laid 13 to 14 courses in the rear and 16 courses in the front to create a slope for the mono-pitch roof.

While the walls are drying out, the builders pour the flooring of clay and water mixture inside and compact it to form a hard flat finish. It should be at least one block course above the surrounding ground to avoid water flowing in. If a client can afford a little cement, they add a 75mm layer of concrete screed to the floor. This is often added later after the owner saves up for the cement. When the walls dry out, the builders assemble the roof using three gum-poles per room, tying them down to the wall in front, the middle and the rear. They then fix the roofing material to the timber. This is relatively easy if a client managed to buy iron sheets because the accurate overlaps prevent leakage.

Finally, the builders plaster the walls with clay or cement and then add a thick mud apron around the house to protect the mud walls from splash-back in heavy rains. If the blocks at the bottom erode, the house is likely to collapse with time.

Table 17. Charges for building a two-room structure in Chaisa

	Kwacha	USD
Labour	14-15 million	2,800 – 3,000
Materials	28-30 million	5,600 – 6,000
Total	42-45 million	8,400 – 9,000

Specifications: Two 3m x 4m rooms in cement blocks, plastered walls, cement screed flooring, asbestos-cement sheet roof, no ceiling, metal window and door frames.

Source: Interview.[54]

Mwango found that builders charge according to the number of rooms they build. For a standard two roomed house, they charged about ZMK50,000 (USD14); about ZMK25,000 (USD7) per room, for labour only. Time taken to build such housing depends on the skills of the artisans. A four roomed houses can be finished in about two weeks while two rooms only takes four to five days. A builder could complete three two-roomed houses per month. Speed is constrained because building in earthen materials requires some drying time between groups of courses or the wall would bend under its own weight. The roof also adds weight, so it could damage the walls if the builders added it too soon.

In an interview with an informal builder in Chaisa, Lusaka, the profile found costs of ZMK42-45 million (USD8,400-9,000) in 2011 (table 17.).

There is a market in used housing in the informal sector. Many retirees are buying dwellings in the informal settlements as they find formal housing too expensive to retain. They may buy to demolish and rebuild or just live in the current dwelling.[55]

Of Mwango's sample in Kamatipa, about half had bought their houses but had subsequently demolished and rebuilt to their own requirements. Interestingly, residents often recycle the clay used to make building blocks by breaking them down, re-casting and re-firing them in informal kilns.

A typical four-roomed house built with burnt clay blocks, a galvanised roof, cement-sand plaster and screed floors cost an average of ZMK600,000 (USD134) to build in Kamatipa in 2005/06. The most expensive unit covered by the survey was built by a bricklayer, a second generation settler, at a cost of ZMK8 million (USD1,778) using conventional building materials.

Of Mwango's sample of the households in Kamatipa, 35 per cent had carried out repairs to their houses at least once a year; these tended to be mainly cosmetic repairs to replace the mud plaster washed off exterior walls during the rainy season. They were generally done by the occupants themselves using locally available clay at no direct cost to the household. Half of the households had extended their houses, mostly to provide more space for the growing family and for sub-letting.

Several households are now using local earth-based materials to build large houses in informal neighbourhoods as it allows them to reduce the cost of construction whilst building durable houses. There is evidence of considerable consolidation to housing over time and as average income increases.[56] Changes recorded in Kamatipa include types of wall and floor finishes, doors and windows used, better and more permanent pit latrines and wells.

The dwellings in mud-brick and pole and dagga[57] last up to ten years without needing any structural repair and then repairs are needed once in a while to keep the structure sound. Residents themselves re-plaster them after each rainy season.[58] Extensions are common and motivated by extra children, maturing children needing more privacy, or to sublet rooms for income.[59]

The sale of institutional housing

On the eve of the great institutional sale of housing under the MMD government (see above), the public sector housing stock numbered approximately 180,000

Table 18. Institutional housing in major cities and towns of Zambia in 1995, before the sale of stock

Type of Dwelling	Local Authority owned	Central government owned	Parastatal owned	Total
Low cost	95,955	17,055	39,390	152,400
Medium cost	1,611	4,724	6,145	12,480
High cost	1,261	4,864	6,864	12,989
Total	98,827	26,643	52,399	177,869

Source: National Housing Authority, 1995.[60]

dwellings across urban Zambia. Just over half were owned by the local authorities and about 85 per cent were low-cost. Local Authority housing was almost entirely low-cost while both government and parastatals had relatively large high- and medium-cost stocks.

Once the major formal sector housing supply approach, institutional housing has virtually disappeared in urban Zambia except for the most senior staff and expatriates. The scaling down of mining and the closures of giant parastatal companies, such as the United Bus Company and Zambia Airways, put thousands of former company dwellings onto the market. Kitwe City Council repossessed many dwellings in Ndeke from the Zambia Consolidated Copper Mines (ZCCM) as it reduced its staff. In Mufulira, ZCCM leased 2,900 of its dwellings out to Government departments, private companies and individuals, following the reduction in mining labour.[61]

The MMD government amended the Employment Act to remove the obligation of employers to house their workers and then demanded that councils, mining companies and central government should sell their housing to the sitting tenants. There was some suspicion of using the policy to buy votes as this was announced in 1996, just after the launch of the National Housing Policy and close to the date on which the MMD hoped it would be re-elected.

The NHP[62] recognised the tying of housing to employment as an unnecessary burden on employers and that such housing causes major constraints for housing supply. These are as follows:

- Most institutional dwellings are in poor repair owing to lack of maintenance.
- Institutional housing is discriminatory and create a false sense of comfort and security for the employee.
- Subsidised rentals reduce maintenance and discourage increasing the stock.
- Subsidised housing distorts the housing market.[63]

The first sale announcement talked of sale for market value and Kitwe City Council was used as a pilot site. Valuations were made by a government valuer and sales went ahead at the prices thus determined. Later amendments reduced the costs according to age and, therefore, rent already paid.[64]

At an early stage in the process, however, President Chiluba declared that all dwellings built before 1960 should be given to the tenants for free except for rent arrears and legal costs (between ZMK10,000 and ZMK20,000 – USD8-15). While many former tenants benefited from becoming owners, many more had little benefit. Instances given by Schlyter in her examination of the impact of the sales on gender issues[65] include tenants in Matero (built before 1960) who owed so much back rent that they found third-party buyers who would both pay off their arrears and give them a lump sum. Others, in dwellings rented by companies and sub-rented to their workers, found the process was obstructed so that the senior staff could buy them for their own use.

Current formal housing supply

Most of the few formal developers in the housing sector were involved in supplying high-cost dwellings for senior staff in institutions and companies, mostly one at a time on plots serviced by the local authority

Of the formally registered contractors for housing work in Zambia, 78 per cent are in the very small class (Grade 6).[66] There are very few officially able to build large estates. In addition, of course, many formal dwellings are built by informal-sector contractors employed, often, on labour-only contracts. A developer in Livingstone reports labour costs for a two-roomed dwelling as shown in table 20.

There are very few current housing developments of any size offering affordable housing. A well-functioning housing supply sector is prevented by a range of obstacles, including (among others):

- Land titling and transfer problems because of a centralised, convoluted, and inaccurate land registry system;
- Very poor service reticulation and bulk infrastructure installations (water, roads, sewer, electricity, solid waste removal) beyond the high-cost areas dating from before the 1970s;
- Ineffective local authorities with very limited capacity to administer services, and very meagre capital resources to extend or improve infrastructure networks;
- A limited building materials supply industry;

Table 19. Contractors registered for residential development (in the 'building' sub-sector) in November 2007

Number of Contractors	Grade					
	1	2	3	4	5	6
Total = 797	10	3	14	33	113	624
Percentage	1.25	0.38	1.76	4.14	14.18	78.29

Source: NCC Registration and Regulation Department

Table 20. Labour costs charged by developers in Livingstone for a two-roomed dwelling

Component	Cost range (ZMK millions)	Cost range (USD)
Roof	3.5 – 4.0	700 - 800
Plumbing	1.0 – 2.0	200 – 400
Electrical wiring	1.5 – 3.0	300 – 600
Foundation and walls	10	2,000

Source: Interview with Calsius Mutumba in Livingstone (October, 2011).

- A limited local professional and artisan skills base; and
- A new and inexperienced housing finance sector with little long-term, reasonably priced capital for housing lending.[67]

The consensus among local experts[68] is that the pockets of housing development that are currently developed happen in spite of almost insurmountable obstacles facing them. The developments tend to be pilot projects with little potential for replication, mostly being the result of the extraordinary commitment and financial backing of their developers. Local experts believe that major inroads into the shortage of formal-sector housing in Zambia will only result from large-scale, comprehensive neighbourhood or new town urban development initiatives. These would require effective land purchase, planning, subdivision, titling and transfer, infrastructure development, management and maintenance, and housing construction. They further agreed that the currently responsible institutions are incapable of fulfilling their roles in such comprehensive developments.[69] The dwellings built in such developments are also well outside the ability to afford of the majority of the households in urban Zambia.

The activity of NHA in building high cost housing either alone or in partnerships, for example with MKP of Malaysia, may involve the transfer of administrative costs from the tax payer to some of the richest households in the country. The majority of the formal supply continues to be by individuals working their way through the formal land and regulatory processes, engaging building contractors and building new dwellings. This supply process appears to be much less prevalent than the informal supply but figures to demonstrate their respective scales are not available.

Current upgrading of unplanned settlements

It is the intention of local authorities and government alike that as many unplanned settlements as possible are either upgraded or replaced. Indeed, Vision 2030 calls for increasing the number of people in planned urban settlement to 50 per cent of the population by 2015 and 75 per cent by 2030.[70] In-situ upgrading is favoured in theory for most large settlements not occupying potentially lucrative central areas but there seems to be a lack of enthusiasm at both local and central government level.

LCC is currently attempting to establish Mtendere East as an Improvement Area. The bureaucratic hurdles to declaring an Improvement Area are very great. Indeed, it can take two years just to obtain MLGH approval to survey and grant the head lease to the council. Boreholes have already been sunk and there are spaces for roads but it is mired in bureaucracy and political interference before the 2011 election which the MMD lost.

A number of layout plans have been prepared with the help of donors to guide the development of basic infrastructure such as roads, water supply and sanitation in some major peri-urban settlements, e.g. N'gombe, Bauleni, and Chibolya. Settlement improvement plans and plans for "Environmental Improvement of Unplanned Urban Settlements in Lusaka" have been prepared by JICA and MLGH. There has been some environmental planning and management in informal settlements, through the UN-Habitat/UNDP-supported Sustainable Lusaka Programme and the Chaisa Land Tenure Initiative by Swedesurvey and LCC.

LCC is partnering JICA in preparing a plan to upgrade Chibolya. This currently means experimenting with replacing slum housing with multi-storey walk-up flats, similar to those which have been previously built in New Kabwata. Experience with the Kabwata flats, dating for the 1970s, suggests that they may not be a good solution for low-income households. Msisi is suggested for relocation as it is situated in the Kafue Commercial Development Corridor.

Figure 40. Kabwata flats in Lusaka. Photo © UN-Habitat

Table 21. Number of dwellings in the housing stock, 1990 and 2000

	1990		2000	
	Number of housing units	%	Number of housing units	%
Zambia	1,321,062	100	1,768,287	100
Rural	834,426	63.2	1,170,781	66.2
Urban	486,636	36.8	597,506	33.8

Source: 2000 Census.[72]

4.4 HOUSING CONDITIONS

As most of the urban growth in Zambia has been taken up in informal settlements, the current housing stock is dominated by the informal sector. In Lusaka, for example, about 70 per cent of all housing is informal. It accommodates about 90 per cent of the population but only occupies 20 per cent of the residential land.[71]

The number of urban dwellings added in the last decade of the twentieth century was 110,870 (table 21.) or 11,087 per annum.

In the absence of 2010 Census data in time, the profile assumes that the supply of housing between 2000 and 2011 is similar to that in the previous decade; 11,100 per annum. Over 11 years this equals 122,100 dwellings estimated as having been added 2000-2011.

Types of dwelling

As can be seen in table 22., almost half of urban households in Zambia live in detached houses; even in the low-cost sector, 42 per cent live in detached houses. Most of the remainder is reasonably evenly divided among flats/apartments, improved traditional houses and semi-detached houses. Flats/apartments accommodate one quarter of households in the high cost sector but are less common elsewhere.

It is important to notice the distribution among the three urban housing sectors. The low cost sector constitutes 81.2 per cent of the entire stock with medium cost being 10.8 per cent and high cost being only 8.0 per cent.

Materials used in construction

The predominant walling material is cement blocks (40 per cent) with mud bricks (24 per cent), concrete blocks (20 per cent) and burnt bricks (12 per cent) constituting most of the remainder. Only about two per cent are built in pole and dagga or mud walling.[73]

Urban floors tend to be finished in a cement screed (65 per cent), mud (19 per cent) or concrete (11 per cent).[74]

About half of the dwellings in urban Zambia are roofed in asbestos-cement sheeting. While an existing fitted asbestos-cement roof offers little health risk while it remains intact, the manufacture and fitting of asbestos is so dangerous that it cannot be continued. Any alteration or removal work requires specialised breathing equipment and disposal of wastes to protect workers from contracting asbestosis, mesothelioma and other chronic conditions caused by the inhalation of asbestos fibres, and to protect the wider public from inhaling the loosened fibres.

Most of the remainder (33 per cent of all) are roofed in corrugated iron sheets while about 14 per cent are thatched.[75]

Table 22. Type of dwelling occupied, 2006

	Type of dwelling							Total number of households
	Detached house	Flat/ apartment	Improved traditional house	Semi-detached	Traditional hut	Servants' quarters	Other	
All Zambia	20.9	6.5	20.4	4.6	46.2	1.0	0.5	2,283,211
Urban	*44.9*	*16.9*	*13.9*	*12.3*	*8.5*	*2.7*	*0.8*	*799,684*
Low Cost	*42.1*	*16.2*	*16.3*	*13.2*	*10*	*1.6*	*0.7*	*648,994*
Medium Cost	*63*	*14.4*	*7.2*	*9.7*	*3.3*	*1.8*	*0.7*	*86,092*
High Cost	*48.5*	*26.2*	*1.5*	*7.8*	*1.1*	*13.7*	*1.2*	*64,598*

Source: LCMS V, table 14.1

Occupancy and tenure

The Lusaka Integrated Development Plan[76] found a large variations in floor space per person between the planned and the unplanned urban areas. The floor space per person of typical settlements in the unplanned ranges from 5.7 square metres to 8.3 square metres, whereas the planned areas of Mandevu and Matero have floor space per person of 12.4 square metres and 13.2 square metres respectively.

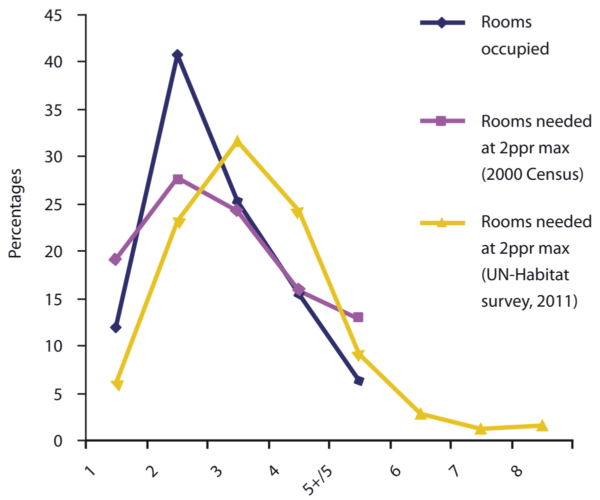
It is obvious from figure 41 and table 23. that 65 per cent of all urban households occupy two or three rooms and the mean number of rooms per household is 2.7, which is quite generous for Sub-Saharan Africa.[77] At the same time, the number of households needing two or three rooms is only about 52 per cent. This seems to show that the current concentration of supply of two and three-room dwellings should be varied into those with more rooms.

At a nationally preferred occupancy threshold of two persons per room, about 60 per cent of households in one room are overcrowded while 46 per cent of those in two rooms and 37 per cent of those in three rooms are overcrowded (table 23.). Between them, there were 250,000 overcrowded urban households in 2000. Female-headed households tend to occupy slightly fewer rooms than male-headed households.

In figure 41, it is clear that many more two roomed dwellings are supplied than are needed and too few larger dwellings are supplied. The sample survey done for this profile shows even poorer fit between supply and need than the 2000 Census figures and a larger need for more roomed-dwellings. Furthermore, from a need of about 2.9 rooms per household in the 2000 data, the need in 2011 seems to be for 3.3 rooms.[80]

With 597,500 dwellings accommodating 643,000 urban households in 2000, there was a shortfall taken up by sharing of 45,500 dwellings. In total, 230,300 urban households were overcrowded in 2000, equivalent to 35 per cent of all urban households. Half of these live in two roomed dwellings. Thus, a policy which encouraged those living in two rooms to add an extra room might be very effective in reducing overcrowding.

Figure 41. Rooms occupied and needed at 2 persons per room (ppr) in urban Zambia



Source: 2000 Census of Population and Housing[79] and UN-Habitat sample survey, 2011.

Two ZHPPF/PPHPZ studies in 2011 provide useful recent information on housing conditions in two squatter settlements in urban Zambia. In Kalundu View, Kafue, in 2011, they found a mean of five people occupying a mean of three rooms, or 1.7 persons per room.[81] In contrast, in Katuya, Senanga, households of a mean of six persons occupied a mean of one room, giving an occupancy rate of 6 persons per room.[82] These are very contrasting conditions.

In the Profile's own sample survey, mean occupancy rates are quite similar across the three cities at a little over two persons per room. At the median, they are lower, especially in Kitwe and Lusaka (table 24.). These occupancy rates do not betray a seriously overcrowded housing stock but there is room for improvement, especially if the Planning Guidelines threshold of two persons per room is to be achieved.

Table 23. Rooms occupied by household size, 2000

Household size	Rooms occupied						Mean rooms
	1	2	3	4	5	6+	
1-2 persons	36,677	56,456	18,652	9,263	2,629	1,627	2.2
3-4 persons	30,352	90,132	37,465	16,470	4,344	2,172	2.4
5-6 persons	11,596	69,732	44,953	23,826	6,036	2,700	2.7
7+ persons	4,686	53,043	60,915	48,170	13,870	6,747	3.2
Total	78,293	265,543	165,720	101,128	28,055	13,701	2.7
Overcrowded households	46,633	122,775	60,915				
Percentage households overcrowded	59.6	46.2	36.8				

Source: Central Statistical Office.[78]

Table 24. Persons per room in the three sampled cities (2011)

	Kitwe	Lusaka	Livingstone
Number of responses	82	99	99
Mean	2.04	2.05	2.11
Median	1.60	1.67	2.00

Source: UN-Habitat sample survey, September, 2011.

Many households in the low income areas are compelled, by the costs involved, to share a dwelling, so that sharing has become common in high density residential areas. There are 652,440 urban households but only 597,506 urban housing units. This constitutes a shortfall of 54,934 (8.4 per cent). Of the 652,000 urban households, 54 per cent (349,000) live in a dwelling owned by one of their household members.[83] Of these 349,000 dwellings, the census classes 46 per cent as self-built and 43 per cent as purchased. The latter must include many who have bought a former council or government dwelling. Only 1.3 per cent have mortgages. Five per cent of households have inherited their dwelling and about three per cent received them free.[84] Thus, there are rough balances between ownership and other tenures, and between purchase and self-build.

The strong link between housing and employment in urban Zambia has been effectively cut. Renting from an institution, which was predominant in urban areas, following the requirement for employers to house their workers, had declined to only a tiny remnant by 2002/3.[86] It has now been replaced by renting from central government in the LCMS data and very few households benefit.

According to the LCMS V, almost half of urban households own their dwelling and ownership is most common in the low-cost sector (table 25.) where institutional housing was sold off and squatters form a large component. The privately rented sector is now almost as large as owner-occupied following the buying and renting out of former institutional housing and the rise in renting in squatter settlements. The most common landlords of the 34,000 rented dwellings in urban Zambia are individuals (47 per cent), followed by the government (25 per cent of tenancies), private organisations (18 per cent) and parastatals (8 per cent).[87]

The largest other component of urban tenure is the free rental sub-sector but this has declined markedly in the last decade. Although, according to the 2000 Census,244 85,500 households lived in a rent-free dwelling, mostly provided by a private organisation, usually an employer or a parastatal enterprise, only 21,600 urban households had free housing by 2006.

The 2000 Census[88] is ambiguous as to the share of housing rented from an employer. It seems that the most likely interpretation of these data is that about five per cent of all urban housing is rented from an employer (with rent being paid) in addition to those occupying free housing owned by their employer.

4.5 CROSS-CUTTING ISSUES: CAPACITY BUILDING, GENDER, HIV/AIDS, YOUTH

The extended family system in Zambia has tended to provide housing for the disadvantaged. The NHP identifies specific problems related to housing for disadvantaged people, as follows:

"(a) existing housing institutions catering for the disabled and aged do not adequately meet the housing needs of this section of the population;

(b) existing infrastructure has not been maintained due to lack of funds rendering such housing unfit for human habitation;

(c) most buildings in the country were designed without due consideration for the disabled;

(d) institutional housing for the disadvantaged groups are mostly located far from facilities and amenities; and,

(e) lack of data on the disadvantaged has hampered the development of housing for the disabled."[90]

Construction employment is reckoned to be easily entered and self-selecting for the poor.[91] Thus, housing

Table 25. Households by tenure, 2006 (percentage frequencies)

	Owner occupied	Rented from private persons	Rented from private company	Rented from central government	Other free housing	House owned by Employer	Other
All Zambia	75.4	16.2	0.6	0.4	3.4	3.6	0.5
Urban	46.4	42.9	1.2	0.6	5.3	2.7	1.1
Low Cost	47.5	42.9	1.1	0.6	5.2	2	0.7
Medium Cost	47.2	43.6	0.3	0.5	5.4	2.5	0.6
High Cost	34.7	42	2.7	0.6	5.9	8.4	5.6

Source: LCMS V.[85]

supply is important for employing young workers, either in jobs or in enterprises. Encouraging housing supply in the lower parts of the market is an excellent way to encourage young people into gainful employment. It is noticeable how many of the block manufacture and aggregate crushing enterprises seen by urban roadsides are operated by young people.

Women and girls are noticeably present in the labour-intensive aggregate crushing industry. Thus, increasing housing supply may well provide more employment for them. There is a serious issue, however, in the nature of such work and whether it should be encouraged.

People in informal settlements are most vulnerable to the effects of HIV/AIDS owing to poor hygiene arising from vectors, mud floors, etc., and crowding within dwellings which increases rates of infection for anyone whose immune system is low. HIV/AIDS can lead to homelessness owing to relationships breaking down, stigma and loss of income.

Although there is scanty direct data on the impact of HIV/AIDS on the housing sector, indications are that HIV/AIDS is not primarily a disease of the most underprivileged; infection rates are very high among affluent people and those who are educated, and infection is most prevalent in urban centres. There are more than 50,000 HIV-positive people who belong to the Network of People Living with HIV, an organization which assists its most vulnerable members with basic shelter.[92]

Organisations that are very active in HIV/AIDS and housing interventions in Zambia include the Network of People Living with HIV (NZP+), Zambia Interfaith Networking Group on HIV and AIDS (ZINGO), Zambia National AIDS Network (ZNAN), Churches Health Association of Zambia (CHAZ), Expanded Church Response (ECR) and HIV/AIDS Trust. Among the major employers are the Mining Companies, such as Konkola Copper Mines (KCM) and Mopani Copper Mines, and the Zambia Business Coalition on HIV and AIDS.[93]

In Zambian policy, a "youth" is defined as a male or female person aged between 15 and 25 years.[94] It includes the school drop-outs at the levels of Grades 7 ,9 and 12 (and, to a certain extent, college level), many of whom are unemployed and, therefore, have little ability to afford accommodation. Many also lack the life skills, training and experience to obtain formal employment or resources to trade. They are likely to form a group with difficulties in obtaining housing for many years to come.

Capacity Building

There is little evidence of capacity building occurring among housing suppliers, private or public. The major suppliers of the past are no longer involved and the new informal suppliers receive as little encouragement or enablement in Zambia as they do in much of Sub-Saharan Africa. The rise of the enabling approach, internationally, and its official adoption in the National Housing Policy seems to have 'allowed' the government to turn its attention away from housing supply. So complete is the reduction in importance of housing in national policy that housing is one of four activities which share a single ministry and the ability of the personnel employed to promote housing is limited by their small number and the immense scale of the task.

There is some lobbying, from groups such as Civic Forum for Habitat, advocating for an improved focus on housing in national policy.

4.6 CONCLUSION

Zambia has made a transition from a housing supply based on employer institutions to one in which individuals make the greatest contributions. Much of the current supply is, however, informal and, thus, does not meet current regulations, nor is it serviced. It is, however, affordable. Housing supply appears to keep up with need at a level which has provided most households with a dwelling and at reasonable occupancy rates. At the most simple level, current households could be assisted greatly by each having one more room available to them. The major challenge is to provide three times as much housing for the future need, as the next chapter will indicate, and to build it at affordable levels.

ENDNOTES

1. Or colloquially in Lusaka; “Mdadada”.
2. Mutale (2004).
3. On which each dwelling had about 100 square metres of land.
4. Tipple (1979).
5. High-density is a relative term for these areas. Compared to the residential areas occupied in many parts of the world, they are very low density.
6. UN-Habitat (2007).
7. Mutale (2004).
8. Interview with Mr Lombe Mbalashi, Legal Officer, Compliance and Conveyance, ZCCM Investments Holdings plc., Dec 2011.
9. Including Government of Northern Rhodesia (1935; 1944).
10. Tipple (1979).
11. Tipple (1981).
12. Mashamba (1997).
13. Central Statistical Office (not dated: table 2.9).
14. Mutale (2004). The large Chimwemwe estate in Kitwe, built in the 1960s, was originally planned as lower density three and four room dwellings. As an economy measure, however, 600 four-roomed dwellings were designed as pairs of two-roomed semi-detached dwellings capable of conversion to single detached dwellings by knocking through a door opening inside. This explains its current high density.
15. Mutale (2004).
16. Tipple (1979 cited in Makasa 2010).
17. Makasa (2010).
18. Mutale (2004).
19. Mutale (2004: table 8.12).
20. Kitwe City Council (1976: table 3.01).
21. Kitwe City Council (1976: table 3.01).
22. Sanyal (1981).
23. Mutale (2004).
24. In Lusaka and Livingstone, in the 1930s, domestic service was the largest category of employment and dominated by men (Hansen, 1992). Hansen estimated there to be about 100,000 servants in Zambia in 1983-84, twice the number of mine workers.
25. Tipple (1981).
26. National Housing Authority (1975).
27. Mutale (2004). NHA provided over 240,000 site and service plots between 1971 and 2002 - see Chapter 3.
28. Named after the diamond-mining town in South Africa because they were first cast in dynamite boxes left over from there. The soubriquet ‘Kimberley’ has now been dropped in common usage.
29. UN-Habitat (2005).
30. In 1975, the ‘price’ was ZMK10 (USD20).
31. Mutale (2004).
32. Schlyter (1995).
33. Simons (1979 cited by Mutale, 2004).
34. Kasongo and Tipple (1990).
35. Mulenga (1981 cited in Mutale, 2004).
36. Kitwe City Council (1976).
37. Mashamba (1997).
38. Kasongo and Tipple (1990). The international consultant on this report planned the area in 1974/75 while working for Kitwe CC, under whose jurisdiction it fell at the time. It is now in Kalulushi District.
39. Kasongo and Tipple (1990).
40. Tipple (1976).
41. Bamberger et al. (1982 cited in Mashamba, 1997).
42. Many officers and councillors did not approve of basic servicing as it did not represent to them all Zambians having “equal rights under the sun” for which UNIP stood.
43. Kasongo and Tipple (1990).
44. Mutale (2004).
45. Republic of Zambia (2006).
46. Central Statistical Office (2011b: table 14.7).
47. UN-Habitat (2007).
48. World Bank (2002).
49. World Bank (2002).
50. This section draws on Mwango (2006) without further referencing.
51. UN-Habitat (2010).

52. UN-Habitat,(forthcoming, 2011).
53. Martin (1976) cited by Mwango (2006).
54. Interview with Kenneth Maseka, informal contractor, Chaisa, October 2011.
55. Interview with Adrian Nsefu, Ward Committee chairman, Chaisa, October 2011.
56. Schlyter (1990).
57. This is the Zambian equivalent of wattle and daub in which an armature of wooden uprights, woven across with thin strips of wood, is then covered with wet mud. It tends to be less durable than other earth construction because termites consume the wooden armature.
58. Mwango (2006).
59. Mwango (2006) and see Tipple (2000) for a full discussion of the user-initiated extension and alteration (transformation) process.
60. Quoted in Mashamba (1997: table 7.2).
61. Mashamba (1997).
62. Republic of Zambia (1996).
63. Republic of Zambia (1996).
64. Schlyter (2002).
65. Schlyter (2002).
66. See chapter 9 for classification details.
67. Gardner (2007).
68. Interviewed by Gardner (2007).
69. Gardner (2007).
70. Republic of Zambia (2006).
71. World Bank (2002).
72. Central Statistical Office (not dated: table 2.2
73. See chapter 9 for classification details.
74. Gardner (2007).
75. Interviewed by Gardner (2007).
76. Gardner (2007).
77. Republic of Zambia (2006).
78. World Bank (2002).
79. Central Statistical Office (not dated: table 2.2).
80. Central Statistical Office (not dated: table 2.4).
81. Central Statistical Office (not dated: table 2.5).
82. Central Statistical Office (not dated: table 2.3).
83. Ministry of Local Government and Housing et al (2009).
84. It is surprising that the biennial Living Conditions Monitoring Survey (LCMS) does not mention rooms occupied. Thus, the most recent data on occupancy is the 2000 Census.
85. Central Statistical Office (not dated: table 5.2).
86. Central Statistical Office (not dated: table 5.1).
87. The former data generalises all the 10+ household sizes as needing six rooms whereas the 2011 data records larger household sizes and allocates them to the appropriate number of rooms at two persons per room. Some of the difference is probably owing to this change. ZHPPF/PPHPZ (2011a).
88. ZHPPF/PPHPZ (2011b).
89. Central Statistical Office (not dated: table 2.7).
90. Central Statistical Office (not dated: table 2.8).
91. Central Statistical Office (2011b: table 14.2).
92. Central Statistical Office (2004).
93. Central Statistical Office (not dated: table 2.11).
94. Central Statistical Office (not dated: table 2.9).

05

HOUSING NEED AND DEMAND

In the discussions on housing supply in Zambia before this profile, the shortfall of dwellings nationally refers back to the estimate made by NHA in 2005 of about one million.[1] This profile starts from an assumption that every dwelling, regardless of its condition or status can be accepted as an existing dwelling,[2] and then attempts to make a more accurate estimate as follows.

5.1 ESTIMATING URBAN HOUSING NEED, 2000 - 2030

Population growth

In most of the profile's calculations of housing stock, 2000 is taken as the starting date because it is the last national census with housing figures published. The 2010 data may be available soon and can then replace the 2000 data in the calculations.

In light of the lack of a reliable population figure for 2030, the profile has considered the trend in additional urban population and up to 2025 and added a round million to the 2025 figure as a best estimate. Table 26. shows that nearly 5.3 million people will probably be added to the urban population of Zambia between 2000254 and 2030.

The Lusaka Master Plan uses a reducing household size of 5.0 in 2000 reducing to 4.4 in 2020 in a curve which would hit about 4.35 in 2025 and 4.3 in 2030.[7] If the profile uses those household sizes, there would be 1.373 million more households in urban Zambia in 2030 than in 2000 (table 27.).

There was a shortfall in 2000 of 45,500 dwellings, represented by those households who shared with another, which needs to be added to the new provision.

Table 26. Population in 2000 and 2010 and projections for 2015, 2020 and 2025 (thousands)

	2000	2010	2015*	2020*	2025*	2030†
National population	9,792	13,907	16,587	19,767	23,616	
Urban population	3,401	4,794	5,639	6,581	7,673	8,673
Percentage urban	40.0	34.5	34.0	33.3	32.5	
Additional urban population in the previous five years	48	1,393	845	942	1,092	1,000
Additional urban population since 2000		**1,393**	**2,238**	**3,180**	**4,272**	**5,272**

* Projection from 2000 Census.[3]
† Estimated by adding one million people since 2025.

Table 27. Urban households in 2000 and 2010 and projections up to 2030, assuming Lusaka household sizes

	2000	2010	2015*	2020*	2025*	2030 estimate†
Urban population	3,401,000	4,794,000	5,639,000	6,581,000	7,837,000	8,673,000
Mean household size	5.29	4.93	4.55	4.4	4.35	4.3
Urban households	643,207	972,414	1,239,341	1,495,682	1,801,609	2,016,977
Additional in the previous period	151,913	385,116	266,927	256,341	305,927	215,368
Additional since 2000		**385,116**	**596,134**	**852,475**	**1,158,402**	**1,373,770**

* From 2000 Census projections[5] † From UN-Habitat.[6]

Figure 42 New urban households expected, 2000 to 2030, assuming households sizes from Lusaka projections

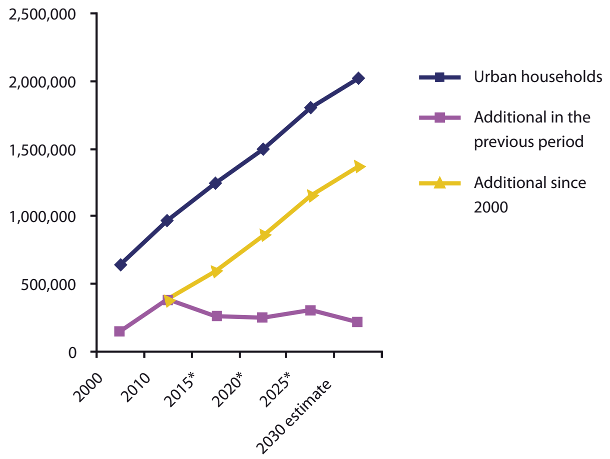


Table 28. shows that the provision estimated for 2001 to 2011 has fallen short of need to such an extent that only 122,100 have been supplied during the last 11 years; only five dwellings per hour. This has added a further burden on the next 19 years to 2030 which mean that 1.3 million dwellings are now required; 28 per hour or one every two minutes of the working day. This is a huge task and one which calls for a paradigm shift in supply policies.

THERE WILL BE A NEED FOR ABOUT 1.3 MILLION NEW URBAN DWELLINGS BETWEEN 2011 AND 2030, OR ONE EVERY TWO MINUTES OF THE WORKING DAY FOR 19 YEARS.

The State of African Cities, 2010, estimates the 2025 population of Lusaka urban area to be 2,267,000, about 29 per cent of Zambia's urban population. In Lusaka urban area, therefore, about 12,500 new dwellings will be required, one every 11.5 minutes of the working day over the period 2011 to 2030.

Household characteristics

According to the 2000 census, about 78 per cent of urban dwellings are occupied by single households, five per cent are shared with another, and three per cent are shared by multiple households. There is a vacancy rate of about five per cent.[8]

It is evident from table 29. that only 7 per cent of urban households are single persons but 56 per cent are in the three to six persons categories. The mean

Table 28. Calculating the rate of supply needed for new housing 2011 to 2030

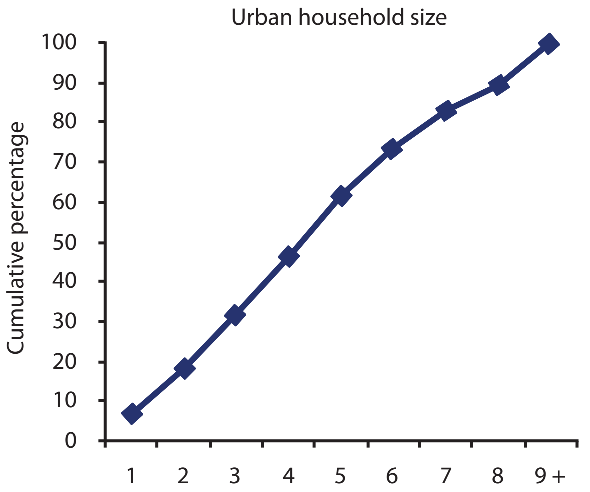
	Need/provision	per working year	per working week	per working day	per working hour	Minutes per dwelling
Need 2001-2030	1,373,770	45,792	916	153	19	3.14
Provision 2001-2011	122,100	11,100	222	37	5	12.97
New provision 2011-2030	1,251,670	65,877	1,318	220	27	2.19
Plus 45,500 shortfall in 2000	1,297,170	68,272	1,365	228	28	2.11

Table 29. Household size distribution in urban Zambia, 2000 (percentage frequencies)

Household size	Urban	Rural	Zambia
1	6.8	8.2	7.7
2	11.1	9.7	10.2
3	13.6	14.0	13.9
4	14.9	15.6	15.4
5	15.3	16.2	15.9
6	12.0	13.7	13.1
7	9.2	9.1	9.1
8	6.4	6.0	6.2
9 +	10.7	7.4	8.5
Mean household size*	5.0	4.8	4.9

Note * This differs slightly from the number obtained by dividing the number of people by the number of households which gives an urban household size of 5.33.
Source: Zambia Demographic and Health Survey.[9]

Figure 43. Urban household sizes (cumulative percentages)



urban household size in 2000 was five persons. Apart from urban households being slightly more likely to be in the seven plus sizes, there is very little difference in household size distribution between urban and rural Zambia.

Figure 43 shows how evenly spread household sizes are across the urban population; the cumulative percentage graph is almost a diagonal. This emphasises how unsuitable is the concentration of formal provision on two- and three-roomed dwellings and how necessary the ability to extend as the household expands is in urban Zambia.

According to the LCMSIII,[10] mean household size in urban Zambia in 2002/3 was 5.2 persons. By 2006, it was 5.1.[11] Female headed households, which constitute 22 per cent of urban households are, at the mean, one person smaller than male headed (4.4 and 5.4 persons respectively).[12]

5.2 INCOME AND AFFORDABILITY

According to LCMSV, mean monthly expenditure in urban Zambia was one million kwacha per household, ZMK244,000 per capita in 2006 (table 30.). In the urban housing strata, occupants of high cost neighbourhoods report expenditures of three times those in low-cost neighbourhoods, up from twice as much in 2002/3.[13]The mean percentage spent on food varies between 29 per cent in the high cost areas to 42 per cent in the low.

Household expenditure is often regarded as the most reliable measure of housing affordability because it reflects long-term income and is usually more accurate than income data in surveys.[14] Reported expenditure is usually higher than reported income because the latter does not usually include extras such as allowances or extra money from small business deals, etc. Indeed, the Profile's own sample survey shows reported median expenditures 50 per cent and 100 per cent higher than reported incomes in Lusaka and Livingstone. Only in Kitwe are they almost equivalent.

Using LCMS V data, inflated to 2011, table 30. shows that households in low-cost neighbourhoods, who are the overwhelming majority in urban Zambia, are likely to have a 2011 mean household expenditure per month of about ZMK1.25 million, or USD250. The differences between them and the medium-cost and high-cost neighbourhood occupants is very marked – the latter spend 2.1 and 3.4 times as much as those in low-cost neighbourhoods.

The Profile's own sample survey shows rather higher expenditures at between USD300 and USD700 per month for the formal sub-sector and USD150 to USD660 for the informal sub-sector. Lusaka households have the highest expenditure, Kitwe the lowest and Livingstone in between.

Table 30. Household and per capita monthly expenditure from 2006 inflated to 2011 values (ZMK and USD per month)

	Household expenditure		**Per capita expenditure**		**Percentage of food expenditure in 2006**
	(ZMK)	(USD)	(ZMK)	(USD)	
Zambia	907,191	181	217,180	43	47.8
Urban	1,651,016	330	403,189	81	37.8
Low cost urban neighbourhoods	1,257,330	251	308,865	62	42.3
Medium cost urban neighbourhoods	2,690,871	538	575,084	115	32.1
High cost urban neighbourhoods	4,242,635	849	1,126,602	225	28.9

After LCMS V[15] with CPI inflation to Kwacha values by 165 per cent from September 2006, using current K to USD conversion rates for 2011.

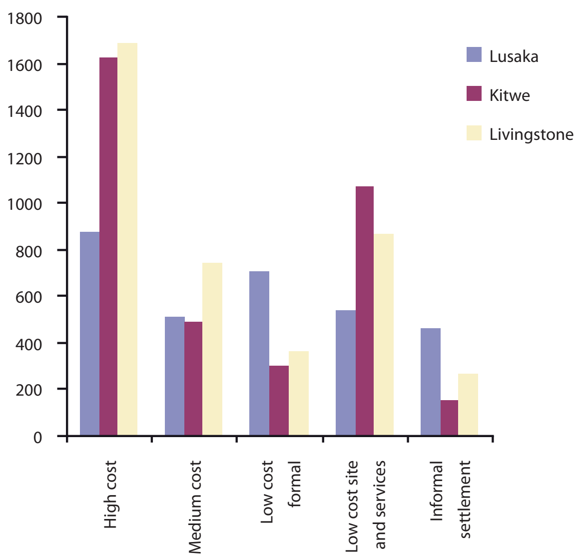
Table 31. Household monthly expenditure in 2011 (ZMK and USD per month)

	Lusaka	Kitwe	Livingstone
High cost	4,391,411 (USD878)	8,130,780 (USD1,626)	8,457,051 (USD1,691)
Medium cost	2,550,500 (USD510)	2,440,727 (USD488)	3,711,857 (USD742)
Low cost formal	3,549,478 (USD710)	1,510,818 (USD302)	1,807,430 (USD361)
Low cost site and services	2,709,477 (USD542)	5,344,750 (USD1,069)	4,342,000 (USD868)
Informal settlement	2,303,485 (USD461)	768,438 (USD154)	1,345,456 (USD269)

Source: Profile sample survey, September, 2011

Although the housing sectors occupied by the households are placed in order of expected household incomes or expenditures, with the high cost on the left and the informal settlements on the right, the expenditure data shows no steady diminishing from right to left. Indeed, occupants of the site and services housing are better-off than households in medium-cost housing, especially in Kitwe. This is important for policy as it shows that site and service projects are not likely to be the most suitable way of providing affordable housing solutions to low-income households. The low income formal prices are highly distorted because of the sale of institutional housing at give-away prices. Thus, the informal sector appears to be the only current way for low-income households to own dwellings.

Figure 44. Monthly household expenditure (USD)



Source: UN-Habitat sample survey, 2011.

The other major variable used in affordability calculations is the acceptable house cost to income ratio (HC:Y). The stakeholders' workshop, December 1-2, 2011, provided a forum for discussion of the most appropriate HC:Y ratio for urban Zambia. The consensus was that the medium rate of 4:1 can be used for the calculations and advice on policy within the profile. If other ratios are thought more appropriate in the future, it is a simple matter to recalculate.

Using the agreed rate of HC:Y of 1:4 (using expenditure as a proxy for income) and the LCMS V data updated according to the CPI, the profile predicts that urban households require housing costing a mean of about USD16,500 while the majority living in low-cost neighbourhoods requiring housing costing a mean of only USD12,000 (table 32.). At the current household size of about five and the nationally preferred occupancy rate of two persons per room, this means that three-roomed dwellings, or three rooms in a shared house, are required at the mean. Thus, for them to be affordable to the mean low-income household, rooms (and their share of land and services costs) should be built for about USD4,000 each.

IN ORDER TO BE AFFORDABLE TO THE HOUSEHOLDS WHO NEED THEM, MOST OF THE DWELLINGS SHOULD COST IN THE USD10-40,000 RANGE, INCLUDING LAND AND SERVICES.

Table 32. Mean annual household expenditures from LCMS V inflated to 2011 in USD per month and the subsequent affordability at HC:Ys of 3, 4 and 5

	Monthly household expenditure	Affordability (rounded to 3 significant figures) at house cost to annual income (expenditure) ratios of:		
		3	4	5
Zambia	181	6,516	8,688	10,860
Urban	330	11,880	15,840	19,800
Low cost urban neighbourhoods	251	9,036	12,048	15,060
Medium cost urban neighbourhoods	538	19,368	25,824	32,280
High cost urban neighbourhoods	849	30,564	40,752	50,940

Source: Household expenditure from LCMS V table 11.1 with CPI inflation to Kwacha values by 165 per cent from September 2006, using current ZMK to USD conversion rates for 2011.

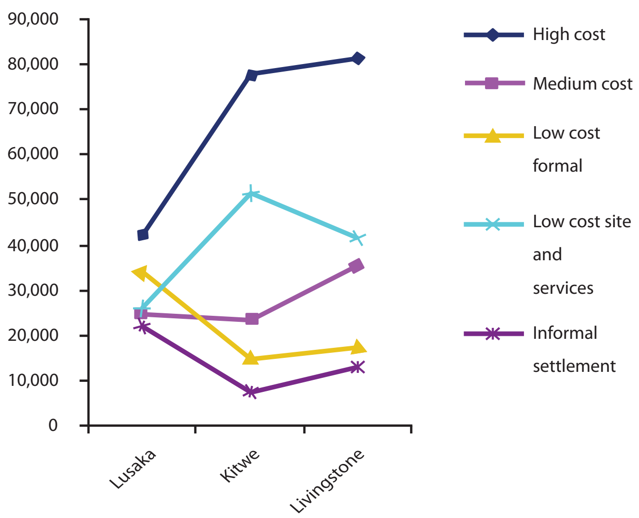
Table 33. Mean affordability at HC:Y of 4 from the Profile sample survey, 2011 (USD)

	Lusaka	Kitwe	Livingstone
High cost	42,158	78,055	81,188
Medium cost	24,485	23,431	35,634
Low cost formal	34,075	14,504	17,351
Low cost site and services	26,011	51,310	41,683
Informal settlement	22,113	7,377	12,916

Source: Profile sample survey, September, 2011

The profile's own sample survey, however, predicts different affordabilities at HC:Y = 4 (table 33.). The means mainly fall within the USD10-40,000 range, giving a more generous target than the LCMS V data. Three roomed dwellings falling within this range should be costing between USD3,300 and USD17,000 per room. However, the affordability of households in the informal settlements remains very low at between USD7,400 in Kitwe (USD2,800 per room) and USD22,000 in Lusaka (USD7,300 per room).

Figure 45. Mean affordability at HC:Y of 4 from the Profile sample survey, 2011 (USD)



Willingness to pay for housing

In the sample survey conducted for the profile, households were asked how much they were willing to pay for a dwelling to own, how much rent and how much in loan repayments.

It is clear from table 34. that there is a large difference between means and medians of how much households are willing to pay for a dwelling, caused by the few households who are willing to pay much more than most households, i.e., the 30 per cent who are willing to pay more than about ZMK200 million (USD40,000) in Lusaka and Kitwe. Median willingness to pay, however, is only ZMK50 million (USD10,000) in Kitwe and ZMK80 million (USD16,000) in Lusaka. Housing in

Table 34. Willingness to pay for a dwelling in the three sampled cities (2011)

	Kitwe	Lusaka	Livingstone
Number of responses	78	69	90
Mean ZMK and (USD)	129,480,769 (25,900)	131,697,262 (26,300)	48,082,500 (9,600)
Median ZMK and (USD)	50,000,000 (10,000)	80,000,000 (16,000)	25,000,000 (5,000)

Source: UN-Habitat sample survey, September, 2011.

Table 35. Willingness to pay monthly rent in the three sampled cities (2011)

	Kitwe	Lusaka	Livingstone
Number of responses	32	59	31
Mean ZMK and (USD)	972,031 (194)	1,068,737 (214)	1,054,677 (211)
Median ZMK and (USD)	500,000 (100)	500,000 (100)	350,000 (70)

Source: UN-Habitat sample survey, September, 2011.

Livingstone is much cheaper and willingness to pay is also much lower, ZMK25 million (USD5,000) at the median. These data reinforce the need for much of the new housing at the low end of the USD10-40,000 range posited above and reinforces the validity of the USD12,000 proposed in table 32.

Willingness to pay rent is very similar in Kitwe and Lusaka both at the mean (c.ZMK1 million; USD200) and the median (ZMK500,000; USD100) (table 35.). In figure 46, the middle 50 per cent of the population falls between ZMK200,000 and ZMK700,000. Thus, dwellings renting for that range USD40 to USD350 per month are likely to attract many households. The households in the sample survey's willingness to repay loans monthly is the same at the median (ZMK500,000; USD100) but the means are stretched upwards by a few households willing to pay large amounts, up to ZMK4 million per month) (table 36.).

Livingstonians, again, expect cheaper housing and may represent the rest of Zambia's urban population with median willingness to pay rents at ZMK350,000 (USD70) per month and median willingness to pay loans at only ZMK200,000 (USD40) per month. This demonstrates that loans with repayments of between USD40 and USD100 may be the most appropriate for Zambian urban households in need of low-income housing.

Figure 46. Willingness to pay rent per month by deciles, 2011

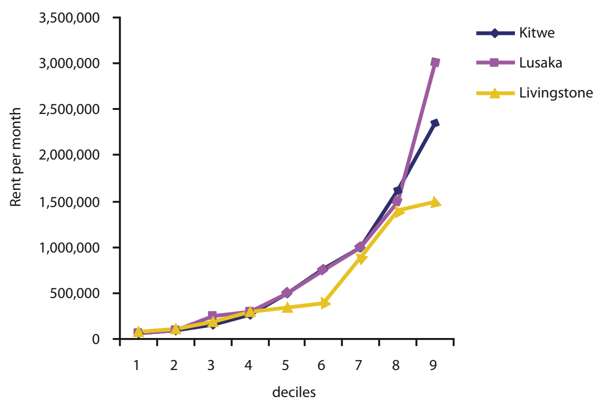


Table 36. Willingness to pay loan repayments monthly in the three sampled cities (2011)

	Kitwe	Lusaka	Livingstone
Number of responses	55	65	90
Mean ZMK and (USD)	1,699,091 (340)	4,098,508 (820)	870,611 (174)
Median ZMK and (USD)	500,000 (100)	500,000 (100)	200,000 (40)

Source: UN-Habitat sample survey, September, 2011.

5.3 SPECIAL GROUPS NEED/DEMAND

Vulnerable groups such as the aged, widows, orphans and vulnerable children, and disabled people without any means of support, must be considered in future housing provision. The MCDMCH has developed criteria to identify the most vulnerable in the communities and so collection of data on such groups should not be difficult

There is likely to be a group of households who have too little income to afford any sort of housing and who currently share or live on the streets. Such people are unlikely to benefit from housing planned against an affordability calculation. It is likely that they will need highly subsidised housing of a different form from the slightly better-off majority.[16]

Young people and their households often need cheap rental property usually provided by home-owners renting out a room in their dwelling. As plots tend to be large, there is much scope in urban Zambia for extending the existing housing stock with rooms or separate structures for renting. Encouragement for this process, known in the literature as 'transformation', could be very fruitful at the bottom of the market.[17]

Gender mainstreaming is not current in housing production and provision. There are some tangible efforts to improve equality, as indicated in government's commitment to implement the National Gender Policy whose statements highlight a strong and visible political commitment towards gender equality in all spheres of Zambian life. A focus on gender equity implies the need for stakeholders in the housing sector to invest in both women and men - in their access to information, resources, opportunities and spheres of political decision making. These can contribute to poverty reduction, economic growth and good governance in housing provision.[18]

ENDNOTES

1. Phiri (not dated: post 2008).
2. Replacement rates for deteriorating or qualitatively inadequate dwellings are discussed later.
3. (Central Statistical Office, 2003).
4. The last census date for which detailed housing data are available.
5. Central Statistical Office (2003).
6. UN-Habitat (2011a). It uses GRZ projections from Central Statistical Office (not dated: table 3.6) for earlier dates.
7. Ministry of Local Government and Housing et al (2009: table 2.2.3).
8. Central Statistical Office (not dated: table 2.6).
9. Central Statistical Office (2009).
10. Central Statistical Office (2004: table 4.9).
11. Central Statistical Office (2004: table 4.9).
12. Central Statistical Office (2011b: table 4.9 and 4.10).
13. Central Statistical Office (2004).
14. Tipple et al (1997).
15. Central Statistical Office (2011b: table 11.1).
16. Tipple and Speak (2009).
17. Tipple (2000).
18. Women and Law in Southern Africa (WLSA) (2007).

06

LAND FOR HOUSING

"Many urban land managers are confronted with multiple land challenges when they try to address sustainable development issues. They find that in dealing with the land issues there are problems of over-regulation; ambiguous and inadequately defined rights; outdated legislation; outdated plans; a lack of information – there is either none at all or it is not in digital form; frequent and unrecorded land use changes; poorly monitored and implemented land use plans; a lack of effective development control; ambiguous land use plans; land conflicts; fraudulent valuations; land grabbing by powerful elites – access to urban land is a prime area of corruption; inadequate institutional capacity and a weak private land sector. Whereas urban land management needs to be systemic to produce sustainable development, urban land managers are constantly forced to undertake ad hoc non sustainable decisions about fundamental issues such as environmental concerns, climate change and the occupation of vulnerable and disaster prone locations."[1]

6.1 LAND ADMINISTRATION IN ZAMBIA

In colonial times there were three categories of land in what was then Northern Rhodesia: Crown Land, Native Reserves and Trust Land. At independence, Crown Land (almost all of which is on the line of rail) became state land (6 per cent of the whole) and the rest remained as Reserve and Trust Lands (94 per cent). Much of the state land is held as large farms.

All urban development was originally on crown/ state land but, as cities and towns grow, they are spreading increasingly onto customary land, controlled by chiefs. The chiefs' status was reduced under the Kaunda government but has been increased in the last twenty years, including instituting a House of Chiefs and, recently, a Ministry of Chiefs and Traditional Affairs.

A system of deeds registration, influenced by South African cadastral surveying practices, is used in urban Zambia. All land transfers must be registered in the Lands and Deeds Registry. In the small amount of land under the direct control of the state, cadastral surveys are necessary. Cadastral surveys are also carried out when customary land is to be converted to leasehold.[2]

The cadastre gives a few urban land holders complete security as the beacons are a sure way of fixing the boundaries which cannot then be challenged in court. Thus, there is very little litigation under the Land Survey Act relating to boundary disputes. Unfortunately, the cadastral survey system is very expensive both in money and in time. The requirement for the ministry to examine every survey before approval of the diagrams is a lengthy process taking up to two years. Where it is not possible to conduct an approved survey, 14-year leases can be issued to act as an intermediate form of title.[3]

Where cadastral systems dominate, there is sometimes a means of establishing title on less than a full cadastre; through a sectional title within a cadastral plot. In this, a plot is divided up on a diagram and each possessor has a lease for his/her portion. In former Mining Area and in Statutory Areas under the HSIA, the local authority holds the Head Lease and issues sub-leases to occupiers. There are some signs that this is an acceptable way forward in new formal neighbourhoods. For example, in the proposed new housing in Solwezi, the developer will hold the head lease for the whole area and each dwelling will have a subsidiary 99 lease without a separate cadastre.[4]

It is possible to delay the expense of a cadastral survey by obtaining a Letter of Offer from the Commissioner of Lands but this is intended as only a temporary expedient; the occupier will be required to lodge survey diagrams within a specified period. Where land is subdivided or consolidated, sectional titles may be issued to confirm the owners before they undertake a full cadastre and gain title to the subdivided or consolidated land.

Where there is no cadastre but a developer wants to start building, temporary building permits may be given. Owing to the cost of the cadastral survey, many continue to occupy the unsurveyed land which creates boundary disputes.

The status of cadastral surveying in Zambia needs revising but attempts to do so have failed to improve it much. The process of licensing of land surveyors

Figure 47. Organogram of the Ministry of Lands[6]

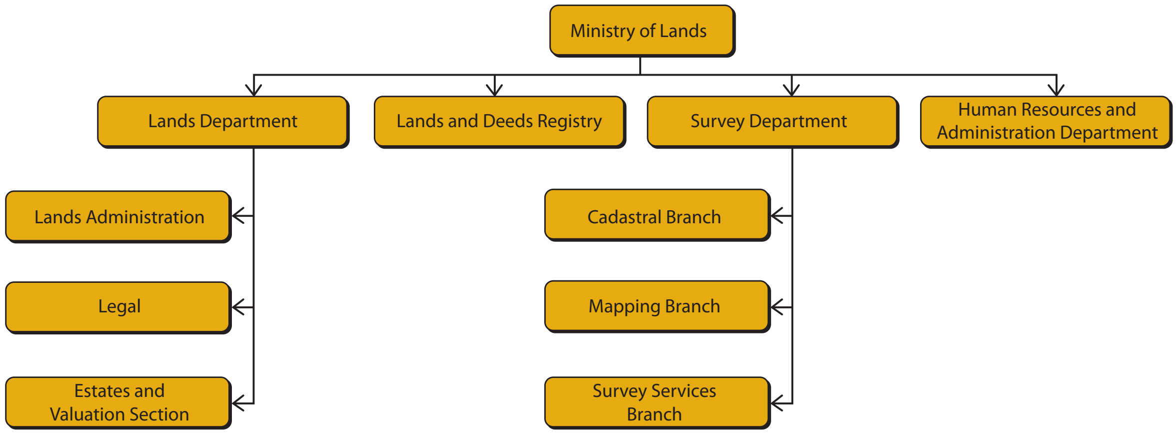
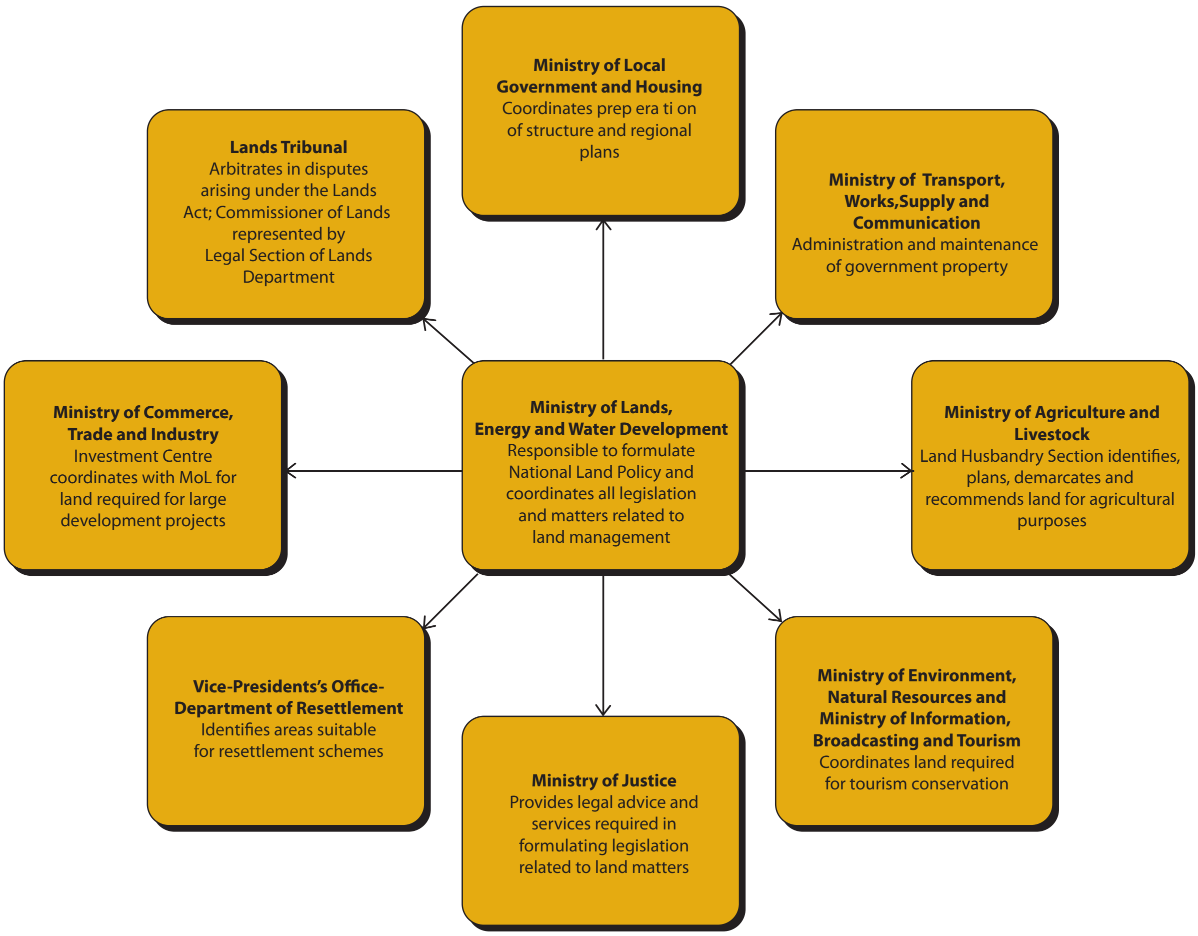


Figure 48. Institutional Framework for land management in Zambia[7]



is a particular weakness of the system, resulting in a shortage.[5]

The land administration system is inefficient, partly owing to a lack of co-ordination among the institutions dealing with land and the dual system of policy and legal frameworks that govern customary and statutory land. The absence of information on how much customary land has been turned into private leasehold or state land (e.g., for the use of parastatal organisations), is unhelpful for policy-making.[8]

Land can be bought directly at market prices through agents or by direct negotiations with private owners. This is common on the farm plots surrounding many urban areas. Alternatively, and for those fortunate enough to be selected through the process, land can be bought through Councils and the Commissioner of Lands.

Members of the public applying for plots should fill in an 'Annexure A' form giving many personal details and attach supporting documents, such as bank statements, as proof of their ability to develop the plot. Once application forms are received, they are processed by Plans, Works and Development (PWD) Committee whose recommendation is sent to the Full Council for approval. Three applicants are usually recommended for each plot and these names are then forwarded to the Commissioner of Lands. The affirmative policy for women applicants (see below) is applied by giving priority to their applications. In allocations on state land, councils only act as agents of the central government. The length of lease on state land is 99 years. [9]

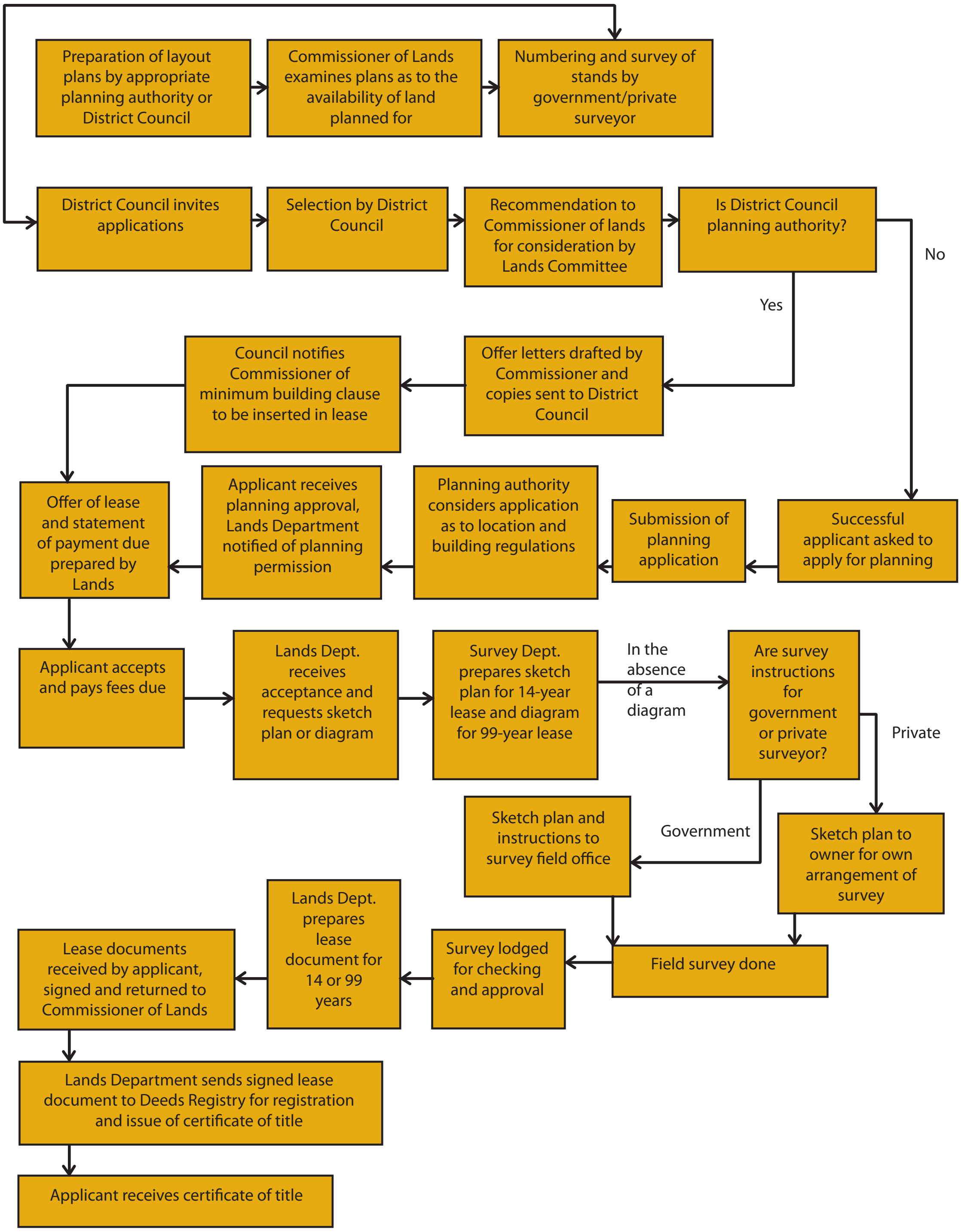
Once the Commissioner of Lands has decided which of the three applicants is to be successful and sent a letter of offer, the approved applicant can start building and must at least lay a foundation slab within six months and complete building within 18 months. It is evident that the prior requirements and the need to build quickly rule out the majority of Zambians from this formal process.[10] There are many delays in this process; a matter of years is no longer unusual as the centralised process is handled by a small staff and all applications must pass through high level bureaucrats. Such practices are likely to encourage corrupt practices to have applications fast-tracked.

Through Councils, the successful buyers are required to pay a non-refundable fee of about USD1,000, or less in some areas, and then the service charge to cover the cost of installing mains service. The maximum cost for a high cost plot through Councils is about USD2,000 including service charges. When buying through the Commissioner of Lands, successful applicants pay ground rent and processing fees there and are then expected to pay the servicing costs to the respective Council.

Vision 2030 sets out a vision for "Secure, fair and equitable access and control of land for sustainable socio-economic development in Zambia by 2030. [To achieve this, its goals are]:

- "Land being productively exploited for socio-economic development by 2030; and
- Women, men and the disabled having equal access to productive land for socio-economic development by 2030."[13]

Figure 49.Land Allocation Procedures. [11]



Source: Mulwanda, M & Mutale, E. (1994)

Table 37. Recognised land tenure types in Zambia

Type	Characteristics	Legal basis
Customary tenure	Obtained through permission of headman or chief. Matrilineal and matrilocal groups of northern Zambia: husband is granted land rights by in-laws in his wife's village, which he forfeits upon dissolution of marriage. Matrilineal and patrilocal groups of southern Zambia: any land acquired by the man upon marriage or prior to it belongs to him. The wife has only a right of cultivation and to half share of the standing crops upon marriage dissolution. Patrilineal and patrilocal tribes of eastern Zambia: inheritance on the basis of primogeniture (the eldest son of the senior house in the case of polygamous marriages). Bilateral groups of western Zambia allow inheritance only by the children of the deceased both male and female who get equal shares of the property. Customary land can be converted into leasehold as described below.	Governed by customs and traditions relevant to the particular ethnic grouping. Sections 2 and 7(1) of the Lands Act. Customary Tenure (Conversion) Regulations apply when converting to leasehold tenure
Registered lease for 14 years	Issued on both customary and state land on the basis of a "sketch plan" (requires no cadastral survey before registration). Holder of this lease must develop the land within the 14-year period for the lease to be renewed. It may be mortgaged and transferred to third parties, but in practice most banks do not accept 14-year leases as a basis for a mortgage.	Lands and Deeds Registry Act [Cap. 185]
Registered lease for 99 years	Issued on both customary and state land registered in cadastre. A diagram showing an accurate measure of the size of the land parcel and coordinates indicating the precise boundaries of the property must be provided. Mortgages are easier to obtain for this lease. Joint leasehold for spouses is available on request or "optional".	Lands and Deeds Registry Act [Cap. 185]
Registered lease in statutory housing areas	"Council Certificate of Title" is registered in local council property register. The plan registered by the council must include information on "the area and dimensions of each piece or parcel of land identified by a serial number". Valid for 99 years. Can be mortgaged and transferred.	Section 4(2) HSIA [Cap. 194]
Registered occupancy licence in improvement areas	A 30-year occupancy right or "occupancy licence" is registered in local property register. The council plan need only indicate the 'location of each building identified by a serial number'. Can be mortgaged and transferred but in practice most banks do not accept this lease as basis for mortgage.	Section 37(2)(f) HSIA [Cap 194]
Unregistered lease or rental	Regulated by a tenancy contract signed and witnessed by both parties, which need not be a registered document. In practice this form of agreement applies to dwelling houses in the high and medium cost formal residential areas.	Rent Act, 1972
Informal rights in informal settlements	Informal renting and subletting, based on unwritten (verbal) agreement. Illegal subdivision and occupation of land in expanding illegal settlement.	None
Adverse possession or prescription	Not applicable in Zambian land law.	None

Source: UN-Habitat[12]

6.2 KEY PLAYERS IN THE LAND SECTOR[14]

The Ministry of Lands, Energy and Water Development

The Ministry of Lands is at the centre of all land matters being responsible for the formulation and coordination of all legislation related to land management in the country. It is divided into four departments, three of which deal directly with matters of land administration, namely (a) the Lands Department, (b) the Lands and Deeds Registry and (c) the Survey Department (figure 47).

The Lands Department

Under Zambian law all land is vested in the President, on behalf of the people. The President delegates the powers of land administration to the Commissioner of Lands who is the head of the Lands Department. The Lands Department makes and executes grants and dispositions of land throughout the country.

The Lands Department is divided into three sections; Land Administration; Legal and Estates; and Valuation. The Land Administration Section has administrative responsibility for all land matters in the country in addition to ensuring the orderly development of areas planned by the local authorities under the direction of the Department of Physical Planning and Housing in the Ministry of Local Government and Housingand the Land Husbandry Section of the Ministry of Agriculture and Livestock

As the Lands Commissioner does the president's bidding, and this might not be in the best interests of the people, some NGOs call for an independent Lands Commission.[15]

The Lands and Deeds Registry

The Lands and Deeds Registry keeps a record of all land transactions and issues title deeds to all land situated in state land areas, as well as customary land that is being converted to statutory leasehold. A regional lands office was set up in Ndola in 1995, for land in the Copperbelt, Northwestern and Luapula Provinces, in an attempt to ease the burden on the Lusaka headquarters. There have been communication problems between the two offices which have hampered efficiency. It is still necessary for all who want to have titles issued to travel to Lusaka. According to the NHP, procedures are centralised and cumbersome.[16]

Survey Department

The Survey Department is responsible for the provision of accurate land information through the provision of surveys and mapping services.

ABOUT 94 PER CENT OF LAND IN ZAMBIA IS CUSTOMARY LAND AND ONLY 6 PER CENT IS STATUTORY LAND; THIS IS MOST OF THE URBAN AREAS.

The Government Valuation Department

Through the Government Valuation Department, the Ministry of Local Government, Housing, Early Education and Environmental Protection advises the Ministry of Lands, Energy and Water Development (MLEWD) on property valuation and any other matters of real estate management. It also uses property data from the MLEWD to prepare valuation records.

District Councils

Under the direction of the Ministry of Local Government, Housing, Early Education and Environmental Protection, District Councils have the power to control the development of land in their areas. Under the Local Government Act, they can prohibit and control the use of land and the use and erection of buildings in the interest of public health, safety and orderly development. Councils administer state land as agents of the state under the direction of the Commissioner of Lands, and they administer the land in Statutory and Improvement Areas.

Under the provisions of the HSIA, councils are granted a head lease from the Commissioner of Lands and they then can allocate plots to applicants by giving 99-year leases. Only one plot can be allocated to any one individual in a statutory housing area so as to avoid the danger of land raiding by more affluent households who want to assemble two or more adjoining plots into one large plot.

Councils face many problems in land alienation. These include

- insufficient serviced land;
- double allocation owing to poor recordkeeping; and
- abuse of the system by council officials who obtain land only to resell it.[17]

Councils find servicing of new residential developments on virgin land particularly difficult owing to lack of capital resources. New owners must pay a service charge on their plot, to cover the cost of providing roads, drainage, street lighting, water and sanitation services, before they can develop the land. Once this is paid, the council should deliver all the services before any building takes place. However, there is often a substantial delay so owners are allowed to build before the services due are actually provided. When they are provided, they are frequently at a lower standard than expected.[18]

The traditional chiefs

Although chiefs have no legal power over land within city boundaries, they control land alienation and development in customary areas, that is, outside statutory areas as defined by the TCP Act. Many Zambian urban areas are coming to the end of their land within the council boundaries and are finding that development is occurring on the surrounding customary land. Chiefs have the power to alienate land to outsiders and there are many complaints that they do so without consulting the people whose livelihoods are gained from it. Traditional leaders command a lot of respect and usually are the first to know of most problems, including land issues affecting their subjects. However, most chiefs are not adequately educated on land alienation procedures and the value of holding title deeds.

The Commissioner of Lands will normally grant leases of any duration up to a maximum of 99 years on all state land. Non-Zambians cannot be granted land in customary land for more than five years except for charitable organisations which can be granted 33 year leases. There are, however, no such restrictions on State Land. The 1975 Land Act and its amendments introduced many controls and restrictions which in turn has discouraged property investment for non-Zambians.[19]

Zambia Land Alliance (ZLA)

Set up in 1997 as a response to the land reforms of the early 1990s, the ZLA is a network of NGOs advocating for fair land policies especially as they affect the poor. Under the banner of "Land is life" ZLA lobbies for policies, laws and administrative systems on behalf of people living in poverty and vulnerable groups. Notable among its causes are the way customary tenure discriminates against women, especially widows, and the way chiefs can alienate customary land without consulting the occupants. It works with the Victims Support Units in police stations on behalf of women who suffer dispossession.

6.3 LEGAL AND REGULATORY FRAMEWORKS GOVERNING LAND SUPPLY

The dual system

The dual customary and statute law land systems are enshrined in the constitution. Under the customary system, traditional authorities, such as the chief and/or village headman, allocate vacant land to families and individuals. Under the statutory system, individual land owners have title deeds to their land and can sell, rent, mortgage or transfer that land.[20] Ninety-four per cent of the land area in the country is under the customary system whilst 6 per cent is under the statutory system.[21] Land and other property and productive assets are normally inherited by the deceased man's male family members according to patrilineal or matrilineal custom through the blood line of the father or mother to his or her male children. Women acquire use rights to family land through their husbands.[22] These traditions and perceptions introduce psychological, religious, and social constraints on transferring land to women.[23]

The customary system is perceived as being less important than the statutory system and land can be converted from customary to statutory by an individual or by the President,[24] but it cannot be converted back. There is no easily accessible record of how much has been converted so it is outside public control.[25]

There is a draft National Land Policy which, among other measures, recognises the customary sector (see Box 1).

Box 2: The Draft National Land Policy: specific objectives

- Promote equal opportunity for access to land while recognising customary and leasehold tenures;
- Redress the gender imbalance and other forms of discrimination in land holdings by providing security to all land holdings and creating opportunities for development;
- Improve timeliness and accuracy of land information delivery system;
- Improve the capacity of physical planning in order to strengthen the land delivery system and promote coordination among institutions directly involved in physical planning;
- Ensure that the covenants and conditions under which land is held are adhered to;
- Promote increased revenue generation from land;
- Support initiatives by local investors and, where appropriate, assist foreign investors through the provision of land;
- Maintain a clear description of Zambia's international boundary with its neighbours;
- Encourage people with special needs and other disadvantaged groups to own land;
- Develop and enhance the capacity of the Lands Tribunal to quickly deal with land dispute matters; and
- Address the pressures and need for land of urban populations.[26]

Informal land supply and the relaxation of tenure law for informal areas

In the early days of informal settlements, before and just after Independence, low-income workers settled on private (white) land or Crown land without permission, using their distance from others and the barrier provided by the long grass to keep a low profile. Eventually, squatting became such a universal way of achieving housing that any spare land around cities became subject to informal occupation with or without political protection.

As the number and visibility of squatters increased, especially, following the declaration of a one party state in 1972, the ruling party, UNIP, became an active player in the founding and management of squatter settlements. The local party chairman acted as an informal land allocator, in much the same way as a chief allocates customary land, even charging new settlers nominal amounts for occupying the land. As UNIP spread its political influence in this way, the squatters perceived they were safe from eviction and most of them were. The extension of services to them, however, was impossible because the service provider (the council) did not own road ways in the land through which its services had to pass.

In 1974, Zambia passed one of the most innovative land laws in the world at the time. As cities were growing very rapidly after Independence, and more people were establishing informal settlements to cope with the shortage of housing, Zambia was leading the world in site and service projects and settlement upgrading. In order to allow councils to install infrastructure and give title to residents of both, the Housing (Statutory and Improvement Areas) Act (HSIA) of 1974 was enacted.[27] By its provision, local councils could issue Certificates of Title to plots in sites and services schemes that had been declared Statutory Areas.

In informal settlements, upgrading could be done and people's confidence to improve their homes established through declaring them Improvement Areas and granting residents Occupancy Licences for 30 years. The World Bank Lusaka Upgrading Project both initiated the Act and made good use of its provisions as many informal settlements became Improvement Areas and upgrading was carried out. The Occupancy Licences were intended to provide enough security to borrow housing finance. The Zambia National Building Society has always been willing to accept them but the Local Authorities who hold the head leases on Improvement Areas have refused to endorse such mortgages.

Unfortunately, the many positive effects of the HSIA did not spread outside the capital. By the early 1990s, Zambia had taken a much more hard-line stance on informal settlements and upgrading became redevelopment to the Second National Development Plan (SNDP) housing standards of fully serviced 12 x 27m plots.[28]

For residents of informal settlements not recognised as Improvement Areas, there are no rights to land at all. Neither the Constitution nor the Land Act of 1995 recognise squatter's rights. There is no provision in Zambian law for an occupier of land to apply for legal title after a number of years (adverse possession); only those on customary land and in Improvement Areas are allowed to regularise their title.

Customary law related to housing

The details of customary land tenure differ from area to area but there are some common features. Any householder from the village is entitled to land there, for ever, for a homestead and farm. This is an important social safety net and should not be surrendered lightly. Land is identified through a village head or chief and a sketch plan is made to identify it. This is endorsed by the chief who writes a letter to the local council which it sends on to the Lands Commissioner for approval. Anything over 250 Ha requires permission from the minister responsible for that land. The importance of this for housing is especially where customary land abuts an urban area.

Customary tenure of land is seen as intrinsically vulnerable. Not only is the chief entitled to alienate it to developers who want to gain statutory tenure over the land, but also there are no documents of possession and no record of boundaries. It does, however, have some important advantages for the majority low-income households. It is free to occupy, no ground rent or property rates are payable; it does not have to be surveyed and registered with all the transaction costs including a trip to Lusaka or Ndola to obtain the documents.[29]

Following the liberalisation of the economy and the retrenchment of many workers, demand for peri-urban customary land increased and has continued. Many holders of customary land would be satisfied with only a letter from the chief confirming that they hold the land. This is advocated by ZLA as a protection against land grabbing, especially for widows.[30]

The 1975 land reforms: the Land (Conversion of Titles) Act, 1975

In 1975, the land reforms were based on President Kaunda's philosophy that land should not be a subject for speculation. The act nationalised all land, converted all freeholds to 99 year leaseholds, abolished estate agents, and introduced the concept that land had no value, only the improvements thereon, e.g., infrastructure and housing, were valuable. It also stipulated that all land transactions should be subject to state participation.[31] This reduced speculation but did not give ordinary Zambians access to land. The poor and disadvantaged had to invade land or 'purchase' it from Party Chairmen or others who had the political power to control land use. As the reforms also included a clause giving the President the right to determine prices on land, the processing of land transactions was delayed. Transaction costs of this included frustration of investment and the creation of a black market with different prices from those determined centrally.[32]

The Lands Acquisition Act, 1970

Under this Act, any land included in a Structure Plan made by a local authority can be compulsorily acquired. Unless the President directs otherwise, two months' notice must be given and compensation must be paid, at market valuation, either in money or replacement land.

This Act can be used for compulsory acquisition and assembly of land for housing development and funds set aside for compensation to the landowners. Unfortunately, the compensation costs would be a major burden for the local authorities and an obstacle for urban development. The direction of growth and development will often, therefore, be dictated by the location of land already under the control of the municipal council.

The Lands and Deeds Registry Act[33]

This act sets up the system for registration of land documents, issuance of provisional and final certificates of title, and the transfer of registered land. The Lands and Deeds Registry is responsible for holding records of all transfers affecting private and state land, each with a description of the land by diagram or detailed plan that has been approved by the Surveyor General and documents verifying the ownership through purchase or otherwise. The Act assumes that the land has been surveyed as part of a regular development scheme or as an approved subdivision of land. The procedures for issuing provisional and final Certificate of Title are elaborate and cumbersome. Certificate of Title may take six years to issue after the Provisional Certificate is obtained.[34]

The Land Survey Act[35]

The Land Survey Act covers all the system and processes for surveying land under the cadastral system including registration of surveyors, safeguarding survey beacons, and looking after the diagrams and plans. It provides for the settling of boundary disputes and the issuing and signing of boundary agreements. Section 25(1) stipulates that the beacons defining any parcel of land, once they are lawfully established, cannot be brought into question by any court of law. This fixed boundary system has been largely responsible for the absence of litigation relating to boundary disputes.

Fourteen-year leases can be issued where it is not possible to obtain an approved survey diagram, acting as an intermediate form of title. The requirement to examine every survey before approval of the diagrams gives rise to a lengthy process, which is equivalent to the survey and data compilation itself and can take up to two years.

The 1995 Land Act[36]

The MMD Government under President Chiluba came to power in October, 1991, and reformed land policy. The economic value of undeveloped land was restored and the right of private land ownership re-introduced. Reserve and Trust Lands were merged into customary land and it became subject to statutory leasehold. From this time on, therefore, leaseholds could be created on customary land. The Act provided for the legal eviction of anyone who occupied land without lawful authority. This increased the vulnerability of residents of informal settlements that had not been declared Improvement Areas (most of the smaller ones have not), reinforcing the growing alienation between the squatters, who had been assisted by UNIP to settle in the 1960s and 1970s, and local and central government.[37]

The 1995 Land Act vests all land which is not already alienated in the President[38] who has the right to alienate State land to any Zambian but must involve local chiefs and local authorities before alienating customary land. The chiefs and local authorities, however, do not need to involve the people who occupy the land under customary law. Furthermore, the Act is neither gender sensitive nor sensitive to vulnerable groups such as disabled people. Instead, it paves the way for local people and foreign investors to acquire customary land, sometimes against the interests of those who have customary rights in the land. Local people, whose land it is, can be kept in ignorance throughout the process.[39]

Other provisions of the Land Act of 1995 that affect housing development are as follows:

- Land is still vested in the State, so large parcels of land for major housing developments can only be obtained through the state. This is a very slow process which stifles any private sector-driven land market.
- Until recently, the LDF has been little used owing to lack of supporting economic and financial reforms. It has recently been re-activated and provides many small urban councils with resources to open up and survey land for housing development. It usually, however, proves insufficient to develop land for housing estates.
- The government does not allow the private sector to own large pieces of land (except for farming) and requires the developer to provide proof of finances before allocation of land. Financiers, on the other hand, want to see title to land before negotiating financing terms.
- For a long time there has been no land audit to determine how much customary land has been converted to leasehold.
- Development land is unlikely to be serviced even if the developer has paid up to USD1,000 per plot, though a cadastral survey may have been done. Services such as sewerage or access roads will only follow years hence and so the developer must provide these services more quickly, despite having paid development charges. Where the serviced plots are sold, they are much too expensive for the majority of Zambians.

The Constitution of Zambia

The Constitution recognises both customary and statutory land systems. The property clause of the Constitution, Article 16, provides for compulsory purchase only when adequate compensation is paid. The exceptions mentioned in the Article, however, may weaken the tenure of informal settlers and those under customary land rights.[40] Under Article 23, no discriminatory laws may be passed on the grounds of race, tribe, sex or marital status, but exceptions are added including where the application of customary law excludes other laws and in laws which differentiate between people through, for example, marriage, adoption, divorce and inheritance. Thus, people with property owned and devolved through customary law are not protected from discrimination.

6.4 OTHER LEGISLATIVE INSTRUMENTS RELEVANT TO LAND FOR HOUSING[41]

The Common Leasehold Schemes Act[42]

This allows for dividing buildings into separate leaseholdings as in a condominium.

The Town and Country Planning Act[43]

This sets up planning authorities with all powers to sub-divide land, allocate its use, set minimum plots sizes, building lines, etc., and negotiate allocation of all land in collaboration with central government. Its amendment in 1997 gives local authorities the duty of preparing Structure Plans every year. Currently change to formulating Integrated Development Plans is being discussed.

The Planning Standards Guidelines lay down minimum plot sizes as outlined in table 38.

These very large plots lead to very low densities, long servicing lengths and the sprawling of urban development to the detriment of transport to and from work.

Table 38. Minimum plots sizes according to the Planning Standards Guidelines

	Dimensions (metres)	Area (square metres)
Low density/ high cost	30 x 45	1350
Medium density/ cost	18 x 30	540
High density/ low cost	12 x 24	288

Source: Planning Standards Guidelines[44]

6.5 NEED FOR LAND FOR NEW HOUSING, 2010 TO 2030

Several local authorities have new areas of plot development taking place. In Livingstone, 1,000 plots were made available in 2008 of which all are now alienated. Locations such as Kitwe West, between Kitwe and Kalulushi, Meanwood and Lilayi on the edge of Lusaka, and others have made several thousand plots available in recent years. It is a common refrain of planners and policy-makers, however, that there is no urban land left. This perception that land suitable for development is in short supply is a function of the division between statutory land and customary land. All urban areas have plentiful customarily-held land just outside their borders and the time has come for major negotiations with chiefs to plan the development on such land.

As shown in Chapter 5, there is a need for 1.3 million new dwellings between 2011 and 2030. It is important that the profile calculates at least a rough estimate of the amount of land required. It is evident from figure 4, in terms of land used, that there are great advantages in building to higher residential densities rather than lower. Angel shows how, when cities have recently doubled in size, they have tripled in area. [45] Unless the inexorable lowering of densities is to be combated, it will be very challenging to service and travel around large cities. Lusaka is already plagued by the traffic consequences of low density sprawl.

IN PROVIDING 1.3 MILLION NEW DWELLINGS BY 2030, 48,000 HECTARES OF LAND (62,000 INTERNATIONAL STANDARD FOOTBALL PITCHES OR TWO LUSAKAS) WILL BE REQUIRED BY 2030.

According to the Lusaka Integrated Development Plan, Lusaka city covered an area of 27,000 Ha in 2007.[46] At 30 dwellings per Ha, the current densities of both council-built housing and informal settlements in both Lusaka and Kitwe, a total of 48,000 hectares of land (62,000 international standard football pitches) would be required for the urban growth up to 2030. This is almost twice the size of Lusaka in 2007. At the suggested 15 dwellings per hectare of FoNDP, 87,000 hectares (124,000 football pitches) would be required, almost four Lusakas. These figures are only residential area sizes – on to this should be added at least 40 per cent for the other urban uses.

Existing residential densities in various neighbourhoods

In selecting suitable densities for future land take, it is helpful to be able to visualise the type of development currently built at that density. Table 3. shows that there are a wide variety of residential densities in Zambian cities, from 2.5 dwellings per hectare in mine high cost neighbourhoods to 30 per hectare in unauthorised urban neighbourhoods in Lusaka.

Figure 50. Land take required for 1.3 million new dwellings by density of dwellings (hectares)

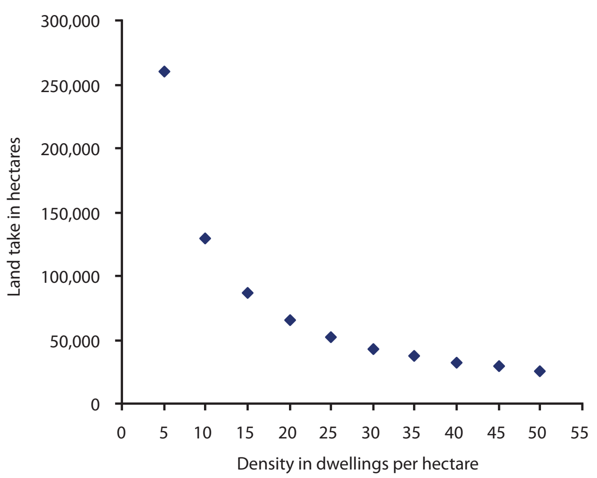


Table 39. Average net densities in urban neighbourhoods (dwellings per Ha)

Classification	Council	Mine	FoNDP	Other
Kitwe[47]				
Low-cost/ high density	*15.5*	*20*	*15*	
Medium cost/ medium density	*8*	*13.5*	*6*	
High cost/ low density	*3*	*2.5*	*5.5*	
Chipata squatter settlement, Lusaka[48]				10
Squatter settlements, Kitwe[49]				28.6
SNDP low-cost (12x27 plots)				15.4
Planning Guidelines			Low-cost/ high density	17.4
			Medium cost/ medium density	9.3
			High cost/ low density	3.7
Unauthorised urban settlements in Lusaka[50]				30
Matero				15-20

6.6 CROSS-CUTTING ISSUES: GENDER, HIV/ AIDS, YOUTH

The dual system of statutory courts, operating under English law, and customary local courts can cause problems over land, especially for inheritance. Under customary law, a wife cannot inherit land or other property from her husband.[51] Under statutory law, titles tend to be passed through male relatives in both matrilineal and patrilineal systems.[52] The Intestate Succession Act (1989) allows a surviving spouse to inherit 20 per cent of the deceased's estate and, together with the children, the house.[53] However, if the land is under customary tenure, as much peri-urban land is, the relatives can argue that customary law should overrule and women still lose their land.[54]

The statutory process of acquiring land presents several problems for women and other vulnerable groups. Proof of capacity to buy[55] is often a problem for women; few have their own bank accounts[56] and women are less frequently literate in English than men.[57] In principle, Zambian women can ask to acquire land under both the statutory and customary systems. In reality, however, women are disadvantaged in terms of access to, ownership of and control over, land.[58] Socio-economic and cultural factors such as illiteracy, the high cost of land, lack of capital, and patriarchal attitudes among men and civil servants, mean that women rarely apply to lease or own land.[59] Customary law historically safeguarded women's access to land but only through a male relative.[60]

Although Article 23 of the Republican Constitution of 1991, amended in 1996, forbids discrimination on the basis of gender, it explicitly excludes customary laws related to property inheritance.[61] Thus, women's access to and security of land is greatly limited despite recent changes to land policy in Zambia attempting to address the gender imbalance in land ownership. In formal developments, there is now a requirement that at least 30 per cent of the plot leases to be allocated to women and persons with special needs.[62] With the patriarchal mindset of most government land administrators,[63] this is probably still not biased towards women enough to equalise allocations as the demand for land by women easily outstrips supply.[64]

By 2005, the Commissioner of Lands reported that more than 50 per cent of the leasehold titles then being registered by his office were to women, in their own names. This provision only applies, however, to urban state land. In customary areas, it is rare to have many applicants at one time and traditional rulers are mostly conservative and see no reason why women should own land, especially if they are married. Thus, it is difficult to encourage or monitor women's progress in acquiring land.[65]

Property grabbing

There is much concern about widows' land tenure insecurity in Zambia, particularly when the husband's death is attributed to HIV/AIDS.[66] The Intestate Succession Act should have stopped the practice of "property grabbing" by blood relatives to oust a widow from her home when became law in 1989. It does not seem to have done so, however, probably owing to a general lack of knowledge of its provisions. There is some evidence that efforts to educate the public are beginning to bear fruit as case numbers decline. The Zambia Police Service set up the Victim Support Unit, in 1994, in all police stations, to help in cases of land-grabbing, domestic violence and child abuse.[67]

Studies in Lusaka have revealed that women are less secure than men in their land tenure. In Chaisa, for example, a study in 2003 revealed that women owned only 15 per cent of the 2,600 dwellings, and only five of them had secure tenure. Similarly, joint property ownership was extremely rare; only three were jointly owned.[68]

Several organisations and donors such as the Zambia Federation of the Homeless, Zambia Federation of the Handicapped, and World Vision have developed programmes to assist the vulnerable groups, especially double orphans who live in child headed households, the aged and disabled people, to acquire housing or land on which to build houses. The Ministry of Community Development, Mother and Child Health has several programmes and funding streams to assist the most vulnerable in the communities.[69]

ENDNOTES

1. UN-Habitat (2011b: 28).
2. UN-Habitat (2005).
3. UN-Habitat (2005).
4. http://www.postzambia.com/post-read_article.php?articleId=22479, accessed 12th December, 2011.
5. UN-Habitat (2005).
6. UN-Habitat (2005: 99).
7. UN-Habitat (2005: 100).
8. UN-Habitat (2005).
9. UN-Habitat (2005).
10. UN-Habitat (2005).
11. UN-Habitat (2005: 105) citing Mulwanda and Mutale (1994).
12. UN-Habitat (2005).
13. Republic of Zambia (2006: Annex 1).
14. This section draws heavily on UN-Habitat (2005).
15. Caritas Zambia and Zambia Land Alliance (2009).
16. Republic of Zambia (1996).
17. UN-Habitat (2005).
18. UN-Habitat (2005).
19. Phiri (2005).
20. Republic of Zambia (2005) cited in Chapoto et al. (2007).
21. Ministry of Lands (2002) and (Machina, 2002) cited in Chapoto et al. (2007).
22. Chapoto et al. (2007).
23. Chapoto et al. (2007).
24. Through the Lands Commissioner.
25. UN-Habitat (2005).
26. Ministry of Lands (2002).
27. See Chapter 2.
28. Kasongo and Tipple (1990).
29. Zambia Land Alliance (2011).
30. Zambia Land Alliance (2011).
31. UN-Habitat (2005).
32. UN-Habitat (2005).
33. Chapter 185, Volume 12.
34. Larsson (2005).
35. Chapter 188, Volume 12.
36. Chapter 184, Volume 12.
37. UN-Habitat (2005).
38. The vesting of former Crown Land in presidents in Africa at Independence gave the person of the president much greater power than that possessed by the wearer of the British Crown. Whilst the President can act more or less autonomously, Queen Elizabeth can only act through Parliament so Crown Land is effectively owned by all British people.
39. Zambia Land Alliance (2011). Corruption tends to thrive in land acquisition.
40. UN-Habitat (2005). The exceptions include where the land has been abandoned, is unused or undeveloped; where acquisition is in connection with implementing a comprehensive land policy or a policy effecting uniformity of customary and common law, and any law converting freeholds to leaseholds.
41. This section draws on UN-Habitat (2005).
42. Chapter 208, Volume 12.
43. Chapter 283, Volume 16.
44. Ministry of Local Government and Housing (1980).
45. Angel et al. (2005).
46. Ministry of Local Government and Housing et al. (2009: table 3.3.1).
51. Mutangadura (2004).
52. Republic of Zambia (2005) cited in Chapoto (2007).
53. Milimo (1990 cited in Chapoto, 2007).
54. Zambia Land Alliance (2011).
55. In the form of a bank statement.
56. Zambia Land Alliance (2011).
57. UN-Habitat (2005).
58. Muchima (2004 cited in Chapoto, 2007).

59. Keller (2000), Republic of Zambia (2005) cited in Chapoto (2007).
60. UN-Habitat (2005) and Shezongo-Macmillan (2005). Women are even perceived as property belonging to someone themselves. This occurs because most rural marriages in Zambia are virilocal; the wife settles in the husband's village. Thus, when the woman's husband dies or the marriage ends in divorce, the woman loses access to the land in her husband's village and returns to her village of birth. In matrilineal systems, where the husband settles in the wife's village, women generally have more secure land rights (Chapoto et al., 2007).
61. Keller (2000 cited in Chapoto, 2007).
62. They are also allowed to compete for the remaining 70 per cent of the plots.
63. UN-Habitat (2005).
64. Chapoto (2007).
65. UN-Habitat (2005).
66. UN-Habitat (2005).
67. UN-Habitat (2005).
68. UN-Habitat (2007).
69. Ministry of Health and National Aids Council (2008).

07

HOUSING FINANCE[1]

7.1 INTRODUCTION

According to the NHP,[2] there has been no consistency in the approach to housing finance in Zambia. Investment dropped from 3.0 per cent of GDP in 1969 to less than 0.5 per cent in 1992 – well below the UN and World Bank norms of 5.0 per cent of GDP. The problems with housing finance in Zambia are as follows:

"(a) a large majority of the Zambian people cannot afford to pay the economic rent or price for a decent house;
(b) building costs and finance charges have rocketed beyond the effective demand levels of market forces;
(c) property rates on housing have grown totally out of step with people's incomes;
(d) only a few employers have availed house loans at subsidised interest rates and only to their own employees (e.g., ZSIC, ZNPF, ZCCM, GRZ, commercial banks, etc.);
(e) low cost houses have been regarded as high risk business both in transferability and security of tenure;
(f) public sector, local authority and employer housing has attracted relatively cheaper (sic) rentals which have discouraged private investment in this sector;
(g) the slow land delivery system for housing has prevented private sector finance houses from releasing loans to this sector at acceptable rates;
(h) the housing market in Zambia has become a disparate mix of uncoordinated bodies and actors with no significant impact on the housing scene;
(i) there is no housing finance capital market to ensure easy flow of key requisites for house building or home ownership; and
(j) the government has played an insignificant role in the mobilisation of housing finance."[3]

All these add up to a very difficult environment in which to offer housing finance.

7.2 THE FINANCIAL AND CAPITAL MARKETS

The actors in the formal Zambian financial market include the Bank of Zambia, Commercial Banks, Non-Bank Financial Institutions, and Contractual Savings Providers (insurance industry and pension schemes).

From Independence, Zambia embarked on a command economy which kept administrative control over all sectors of the economy including the banks so they "remained underdeveloped and repressed".[4] Following the rise in the oil price and the dip in the copper price, the economy moved into negative growth with very high inflation and little capital market activity. In the 1990s, the MMD liberalised the economy and removed control of interest and exchange rates but the lending and inflation rates remained high because of high default rates and poor loans performance.

Since then, Zambia has benefited from the Highly Indebted Poor Country (HIPC) Programme through which it made its greatest strides since the 1960s. The economic growth rate has steadily risen from 5 per cent in 2004 to 7 per cent in 2011[5] but there is still likely to be high rates of formal unemployment for years to come.

Access to financial services among adult Zambians is extremely limited; less than a quarter of the adult population has access to financial services. Among them, most are savers or use the bank for transactions. The use of credit (housing or other), whether formal or informal, is recorded by FinScope Zambia as being extremely low (5.5 per cent).[6]

The capital market in Zambia is small and the macro economic situation generated high inflation rates. These have now dropped from over 30 per cent in 2002 to 9 per cent in early 2011.[7] The volatility of the Kwacha exchange rate continues to create uncertainty in the capital markets and hampers efforts to mobilise external sources of financing. Prime lending rates reduced from very high levels (46 per cent in 2001) to 19 per cent in 2011.[8]

7.3 LEGAL AND REGULATORY FRAMEWORK FOR THE BANKING SECTOR

The regulatory framework for banking is weak and unhelpful; the government has multiple and potentially conflicting roles in the financial sector and there is little long-term finance.[9] The banking sector is governed by the Companies Act, the Bank of Zambia Act, the Banking and Financial Services Act and the Securities Act.[10]

Financial Sector Development Plan for Zambia (FSDP)

The FSDP was drafted in 2004, with the aim of guiding financial sector reform over the period 2004 to 2009. The FSDP identified seven key weaknesses in Zambia's financial sector:

- Low levels of financial intermediation
- A poor credit culture
- Multiple and potentially conflicting roles of government in the financial sector
- Weak regulatory framework for non-bank financial institutions, insurance and pension funds
- The undeveloped capital market;
- The lack of long-term development and housing finance; and
- The limited number of monetary policy instruments.

These all have direct impact on the growth and viability of housing financing so it is crucial that they are rectified.

The Bank of Zambia (BoZ)

The BoZ is the regulatory authority for both bank and non-bank financial institutions,

"responsible for formulating and implementing monetary and supervisory policies that will ensure the maintenance of price and financial system stability in order to promote balanced macro–economic development."[11]

The Non-Banking Financial Institutions Department (NBFISD) supervises the activities of Building Societies, leasing and finance companies, the National Savings and Credit Bank, the Development Bank of Zambia, microfinance institutions and Bureaux de Change.[12] BoZ has been driving the process of implementing the Financial Sector Development Plan (FSDP) of 2004.

7.4 ZAMBIA'S HOUSING FINANCE SECTOR

The traditional problem for housing finance institutions is that they "borrow short but lend long". They are reliant on money invested for relatively short periods, or money which has to be available in a short time if called upon, but their loans last for 20 to 25 years. In Zambia, over 90 per cent of the deposit base are the short term investment deposits.[13]

In the past, large employers and the local authority supplied housing. Council housing was partly financed directly by government subvention but, in some major centres, e.g., Kitwe, also partly through the "Durban System", developed in that South African city at the turn of the twentieth century to relieve rate-payers from the 'burden' of housing workers in small businesses. It drew profits from the local authority's monopoly on the manufacture and sale of local beer ('chibuku' in Zambia) through council taverns[14] into the housing account. This subsidy from the liquor undertaking account was still occurring in the 1990s in independent Zambia[15] but councils have sold off their taverns and are no longer building housing.

Despite Zambia's historical reliance on industrial jobs, only 16 per cent of Zambians are now employed in the formal sector and few self-employed workers earn enough, regularly enough, to qualify for housing loans. FinScope estimates that there are only 2.2 million people in the potential market for housing finance and, of these, 40 per cent currently have no dealings with banks. While inflation and interest rates were extraordinarily high, there was virtually no demand for housing finance from them. With the slowdown in inflation, improvement in exchange rates, drops in bank lending rates and increasing availability of longer-term financing, a more viable market for housing finance is developing, but only at the top of the income scale and integrally linked with particular housing developments.

It is obvious from the above that the formal housing finance system is extremely small and only suitable for the richest segment of Zambian society. The demand for housing finance originates from three main sources:

- New Housing Purchase: There are very few new formal ('bankable') dwellings and poor market information, so it is also difficult, even for rich Zambian households, to identify and purchase new dwellings. FinScope Zambia found that only 3.2 per cent of the households accessing any form of loans used them to buy a home.
- Secondary Market Transactions: As in much of Sub-Saharan Africa, there is a very limited market in used housing so few Zambian households can change their housing circumstances by selling existing accommodation and progressing up the 'housing supply ladder'.
- Construction / Refinancing Requirements: Households seek financing to release the equity in their existing housing to finance improvements. FinScope Zambia found that 7.3 per cent of households accessing loans (housing loans or other, formal and informal) used them to renovate or extend their homes; and 0.9 per cent used them to purchase land.

7.5 KEY INSTITUTIONS IN HOUSING FINANCE

There has been significantly increased interest in the banking sector towards housing finance since 2005, when only one bank was considering entering the home loan market, two building societies had limited lending and the state-owned banks had moribund home loan portfolios. Zambia's formal housing finance sector includes development banks, pension & provident funds, commercial banks and building societies, micro finance institutions and the insurance industry. There are also 'Special Purpose Vehicles' to facilitate the complex financing arrangements necessary for some major housing development. Currently, the major banks offering Home Improvement Loans include Indo-Zambia, Standard Chartered and Barclays, while the Zambia National Building Society and Finance Building Society also offer house loans. The level of financial intermediation is low but growing. There is also an informal sector, consisting of money lenders and traders and a semi-formal sector in which fit the microfinance institutions (MFIs).

7.6 FORMAL CREDIT: MORTGAGE FINANCE IN ZAMBIA

Credit from the commercial banks is often very scarce and expensive with high rates of interest especially for customers who do not have collateral.[16] Mortgage loan conditions usually specify a minimum balance for an account and involve high transaction costs including complicated transactions and bank charges.[17] In the past, interest paid on mortgages attracted tax relief but this is no longer the case.

The main institutions in the sector are as follows:

Building Societies

The housing finance industry in Zambia mainly comprises the three Building Societies whose main task is to provide banking services and mortgage lending. They are the state owned Zambia National Building Society (ZNBS), established in 1972, the Finance Building Society (FBS), which is affiliated to the Finance Bank, and the Pan African Building Society (PABS), which was established in 1996. All are regulated by the Building Societies Act (Cap 412); all are mutually owned by savers.[18] Required to have a liquidity ratio of 25 per cent,[19] Zambian Building Societies have been under-capitalised until recently. As there is no apex organization with access to cheap money, they find great difficulties in obtaining money at interest rates that allows them to lend on affordably.

Zambia National Building Society (ZNBS)

ZNBS is currently not offering long-term loans, as it is constrained by the financial consequences of its historical lending practices. Non-performing loans now comprise less than 10 per cent of the mortgage portfolio. In 2006, it had about 3,000 outstanding loans with an average size of ZMK45 million (USD10,000 to USD12,000).

> HOUSING FINANCE IS MAINLY CONCENTRATED ON MORTGAGES FOR THE WELL-TO-DO, AT HIGH INTEREST RATES, WITH A DEPOSIT OF AT LEAST 10 PER CENT; UNAFFORDABLE BY MOST ZAMBIANS.

ZNBS provides mortgage loans; amounts depend on a person's income (mainly their salary) and range between USD7,000 and 8,000 but significantly large amounts are given to a few individuals. It also offers a few hundred home improvement loans per year. These loans are not however readily accessible to low income groups. It also offers a 'Building Materials Loan'; a two-to-three year unsecured loan at 24 per cent interest for building materials purchase, with payments deducted from the client's salary.

ZNBS's historical loan book has a very high proportion of non-performing loans. Government did, however, write off its current account deficit in order to improve the footing of ZNBS while its shareholders were required to re-capitalise the building society.

Finance Building Society (FBS)

FBS developed from a zero base in 2004 and currently has a housing finance portfolio of ZMK31 billion (about USD8 million), comprising about 500 loans.[20] Its mortgages have a ten-year term, and range from ZMK80 million to ZMK500 million (USD20,000 to USD125,000). FBS also runs a Home Savings Plan where an individual agrees to save a regular amount (minimum ZMK200,000) for a minimum of two years before he/she can access a housing loan. By this, it is assumed that the person will have accumulated enough to make a down payment on the loan. The savings attract a 7 per cent interest payment per annum which fluctuates with money market conditions. Savers are also entitled to a Loyalty Bonus equivalent to 5% of accumulated savings at the end of their two years and attain Preferred Borrower status. The borrower will then be entitled to three times the maturity value of savings at an interest rate of 23 per cent per annum (5 per cent less than the prevailing mortgage rate of 28 per cent p.a.).[21]

Borrowers must be members of FBS; they can obtain mortgages in Kwacha, if they are Zambian citizens, or in USD if they are non-residents. All borrowers are required to take out a Mortgage Protection Policy.

Pan African Building Society (PABS)

Pan African Building Society (PABS) is currently undertaking limited housing lending with the help of a 'twinned financing' arrangement through the UK Department of International Development (DFID) which injected USD50 000,[22] to which PABS was required to add matching funds from another investor.

Commercial Banks

Of the eighteen registered commercial banks, only those that are subsidiaries of international banks have the extended branch network and financing capacity needed for housing finance.

Finance Bank (FBZ)

FBZ was incorporated in Zambia on September 23, 1986. It currently employs nearly 600 personnel, has a nationwide network of 34 branches and 16 agencies, but has no housing loan portfolio.[27] Its base lending rate is 15.5 per cent per annum.

National Housing Bond Trust (NHTB)

The NHTB was introduced in 2004 as a Special Purpose Vehicle and through a Trust Deed settled by the MLGH with the mandate to provide affordable quality housing over an initial period of 20 years, in consultation with the Ministry of Finance and Economic Development.

Table 40. The main commercial banks active in housing finance

Zambia National Commercial Bank (ZANACO)	Zanaco was a wholly government-owned bank, but is in the process of seeking equity partners to expand its capital base. Zanaco intends to commence mortgage lending. Discussions have been held with First Building Society for them to administer the loans on Zanaco's behalf.
Barclays Bank	Barclays launched its home loan product in January, 2006. Currently, the product has a twelve year maximum term, an interest rate recently set at 17 per cent per annum. Currently, the portfolio comprises 80 loans with an average value of about ZMK200-million (USD50 000). Barclays has almost utilised the capital raised from its first 12-year bond issue of USD10-million in 2004. Barclays has set up dedicated home loan branches in key locations to attract business. It is estimated that 35 per cent of loans are for housing purchase, 40 per cent for equity release, and the remaining 25 per cent re-mortgages. Currently, there are no defaults in the portfolio. The assessment criteria require 40 per cent of personal income for servicing a bond.
Stanbic Bank	Stanbic offers home improvement loans. Home loans are tied to the number of years remaining before retirement. The banks currently provides ZMK90 million (USD18, 000 approx.) as a minimum loan. There is no maximum loan amount one can apply for but the Bank may require proof of other sources of income such as Director's Fees and Lease Agreements for large amounts. An equity contribution of 10 per cent from the borrower is required while the loan repayment period is 5 years. For salaried employees the loan repayment should not exceed 35 per cent of income. The current loan lending rate is 14 per cent per annum, i.e., base rate of 16 per cent minus two per cent[23]
Standard Chartered Bank	Standard Chartered launched its mortgage product in 2003-04. Initially, it had a slow take-up owing to high interest rates and a 20 per cent deposit requirement, which few Zambians had owing to a poor savings culture. The poor response forced Standard Chartered to withdraw from this market. With the improved economy and interest rates, the bank now provides home improvement loans. They believe they should be able to offer up to 20 year terms, with interest rates in the mid-teens.
Indo Zambia Bank	This Bank lends to salaried employees and other with proof of employment. It enters into an agreement with relevant institutions to deduct loans from salaries. Special arrangements are made with non-salaried employees. The borrower has to find a dwelling, obtain full title and write an application. The borrower's down-payment is 10 per cent of the value of the house, the repayment period is 10 years, while the base lending rate for IZB is 16 per cent per annum.[24]
Banc ABC	This is another locally owned Bank which offers loans at 17 per cent per annum. The borrower's downpayment is 30 per cent of the value of the house. The bank requires a letter of offer, Valuation Report and an operating account at the point when the loan is approved.[25]

Source: FinScope™ Zambia.[26]

The NHBT was supposed to access private sector financing through issuing Municipal Housing Bonds via the Lusaka Stock Exchange (LUSE).

The plan was to develop self-contained suburbs, housing estates and mini- townships in all 72 Districts of Zambia. Phase I of these projects was piloted in Chipata, Kitwe, Livingstone, Lusaka and Solwezi. A total of 12,000 dwellings were planned to be built in all the pilot towns with an investment of USD120 million. Although 4,000 were planned for Livingstone, only four demonstration dwellings were started and even they have not been completed.[28] The NHBT, however, failed to raise funds for the construction of houses and was abandoned by the government.[29] The dwellings in the scheme were too expensive for most prospective owners and anyone who already had a plot could not borrow to build a house

The programme to construct houses in Councils through Municipal Bonds did not occur as originally planned owing to difficulties in securing assets and income streams from Local Authorities. Some observers[30] noted that this was poor policy-making since Municipal Bonds were like loans to Councils who would promise to pay back at maturity with interest. Councils could not pledge public assets as security but, though they could pledge revenues, the Councils' revenue bases was very small as government had taken away rental housing and the taverns.

Development Banks

Some development banks with a presence in Africa have recently extended their activities to Zambia and are providing commercial banks with the capacity to offer housing loans. They are the Development Bank of Zambia (DBZ), the Development Bank of Southern Africa (DBSA), the African Development Bank (ADB) and Shelter Afrique (SA). [31]

Pension & Provident Funds

The large public sector pension and provident funds and the private provident funds have large, capital resources at their disposal that they should invest to ensure the pensions of the future. They are regarded, in many countries, as a major potential source of housing capital both on their own account and for the workers whose pensions they will buy. The national public-sector pension system was established as the Zambia National Provident Fund (ZNPF) which was replaced and subsumed by the National Pension Scheme Authority (NAPSA) in 2000. There are also private industry pensions schemes. Together they have the combined retirement assets of around 550,000 Zambians, estimated at more than ZMK2.5 trillion (USD600 million), a large proportion of which must be invested within Zambia.

A large amount of the potential pension resources have not been paid over by government,[32] but existing reserves are still very large. These funds are an important player in housing finance in Zambia but at a very small scale and usually high up in the market. It must be remembered, that money invested in housing, or anything else, must bring a reasonable return if members' pensions are to be protected. Thus, the first duty of the pension fund's investment is to its own capital growth, not to affordability in housing. Some past investments from pension funds into institutions such as FBS and ZNBS are still liabilities for them and stand in the way of future forays into financing housing.

The pension and provident funds involved in housing finance in any way include the following:

The National Pension Scheme Authority (NAPSA)

NAPSA is involved with the NHA in financing housing targeted at the educated middle class. Its current medium-density scheme in Nyumba Yanga, Lusaka (Error! Reference source not found.), is currently being sold at current market prices ranging from ZMK200-350 million (USD40-70,000) depending on the extent of refurbishment. NAPSA funds are also targeted by developers in Public-Private Partnerships. For example, the construction of 8,000 new dwellings for the mine at Solwezi.[33]

The Public Sector Pension Fund (PSPF)

The Public Sector Pension Fund (PSPF) is currently the only pension and provident fund legally able to provide mortgage finance, and only to its members.

Zambia National Provident Fund (ZNPF)

In the past, the Zambia National Provident Fund (ZNPF) granted mortgages, loans to staff, and loans for housing projects. The last included loans to local authorities for conventional low-cost housing and to employers for medium and high cost staff housing. ZNPF's home-ownership scheme allowed members to withdraw some of their pension funds to finance a home. As the loans are paid back over time, it should not affect their pensions. The ZNPF was transformed into NAPSA in 2000.

The Zambia State Insurance Corporation (ZSIC)

The Zambia State Insurance Corporation (ZSIC) also provides mortgages and loans for staff to house themselves.

The Local Authorities Superannuation Fund (LASF)

The Local Authorities Superannuation Fund (LASF) is allowed to provide a limited amount of mortgage finance to its members at below-market rates. Insufficient capital has constrained LASF in expanding its housing lending.

The Zambia Housing Development Fund

In 1988, a Fund was set up ostensibly to enable home-ownership at all levels. As with other such funds, e.g., through the Home Finance Corporation in Ghana,[34] this is a conventional mortgage fund requiring full title to land and formal standards of construction. It is, thus, only suitable for the upper income groups. Insofar as it diverts general tax income to upper income households, it is a measure which helps the well-off at the expense of everyone.

Public-Private Partnerships (PPP)

Government and quasi-government organisations are increasingly looking to the private sector for the funding required to fulfil their housing responsibilities. So NHA is involved with Malaysian and Chinese companies, the new housing for the Solwezi copper mine is being put out to PPP, with the possibility of NAPSA funding.

7.7 INFORMAL CREDIT

The informal sector is characterised by money lenders and traders who provide credit at interest rates as high as 50 per cent per month, but with many variations of interest, especially among relatives. This kind of credit is very common among the low-income groups. The penalties for non- repayment can be very high. There are also rotating savings and credit associations (ROSCAs) called "Chilimba", common among market traders and generally used for household needs.

ROSCAs are very common in Zambian urban centres were they are operate mainly on an informal basis. They are most common among women who contribute on average USD20-50 per month towards the *chilimba* – a common fund which is given to one member every month. This enables the members occasionally to aggregate sufficient capital to sustain their small businesses from which they may be able to finance housing projects. ROSCAs are an effective livelihoods coping strategy for many urban households. There are no specific sanctions for members who fail to contribute to the *chilimba*. In the past there have been efforts to form an Association of ROSCAs but, because of the diverse and dispersed nature of would-be members, this has been a very difficult task. It may require government policy intervention and would certainly require significant community effort to organise the members into a formal ROSCA.

7.8 MICRO-FINANCE IN ZAMBIA

As in many countries in Sub-Saharan Africa, micro-finance is a growing phenomenon. MFIs offer financial services, mainly through small loans and savings facilities but also offer capacity building services. The microfinance sector in Zambia emerged in the 1990s; it includes private companies, for-profit companies, and non-governmental organisations (NGOs).

Though regulation and supervision of MFIs is still at an embryonic stage, BoZ is working on draft microfinance regulations.[35] There are probably over 100 MFIs operating in Zambia, many are NGOs but, more recently, commercial institutions started offering loans. There are five or six 'First-tier' deposit-taking MFIs, including FINCA, Pride Zambia, Microfin and Bayport; they are required to have a minimum capital requirement of ZMK1.5 billion (USD340,000). Second-tier, or non deposit-taking MFIs, which are required to have a ZMK500 million (USD113,000) minimum capital, are numerous in Zambia.[36]

There is also a range of Third-tier (Small) MFIs in the form of community credit institutions that have delegated supervision requirements. Microfinance regulations were issued for the first time in early 2006 to give credibility and structure to the sector and to improve the chances of MFIs' obtaining financing from other financial sectors. The Association of Microfinance Institutions of Zambia (AMIZ) is a representative body, but it is not compulsory for MFIs to belong to it.

In the last 10 years, Zambia has witness a proliferation of MFIs, such as Bayport, FINCA, Meanwood Financial Services, Blue Financial Services, Blue Cash Express, and Ingwee which only lends to government workers. The MFIs mostly focus on lending to SMEs and MSMEs; some, such as Pulse Financial Services Ltd, also lend for home improvements initiatives. The loans range between USD100 for marketeers to over USD1,000 for home improvement schemes. The amount someone can borrow often depends on their liquidity which must be proven through bank statements. The MFI has a set of conditions such as that a lender should be in full employment and have assets and guarantors to borrow. The majority urban poor cannot meet these conditions and so the benefits are limited to only a few salaried employees. The MFIs are regulated by the Bank of Zambia.

African Housing Fund (AHF)

According to Muchima,[37] AHF is a MFI which has housing microfinance loans. AHF was established in 1996. It is a quasi-government institution operating in many parts of Zambia. Together with the usual MFI focus on assistance to improve income generating activities, AHF provides materials loans for the construction and improvement of shelter. AHF co-operates with the government through the Department of Physical Planning and Housing at the Ministry of Local Government and Housing which selects communities to be assisted. The funding and resource mobilisation is done by the Ministry of Finance. As with many MFIs, there is a focus on women who must constitute not less than 51 per cent of beneficiaries. The clients form groups of 10 households for low-cost housing, 25 for water-well loans and 5 individuals for micro-credit, with each member co-signing for others. Loan repayments are deposited in a revolving fund for further lending.

In 2004, AHF was working in Linda squatter settlement, collaborating with the local government in upgrading. Where the beneficiary does not have land, the local authority gives the land on a 30 year Occupancy Licence. The areas are serviced with water and graded roads and AHF helps the community to construct in an organised way on a standard plan. In 2004, the lowest housing loan was ZMK4 million (USD800) while the highest loan was ZMK6.5 million (USD 1,300) for a complete dwelling given as materials and not cash. As they are collected from the store-room, the materials in the loan are entered on a bill card. The interest paid is 27% per annum plus 10% as a supervision cost. The loan period is three years for renovation and seven years for new construction. Loan repayment may be in cash or material, including farm produce. Beneficiaries participate by providing labour while AHF provides the skilled labour.[38]

Box 3: Lilayi Housing Project: Special Purpose Financing Vehicle

"In order to overcome the many pitfalls facing housing development in Zambia, the Lilayi Project has developed a complete development solution. The project has been structured from the beginning as a stand-alone community, with most of its services and facilities being developed as a part of the scheme. In addition, it will be piloting a new, decentralised procedure for the transfer of title, which relies on local offices rather than the Department of Lands.

The project kicks off with three basic products: a USD25,000 one bed unit, a USD35,000 two bed unit and a USD45,000 three bedroom unit.

Given the absence of housing finance players in the market over the last four years, the Lilayi Housing Development took an alternative approach to ensuring it could arrange take-out financing for purchasers. They will raise their own capital for end-user finance, and will then recoup the funds from the individual purchasers. Finance repayments are indexed annually in advance, in order to give borrowers Kwacha stability for the period of a year.

Re-indexing cannot exceed 20 per cent. Stanbic will administer the home loans on Lilayi's behalf. Originally few financiers were interested in the scheme, with the exception of OPIC. However, at present approaches have been made by IFC, ADB, DBSA and others."[40]

Table 41. Bonds used to finance housing

Housing finance related bond issues	Barclays floated a USD10-million bond in 2004/5, and the success of this has led to other actual and rumoured bond issues on the LUSE. Specifically, in relation to housing finance, Barclays and Stanbic both indicate they will use future bond issues to obtain long-term sources of funding for their home loan portfolios. FBS also offers bonds. The issuance of housing bonds has not been a success story in Zambia partly because of the weak financial base of most would-be targets. Nor has the population been made aware of the benefits of the bonds. This can be contrasted with mortgages and loans which many in the middle and high income groups use.
Lilayi Housing development	As noted in Box 1, Lilayi has also gone to the markets (albeit through a more complex mechanism) to finance its capital needs for the ambitious housing project. This will include proposed municipal bond issues to mobilise resources for the provision of services in their areas of jurisdiction.
Municipal bonds	An initiative is under way that aims to source financing from the capital markets for infrastructure development by the five major city councils in Zambia. The mechanism proposed is a Special Purpose Vehicle (SPV) with an independent board and management structure that will aim to 'guarantee' the success of the venture. Unfortunately, this initiative failed because the council revenue bases and income streams are either so low, or are used for other urgent needs such as salaries and services, that the Councils have no effective collateral against which to issue the Bonds. Neither is the Government supportive as it often fails to pay its debts.

Source: Gardner.[41]

By the year 2001, AHF had trained 3,038,participants in construction skills such as block making, manufacturing of roofing tiles and bricklaying. The Linda project has 465 houses and about 50–60 of them have been fully paid for. By 2004, 2,408 dwellings had been constructed throughout the country through AHF microfinance with over 300 dwellings each in Solwezi, Masabuka, Mongu amd Kasama.[39]

Housing Bonds

There are signs of gradual capital market expansion in the Lusaka Stock Exchange (LUSE), though it lists only a few stocks and bonds. Whenever good bond issues are made available, they are over-subscribed by a factor of two or three. Treasury bills and Bonds, which are currently offering mediocre returns, are also popular.

Swalisano Urban Poor Fund

The Swalisano Urban Poor Fund is a capital fund operated by the People's Process on Housing and Poverty in Zambia (PPHPZ) and the Zambian Homeless and Poor People's Federation (ZHPPF). It is used for leveraging resources from central government, local authorities utility companies and other partners in development. It is also the community capital fund allowing members to access low interest loans which they would not be able to access through conventional financial institutions owing to their inability to raise the collateral normally required.[42]

In Livingstone, ZHPPF dwellings cost ZMK8 million (USD1,600) for one room and ZMK12 million (USD2,400) for two rooms. ZHPPF members are required to pay ZMK200,000 (USD40) surety to access housing loan finance as well as fulfilling other criteria. Houses are built incrementally to ease payment. Currently, repayments on the loans are ZMK200,000 (USD40) per month in Livingstone but this is acknowledged to be beyond most households' ability to afford. The Kitwe households pay ZMK100,000 (USD20) per month.[43]

7.9 AFFORDABILITY OF HOUSING FINANCE

In common with much of Sub-Saharan Africa, and as shown in both the Ghana and Malawi Urban Housing Sector Profiles,[44] affordability is probably the major problem in housing in Zambia. The low level of formal employment required to qualify for a loan withdraws the majority from the mortgage market. Life expectancy in Zambia is so low (at less than 40 years) that long loans become problematic. Mortgage protection life insurance could be of great assistance but it might be expected to be expensive. Zambians are not averse to debt and more opportunities for consumer credit are being presented every day but this also reduces the amounts of housing credit that any individual might be able to raise.

ALTHOUGH THE HOUSING (STATUTORY AND IMPROVEMENT AREAS) ACT WAS MEANT TO PROVIDE GOOD ENOUGH TENURE TO BORROW MONEY FOR HOME-IMPROVEMENT, COUNCILS HAVE BEEN SLOW TO ALLOW BORROWING WITHIN THEM.

All the above formal institutions are important, but the nub is surely the low household incomes. Apart from the recent FinMark study upon which this chapter is based, little effort has been put into defining a profile of housing demand in Zambia and there is little empirical work on the current housing strategies of ordinary Zambian households.[45] It is likely that effective demand for housing, i.e., willingness and ability to purchase housing, is only a fraction of the stated 'need'. So few people are banked and in formal employment that eligibility or demand for mortgage credit is low. According to FinScope Zambia, only 0.4 per cent of the population currently have any sort of a loan from a bank, government scheme or employer to buy a dwelling (only 0.1 per cent have a housing loan from a bank). A further 2.4 per cent have paid off a loan to buy a dwelling.

Capacity for servicing loans is very low; even amongst the formally employed. Using income data, FinMark calculate that only the 23 per cent of the population that earned over ZMK450,000 (USD118) per month in 2007 (equivalent to over USD178 per month in 2010) can only afford a mortgage of USD3,758 or more (in 2011), at 15 per cent interest over 20 years. At a mortgage covering 75 per cent of the cost price, this indicates an affordable dwelling price at the 77th per centile of income of only USD5,000. The profile uses expenditure figures to calculate housing affordability and these are higher than income data. It is reasonable, however, to consider the income figure as a marker for the ability to raise a formal loan.

Most of the housing 'need' is from households with limited or no formal employment, very low incomes and no social security safety net from the state. Fifty-six per cent of households need housing finance of USD1,250 or less; this is not the realm of mortgages.

7.10 FUTURE CHALLENGES FOR ACCESS TO HOUSING FINANCE

The FinMark study offers useful insights into future needs and prospects from 2007.[46] As in most of Sub-Saharan Africa, the lack of local, secured, capital over the long-term (more than three years) is a major constraint on organisations that inevitably have to 'lend long'. Zambia's lack of a sovereign credit rating means that even the government has to pay highly for any debt. On the positive side, the recent macro-economic stability and promotion to the status of Zambia to a 'low-middle income country' are a helpful sign.

To sustain the mortgage financing sector, it is vital to change direction from concentrating on the relatively easy-to-serve high net-worth households. There are too few of them to allow a sustainable mortgage market to thrive. Even in mortgage financing (which is only appropriate at the higher-end of the market), alternative financial mechanisms (smaller, non-mortgage instruments), serving alternative construction processes (incremental) are likely to be important.

Appropriate finance is needed for the vast need for housing within Zambia's predominantly low-income households who occupy informal housing and whose children will probably also do so.

7.11 NEED FOR HOUSING FINANCE TO PAY FOR THE HOUSING NEEDED TO 2030

Using the affordability calculations from the 2006 LCMS V data inflated to 2011 using the CPI, the mean amount likely to be afforded for housing by the majority low-income population is USD12,000 (ZMK60 million). The total cost of 1.3 million new dwellings in that range would be USD15.6 billion (ZMK78 trillion (table 3.)). If they were to borrow three-quarters of this, the mean size of loan would be USD9,000 (ZMK45,000,000). If there are to be 1.3 million households to be housed, just using the low-cost housing need as the mean amount, this would require the equivalent of ZMK58.5 Trillion (USD11.7 billion) over 19 years to 2030, ZMK3 trillion (USD616 million) per annum (table 4.).

The profile's own sample survey, however, predicts different affordabilities at HC:Y = 4 (table in Chapter 5). The means mainly fall within the USD10-40,000 range, giving a more generous target than the LCMS V data. The total cost of 1.3 million new dwellings in that range would be between USD13 billion and USD52 billion (table 3.). Three-quarters borrowed would mean loans totalling between USD9.75 billion and USD52 billion (ZMK65 trillion and 260 trillion). Per annum financial need would be between USD0.51 billion and 2.06 billion (ZMK2.55 and 10.28 trillion) (table 43.).

In comparison to the above, the total of pension funds available for investment in Zambia is about USD600 million.

Table 42. Likely cost of the housing needed 2011-2030 (within the range USD10-40,000 per dwelling)

	Total required		Per annum	
Cost of dwellings	**(USD billion)**	**(ZMK trillion)**	**(USD billion)**	**(ZMK trillion)**
12,000	15.6	78	0.82	4.1
10,000	13	65	0.68	3.4
20,000	26	130	1.37	6.8
30,000	39	195	2.15	10.3
40,000	52	260	2.74	13.7

Table 43 Finance required to meet the housing need, 2011-2030 (75 per cent finance for dwellings costing USD10-40,000 per dwelling)

	Total required		Per annum	
Loan amount per dwelling (USD) (75 per cent of cost)	**(USD billion)**	**(ZMK trillion)**	**(USD billion)**	**(ZMK trillion)**
9,000	11.7	58.5	0.62	3.08
7,500	9.75	48.75	0.51	2.55
15,000	19.5	97.50	1.03	5.10
22,500	29.3	146.25	1.61	7.73
30,000	39.0	195.00	2.06	10.2

The NHP[47] states the following as its main principles in housing finance:

"(a) to put housing in a central position in national policies alongside health and education;

(b) to mobilise housing finance from the public sector, the private sector and from international agencies;

(c) to give positive incentives to individuals and institutions to invest directly into housing or directly through an approved housing finance system;

(d) to develop mechanisms to assist vulnerable groups;

(e) to seek avenues for the creation of seed capital to assist private sector financial institutions involved with housing;

(f) to encourage individual home ownership; and,

(g) to develop a secondary mortgage market."

In order to do this, the following are proposed

- To establish mechanisms for mobilising relatively cheap housing finance to be controlled by building societies or similar housing finance institutions
- to promote the establishment of savings co-operatives to create loan funds for home ownership;
- to provide incentives to statutory pension funds, commercial banks, insurance, houses and similar institutions to invest a percentage of their funds into housing development;
- to direct employers and employees to subscribe into a fund for housing development;
- to encourage all employers to channel their staff housing loans through specialised housing finance institutions such as building societies;
- to provide appropriate bonds and guarantees for housing finance institutions to lend to the low-income households;
- to establish a mechanism for regulating and supervising housing finance institutions;
- to review taxation on building materials and components with a view to bringing costs down; and
- to review the system of fees, levies and duty between developers and mortgages, on one hand, and "first time home owners"' on the other, with a view to minimising costs.[48]

In light of the calculations that the profile makes for the need for new housing and the likely ability to afford housing in the population, the need for finance will be of a different order from that envisaged in the 1996 National Housing Policy. It makes the need for sustainable housing finance, at appropriate loan size and numbers of loans, a key element in Zambia's housing supply to 2030.

THE NEED FOR HOUSING FINANCE UNTIL 2030 (AT 75 PER CENT OF HOUSING COST) IS AROUND USD616 MILLION PER ANNUM, IN LOANS BETWEEN USD7,500 AND USD30,000.

7.12 SPECIAL GROUPS NEED/DEMAND: GENDER, HIV/AIDS, YOUTH

The Government has recently introduced the Social Cash Transfer Schemes administered by the Department of Community Development for the most vulnerable households. These are expected to mitigate some of their housing needs.

The reduction in life expectancy owing to HIV/AIDS, and especially the pandemic's spread amongst the young adult cohorts, leads to difficulties with long loans. While mortgage-linked life insurance can take care of that issue for the borrower, the lender and the insurers are reluctant to lend when the mortgagee is quite unlikely to outlive the loan. At the same time, the ownership of a dwelling is a vital benefit when disaster strikes. It can make the difference between sending the remaining household into a cycle of poverty and destitution so home-ownership becomes more important because of HIV/AIDS.

Within this context, short-term loans for the small amounts that can build a room or add improvements to an existing structure become very important and could help to improve the housing conditions of those affected by HIV/AIDS.

In the disasters literature, insuring the structure of the home is seen as a necessary step to ensuring continuing economic viability after natural disasters when public money should be concentrated on repairing public goods such as infrastructure. In the same way, under the threat of HIV/AIDS and other life-shortening conditions, house insurance and, where relevant, mortgage-linked life insurance should be encouraged for all home-owners.

7.13 CONCLUSIONS

There is a well-regulated banking sector in Zambia which is attracting international confidence. Housing finance, however, remains fairly undeveloped and mainly concentrated on mortgages for a small part of society; the rich and the emerging middle class. Interest rates are typically quite high (above 20 per cent per annum) and a deposit of at least 10 per cent is required. Loans like that are unaffordable to most Zambians. There is about USD600 million in pension funds that could be invested for housing.

Informal finance is commonly used in Zambia for small loans, especially through ROSCAs ('chilimba') but these are unlikely to provide housing finance. Microfinance is a growing industry in Zambia but few lend for housing.

There is a general lack of 'bankable housing' for the poor majority. Although the HSIA was intended to provide informal settlers good enough tenure to borrow money for home-improvement, councils have been reluctant slow to allow borrowing within their head-lease area.

Small-scale innovations such as the Swalisano Urban Poor Fund provide low-interest loans to members of particular community organisation through special, and probably not generally replicable, sources of finance.

Most of the 1.3 million dwellings housing 'need' is from households with limited or no formal employment, very low incomes and no social security safety net from the state. The scale of financial need for housing until 2030 (at 75 per cent of housing cost) is around USD616 million per annum, in loans between USD7,500 and USD30,000.

ENDNOTES

1. This chapter draws heavily on the FinMark Trust assessment of Zambia (Gardner, 2007).
2. Republic of Zambia (1996).
3. Republic of Zambia (1996:16).
4. Bank of Zambia (2004b: 8) quoted in Muchima (2004).
5. http://www.indexmundi.com/zambia/gdp_real_growth_rate.html.
6. Gardner (2007).
7. Index Mundi http://www.indexmundi.com/zambia/inflation_rate_(consumer_prices).html.
8. http://www.indexmundi.com/zambia/commercial_bank_prime_lending_rate.html.
9. Bank of Zambia (2004b: 8).
10. Caps 388, 360 and 354 respectively. Cap 388 Companies Act Vol 21 of the Laws of Zambia; Cap 360 Bank of Zambia (Amendment) Act Vol 20; Cap 387 Banking and Financial Services Act Vol 21; Cap 354 Securities Act Vol 20
11. Bank of Zambia (2004a: 1) quoted in Muchima (2004).
12. Muchima (2004).
13. Makundi (1992).
14. Which were built with public money perhaps instead of other social facilities which could have done more good.
15. Mutale (2004). It was not very effective, however, as profits were surprisingly small and the incidence of tavern managers disappearing with the takings unfortunately frequent. The taverns are now in private hands.
16. Muchima (2004) quoting Mutambo (2003).
17. Muchima (2004).
18. Muchima (2004).
19. Compared with the banks' 15 per cent.
20. The mean loan size is USD16,000.
21. Finance Building Society (FBS) (2010). Base interest rates after September 20, 2011 have ranged between 14 percent and 19 percent.
22. This, again, is a very small sum of money in housing finance terms.
26. Gardner (2007).
27. Personal communication with Mrs N Mwansa, Branch Manager FBZ, Kitwe..
28. Information provided by the Deputy Director of Planning, Livingstone City Council, October 2011
29. www.dgmarket.com; ZNBC.com
30. Comments and recommendations of the Parliamentary Committee on Local Government. Zambian Economist 2011 Wednesday, 6 January 2010 Blog on Municipal Bonds.
31. Gardner (2007).
32. The non-payment of debts by government is a common complaint from suppliers of services and local authorities.
33. http://www.postzambia.com/post-read_article.php?articleId=22479, accessed 12th December, 2011.
34. UN-Habitat (forthcoming, 2011).
35. Bank of Zambia (2004a: 7).
36. Chiumya (2010).
37. Muchima (2004).
38. Muchima (2004).
39. Muchima (2004).
40. Gardner (2007: 13).
41. Gardner (2007: 14).
42. Personal communication. Nelson Ncube, September, 2011.
43. Personal communication, Nelson Ncube, September, 2011.
44. UN-Habitat (2010) and UN-Habitat (forthcoming, 2011).
45. Exceptions are dissertations such as Mwango (2006).
46. Gardner (2007).
47. Republic of Zambia (1996: 22-3).
48. Government of the Republic of Zambia/MLGH (1996).

08

INFRASTRUCTURE FOR HOUSING

8.1 BASIC URBAN INFRASTRUCTURE PROVISION IN A NUTSHELL

As in many other countries in Africa, there are two systems within urban Zambia; the formal city in which full infrastructure has been provided (though it may not still function) and the informal city where little or no infrastructure is provided and people cope as best they can. Government policy tends to concentrate on the formal and only deal with the informal when some crisis occurs or when citizens' representatives, international agencies or NGOs force the issues. Even within the formal sector, there are favoured and less-favoured areas; areas with all services in the dwelling at one end and those whose occupants have to walk many 100 metres to obtain water or use a toilet, and have no lighting or heating other than paraffin lamps or charcoal stoves.

The services provided have historically been seen as welfare and basic needs which should be provided as cheaply as possible to the consumers. Government funded the local authorities and they provided the services. By the 1980s, however, Local Authorities' capacity to deliver water, sanitation, waste collection and road maintenance was severely hindered by reductions in government subventions leading to a chronic lack of finance and skilled personnel. At the same time, residents in the cities were often at loggerheads with the councils owing to their failure to deliver adequate services. Even when residents paid their bills, the council may not provide services.[1]

In the formal sector, the sale price of residential plots includes the cost of servicing them. Thus, during the days when land had no value (in the Second Republic), plots were charged for through a 'plot premium' which covered the cost of services provided. During that time, connection costs to water and sewerage mains reflected the average cost of the previous year's connections. Thus, it was in the City Council's interests to extend the mains and keep the average cost of each connection down. Currently, new areas are charged for by the plot, pro rata, according to the total cost of the new neighbourhood divided by the number of plots. Individual plots are charged according to how much that connection costs to install.[2]

There is a general lack of provision for financing maintenance and refurbishment or replacement in the way infrastructure is financed in Zambia. Thus, the providers are both poorly capitalised and poorly paid for their day-to-day deliveries of services. Furthermore, there is no additional charge made over unit costs to build up maintenance budgets. There is even no attempt to recover the capital costs of the infrastructure in the charging systems; only unit charges for water etc., are levied.[3] These do not make for sustainable systems which the operator can plan ahead or is keen to extend as demand increases. Extension to the system is such a problem that, when mining companies are considering building thousands of new dwellings in Solwezi, the servicing companies are insisting that the mines fit the infrastructure reticulation and then hand it over free of charge to them.[4] LCC is negotiating with the USAID Millennium Challenge Account (MCA) for several billions of Kwacha for infrastructure development in Lusaka. JICA has been funding infrastructure upgrading for about a decade and has pledged to assist with further infrastructure rehabilitation and upgrading in various parts of Lusaka.[5] This is virtually the only way of improving infrastructure in urban Zambia currently.

While privatisation suggests full cost payments from customers, this has not worked in practice. Water and Sewerage Companies, for example, must submit tariff structures to National Water Supply and Sanitation Council (NWASCO) for their approval. Even though there is an approved strategy to move gradually towards full cost-recovery, the last time Lusaka Water and Sewerage Company (LWSC) applied for an increase in tariffs, the regulator cut them in half. In addition, the largest customer for the WSCs, the government, is a very poor payer of service charges. In 2011, the government, which constitutes 30 per cent of all the billing in Lusaka, owes Lusaka WSC ZMK43 billion (USD8.6 million).[6]

THERE IS INSUFFICIENT INVESTMENT IN INFRASTRUCTURE, LEADING BOTH TO POOR PROVISION AND GROSSLY UNDER-FUNDED SERVICE PROVIDERS.

Vision 2030 identifies many shortcomings in the infrastructure supply system but sets out its vision to provide clean and safe water and sanitation for all by 2030. Its goals are as follows:

- Improve access to appropriate, environmentally friendly sanitation by all Zambians;
- Attainment of 80 per cent access to clean water supply […] by 2015 and 100 per cent by 2030;
- Attainment of 68 per cent access to sanitation […] by 2015 and 90 per cent by 2030; and
- Fully integrated and sustainable water resource management.[7]

8.2 WATER SUPPLY AND SANITATION

Initially, under the Urban African Housing Ordinance of 1948, Councils and mining companies were the providers of water to urban residents on a non-profit basis. The mining companies also regarded water supply as a social overhead, paid for at a fixed subsidised rate out of mineworkers' salaries.[8] This culture persisted into the 1990s,[9] well after the withdrawal of government subventions to local authorities had made it impossible to sustain subsidies.

The two Acts which provide the main legal framework for water supply and sanitation are the Local Government Act (No. 22 of 1991), which gives the local authorities the responsibility for water supply throughout their areas, and the Water and Sanitation Act (No.28 of 1997) which specifies how the local authorities should provide the services directly or through Commercial Utilities. The latter act also set up the National Water Supply and Sanitation Council (NWASCO) which regulates the suppliers.

The National Water and Sanitation Strategy of 1994 provides an overall policy framework for water and sanitation. It aims at equitable and good quality service for all users. It provided for the separation of water and sanitation from the Local Authorities and the adoption of technologies appropriate to places and people. The Water Supply and Sanitation Act (No. 28 of 1997) specifies how LAs should provide urban water supply and sanitation and sets up the National Water Supply and Sanitation Council (NWASCO) to regulate the sector.[10]

For extensions to the service or major maintenance, the Water and Sewerage Companies, wholly owned by the large local authorities, face the task of raising money on the market and despair at finding it cheaply enough to carry out the extensions to and maintenance of the networks. Partnerships with the private sector are rare as there is insufficient profit to be made. The only way forward is to raise donor money from those interested in improving peri-urban conditions (the World Bank, USAID, the European Union). This finance for extending the mains reticulation is only available as project costs. In squatter upgrading projects, LCC have to buy the pipes and fittings for LWSC to connect up.[11]

As their name suggests, the Water and Sewerage Companies in the larger urban areas take a partial view of sanitation and are only responsible for sewerage. Other forms of disposal for human waste, for example, composting waste, pit latrines, etc., are the responsibility of the local authorities. There are regulations stipulating 30 metres minimum distance between a latrine and both a dwelling and a water source. The same standard applies for ground water sources but is difficult to determine because of fluctuations in the water table for different areas. This standard is rarely followed especially in urban informal settlements where water wells and latrines are dug a few metres from each other resulting in a high incidence of diarrheal diseases in the communities.

Lusaka Water and Sewerage Company (LWSC) is responsible for supplying the capital with water and sewerage facilities. It relies on the Kafue river for 97,000 cubic metres per day and a similar amount from 72 boreholes reaching deep groundwater.[12] The boreholes have their own system of tanks and pipes in the peri-urban areas. Another 80,000 cubic metres per day is supplied by private boreholes and shallow wells. The demand for water in Lusaka and other towns is growing quickly so that demand already outstrips supply of treated water. Some major increases in processing capacity are required in the near future if water is to be available to all urban residents.

Figure 51. Informal settlements spreading across dolomite, George, Lusaka. Photo © UN-Habitat

The area of the city with dolomite rock is almost impossible to service, requiring dynamite to blast trenches through the hard rock. This limits formal growth to the west of the city centre but informal settlements are spreading across the dolomite (figure 1), rendering them virtually impossible to service later on.

LWSC provides water to the perimeter of its supply areas and then WDCs distribute it from there through their Water Committees and Tap Committees. In unplanned settlements, water may be supplied via connections to the central water distribution system or from local networks with communal taps supplied by local boreholes, from boreholes with hand pumps, or from hand dug wells. LWSC's supply is inadequate and erratic while that from local boreholes and wells may be contaminated (the latter may also dry up). Most unplanned settlements have poor and unsafe water supplies, especially where the dolomite rock limits well-digging to a few metres and sanitation pits contaminate the ground water.

In Kitwe, the dual nature of the city was reflected in its water supply. The mining company had one water works and the City Council had two. All draw water from the Kafue River system. When the mines withdrew from water supply, the systems were jointly managed. The Konkola mine in Chililabombwe generates 300 million litres of groundwater per day, which is pumped into the Kafue River; ten times as much water as is extracted and purified at the town's water works.[13] This pumping is necessary to keep the mine operational and represents a collateral source of water suitable for treatment and distribution into the future.

While privatisation has failed to deliver improvements in the formal supply based on the ageing fixed networks, it has allowed community-based approaches to water supply in some areas. In Chaisa and Chipata unplanned areas in Lusaka, for example, boreholes have been drilled and supply networks established which are run by community-appointed workers (figure 52).

Surface water quality in Lusaka is affected by uncontrolled quarrying which is a popular occupation for people who cannot gain formal sector jobs. Quarrying increases the quantity of undissolved solids in the water while poor waste disposal adds other pollutants.[14]

There is an urgent national need to recapitalise the infrastructure providers and increase supply to unplanned settlements.[15] In the 1990s, water supply was privatised as a way of increasing efficiency and encouraging a commercial approach to such issues as quality of service and revenue collection. It was done mainly by dividing off the water and sanitation activities into a company wholly owned by the council. The exception was in the most profitable areas, the Copper-mining towns, in which a private company (Asset Holding Company - Mining Municipal Services; AHC-MMS) took over the supply with the assistance of a World Bank loan aimed at privatising water supplies. The high hopes, however, have not been translated into improvements in services. Even AHC-MMS, a subsidiary of the French company SAUR, could not perform according to expectation and its contract was withdrawn in 2005 when the service was transferred to Ndola's Water and Sewerage Company.[16]

THE INFORMAL SECTOR AND COMMUNITY GROUPS, ASSISTED BY NGOS, STRIVE TO FILL THE SERVICING GAPS LEFT BY THE OFFICIAL PROVIDERS BUT THEY CANNOT KEEP PACE WITH INFORMAL DEVELOPMENT OR CATCH UP ON THE BACKLOG.

In Lusaka, sewage pump stations and sewage treatment works must be rehabilitated and updated.

Water supply

"...the region's water is a pool reflecting back to us the contradictory faces of unlimited privilege for the few, and limitless poverty for the many"[17]

In general, Zambia has sufficient water resources for many decades of population growth. Even in drought years, it only consumes 5 per cent of its available surface water. However, many urban households have little access to water.

Figure 52. A water main fitted in Chaisa, Lusaka.
Photo © UN-Habitat/Daniel Phiri

Table 44. Urban source of drinking water, households and population, 2007 (percentages)

	Households	
	Urban	**Zambia**
Source:		
Improved sources	**82.5**	**41.1**
Piped water into dwelling/ yard/ plot	*39.7*	*14.7*
Public tap/ standpipe	*36.9*	*14.0*
Protected dug well	*5.6*	*12.3*
Bottled, etc.	*0.3*	*0.1*
Non improved source	**13.7**	**55.7**
Unprotected dug well	*12.6*	*35.0*
Surface water	*1.1*	*20.7*
Other	**3.8**	**3.2**
Location:		
Off plot but less than 30 minutes away (round trip)	*42.1*	*54.3*
30 minutes or more away (round trip)	*8.4*	*22.5*

Source: ZDHS[19] with bottled water moved into the improved sources.

Safe water supply is defined in Zambia as having access to 25 litres per capita per day from a protected source every day of the year within 500m. A safe ground water source should

- be at least 30m from a latrine or refuse pit,
- be lined all the way down,
- have a platform to protect against surface water penetration,
- have a lifting device, and
- have a functioning waste water drainage system.[18]

Table 44. shows that urban households have much better access to water than those in Zambia overall. More than 80 per cent of urban households have improved water sources and more than 40 per cent have piped water into the plot or dwelling. This is the best water supply but there are areas where flows are so intermittent that it becomes a problem. About 37 per cent of households rely on public standpipes and only 6 per cent use protected wells. The 14 per cent who rely on unimproved water sources mostly use wells (figure 53).

Figure 53. A shallow well, Lusaka. **Photo** © UN-Habitat

Both the 2000 census[20] and LCMS V (2006)[21] show 86 per cent of urban households in 2000 with access to improved water supply, slightly more than in table 1. Low cost neighbourhoods have 85 per cent with improved water supply while plots in the high cost neighbourhoods have virtually universal supply.

In the 1970s, PVC pipes became available at a much lower cost than asbestos-cement or copper and they were much more flexible. Council engineering departments used them widely in servicing low-income and informal neighbourhoods, especially when community self-help was involved, to reduce cost and provide more connections for the same price. In the medium-term, however, the economy has proved unhelpful. As many were only just below the surface, they were reached by the ultra-violet rays and became brittle. Thus, by 1990, Kasongo and Tipple[22] could report that water had ceased to run in Luangwa, Kitwe, less than 20 years after installation.

Households who rely on water sources off the plot tend to have them within a half an hour round trip but almost one in ten urban households and people have to endure a 30 minute or more round trip for any water.

A high percentage of water is unaccounted-for or lost owing to pipe leaks and bursts. System losses of water in Lusaka are estimated at 56 per cent of water delivered from the works. They occur through the bursting of old

Figure 54. Public water standpipe, N'gombe, Lusaka. Photo © UN-Habitat

Figure 55. Pit latrines in Kamatipa, Kitwe. Photo © UN-Habitat

pipes, illegal connections and vandalism[23] In Kitwe, they were 30 per cent in 1997.[24]

Revenue collection tends to be poor. While under council and public control, water was provided as a social overhead and was only meant to cover production cost. Private and communal standpipes attracted standard charges regardless of water consumption (figure 54). Private metered connections were charged differently depending on area with high-cost areas subsidising low-cost. Currently water is charged for in a rising tariff, the more a consumer uses, the more they pay for the next cubic metre (cum). On average, occupants of high cost neighbourhoods pay USD50-75 per month, in medium cost areas, USD30-50 per month, and in low cost areas the charge is usually fixed at USD20 per month. In informal settlements water can be bought from a Water Kiosk for ZMK1000 (USD0.20c) per 20 litre bucket (price varies however). The World Bank[25] found that less than 50 per cent of their respondents in informal settlements paid for their water use while 80 per cent said the distribution was poor.

There is too much contamination of ground water, partly through the proximity of latrines and partly through other forms of pollution. The supply companies have insufficient funding for capital projects, to extend the systems, and for operation and maintenance.

8.3 SANITATION

In its untreated state, human faecal matter is the most toxic substance with which most people come into routine contact. Its safe disposal or decomposition into harmful compost is an essential component of urban living. Adequate sanitation is defined as access to an adequate latrine. In Zambia, the list of adequate latrines includes Ventilated Improved Pit (VIP) latrines, pit latrines with sanitation platforms, traditional pit latrines with a smooth floor surface, EcoSan latrines,[26] pour-flush latrines and septic tank latrines.[27]

Under the National Water Sector Policy, appropriate forms of sanitation are promoted. The profile of sanitation is raised in the provision of social services by the National Environmental Sanitation Strategy (1998).[28]

Access to toilets in the 2000 census is unhelpfully split between 'proper' and 'improper'. Proper toilet facilities refer to access to flush toilets (private or communal), and ventilated pit latrines. The other toilet facilities, such as pit latrines and buckets are regarded as improper. About 40 per cent of urban households had 'proper' toilets in 2000 (table 45). In Lusaka, the 30 per cent of households who have private water connections also have sewered sanitation. Elsewhere, unplanned settlements are ill-served with 90 per cent of households using pit latrines that are often shared among several households (figure 55);[29] in Kamatipa, Kitwe, 55 per cent of households

Table 45. Urban households with access to 'proper' toilets, 2000 (percentages)

Source	Households	
	Urban	Zambia
Have 'proper' toilet, i.e., flush toilet or ventilated pit latrine	39.8	14.9

Source: 2000 Census.[31]

Table 46. Urban access to toilets, 2006 (household percentages)

	Own pit	Own flush toilet	Communal pit	Communal flush toilet	Other	None
Zambia	59.0	13.9	7.3	1.0	6.2	12.6
Urban	43.2	36.7	13.4	1.9	3.8	1.0
Urban low cost	*49.2*	*27.3*	*16.0*	*1.9*	*4.4*	*1.1*
Urban medium cost	*20.4*	*71.8*	*2.6*	*2.3*	*1.9*	*1.1*
Urban high cost	*16.9*	*77.9*	*2.8*	*1.7*	*0.6*	*0.1*

Source: LCMS V[32]

share a toilet with between 6 and 15 people.[30] Many of these latrines are not situated far enough from wells to avoid contamination and the spread of diseases such as diarrhea.

It is evident from table 46. that there is a major gap in provision in the majority low-cost neighbourhoods compared with the high- and medium-cost neighbourhoods. The residents of low-cost areas rely on pit latrines, private or communal, while those in the medium- and high-cost areas mainly have a flush toilet on the plot. As even such areas are developing before services follow, some household in the higher-cost areas must rely on pits.

Low-cost neighbourhoods divide between those that are serviced, because of their formal origins as government, council or mine housing, and those that are not, because they were developed informally. Thus, 29 per cent have their own or share a flush toilet while 66 per cent rely on pits (table 46.). Some of the latter are in former government, council or mine areas built before Independence. There is a pilot scheme to extend sewerage to peri-urban areas in Kalingalinga in liaison with the local WDC.

The large public toilets found in Ghana, for example,[33] are absent in Zambia. Only in medium and high cost housing do a majority have flush toilets. In parts of Lusaka and Ndola, there is an unusual small-bore sanitation system in which solids are settled out in a local tank and the liquid passed through small-bore pipes to a settlement tank or directly into the mains sewers. Some parts are still working but others, for example, Matero in Lusaka, are blocked. LWSC is currently experimenting with small bore sewerage in part of Kalingalinga, Lusaka.[34]

Thirty per cent of households in Lusaka are on mains sewers. The remainder use septic tanks or pit latrines; 90 per cent of households in unplanned settlements use pit latrines, often shared among several households.[35]

CARE Zambia provided pit latrines with concrete bases in Kamatipa, Kitwe, which are designed to be emptied when full. Following suit, many residents constructed their own pit latrines with the help of the Sanitation Committee of the WDC.[36]

Composting systems of excreta disposal are becoming popular in rapidly developing cities. Some experiments, demonstrations, and pilot projects are underway in Zambia. In Lusaka, EcoSan systems in which urine is diverted into separate containers and can be used in the garden while solids are composted in double chambers are being implemented in Chaisa, and Nakoli in Lusaka, and in Kabwe and other urban centres. The ZHPPF and PPHPZ have also built eco-san toilets which provide organic manure for use in growing crops. There is still no verdict on whether people will be willing to use the compost for gardening as it requires effort and education to change the mindset of people unconvinced about reusing excrement as manure.

8.4 ROADS AND ACCESS

Residential streets are the responsibility of local councils. Much of the residential road network in Zambian urban centres was built four decades ago and has been allowed to run down. Owing to financial incapacity, Councils have failed to replace or maintain the ageing residential roads. Even in former mine areas, residential streets are in poor condition. There is debate on whether Central Government should intervene and construct new roads as it did in the First Republic.

Road standards and regulations in Zambia are stipulated in the Road and Road Traffic Act (Cap, 464) and the National Road Safety Control Act (Cap. 471). The design of roads, however, is laid down in various Regulations and Statutory Instruments but most important are those in the Town Planning Regulations, Building Regulations and Engineering Standards stipulated by the Engineering Institution of Zambia. The standard road reserves are six to eight metres for access roads in residential areas, 12 to 15 metres for collector roads and 18 metres for distributors. The trunk roads have a reserve in the range of 45 to 60 metres.[37]

Informal settlements only have unpaved gravel roads, some poorly engineered and most with no drains. They tend to be impassable in the rainy season. Unfortunately, such are the dire financial straits of the local authorities that even the formally-developed low-cost areas have mainly gravel roads. Some of the formerly tarmac roads are being stripped of their now broken surfaces (figure 56) and left with graded gravel surfaces. Many side roads in high-cost neighbourhoods are now all but impassable for saloon cars.

Kasongo and Tipple[38] report that many roads in Kitwe's site and service areas were so badly maintained that their alignment, profile, and drains had disappeared after less than 20 years and they had as poor access as squatter settlements. It is still very difficult to tell which areas were originally formally provided with roads and which were not by the standard of their current road provision.

It is clear from table 47. that only just over half of the money budgeted for roads was spent in 2006 and, of it, the Road Fund provides only about one third of the funds for even the modest road programme implemented. The remainder is drawn from bi-lateral and multi-lateral donors.

Figure 56. Broken tar road in Buchi, Kitwe. Photo © UN-Habitat

8.5 WASTE MANAGEMENT

There are major shortfalls in urban waste management owing to lack of funding. Fortunately the relatively large plots, even in high-density areas, provides some space for burying garbage in pits on the plot; 64 per cent of urban households do this. This reduces the garbage

Table 47. Funding sources for the Zambian road sub-sector 2006

	Budgetary allocation (ZMK billion)	Amount actually released (ZMK billion)	Percentage of total released
1. Road Fund	193.6	200.5	38.5
2. Government (GRZ)	243.1	72.2	13.8
3. European Union	121.4	100.2	19.2
4. World Bank	137.8	67.4	12.9
5. DANIDA	70.3	55.0	10.5
6. Nordic Development Fund (NDF)	29.1	1.4	0.3
7. OPEC	27.1	13.2	2.5
8. NORAD	20.6	0.2	0.0
9. BADEA/Kuwait Fund	59.3	12.2	2.3
10. Total Road Sector funding	902.2	522.4	100

Source: Mashamba.[39]

Table 48. Main method of garbage disposal, 2006 (household percentages)

	Burying / Pit	Roadside dumping	Refuse collection	Burning	Other
Zambia	57.2	33.6	7.3	1.4	0.5
Urban	60.8	20.6	17.5	0.8	0.3
Low Cost	*61.3*	*24.0*	*13.4*	*0.8*	*0.5*
Medium cost	*62.7*	*7.4*	*29.1*	*0.7*	*0.1*
High Cost	*53.2*	*6.5*	*39.5*	*0.8*	*0*

Source: LCMS V.[41]

burden significantly but is usually accompanied by burning to reduce the volume in the pit.[40] Almost one fifth of all urban households dump their garbage in the street. Collections only deal with 8 per cent of urban garbage.

In all urban centres waste management facilities are generally inadequate in light of the growing population and urban sprawl. Most of the services were designed to meet the needs of a smaller population and, therefore, are neither adequate nor well distributed around the towns. It is clear from table 48. that most households in urban Zambia do not benefit from refuse collection services and instead must bury their rubbish or dump it somewhere.

In Lusaka, about 300 tonnes of waste were generated per annum at the turn of the century, of which households generate 80 per cent.[42] In 2006, it was estimated that only about 26 per cent of waste generated is collected.[43] In consequence, drains, open spaces and streets are used as dumps, with consequent problems of blocked drains and with disease vectors such as mosquitoes, rats and flies. Building on previous initiatives, a DANIDA-sponsored Project developed a 15 year Strategic Plan for waste management in Lusaka. In it, the city has been divided into Waste Management Districts which were awarded to private contractors through the Department of Public Health and Social Services. The fees charged by the contractors, however, are too high for the average household.[44]

Although the 'Polluter pays' principle is enshrined in waste management in Zambia, decisions have been made about the maximum reasonable charge for household waste collection in peri-urban areas. In 2008, Lusaka CC's Waste Management Unit set it at ZMK5,000 (USD1.20) per household.[45] In some peri-urban areas, private garbage collections have been instituted following international donor-led upgrading. For example, in Chaisa, an Improvement Area near the centre of Lusaka, community waste collectors pick up household garbage house-to-house four times per month for ZMK15,000 (USD3) per month. As local authority subsidies to the Waste Management Companies is

Figure 57. Garbage dumped at roadside, Kabwata, Lusaka.
Photo © UN-Habitat

Figure 58. Garbage blocking a drain, Chaisa.
Photo © UN-Habitat

Figure 59. Local private garbage collection, Lusaka.
Photo © UN-Habitat

Figure 60. Skip in peri-urban Lusaka.
Photo © UN-Habitat

withdrawn, the cost to the customer is likely to rise. The current charges do not fully cover the cost of collection but are still too much for many households who avoid paying them and dump garbage indiscriminately.

In other peri-urban areas, the local Waste Management Committees work under the umbrella of either the RDC or the Neighbourhood Health Committee. They collect fees at about ZMK35,000 (USD7.00) per household per month. The new waste management system is supported by the Lusaka City Council (Municipal Solid Waste) By-laws, 2004. Many peri urban areas have been provided with communal 15 cubic metre containers situated on the edge of settlements. The LCC is in the process of securing land for the construction of a sanitary-engineered landfill site.[46]

8.6 POWER SUPPLY AND FUEL USE

Zambian households have relatively poor access to electric power. Under half of urban households have an electricity connection. Despite an increase in electricity

Table 49. Access to electricity, 2000 (household percentages)

	Households with access to electricity
Zambia	16.7
Urban	44.1

Source: 2000 Census[48]

Table 50. Main fuel used for lighting

	Electricity	Candle	Kerosene/ Paraffin	Diesel	Open Fire	Other	None	Total
All Zambia	16.7	19.0	35.3	6.8	6.5	7.9	7.8	100
Urban	43.1	31.5	11.4	7.9	3.5	2.6	0.0	100
Low Cost	*38.4*	*38.9*	*14.3*	*0.9*	*4.7*	*2.8*	*0.0*	*100*
Medium Cost	*73.8*	*16.6*	*4.9*	*3.8*	*0.0*	*1.0*	*0.0*	*100*
High Cost	*83.1*	*8.0*	*2.4*	*0.9*	*1.9*	*3.8*	*0.0*	*100*

Source, LCMS V[49] *corrected so that rows add up to 100 per cent.*

Table 51. Main fuel used for cooking

	Purchased Charcoal	Electricity	Collected Firewood	Own produced Charcoal	Gas	Coal	Purchased Firewood	Kerosene/ paraffin	Total
All Zambia	22.4	15.5	54.1	3.6	1.0	1.0	1.5	1.0	100
Urban	46.8	39.7	4.7	2.0	2.8	1.9	1.0	0.9	100
Low Cost	*53.9*	*31.3*	*5.5*	*2.4*	*2.8*	*1.9*	*1.1*	*0.9*	*100*
Medium Cost	*20.3*	*59.7*	*2.4*	*4.2*	*5.9*	*2.5*	*4.2*	*0.8*	*100*
High Cost	*10.4*	*71.9*	*7.6*	*3.4*	*3.4*	*1.7*	*1.7*	*0.0*	*100*

Source, LCMS V [50] corrected so that rows add up to 100 per cent.

(18 – 39 per cent) and reduction in wood and charcoal use (78 – 53 per cent) between 1980 and 2002/03,[47] many households still rely on wood or charcoal for cooking and heating.

Zambia is richly endowed with a range of primary energy sources, including hydropower and renewables such as solar energy. The hydropower potential is estimated at 6,000 MW but the total installed capacity is about 1,700 MW. This represents 92 per cent of the installed capacity and provides 99 per cent of electricity production. Solar radiation provides significant potential for thermal and photovoltaic exploitation.[51]

Access to electricity, even if only for lighting, is not well distributed among households in urban Zambia. Those in high-cost neighbourhoods tend to have electricity but only a minority of those in low-cost areas (less than 40 per cent) use electricity for lighting. In the low-cost areas, 63 per cent use wood or charcoal for cooking (tables 51 and 52). Connections are perceived to be expensive; they must be paid for up-front by developers. In Highlands, Livingstone, in 2011, payment for connection was ZMK3 million (USD600).[52]

Charcoal is still the major urban cooking fuel, usually used in a small stove called "*mbaula*" (figure 61) which 90 per cent of urban households owned in 2006.[53] The destruction of forestry resources around the urban areas is very noticeable. About eight million bags of charcoal are consumed every year in Zambia, mainly provided by the informal sector through burning branches and trees beyond the urban areas and bringing sacks into town to charcoal markets (figure 12). Lusaka's forests are retreating at a rate of 3.2 per cent per annum.[54] Steps will be required to establish sustainable forests to ensure supplies of charcoal in the future. In light of the serious deforestation in Zambia, there is need to promote the use of solar powered cooking and bottled gas stoves as an alternative to the unsustainable charcoal *mbaula.*

Because of the predominance of informal settlements in urban Zambia, candles or paraffin lamps together provide more urban households with lighting than electricity.[55]

Most of urban Zambia stands at an elevation of over 1200 metres[57] so, in the dry season, night-time temperatures can drop to freezing point. There is an

Figure 61. Mbaula manufacture and sale in Livingston. **Photo** © UN-Habitat

Figure 62. Charcoal market, Chimwemwe, Kitwe (note the new market built with EU money, behind). **Photo** © UN-Habitat

Table 52. Main fuel used for heating, 2000 (household percentages)

	Wood	Charcoal	Electricity	Other
Zambia	44.5	39.6	9.1	6.8
Urban	5.8	63.7	24.5	6.0

Source: 2000 Census.[56]

ever-present danger of death by carbon monoxide poisoning from charcoal stoves being used to heat rooms overnight, despite long advertising campaigns to discourage their use. Thus, it is worrying that two-thirds of urban household used charcoal for heating in 2000.

8.7 INFRASTRUCTURE SUPPLY TO INFORMAL SETTLEMENTS

The first comprehensive attempt at water supply to informal settlements occurred in 1974 as cholera ravaged neighbouring countries. City Councils were empowered to acquire land to provide an access road with bus turn-round to each of their informal settlements through which they could fit a water main to a stand-pipe.[58] In Kitwe, only the largest settlements were provided and the supply pipes[59] and taps were soon vandalised.[60] Following the declaration of Improvement Areas, through which councils gain a head lease on all the land occupied by the settlement, better provision can be supplied.

In Lusaka, 35 per cent of households in informal settlements have their own tap and 41 per cent use public taps. In most settlements, the LWSC provides water through the central distribution system. From this, the Ward Development Committees take over distribution and supply to Water Committees and Tap Committees.[61] In Katuya, Senanga, 68 per cent used public taps (kiosks).[62] The presence of purified water at kiosks is not necessarily enough to ensure that residents of peri-urban areas use them. Only 24 per cent of households in Kamatipa use them in preference to their shallow wells because the kiosks are too far away.[63] Thus, it is clear that unsafe water sources are very heavily used in peri-urban areas. Many private connections are made illegally, tapping into the mains serving neighbouring areas.

The great majority of households in peripheral informal areas use shallow wells. There are kiosks in some settlements which provide piped water at a set price. In some informal settlements in Lusaka, community taps charge ZMK100 to ZMK200 (USD0.02 – USD0.04) per 20-litre container or between ZMK8,000 and ZMK15, 000 (USD1.60 to USD3) per month. Residents with individual taps pay ZMK45,000 to ZMK65,000 (USD9-13) per month per household.[64]

There has been much NGO activity in the water supply to informal settlements across urban Zambia. One example is CARE's PROSPECT initiative which has been involved in fitting safe water supply to many thousand households. The Chipata Community Water Supply Scheme arose from the community's assessment of water supply as its first priority for improvement. The scheme provided boreholes which supply a distribution centre from which the communal water points are supplied by gravity. Each user paid a ZMK6,000 registration fee and ZMK3,000 per month to the community-based accounts office, but no money is being held against repairs and maintenance. The staff are engaged by the community to respond to technical problems and keep track of the collection of the seven buckets per day allowed per household.[65] CARE Zambia has also introduced more hygienic wells that have steel covers encased in concrete bases. The improved but simple technologies fit in well with improving income profiles so that households can pay for the infrastructure in three installments as required.[66]

An evaluation carried out by CARE in 2000 found that success is tempered by the lack of notice paid to other issues, connected with other sectors and with tenure, which were not addressed at the time. It identified needs including:

- a tiered system/differential tariff, with people paying nearer to what they consumed rather than a flat rate of supply and payment;
- flexible payment arrangements to help the disadvantaged;
- establishing a replacement fund, as the scheme is currently not viable in the longer term;
- involving LWSC more when agreeing on tariffs to ensure consistency and compatibility with other areas; and
- establishing a trust to own and manage the scheme, owing to legal uncertainties.[67]

Apart from the issues addressed in their evaluation, the World Bank team suggested several other considerations for any similar schemes.[68] These are:

- Insufficient revenue has been raised for the initial intention of allowing about five per cent of water revenues to be invested in other sectors in Chipata.

- There has been no matching improvement in sanitation with up to 50 households said to be sharing one latrine in some areas.
- Roads and drainage are poor; people have difficulty reaching their dwellings in the rainy season.

"Thus, while gains have been made in community water supply, little visible impact and improvement in other areas is evident."[69]

As 80 per cent of water supplied to a household is reckoned by rule of thumb to come out as waste water, drainage is an important service (figure 63) and its lack is a great problem in many peri-urban areas. In George, Lusaka, for example, there are overhead water tanks providing regular water supply but no drainage reticulation to dispose of it hygienically.

At least some of the lessons were clearly learned as the JICA-sponsored pilot projects in Bauleni, Chibolya and N'gombe (1999) took a more holistic approach including water supply, community- and dwelling-level VIP toilets, health education, garbage management, community schools, roads, storm-water drainage and income generation.[70] An evaluation in 2000 found that the 'soft' interventions to train residents in water supply management and simple accounting were very important. Also, dwelling-level toilets proved much more effective as they reduced ground pollution, but they need subsidising as residents could not afford their full cost.[71] Community contracts have proved successful for waste management within some peri-urban settlements.[72] In Lusaka, most people in informal settlements do not pay for waste collection but those who do pay anything from ZMK5,000 to ZMK35,000 (USD1 to USD7) per month per household or between ZMK1,000 and ZMK3,000 (USD0.20 - USD0.60) for every 25 kilogram bag of waste.[73]

Figure 63. Self-help drains in Garden, Lusaka.
Photo © UN-Habitat

In informal settlements, provision of services relies heavily on the local community providing labour for the installation and, sometimes, maintenance of the infrastructure. This is controversial as it involves the poor in paying for services, through their labour, that the not-so-poor receive for free. The World Bank's assessment[74] emphasises the difference between trunk infrastructure, which should not use local voluntary labour and local infrastructure that can. However, this is more tolerant of using unpaid labour than the ILO's division between major and minor works in which only works directly bringing infrastructure to a person's dwelling should be done by unpaid labour; all other tasks should be paid for at the going rate.[75]

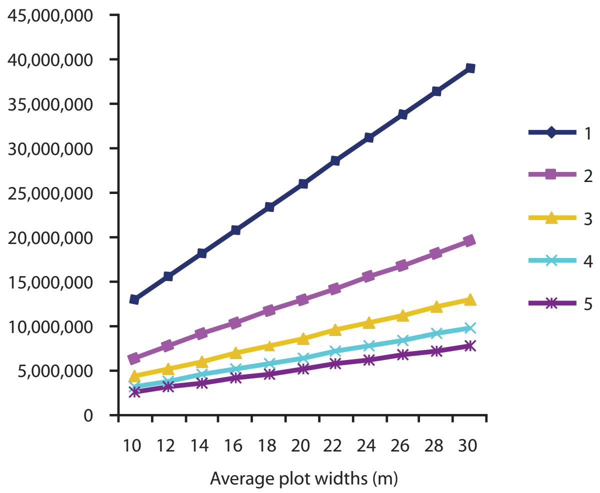
Most of the informal settlements in Livingstone have inadequate water and sanitation but councillors and WDCs are working together for improvements.[76]

8.8 CAPACITY NEEDS ASSESSMENT AND THE AMOUNT NEEDED FOR THE NEW HOUSING TO 2030

In providing for 1.3 million new dwellings by 2030, infrastructure plays an important part in the discussion about standards. How much infrastructure can be provided for that number of dwellings costing only between USD10,000 and USD40,000 each? Will infrastructure be shared among several households or exclusive to each? How large should the plots be, as this fixes the length of pipe or road per plot? How much infrastructure should be provided ahead of development? How far should current networks and technologies be extended and how far should separate networks and different technology be adopted? All these are important policy decisions which are not part of this Profile's remit. The profile shows the implications of a small selection of assumptions.

In servicing the new dwellings required for 1.3 million new households, and catching up on the many thousands of unserviced existing households, the effect of plot size and whether households share plots with others will be very influential. Sharing services among two or three households on a plot cuts down the number of delivery points but may not reduce capacity consumed. Plot size tends to be particularly important as the lengths of pipes, drains, cables and roads are highly dependent on plot widths. If plots are 12 metres wide, lengths of approximately 15.6 million metres would be needed just for the new housing. If, however, plots were 20 metres wide, 24 million metres would be needed. Thus, it is important to take servicing lengths and costs into

Figure 64. Service lengths by average plot widths for different numbers of households per plot



account when deciding on both plot sizes (figure 64). It is also obvious that encouraging more than one household on large plots has a major effect on service lengths.

8.9 CROSS-CUTTING ISSUES: GENDER, HIV-AIDS, YOUTH

The absence of clean water and safe sanitation from many low-income areas imposes a burden of pollution on households which is inimical to the care of HIV/AIDS patients whose immune system is weakened or non-existent. The length of time taken to draw water and use the toilet takes away time from carers and imposes an added burden upon them. Women are overwhelmingly taking on the care burden while they already have the main burden of bringing water to the household.

When water supply is at a distance from the home, women and girls spend considerable portions of their day fetching it. This is harmful to livelihoods and to education chances. The use of communal toilets in the night increases the risk of rape and violence on women, especially when they are distant from the home.

In the upgrading of some peri-urban dwellings in the 1990s, food for work programmes were used as there were severe economic problems at the time. One of the results of this was that the men withdrew as they would not work for food while the women living in poverty continued. One of the results as felt to be that participation in public works programmes became the sole preserve of poor women.[77]

Young people, especially children, are often the ones whose duty it is to dispose of wastes. Insofar as this is true in Zambia, in areas where waste disposal is problematic, children are both disproportionately affected by the difficulties of waste disposal and most responsible for shortcomings in delivering wastes to the designated sites.

Disabled people are badly affected by poor infrastructure in several ways. The journey to a tap, toilet or dump is more difficult for people who find walking a problem. While, in itself, this is something they might routinely achieve each day, when it is linked with poor access, especially rough, eroded and pitted pathways, and with poor lighting at night, it becomes too much of a problem. As disabled people are disproportionately dependent on public transport, where the nearest bus stop is far from a dwelling, this imposes severe restrictions on their ability to live a normal life. All these conditions are present in the peri-urban areas of Zambian cities and even in many formally-developed areas as infrastructure declines.

8.10 BRIEF CONCLUSION

The cities of Zambia are spreading while the service providers struggle to maintain the status quo let alone extend their operations. Currently, infrastructure supply falls very far behind both need and demand. There is insufficient investment in infrastructure leading both to poor provision and grossly under-funded service providers. The government does not help this by maintaining high default levels for its own service use. Regulatory bodies disallow service providers' claims for increases in tariffs to levels which allow for sustainable supply and extensions of the networks. Furthermore, the up-front costs of the network supply to plots appear to reduce demand for extensions to the formal supply.

Where the formal providers fail to fit services, the informal sector and community groups assisted by NGOs strive to fill the gaps. Unfortunately, they are not always successful nor can they keep pace with informal development. Where community groups have succeeded in providing potable water, drainage, sanitation, etc., they tend to do so outside the current dominant

IN THE LONG TERM, THE BALANCE BETWEEN COSTS AND SUSTAINABLE PROVISION MUST BE STRUCK IF THE CURRENT 640,000 HOUSEHOLDS AND THE FUTURE 1.3 MILLION EXTRA HOUSEHOLDS IN URBAN ZAMBIA CAN BE PROVIDED WITH INFRASTRUCTURE BY 2030.

technologies. Indeed, some current technologies are unlikely to be capable of extension quickly enough and at sufficient scale to service the newly developing areas. As Cohen points out, servicing of new areas may require a radically different approach from the current supply systems.[78] Thus, where there is water-borne sewerage, the future scale of the city and the demand-supply nexus of potable water are unlikely to suit such expensive and water-demanding systems.

The dilemma facing service providers is to provide a service as cheaply as possible while instigating a system which pays for the supply and for network maintenance and extensions. In a low-income economy, this appears to be impossible. Some assistance may come through cross-subsidies between high-income consumers being charged over the supply cost to allow poorer households to pay less. In the long term, however, the balance between costs and sustainable provision must be struck if the current 640,000 and the future 1.3 million extra households in urban Zambia can be provided with infrastructure by 2030.

ENDNOTES

1. UN-Habitat (2007).
2. Interview with Mr Ndongwe, MD of LWSC, October, 2011.
3. World Bank (2002).
4. Personal communication, a delegate at the stakeholder workshop.
5. Interview with Mr Michael Kabungo, Assistant Director, Lusaka City Planning Office, and Mr. Makine Kusano, JICA City Planning Adviser to LCC.
6. Interview with Mr Ndongwe, MD of LWSC, October, 2011.
7. Republic of Zambia (2006: Annex 1).
8. Mutale (2004).
9. Mutale (2004).
10. Republic of Zambia (2007).
11. Interview with Concepta Musonda, Deputy Director of Housing and Social Services, LCC, October, 2011.
12. Interview with Mr Ndongwe, MD of LWSC, October, 2011.
13. Simumba (1993).
14. UN-Habitat (2007).
15. UN-Habitat (2007).
16. Dagdeviren (2008).
17. Swatuk (2002 quoted in Kazimbaya-Senkwe and Guy, 2007),
18. Republic of Zambia (2007).
19. Central Statistical et al. (2009: table 2.6).
20. Republic of Zambia (not dated (2004?): table 3.1).
21. Central Statistical Office (2011b: table 14.3).
22. Kasongo and Tipple (1990).
23. UN-Habitat (2007).
24. Mutale (2004).
25. World Bank (2002).
26. The EcoSan toilet separates out the urine which can be used as a fertilizer.
27. Republic of Zambia (2007).
28. Republic of Zambia (2007).
29. UN-Habitat (2007).
30. Matongo (2010).
31. Republic of Zambia (not dated (2004?): table 3.2).
32. Central Statistical Office (2011b: table 14.9).
33. UN-Habitat (forthcoming, 2011).
34. Interview with MD of LWSC, October, 2011.
35. UN-Habitat (2007).
36. Mwango (2006).
37. Interview with Deputy Director of Planning, Livingstone City Council; Also in Ministry of Local Government and Housing (1980).
38. Kasongo and Tipple (1990).
39. Mashamba (2008).
40. Burning of waste is a major nuisance and against Council by-laws, but everyone turns a blind eye since there are no alternative waste management options.
41. Central Statistical Office (2011b: table 14.8).
42. Lusaka City Council and UN-Habitat (2004). It is now thought to be 400 tonnes.
43. Lusaka City Council and UN-Habitat (2004) estimates only 15 per cent of the total waste is collected.
44. UN-Habitat (2007) and Lusaka City Council (2003).
45. Lusaka City Council and Environmental Council of Zambia (2008).
46. Lusaka City Council and UN-Habitat (2004).
47. Republic of Zambia <https://legacy.ncl.ac.uk/owa/?ae=PreFormAction&a=Reply&t=IPM.Note&id=RgAAAABh6jmpLLB4TalsgItpuH6rBwBs6PLuVwNTSqg8mYVNuY4TAAAAYvW0AADBbmAFVSqrTqxnyzGQ6RRQALIEQUF0AAAJ#_ENREF_13> (not dated (2004?)<https://legacy.ncl.ac.uk/owa/?ae=PreFormAction&a=Reply&t=IPM.Note&id=RgAAAABh6jmpLLB4TalsgItpuH6rBwBs6PLuVwNTSqg8mYVNuY4TAAAAYvW0AADBbmAFVSqrTqxnyzGQ6RRQALIEQUF0AAAJ#_ENREF_13>)
48. Republic of Zambia (not dated (2004?): table 3.4).
49. Central Statistical Office (2011b: table 14.6).
50. Central Statistical Office (2011b: table 14.7).
51. Safege-Technum / Tractebel Engineering (2010).

52. Interview with a developer.
53. Central Statistical Office (2011b: table 10.8a).
54. Lusaka City Council and Environmental Council of Zambia (2008).
55. The LCMS shows a greater reliance on electricity in 2003 than the census of 2000, so the 47.6 per cent of households using electricity is higher than the census figure for access to electricity.
56. Republic of Zambia (not dated (2004?): table 3.8).
57. But Livingstone and some riverside towns are as low as 600m above sea level.
58. Republic of Zambia (not dated (2004?): table 3.4).
59. The settlements were Itimpi, Chambeshi and Turf Club, with emergency supplies to another seven.
60. At the time, a brass tap cost the equivalent of a week's wages for an artisan so the temptation was very high. As the consequence was only that the water ran all the time, it did not seem to penalise the neighbours of the thieves!
61. Zambia Homeless and Poor People's Federation (2010).
62. ZHPPF/PPHPZ (2011b).
63. Matongo (2010).
64. Zambia Homeless and Poor People's Federation (2010).
65. World Bank (2002).
66. Mwango (2006).
67. World Bank (2002).
68. World Bank (2002).
69. World Bank (2002: 19).
70. World Bank (2002).
71. World Bank (2002).
72. World Bank (2002).
73. Zambia Homeless and Poor People's Federation (2010).
74. World Bank (2002).
75. See UNCHS/ILO (1995); Lyby et al. (1992).
76. UN-Habitat (2009c).
77. Mulenga (2002).
78. Cohen (2004).

09

CONSTRUCTION INDUSTRY AND BUILDING MATERIALS

The key provider of housing is the construction industry. Houses are, essentially, an assembly of heavy materials and components on site by labour. It is not factory-based, operating instead on a multitude of sites scattered around the urban areas. This chapter examines the nature of the construction industry and the supply of the materials and components it assembles. As the profile demonstrated in chapter 5, the need for new housing is concentrated in the cost range of USD10 – 40,000 (ZMK50 million to ZMK200 million) with a superstructure cost of only USD7,500 – 30,000 (ZMK37.5 million to ZMK150 million).

9.1 THE CONSTRUCTION SECTOR IN A NUTSHELL

The construction industry is important in any country for its contribution to the GDP, for its role in creating much of the Gross Fixed Capital Formation of a country, and for the employment it creates, especially at the bottom of the labour market. It is evident from table 1. that construction contributed about ZMK370 billion (USD84 million) or 10 per cent of the GDP in 2007, with a fairly constant rate in the medium term.

The construction industry has been expanding by 17.5 per cent per year for several years, meaning it is doubling every five to six years. Although the reduction in reported employment in construction appears to be acute, from 75,000 employees in 1974 to only 13-15,000 currently, these figures hide major increases in informal sector employment which may be as many as 200,000.[2]

The construction sector is no exception to the norm in Zambia that businesses are sharply divided between two worlds. One comprises large businesses which are registered, pay tax, benefit from government assistance and generate most of the country's GDP and exports. The other comprises a myriad of Medium, Small and Micro Enterprises (MSMES) which provide 80-90 per cent of jobs, are not registered, do not pay business taxes and rarely employ workers other than the proprietor.[3]

Construction is especially dominated by small and micro-enterprises with a classic case of the 'missing middle',[4] where there are almost no medium sized businesses.

According to Mashamba,[5] the construction industry in Zambia has several weaknesses, as follows:

Lack of skills at all levels (technical/managerial/business);

- Poor contract management skills;
- Inadequate marketing skills, ability to price and post qualifying training;
- Weak organisational capacity;
- Poor training in general and in appropriate regional technologies; and
- Lack of training facilities

Table 53. Contribution of the construction industry to GDP

	2000	2001	2002	2003	2004	2005	2006	2007
GDP at constant 1994 prices (ZMK Billions)	123.6	137.8	161.8	196.8	237.1	287.3	328.7	369.6
GDP Annual Growth Rate %	11.5	17.4	21.6	20.5	20.5	21.2	14.4	12.4
Industrial share %	4.9	-	-	-	-	9.1	9.8	10.4

Source: Bank of Zambia annual reports.[1]

Table 54. Government classifications of contractors for housing work

Grade	1	2	3	4	5	6
Maximum annual turnover (Kbillion)	>25	15-25	10-15	2-10	1-2	<1
Fixed and moveable assets (Kbillion)	>5	>3	>1.5	>0.75	>0.075	
Professional staff	>5	>4	>3	>2	>1	
Technical staff	>10	>6	>3	>1	>1	1
Skilled staff (artisans)	>15	>9	>5	>4	>4	2
Limitation on contract value to be tendered (Kbillion)	Unlimited	25	10	5	3.5	1

Source: NCC First Registration Form, Appendix II.

While the National Housing Policy (NHP) recognises the contribution increasing housing supply can make to the economy, it also highlights that conventional materials are too expensive for the majority of Zambian households. The capital intensive technologies used in their manufacture and assembly into the building do not create as much employment as they could.[6] Furthermore, their high input costs (for power, machinery, and other overheads) and centralised manufacture (with consequent high transport costs) militate against low prices to the customer.

NHP recognises that the current standards and bye-laws are, therefore, inappropriate for the type of construction affordable for the majority. In addition, small contractors are un-financed and so must procure materials using cash only. The NCC classify registered contractors as shown in table 54. have formed the core of many later informal settlements and still bear the name of the contractor, e.g., Roberts and MacKenzie in Kitwe.

9.2 INSTITUTIONAL, LEGAL AND REGULATORY FRAMEWORKS

Building regulations

Following on from the Doxiadis Plan for Lusaka, the following planning and building regulations were adopted for residential areas.

“No sub-division of less than 1,350 square metres shall be permitted in any residential area unless a main reticulated sewage disposal system has been or will be constructed to which the subdivision will be connected.”[7]

Size of habitable rooms

The minimum size for a habitable room in any building is 90 square feet (8.361 square metres) and no horizontal dimension should be less than 7 feet (2.134 metres). With the approval of the Council, kitchens, bathrooms, sculleries, pantries, waste closets and laundries may have a smaller area.

Table 55. Estate layout regulations

Type of building	Minimum plot size (sq.m)	Maximum site coverage (%)	Building lines (m)	Minimum distance from side/ rear boundaries (m)
Low dwellings	288	33½	3	3
Medium cost dwellings	540	33½	6	3
High cost dwellings	1,350	25	7.5	3
Blocks of flats				To be determined by the authority
Any other building				To be determined by the authority

Table 56. Planning Standards and Guidelines

Land use	Standards	ha/population
Residential High Cost	30 x 45m (1350m²)	At a ratio of high cost, 2.55%; medium cost, 15%: and low cost 82.5%, density should be 362.2p/Ha
Residential Medium Cost	18 x 30m (540m²)	
Residential Low Cost	12 x 24 (288m²)	
Site and services	To be determined	

THE BUILDING REGULATIONS IMPOSE STANDARDS TO WHICH THE MAJORITY OF HOUSEHOLDS CAN ONLY ASPIRE AND SO THEY ARE FORCED TO BUILD OUTSIDE THE FORMAL PERMISSIONS SYSTEM. THE BUILDING REGULATIONS IMPOSE STANDARDS TO WHICH THE MAJORITY OF HOUSEHOLDS CAN ONLY ASPIRE AND SO THEY ARE FORCED TO BUILD OUTSIDE THE FORMAL PERMISSIONS SYSTEM.

9.3 CONSTRUCTION INDUSTRY REGULATION

National Council for Construction (NCC)

The National Council for Construction (NCC)[8], was incorporated by the National Council for Construction Act, 2003 (No.13 of 2003) to regulate the construction industry. This was in recognition of the importance of a viable construction industry, and as part of the National Policy on the Construction Industry (NPCI-1995) and the Road Sector Investment Programme (RoadSIP). The NCC operates from the Lusaka Office and the Northern Regional Office in Kitwe. The NCC has a total labour force of 67[9], which is not sufficient fully to regulate the industry. The board consists of representatives from a broad spectrum of professions and institutions. The representation is not complete, however, as Planners/ Real Estate Managers, Home Owners Associations, Co-operatives, etc., are left out.

All construction companies who wish to tender for government work must be registered with the NCC. The NCC keeps a list of contractors in categories according to the maximum value of a job for which they can tender. The NCC is responsible for

- registration of contractors, construction manufacturers and suppliers;
- conducting routine and random inspection of construction sites countrywide; and
- capacity building for local contractors.

The NCC is also Advisor to the government on all infrastructure and construction matters.

Corruption is one of the major problems dealt with by the NCC. It is estimated that Zambia is losing between ZMK713 and ZMK1,426 billion (USD143 – 285 million), or 10-20 per cent of construction contract sums, to corruption and related corrupt practices.[10] The other problems are inadequate capacity of district councils, uncoordinated professional bodies and generally lack of political will to resolve problems in the industry.

Corrupt practices include commissioning of unnecessary public infrastructure and projects; awarding of contracts to undeserving consultants or contractors; inflated construction costs with the full knowledge of the corrupt public officials; acceptance of shoddy construction works by corrupt public officers, and connivance by consultants, contractors and public officers. Corruption is endemic owing partly to low salaries and poor conditions of service in public service. Furthermore, overly bureaucratic practices and delayed payments encourage contractors to offer bribes to public officers to do their duty. Poor records of punishing corrupt offenders encourages others to try.[11]

Labour regulations

Labour regulations are contained in the Employment Act[12] and the Industrial and Labour Relations Act .[13] Among other things, the former sets the minimum contractual age and employer obligations such as to pay, transport allowances and provision of leave. The regulations stipulate that employment contracts may be oral and termination of employment maybe by notice or payment of wages.

Figure 65. The incremental building process, Dambwa, Livingstone. Photo © UN-Habitat/Daniel Phiri

Figure 66. Bricks for sale in Kalingalinga. Photo © UN-Habitat/Daniel Phiri

Employees have the right to wages on dismissal. The Industrial Relations and Labour Act stipulates that employees can join and be protected by Trade Unions. Unfortunately, the Labour Regulations are constantly flouted by employers through poor and inhumane working conditions. The government has set a minimum wage and monitors contractors to ensure this is implemented. The National Council for Construction watches out for breaches of the labour regulations.

9.4 ORGANISATION, ACTORS, SUPPLIERS, CONTRACTORS AND SERVICE PROVIDERS

Construction industry

Formal contractors

As in many Sub-Saharan Africa countries, Zambia has a few formal contractors, many with relationships with international firms, who take on large projects such as stadiums, major roads and bridges, etc., but they have little input into the housing sector. This was not always the case. Indeed, the low-cost housing built in the late colonial period which has a curved roof ridge is known as 'Costain' housing all over Southern Africa after international the firm which built them.

The cost requirements and profit margins on low-cost housing are now, however, too tight for large contractors who carry significant overheads in vehicles, machinery, contracted labour, administrative staff, etc.

A few formal contractors, such as Sable Contractors, Minestone, Chiwusaka and JBD Tech Contractors, build high-cost housing but these contractors tend to be relatively small. They work with development companies or individual high-income households to build expensive and high quality dwellings, often in gated estates. Chinese firms are moving strongly into this market.

They include Wang Kong and Jian Chin.[14] Contractors are required to affiliate either to the Association of Building and Civil Engineering Contractors (ABCEC), if they are medium to large firms, or to the National Association of Small Scale Contractors (NASSC).[15] Affiliation helps in cases of contractual disputes.

The gap in size and contract size between the small and large formal contractors is common throughout the developing world and known as the missing middle. This phenomenon is a feature of virtually all sectors in Zambia[16] and, particularly, in the construction sector.

Informal contractors

Small-scale, locally-based, informal contractors are the main providers of housing in Sub-Saharan Africa and in Zambia. Using locally-sourced materials, labour-based technologies, they provide very economical and efficient building services to the majority of households in Zambia. They fall outside both the tax and the benefits systems for industry, including being able to tender for contracts. Despite this, and with no help from official sources, informal contractors and single artisans build almost all the housing in Zambian towns and cities. Much of it is built incrementally, a room or two at a time, to suit the savings which the clients are able to make. Thus, many dwellings display signs of intended extension or completion (figure 65).

On both formal and informal construction, there is a serious problem of theft of materials by workers and their accomplices. It is not uncommon for twice the materials required in the job to be needed before the project is complete.[17]

Figure 67. Informal manufacture of metal windows, doors and grilles, Lusaka. Photo © UN-Habitat

Figure 68. Aggregate crushing from dolomite, George, Lusaka. Photo © UN-Habitat

Construction materials suppliers

Formal

To match its heavy-industrial copper and lead mining economy, newly independent Zambia followed the route of establishing a few large-scale, relatively high-energy producers of building materials. Thus, for example, Zambia Steel and Building Supplies, Monarch-Zambia (metal window and door frames, wires mesh, brick and block ties), INDECO Properties (building of staff housing), Crushed Stones Sales (quarry sales), Zambia Clay Industries (clay-glazed pipes and face bricks) and Chilanga Cement (cement manufacturing and sales), Kapiri glass and Nega-Nega and Kalulushi brickworks were all set up as centralised State Operated Enterprises (SOEs) to produce all the materials Zambia needed through formal, high technology means. Many of the SOEs have been closed down after privatisation. Others, in their privatised incarnation, now compete with cheap imports from China and elsewhere and with smaller formal or informal sector suppliers.

Informal

Informal traders sell many building materials such as bagged cement, cement blocks, bricks, metal grilles, stone and aggregate by the road side, often more cheaply than in established hardware shops, and they are also willing to negotiate the price for buying in bulk. Mashamba's[18] note that most informal sector traders did not keep their stock under cover so it could not be guaranteed to be good condition has changed more recently as suppliers rent or buy dwellings next to the roads and store their cement in doors in what was residential accommodation.

The informal sector has a major role in the supply of cement blocks and bricks (figure 66), metal goods (gates, door and window frames and burglar bars) (figure 67) and rubble and aggregates (figure 68).

It is also strong in the timber market. Many informal construction traders/suppliers do not to operate from permanent premises, making trade assurances or guarantees difficult. This is not normally a problem where the product can be inspected at the point of sale, for example, sand, crushed stones or burglar bars. In most fields, informal traders and producers can undercut the formal sector on price.[19]

Training organisations

NCC runs an in-service training school for artisans in all aspects of construction and demand-driven professional courses. Since the withdrawal of free tuition, numbers of students have declined. Trade schools and private training establishments are common but fees there and at NCC are too expensive for most prospective students. Liberalisation led to a rise in supply but has also generated a reduction in demand.

There is meant to be a training levy charged to all contractors but it has so far been delayed for four years.

TEVETA

The Technical Education, Vocational and Entrepreneurship Training Authroity (TEVETA) of the Ministry of Education, Science and Technology runs trade schools all around Zambia. It has been concentrating on speeding-up bricklaying as Zambians were missing out on jobs in favour of South Africans. TEVETA holds annual bricklaying contests.

Table 57. Sources of construction materials (for construction suppliers and traders) as percentage of total

Construction Material	Formal market (e.g. Hardware Shop in CBD)	Informal outlet (Open air traditional markets)	Direct import from abroad
Iron and Steel	57	36	7
Timber	54	46	0
Cement	100	0	0
Electrics	78	11	11
Blocks/Bricks	33	67	0
Grass	67	33	0
Burglar Bars	38	62	0
Plumbing items	100	0	0
Aggregate	33	67	0

NB. The informal sector buys cement directly from Chilanga cement and then resells it informally
Source: Mashamba.[21]

9.5 CONSTRUCTION MATERIALS

The price and availability of materials are very influential on the ease and cost of housing supply. Before the privatisations in 1991, the monopoly SOEs did not supply sufficient materials and their prices were always high.

The privatisation of most public companies improved production levels of locally produced construction materials briefly, but many closed down. Such has been the take-up of opportunities to import or manufacture building materials and components that, at present, there are few shortages of construction materials.[20]

According to the NHP, the planned approach towards construction is to favour building materials and technologies which:

- use locally-made, materials manufactured labour-intensively;
- use appropriate technologies in building especially ones which maximise semi-skilled and unskilled labour;
- use mechanical plant and machinery only where this provides cheaper and more efficient processes and does not compromise employment.

The tendering process for public sector work can include small contractors but only those above qualifying thresholds of financial and management responsibility. This disallows most small contractors but they do have opportunities to sub-contract on contracts won by formal-sector firms.

The NHP emphasises the economic potential available from appropriate construction technologies and employment and aims to assist by approving such technologies and investing in the domestic industries which supply the construction industry.

Very little has occurred, however, so that the construction industry is still firmly wedded to cement blocks, burnt bricks, and other conventional materials.

THE FOCUS OF BUILDING TECHNOLOGIES IS CURRENTLY ON CEMENT-BASED MATERIALS BUT THERE IS MUCH TO GAIN FROM ENCOURAGING EARTH-BASED MATERIALS AND TECHNOLOGIES.

Construction materials in the informal sector

Mwango[22] interviewed informal building materials suppliers operating in Kamatipa in Kitwe. They tended not to travel far for custom or raw materials, just around their own and neighbouring settlements. Their way into the industry had been by observing what materials are used in the formal sector. They noticed the type of stone used, for example, and went out in the bush to look for the same rocks, crushed them and sold them to local people. Those supplying earth blocks learnt from their parents where to find the right clay and make compressed or burnt blocks. They were keen to point out that they use the same materials for their own houses and regard them as strong enough to last a long time if used correctly. The informal sector generally uses the following technologies:

Foundations and floors slabs

Usually, to make the base very strong, builders select the strongest looking blocks and lay them in a one block deep trench, preferably using burnt mud blocks even if compressed blocks are used for the rest of the house. Sometimes the builder will raise a platform of compacted mud, very like a raft foundation, on which to erect the walls. The outer edges of the raft often protrude a little from the wall.

Typical slabs involve adding another course of blocks to the foundation course and then adding stone aggregate to the base before topping it with clay. A little water is then added to the clay before it is compacted to the level of the single block course above the ground.[23]

Most people start with a compacted mud floor which they raise above the surrounding floor level to avoid rain water flooding into them. With time they add a layer of cement/sand screed to make the floor smoother and more comfortable to sleep on.[24]

Walling

The poorest quality walling is made with an armature of poles with woven sticks and covered with mud, known as "Pole and dagga" (Figure 69) . The most durable walling available for those who can afford it is burnt brick with cement plaster. Cheaper alternatives are compressed and burnt-mud blocks.[25] The blocks are made from red clay harvested from termite mounds,[26] where possible, as it is easier to mould and freer from organic matter than ground soil. Furthermore, it tends not to crack when the blocks are heated. The block-maker usually adds a little oil to the mixture of clay and water so that the blocks are more water-repellent. Because of their size, many blocks are not burnt all the way through so will be weaker than intended. In 2011, they sell for ZMK1000 each for the burnt blocks and ZMK600 for the compressed blocks.[27]

Figure 69. Pole and dagga walling, Livingstone.
Photo © UN-Habitat/Daniel Phiri

One of Mwango's[28] community builders claimed that his house, built with burnt clay blocks and rendered with sand-cement plaster, had never undergone any major structural repairs over its 40 years' life. This claim agrees with Chifunda's[29] study, which showed that clay-block houses built in the 1940s for the first miners allowed to live permanently in urban areas still exist in many places in the Copperbelt.[30]

Mud plaster is helpful and does not cost anything, but it must be re-applied almost every year after the rains. It takes up a full day or two each time.

The builder usually uses a small amount of cement in the mud used as mortar when building with burnt blocks to mimimise cracking. For people who can afford to use cement, the sand is harvested from river banks[31] or quarries. People who build using bricks or concrete blocks buy river sand. Otherwise most people collect ordinary sand from within the settlement and wash it themselves.

Un-plastered mud blocks without sufficient roof overhang are likely to wash away during the rainy season; about three or four rain storms can bring down an un-plastered mud house. A plastering with clay lasts a few rainy seasons before it needs to be re-done. There are instances when people choose the wrong clay for the blocks and these houses may collapse and wash away even after a short rainy spell.

Roofing

Many poor households use salvaged oil and chemical drums cut up and flattened. The more conventional corrugated galvanised iron and asbestos-cement sheets are also used. The Kamatipa builders in Kitwe[32] buy both drums and roofing sheets from the Chisokone Market (the main market in the CBD) though they can also be bought, more expensively, in hardware stores. The sub-structure is constructed with natural wooded poles.

Figure 70. Good quality informal sector housing, Chaisa, Lusaka. **Photo** © UN-Habitat

Figure 71. Low quality, informal sector housing, Ipusukilo, Kitwe. **Photo** © UN-Habitat

Processed timber is costly but a few people use it. Most roofs in informal settlements are mono pitched. Thatch is not accepted in urban areas but many houses are topped with polythene sheets.[33] Dwellings covered by polythene or even iron sheets are liable to be uncomfortable inside during the hot season, especially when the occupants cannot afford a ceiling. That is why people spend most of the day outside under trees or on a covered verandah if they can afford one. The dwellings cool down at night.[34]

Windows

In informal settlements, many people do not afford full size windows. Instead, they use insolokoto, small openings measuring 100 or150 x 300mm, without lintels or frames. They may be fitted with mesh to keep insects and dust out. Some households block them up partly, so that they are too small for intruders to come in through the window, or completely. A few people install steel-framed glazed windows but they are not common.

Doors

Most use timber framed doors of about 700 to 750mm wide and 2000mm high, with locally manufactured doors available at local markets. Some people source their own materials, such as doors, and ask the builder to fit them. The builder saves on not having to go and look for the materials but still makes some money from the labour supplied.

Formal construction materials production and use

Cement

As Mashamba[35] argues, the explicit mention of Portland cement in Zambia's' building regulations as the main binder has resulted in Portland cement being the main formal-sector building material in Zambia.

Although lime has been used successfully in the past, its deliberate omission in the regulations means that it cannot be used in urban areas.

Lafarge Cement Zambia Plc (LCZ), formerly Chilanga Cement plc,[36] is organised into two operating divisions. There is a plant at Chilanga, near Lusaka, and one at Ndola on the Copperbelt. Chilanga, first built in 1959 was expanded in 2006 with a new 830,000 tonnes plant replacing the original production line owing to poor energy efficiency. It is a modular plant, allowing for additional capacity to be added as demand increases. The current capacity from both Chilanga and Ndola plants is now around 1.3 million tonnes. It has the largest market share in cement and cement clinker.[37]

A new company in the market is Dangote Cement Plc which has a plant being built in Masaiti, Ndola, projected to produce 1.5 million tonnes of cement per annum The domestic market for cement is expanding, partly stimulated by increased availability. Demand grew by 35 per cent in 2009, while major export markets such as the Democratic Republic of Congo also grew. LCZ exports an average of 14,000 tonnes of cement to the DRC every month. Burundi takes 4,000 tonnes a month from LCZ.

Lafarge is a major contributor to Zambia's economy and the government frequently uses its cement production and consumption statistics to help assess growth in the economy. It produces two types of cement:

- Mphamvu is an all-purpose building and construction cement.
- Powerplus is designed for large construction projects and mines.

Most is sold through merchants for residential and commercial building developers. Cement demand in Zambia and the surrounding sub-region is driven by activity in mining, residential and commercial

Figure 72. Cement for sale by the road-side, Kalingalinga. **Photo** © UN-Habitat

Figure 73. Women and children crushing stone, Lusaka. **Photo** © UN-Habitat/Daniel Phiri

construction, as well as infrastructure development such as dams, roads, hospitals, schools and airports.[38]

Cement is widely used as the binder in almost all building and in the manufacture of blocks and frames for housing. Most formal dwellings have a floor finished in a fine cement screed; wood flooring is very rare. A 50 kg bag of cement costs between ZMK65,000-ZMK70,000 (USD9-11).

Sand

Informal-sector operators quarry sand from the river banks around the cities of Zambia. Sand is sold by the truck load at ZMK300,000 (USD60) for rough and ZMK400,000 (USD80) for smooth.

Aggregate (Crushed stones)

Crushed stone (aggregate) is used in housing mainly for floor slabs and concrete beams. The Government-owned Crushed Stones Company used to have a monopoly on supply but, when women started manually crushing stones, the informal industry grew.

The breaking of stones is highly labour-intensive, grindingly hard work and only attractive to the poor, including women and children (figure 73). When the stone is particularly hard, old tyres will be burnt on its surface to crack it before quarrying it out for further breaking up by hand.

There is no foreign exchange involved and most small scale consumers of aggregate buy from the informal traders whose price is lower than the formal crushed stones companies who also have had to add VAT.[39] The informal quarrying for building sand and stone is a cause for concern as it leaves behind degraded land which is then expensive to develop (figure 74). It might be possible, however, through collaboration with informal quarriers to exploit stone to an even depth and then back fill so that servicing becomes possible in dolomite areas of Lusaka. Crushed stone is sold by the seven ton truck load at ZMK500,000 (USD100).

Cement blocks

Cement blocks are more common in house-building than burnt bricks (figure 75). They use less energy than

Figure 74. Dolomite quarrying leaves degraded land difficult to develop. **Photo** © UN-Habitat

Figure 75. Informal construction with blocks and in situ concrete columns, Kitwe. **Photo** © UN-Habitat/Daniel Phiri

Figure 76. Gilpher cement sales outlet, Kitwe. **Photo** © UN-Habitat/Daniel Phiri

Figure 77. Informal manufacture of cement blocks, Kalingalinga, Lusaka. **Photo** © UN-Habitat

burnt bricks and their manufacture does not threaten the forests of Zambia.[40] Blocks are made by informal operators on the roadsides, using simple machines, but there is also a formal-sector supply through factories. About 30 per cent of cement produced in Zambia goes into blocks.[41] Using simple electrical machines, two people can produce 1,000 blocks per day using one part cement to four or six wheelbarrows of sand or quarry dust. Using the equivalent hand-powered machine, two people can produce 400-600 blocks per day.[42]

Formal sector providers include Oriental Quarries in Lusaka and Gilpher Enterprises in Kitwe (figure 76). The latter sells them at ZMK3,500-3,800 (USD0.70-0.79) per block. Informal manufacturers (figure 77) charge ZMK4,500 to ZMK5,000 (US0.90 to USD1) per block.

Burnt bricks

In the late 1960s and early 1970s, the Zambian government formed two parastatal companies; Nega-Nega brickworks and Kalulushi brickworks as the

Figure 78. Brick making from anthill soil, Kitwe. **Photo** © UN-Habitat

sole suppliers of bricks to the Zambian construction industry. Large, centralised, high-technology, energy-intensive brick-making has been shown to be the wrong way for a developing country to go as it minimises labour inputs and maximises capital and imported inputs, and the cost of moving bricks to site.[43] These factories were never able to satisfy local demand. The cost of a burnt brick, sold by an informal trader, is ZMK4,500 -5,000 (USD0.90-1.00).[44]

There is a thriving small-scale brick making industry in Zambia, particularly using termite-hill clay. The termite hills of Zambia are large and extremely common. They contain high quality clay with little organic matter. The clay is dug out, mixed with water and loaded into simple moulds. These are turned out, sun-dried and stacked into clamps for firing.

After several days of intense heat, the clay turns a pale bright orange and the bricks are hard and durable. All this occurs at the site of the termite hill (figure 78).

Stabilised soil blocks

These were commonly used in the past by councils and mines in building low-cost housing, many of which have survived 60 or 70 years without damage (figure 79). More recently, the Ministry of Defence has used it in building housing.

Although stabilised soil technology fulfils similar strength requirements to other allowed materials, it is not allowed under the current building regulations. In response, TDAU is involved in lobbying government to accept the Mozambican standards for stabilised soil blocks and rammed earth. The current building regulations are based on specified materials rather than specific strength requirements.

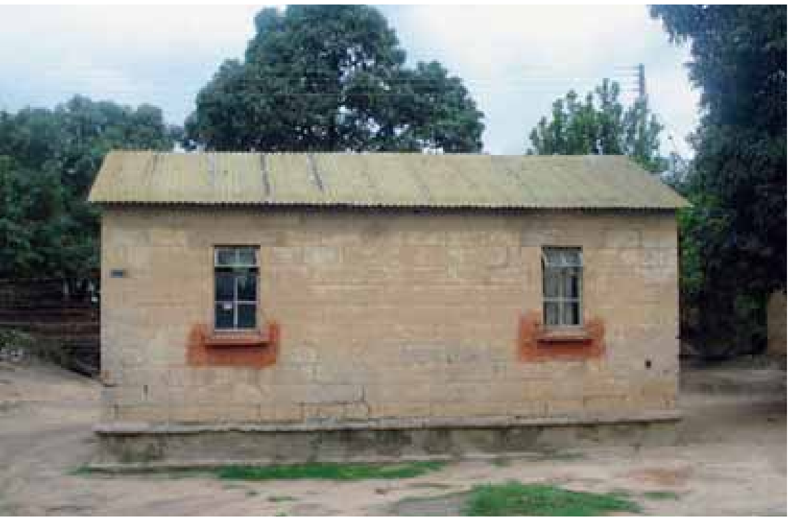


Figure 79. A stabilised soil dwelling over 60 years old, Buchi, Kitwe. **Photo** © UN-Habitat/Daniel Phiri

Figure 80. TDAU hand press for Hydraform blocks. **Photo** © UN-Habitat

Hydraform blocks[45]

Developed in Johannesburg, the Hydraform block is an interlocking stabilised soil block made, originally, using a mechanised hydraulic-compressor machine which costs about USD4,000. Once cured the blocks can be dry-stacked with no mortar. In an effort to reduce costs, the Technology Development and Advisory Unit (TDAU) of the University of Zambia has manufactured, and is marketing, a hand-operated press, similar to the CINVA-Ram or TekBlock press (figure 80). The press produces 4", 6" and 8" blocks and is capable of modification for pressing roofing tiles.

Hydraform blocks are made from whatever soil is on the site. On a domestic site, a hole 2m x 2m x 2m suffices to provide enough material and then can be used for a septic tank. A small amount of cement can be added to the soil to make 70, 11 litre interlocking blocks costing around ZMK2,000 (USD4) each.

Hydraform blocks can provide a saving of 30 to 55 per cent over conventional blockwork with mortar. As all blocks are made in one place, it is relatively easy to control pilferage and the consequent adulteration of cement to cover up such losses.

The People's Process has used hydraform blocks in its projects to good effect (figure 81).

Asbestos

Despite the irrefutable evidence that manufacturing, processing and clearance of asbestos products is highly injurious to health,[46] asbestos pipes and roofing sheets are widely used and still manufactured in Zambia, from mineral imported from Zimbabwe, both for local use and export to neighbouring countries. Turnall Asbestos Products (TAP) are the sole producers of asbestos-cement roofing sheets (endurite) and pipes in Zambia. The company currently has a production capacity of 30,000 tonnes at Chilanga. In 2011, Turnall has started manufacturing non-asbestos products including endurite in response to the banning of asbestos in Mozambique and South Africa, both valuable markets.

The TAP website shows a laudable concern for health and safety in the factory and among the workers; ILO and other standards are complied with. It is developing non-asbestos-based products. However, anecdotal evidence suggests that the factory generates wider environmental issues arising from disposal of fibre-rich sludge from the machinery. Where pipes and sheets have been used in construction in the past and are left in situ, they will cause no harm. When they are removed, broken or modified by drilling or sawing, the fibres are released and potential harm ensues. It will be important in the near future to provide trained personnel and specialist equipment for removing and disposing of asbestos used in domestic building.

Figure 81. Dwellings built with Hydraform blocks, Kawama, Kitwe. **Photo** © UN-Habitat

Glass

Kapiri Glass Products (KGP) the country's sole supplier of glass products was incorporated in 1972 by the state. The company made losses for many years prior to its being sold to a German company for USD9.2m in 1995.[47] Expectations that, with new investment, the company would widen its product base to large sheet glass for the building sector were groundless as it could not compete with imported glass. It is no longer in operation except as a seller of sand. Zambia continues to rely on imported glass sheets.

Chinaware

Zambia Ceramics Ltd, in Kitwe, was a SOE producing bricks and sanitary products. It was privatised and then it closed down.

Windows and door frames

Owing to the prevalence of termites, windows and door frames in the formal sector tend to be fabricated in steel, often by informal sector fabricators.

Roofing sheets

Despite the overwhelming evidence that working with asbestos causes cancer, asbestos-cement roofing sheets continue to be the most commonly used roofing material in Zambia. This is partly because they are produced locally but also because it is lighter than a tiled roof and does not need trusses; simple purlins tend to suffice unless the span is large. Corrugated iron sheets have the disadvantage of needing constant painting and maintenance, so they are more expensive in the long-run. Profiled steel sheeting is now being produced and used which undercuts other roofing materials on price. It is very light and needs little support. Although a number of small scale companies are now engaged in producing clay and cement roofing tiles, their use is still limited because of the strong roofing structure they require.[48]

Structural Steel

The bulkiness and weight of steel makes it extremely difficult for small scale suppliers to enter into steel importation and local redistribution. The former Zambia Steel and Building Supplier was broken up in the 1990s. Shonga Steel used to have a virtual monopoly in supplying the construction industry but several companies have recently started manufacturing, e.g., Kafue Steel Mill especially after liberalisation of the economy. As a result the cost is lower now than it was when Shonga Steel dominated the market. Much steel is currently imported from China and South Africa.

As most dwellings are low rise, little steel work is required in the construction process. There is now some reclaiming of metal to manufacture reinforcement bars.

This leads to unsubstantiated reports of vandalising electricity pylons and other iron and steel structures for the metal.[49]

There is a thriving informal sector steel-fabrication industry comprising numerous welders and small-scale steel fabricators making burglar bars and grilles for protection from intruders (figure 67). These are added to all openings whenever an owner can afford to do so. Many major roadside verges are occupied by traders dealing in burglar bars, barred doors and steel gates. As the steel is all imported, the foreign exchange cost of the threat of crime is very large.[50]

Timber

Zambia has a variety of timber species and many managed forests, some close to cities, e.g., Chati in Kalulushi. The Planning and Building Regulations do not allow timber structures in cities because they are susceptible to termite attack and allow the spread of fire. Studies have demonstrated the ability to keep termites at bay and some timber buildings built by the early missionaries continued to stand despite poor maintenance. Timber is used in roofing trusses and purlins, and in doors. In the informal sector, lintels, and window and door frames are still made of wood.

Stone

Stone has become a common building material, especially for floors but also occasionally for walls. Stone quarrying is, however, not well regulated leading to environmental degradation.

Figure 82. Rough stone for sale, Kalingalinga.
Photo © UN-Habitat/Daniel Phiri

Grass

A particular type of grass that grows in the flood plains of the Western Province has become a common building material both for homes and commercial building. The use of grass for roofing is against the TCP Act and the Building Regulations owing to its tendency to catch fire.

Special permission is obtained to use the grass and measures taken to safeguard the individual developer and the general public.

Pre-Fabricated Materials

There is a growing trend in Zambia to use pre-fabricated materials but they are still negative perceptions about the use of this type of building materials as it is thought not to be strong.

Construction imports

Whereas in the past Government policy was geared towards import substitution and protectionist policies for infant domestic industries, now imports are allowed 'freely into the country and local companies are expected to compete with foreign and established companies. This has eased the former shortages of construction materials and, thus, minimises delays on construction sites leading to lower construction costs. Local producers find great difficulty, however, in competing with Chinese and other imports.

The absence of iron and steel works in Zambia means that all construction steel used in reinforcement and ironmongery is imported and then redistributed by local suppliers. Iron/steel and construction electrical goods have the highest direct import content. The poor quality of some of the locally produced construction materials has encouraged imports. Glass sheets are imported.[51]

The use of indigenous construction materials

Without doubt, the main factor hindering the use of indigenous construction materials among low-income households in Zambia is their non-inclusion in the planning and building regulations. Although the University of Zambia, the NHA and the National Council for Scientific Research have all carried out research and produced some innovative prototypes for use in house building, none of them has been developed commercially. For example, the NHA's sisal reinforced cement roofing sheets, though tried and tested on some demonstration houses in Lusaka, was not used in any of the Authority's own housing schemes, nor on those of local authorities or private builders.[52]

Table 58. Comparison between formal and informal housing characteristics

	Formal	Informal
Foundation and slab	200mm solid core block foundation wall with 2M gauge wall force every 400mm, on 600mm wide x 200mm thick mass concrete footings in a 600mm deep foundation trench. Slab to be 100mm thick mass concrete slab reinforced with 'conforce 86' on 500 gauge polythene damp proof membrane laid on 50mm thick sand blinding laid on a 150mm thick well compacted laterite hardcore base	150mm burnt clay block wall in 150mm deep foundation trench. 50mm thick concrete slab on 100mm compacted clay on 50mm thick crushed stones
Super structure	200mm (external)/100mm (internal) hollow concrete block walls with 2m/1m wall force every 600mm, plastered with 19mm thick sand/cement plaster externally and 13mm thick sand/cement plaster internally. Painting to be 1 coat external quality PVA as finishing coat on 1 coat primer and 1 coat undercoat respectively outside and 1 coat internal quality PVA paint as finishing coat on 1 coat primer and 1 coat undercoat respectively inside.	150mm external and internal walls plastered with 9mm thick sand/cement plaster. Lime washed externally.
Openings	All window openings to be at least 10% of the room floor area. External door openings: 900 x 2000mm. Internal door openings: 800 x 2000mm - bedrooms and living rooms, 700 x 2000mm - bathrooms and closets and storerooms	100x 300mm openings covered with wooden shutters as windows. All door openings: 725 x 1850mm
Roof	150 x 75mm soft wood purlins and100 x 50mm wall plates	100mm diameter gum poles as purlins and wall plates
Services	Water-borne sewerage, Mains water, Electricity, Refuse collection	Pit latrine, well water, charcoal and kerosene, no refuse collection
Site	12x27m, Set backs: 6m (front), 3m (sides), 1.5m (rear)	12x27 (determined in consultation with neighbours and RDC)
Cost	ZMK60 million	ZMK6 million
Cost 2011 (USD)	c. ZMK120 million USD24,700	c. ZMK12 million USD2,470
Construction time	3 month (average)	3 weeks (average)
Durability	Over 60 years	Up to 40 years (claimed)

Source: Mwango[53] with 2011 figures added.

9.6 COST OF CONSTRUCTION MATERIALS AND COMPONENTS

Table 59. Cost of selected building materials in Zambia

Material	Type	Unit	Cost (ZMK)	Remarks
Cement	Ordinary Portland cement	50 kg Bag	60,000 -75,000	Cost varies with distance, e.g., cement costs more in Livingstone than in Lusaka which is near the Lafarge Cement Factory
Roofing sheets	Aluminum corrugated sheets 0.35 / 0.32 0.60mm	Packet of 20	63,000 - 110, 000	"Iron Trafford" 4.5-5metres
	Asbestos cement	360cm x 82cm	215,000	There has been a significant reduction in usage of Asbestos as a result of the realisation of its health effects
Stones	Quarry	Per 7-8 tons load	1,000,000	
	Hand crushed	Per load	500,000	
Sand	Rough	Per 10 ton load	300,000	
	Smooth	Per 10 ton load	400,000	
Timber	150cmx50cm	4.5m lengths	95,000	17,000 /m
	100cmx50cm		55,000	16,000 /m
	75cmx50cm		45,000	12,000 /m
Steel rods	20mm dia.	Metric tonne	130,000	Reinforcement bars
	16mm dia.		69,500	
Plywood	4mm thick	1.2mx1.8m/ Sheet	95,000	
	6mm thick		105,000	
Glass	Transparent Obscure	1.2mx1.8m/ Sheet	310,000	
			135,000	
Mosquito netting	Nylon type	30m	30,000-60,000	depending on size, type, treated or untreated
Emulsion paint		20 litres	136,000-169,500	White
Oil paint		5 Litres	130,000- 169,500	
Steel window frames		1.2mx2m	275,000	
		90cmx150cm	215,000	
Steel Door Frame		825 mm x6"	215,000	
		825 mm x 8"	275,000	
Laterite		7 tonnes	450,000	

Sources: Various including Rekay's Farming and Building Supplies Ltd, Kitwe

9.7 CAPACITY NEEDS ASSESSMENT

According to the Executive Director of the NCC, the construction sector is capable of scaling up supply. It has been increasing at an annual real rate of 17.5 per cent per year which means it doubles every six years or so. Thus, increases in capacity to build should be easily achieved as supply is scaled up to meet the need for new housing.

The Zambian Government is estimated to owe local construction consultants and contractors approximately ZMK380 billion (USD86 million).[54] The construction industry cannot be expected to carry this debt burden and operate effectively. The construction of 1.3 million dwellings by 2030 will not only place a huge burden on the construction industry but also give it a major boost as jobs are created and materials are demanded.

Table 60. Likely work created by the building of 1.3 million dwellings

	Formal	Informal	Total	Work years
Percentage share	10	90		
Number of dwellings	130,000	1,170,000	1,300,000	
Times work months	17	2.9		
Total work months	2,210,000	3,393,000	5,603,000	466,917
Percentage share	20	80		
Number of dwellings	260,000	1,040,000	1,300,000	
Times work months	17	2.9		
Total work months	4,420,000	3,016,000	7,436,000	619,667

The addition of 1.3 million new urban dwellings by 2030 is likely to create significant numbers of jobs and must form a context within which the construction industry manpower requirements are assessed. Ziss and Schiller[55] calculated that work provided per informal dwelling was 2.9 work-months and per formal dwelling (with higher specifications) was 17 work-months. Jobs generated are shown in table 60.

Currently, the split between informal and formal supply is likely to be about 90:10. If this continues, the number of work months employment required to build 1.3 million dwellings would be 5.6 million (or 467,000 work years or jobs; 24,600 jobs per year). If the formal sector is increased to 20 per cent of the new stock, then 7.4 million work-months would be generated, equivalent to 32,600 jobs per annum. Thus, there are likely to be somewhere between 24,600 and 32,600 new jobs per year in construction as a result of the supply of housing required.

There will be great need for training through TEVETA institutions. The supply of building materials required is huge.

9.8 CROSS-CUTTING ISSUES; GENDER, HIV/AIDS, AND YOUTH

The NCC has run a campaign to increase HIV/AIDS awareness on construction sites. Construction workers, especially those away from home, are notorious for their seeking out sexual partners where they are posted.

Thus, as part of the national awareness efforts, contractors must provide condoms and AIDS awareness material to their workers.

The construction industry is especially important for youth employment. It is a sector where, as long as someone is strong and prepared to work hard, they can make a modest living. It is important that the industry provides opportunities for training and advancement for young entrants. This also, however, encourages some people to use children in construction related jobs, especially in stone quarrying and crushing. Little action has been taken to prevent this or provide the children with opportunities for education alongside their livelihood activities (figure 73).

The apprenticeship system is vitally important to the long-term health of the construction industry and the safety and longevity of its housing stock.

9.9 BRIEF CONCLUSION

Though the formal construction industry has been growing very rapidly in the last few years, its role in housing supply is very limited as so few of the urban households can afford its products. As with other countries in Sub-Saharan Africa, Zambia's housing is mainly provided by the informal sector construction firms and artisans in collaboration with prospective owners. The supply of skilled labour is constrained at present and is bound to be more so when much more activity is required to fulfil the need for over 600,000 dwellings per year. The issue of training and capacity building will be an important determinant of how easily urban Zambia keeps pace with demand for housing.

Building materials are in reasonable supply though many local resources in materials supply and manufacture need to be encouraged in the future. The focus of building technologies is currently on cement-based materials. There is much to gain from encouraging earth-based materials and technologies. A multiplicity of small-scale contractors in construction and materials supply are central to housing supply and should form the focus of interventions to increase the efficiency of housing supply for the majority.

SMALL-SCALE CONTRACTORS USING LABOUR-INTENSIVE TECHNOLOGIES SHOULD FORM THE FOCUS OF INTERVENTIONS TO INCREASE THE EFFICIENCY OF HOUSING SUPPLY FOR THE MAJORITY.

ENDNOTES

1. Mashamba (not dated-a).
2. Interview with Dr S Mashamba, ED of NCC.
3. Zambia Business Survey (2010).
4. UNCHS/ILO (1995).
5. Mashamba powerpoint. (n.d)
6. See UNCHS/ILO (1995).
7. Doxiadis Plan
8. A Body Corporate created under an Act of Parliament No. 13 of 2003.
9. Mashamba (2010).
10. Mashamba (2010).
11. Mashamba (2010).
12. Cap. 268.
13. Cap. 269.
14. Interview with NHA, Acting Director of Projects and Chief Architect.
15. www.ilo.org/public
16. Zambia Business Survey (2010).
17. Interview with Mulambwa Imasiku, TDAU, UNZA, August, 2011
18. Mashamba (1997).
19. Mashamba (1997).
20. Interview with Sylvester Mashamba, October, 2011.
21. Mashamba (1997: table 7.4).
22. Mwango (2006).
23. Mwango (2006).
24. Mwango (2006).
25. Mwango (2006).
26. There are still numerous large termite mounds in peri-urban areas though most within the urban area have been cleared away.
27. Interview with Deputy Director of Planning, Livingstone City Council.
28. Mwango (2006).
29. Chifunda (2003) cited in Mwango (2006).
30. In those days, the blocks were called 'Kimberley Bricks' in acknowledgement of the discarded dynamite boxes in which they were moulded (Tipple, 1981). Even in the 1970s, kimberley bricks were an acceptable material for dwellings in site and service schemes. Indeed many houses in Bulangililo were constructed with them.
31. Kamatipa is close to the Kafue River which runs along the eastern edge of Kitwe.
32. Mwango (2006).
33. Thatch is often used in high cost areas for ancillary or recreational buildings and in tourism or catering establishments.
34. Mwango (2006).
35. Mashamba (1997).
36. Formerly owned by the Commonwealth Development Corporation and INDECO.
37. http://inzambia.com/?p=95 accessed 14th June, 2011.
38. Infinity Business Media Ltd (not dated).
39. Mashamba (1997).
40. Interview with Dr Ndilila, October, 2011.
41. http://www.daily-mail.co.zm/index.php/health/1322-supaset-concrete-blocks-local-innovation, accessed 29 December, 2011.
42. http://www.unza.zm/tdau/index.php?option=com_content&task=view&id=72&Itemid=124, accessed 29 December, 2011.
43. UNCHS/ILO (1995).
44. Interview with an informal burnt brick trader at Kalingalinga, Lusaka.
45. Personal communication, Mr Malumbwa Imasiku, Project Engineer, TDAU, September, 2011.
46. Tweedale and Hansen (2000).
47. Mashamba (1997).
48. Mashamba (1997).

49. Mashamba (1997).
50. Mashamba (1997).
51. Mashamba (1997).
52. Mashamba (1997).
53. Mwango (2006).
54. Mashamba, not dated-b.
55. Ziss and Schiller (1982).

10

THE HOUSING MARKET

10.1 THE STRUCTURE AND FUNCTIONING OF THE MARKET

As with most cities in Sub-Saharan Africa, Zambian urban areas have a housing market divided both between formal and informal (and all the combinations between) and between the elite (including expatriates) and the rest. In the formal elite market, there is buying and selling of both developable land and dwellings. There are formal developers building housing for individual clients and in estates for sale. In the informal market, there are a few sales but most of the market is for rental property.

THERE ARE TWO MARKETS IN URBAN ZAMBIA; A FORMAL ONE, OPERATED THROUGH FORMAL ESTATE AGENTS, OFTEN PRICED IN US DOLLARS, AND AN INFORMAL ONE OPERATED BY INFORMAL AGENTS.

10.2 FORMAL AND INFORMAL HOUSING MARKETS

In the past, institutional housing was very cheap to rent and there was great tolerance about arrears. For example, NAPSA accommodated its staff for as little as 3 per cent of their salary as rent. In council dwellings, some households were able to go for months without paying rent owing to a lax collection system.[1] When sitting tenants had bought their institutional housing for highly discounted prices, many had no idea of the true value of their property.

Eager buyers moved in to offer what seemed to the former tenants a great deal of money and many sold for very little and moved into other rented accommodation. With a little renovation, such dwellings can now sell for tens of millions of Kwacha or rents of ZMK200-300,000 (USD40-60) per month. Thus, much of the benefit from the 'empowerment' expected from the sale of institutional housing has passed into the hands of wealthier people than originally occupied the dwellings.

For others, purchasing their dwelling from the institutional owner was followed quite quickly by retrenchment and the loss of their formal-sector employment. At this point, the dwelling became an asset which could offer maximum return by their moving out of it and renting it out for the income it would bring. The household then needed alternative accommodation and many moved into informal housing in the peri-urban areas. Thus, the market for land and housing in the informal sector increased as an indirect consequence of the sale of institutional housing.

Sometimes an informal sector house is sold to a household who are mainly interested in the site. The original owner usually only takes away the roofing sheets from the old house. The new occupiers may then re-use the earth walling material as mortar, or for the floor slab, or make it into new blocks. This ability to recycle the clay ensures that fewer pits will be dug up for new materials.[2]

Such moves, and those of retired people hoping to reduce their expenditure on housing, have increased the pressure on the sale and rental markets in the informal areas. Prices of informal housing for sale tend to reflect the plot size and, where the dwelling is solidly built, the building costs. Where there is only a shack, the price only reflects the plot size. There is a general paucity of market data so a seller must ask around for what other plots have fetched recently, or just to take a guess at the right price for their land. Some dwellings or land are bought for redevelopment as terraces of small dwellings (known as 'flats') which ensure good total rental income

Figure 83. Terraces of small dwellings in Kalingalinga. Photo © UN-Habitat

Figure 84. High quality housing, Garden, Lusaka. Photo © UN-Habitat

from a small space (figure 83). Prices in Chaisa vary between ZMK5 million for enough land for two rooms and a separate pit latrine to ZMK15 - 20 million for 20m x 30m.[3] In both formal and informal low-income neighbourhoods in prime positions in the cities, there is some displacement of low-income households by higher-income households, who then replace the original with more expensive dwellings. Such 'gentrification' is occurring extensively in Kalingalinga and Garden in Lusaka (figure 84).

Residential plot prices

Table 61. Plots for sale in Lusaka in Zambia's daily papers, Septeber/ October, 2011

Location	Size of plot (sq.m.)	Selling Price (ZMK million)	Selling Price per square metre (ZMK)	Selling Price per square metre (USD)
Makeni	20,200	350	17,327	3.47
Leopard's Hill	8,100	500	61,728	12.35
Leopard's Hill	6,500	400	61,538	12.31
Leopard Hill	4,050	450	111,111	22.22
New Kasama, fully serviced	4,050	165	40,741	8.15
Roma	2,800	630	225,000	45.00
Chelston extension	2,500	60	24,000	4.80
New Kasama	2,250	115	51,111	10.22
Mass Media plot	1,500	350	233,333	46.67
Lusaka South Housing Park	1,500	97	64,667	12.93
Chalala	1,500	75	50,000	10.00
Lusaka South Housing Park	1,200	82	68,333	13.67
Chalala	1,200	65	54,167	10.83
Mass Media	1,125	500	444,444	88.89
Lusaka South Housing Park	1,000	72	72,000	14.40
Lusaka South Housing Park	900	62	68,889	13.78
Libala South	900	60	66,667	13.33
Libala South	800	70	87,500	17.50
Chalala	600	50	83,333	16.67
Meanwood with concrete slab	400	120	300,000	60.00
Chelston	400	20	50,000	10.00
Chelston extension	400	18	45,000	9.00
Lusaka west subdivisions	400	8	20,000	4.00

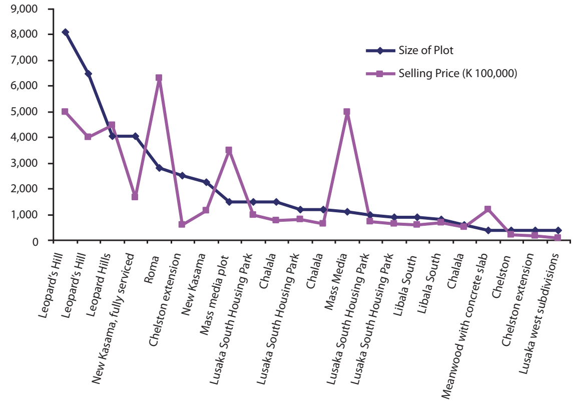
FOLLOWING THE SALE OF INSTITUTIONAL HOUSING, MANY HOUSEHOLDS SOLD OR RENTED OUT THEIR NEWLY-OWNED PROPERTY AND MOVED INTO PERI-URBAN AREAS.

While public land is not easily obtainable but may not be expensive, it is universally accepted in Zambia that private land is very expensive. There is very little evidence, however, to support this assertion. Plots are, indeed, costly compared with incomes but they are also very large, i.e., at least 300 square metres and often more than 1,000 square metres.

It is evident from table 61. and figure 85 that plots advertised for sale tend to be very large and far beyond the buying power of most households. In the high-cost small-holdings of Leopard's Hill, ZMK400-500 million (USD80-100,000) is the norm for 4-8,000 square metre plots. In newly developing areas, such as Lusaka South Housing Park, 600-1,500 square metre plots tend to sell for ZMK70-100 million (USD14-20,000). In low-cost and medium-cost areas, 400-600 square metre plots are for sale for ZMK20-50 million (USD4-10,000). Most of the plots are priced at between USD10 and USD20 per square metre, though some high density/ low cost plots are less than USD10 per square metre. There seems to be no correlation between plot size and price per square metre. Thus huge plots in Leopard's Hill (figure 86) are roughly the same price per square metre as smaller plots in Libala and Chelston (table 61. and figure 85).

Figure 86. Large plots at Leopard's Hill. **Photo** © UN-Habitat

Figure 85. Size of plots and their selling price (Note: Makeni's high value removed for clarity; plot size in m2)



EARNINGS IN ZAMBIA ARE TOO LOW TO AFFORD FORMAL HOUSING BUT, IN ITSELF, HOUSING CANNOT BE FAIRLY SAID TO BE EXPENSIVE.

Renting

There was an anti-renting element in Zambian policy before 1991. Since the economic liberalisation, however, the anti-renting stance has been on the wane with many private and institutional landlords free to determine rentals based on market forces. Liberalisation has also affected the housing rental market in informal, unplanned and other similar areas, where the proportion of renters is almost equal to that of owners. The high rents charged in formal housing areas have resulted in low income earners seeking housing in informal areas, thus pushing up housing rents in these areas.

As shown in chapter 4, urban households are fairly evenly divided between ownership and renting from private landlords. Under the Rent Act, 1972 (Cap. 206), rents are decided on the basis of the "Standard Rent" which is either the rental agreed between landlord and tenant on the date the premises are let or an amount determined by a court at a monthly rate of 1.25 per cent of the cost of construction plus the market value of the land. This is a rent to house cost repayment rate of 15 per cent per annum.[4] Where such price information is not available the court estimate a fair rent in relation to

Figure 87. Small rental dwelling added on a plot in Buchi, Kitwe. Photo © UN-Habitat/Daniel Phiri

Figure 88. Simple dwellings for rent, Kalingalinga, Lusaka. Photo © UN-Habitat

rents of comparable premises in the neighbourhood.[5] The agreed rentals are usually payable on a quarterly basis or any other period agreeable to the parties.[6]

Much of the private renting takes place in what was once owner-occupied housing, site and service housing and squatter settlements. Except for rooms occupied by young people starting their independent life, most renting is of a whole dwelling or a suite of two or three rooms (figure 87) rather than by the room such as is found in Kenya or Ghana. Many of the renters will be in Statutory or Improvement Areas, in which the Rent Act does not apply.

The rental market is perceived to be unstable by many tenants. Muchindu[7] found that over a third of renters were anxious about their tenure, fearing they could be evicted at any time. Some of the reasons given for this are that the landlord may want the dwelling back for his/her own occupation or family use.[8] There could be a misunderstanding or conflict, especially over rent. Many had left their previous dwelling because of some conflict with the landlord; 67 per cent also meant to leave because of arguments with their current landlord. Others have insecurity over possible increases in rent. These uncertainties and conflicts may be a factor of informal arrangements when renting from individuals. Although some tenants indicated that they have a tenancy agreement, many did not.[9]

In the informal areas and squatter settlements, informal renting and subletting are common. There are unwritten (informal) agreements between landlord and tenant to pay an agreed sum on a monthly basis. Many let a room or rooms in their own home while others build structures specifically for renting out as suites of rooms or whole dwellings.[10]

While mean rents for the sub-sample in each of the three cities surveyed for this profile tend to be around the one million kwacha (USD200) mark per month, median rents are only ZMK500,000 in Lusaka and Kitwe and 350,000 in Livingstone (USD100 and 70) (table 62. and figure 66.).

Table 62. Monthly rents paid in Lusaka, Kitwe and Livingstone (means and medians)

	Kitwe	Lusaka	Livingstone
Number of responses	32	59	31
Mean	972,031	1,068737	1,054,677
ZMK and (USD)	(194)	(214)	(211)
Median	500,000	500,000	350,000
ZMK and (USD)	(100)	(100)	(70)

Source: UN-Habitat sample survey, September 2011.

Figure 89. Monthly rents paid in Lusaka, Kitwe and Livingstone (deciles)

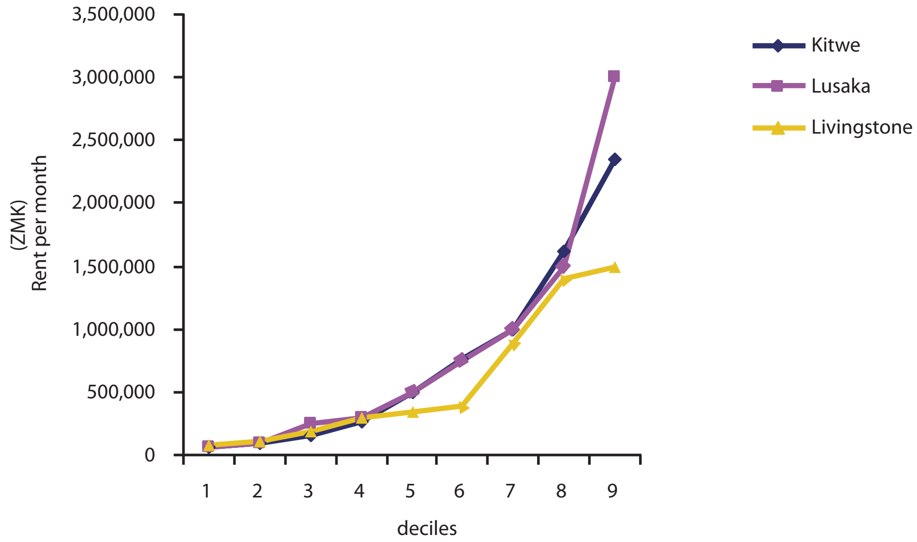


Table 63. Rental values in national newspaper advertisements, September/October, 2011

		Cost per month		Cost per bedroom	
District	**No. of bedrooms**	**ZMK**	**USD**	**ZMK**	**USD**
Mass Media	4	20.0	4,000	5.00	1,000
Kabulonga	3	14.0	2,800	4.67	933
Rhodes Park	5	13.0	2,600	2.60	520
Roma	3	12.5	2,500	4.17	833
Parliament area	6	10.0	2,000	1.67	333
Kabulonga	4	7.0	1,400	1.75	350
Ibex Hill	3	5.0	1,000	1.67	333
Woodlands	3	4.5	900	1.50	300
Avondale	4	4.4	880	1.10	220
Bonaventure	4	4.0	800	1.00	200
Makeni Farm	4	4.0	800	1.00	200
Nyumba Yanga	4	3.5	700	0.88	175
Makeni East	2	2.5	500	1.25	250
Chalala	3	2.5	500	0.83	167
Kafue Estates	3	2.5	500	0.83	167
Olympia Extension	4	2.5	500	0.63	125
Libala South flats	3	2.2	440	0.73	147
Chilenje	3	1.8	360	0.60	120
Kafue Estates flat	2	1.6	320	0.80	160
Lilayi	3	1.5	300	0.50	100
Chalala	2	1.5	300	0.75	150

Table 64. Rental values in advertisement in Kalingalinga, October, 2011

Dwelling offered	ZMK thousands/ month	USD/ month	ZMK thousand/ month/ room	USD/ month/ room
One room	280	56	280	56
One room	250	50	250	50
Two rooms	380	76	190	38
Two rooms	370	74	185	37
Two rooms	400-450	80-90	200-225	40-45
Three rooms	550	110	183	37
Three rooms	650	130	217	43
Three rooms	500	100	167	33
Three bedrooms	2,500	500	625	125
Three bedrooms	2,200	440	550	110
Four rooms	850	170	213	42.5

Rental housing in Lusaka offered in the daily newspaper in September/ October, 2011 (table 63.), covers quite a wide range of rental values; from ZMK10 - 20 million (USD2 - 4,000) per month in the highest cost housingto ZMK1 – 3 million (USD200-600) a month in the medium-cost neighbourhoods. These rents are far beyond households on manual and clerical incomes.

The rents advertised informally in Kalingalinga (table 64. and figure 90), however, show how much cheaper informal housing is. Here, apart from the two dwellings described as ‘three bedroomed’, rent for between ZMK280,000 and ZMK 850,000 per month (USD56 – 170). The dwellings with the bedrooms (counted as four rooms in all) demand much higher rentals and fit into those at the lower end of the formal sector (table 63.). Rents per room in table 64. are in the ZMK167,000 to ZMK280,000 (USD33-56) per month range

Rents are much higher in Lusaka than in other cities and towns. Rents in Mtendere are ZMK600,000 to 800,000 (USD120-160) per month for three rooms plus kitchen. Larger dwellings there demand ZMK1,500,000 (USD300) per month. A household in a new two-dwelling structure on vacant land in Buchi, Kitwe, pays ZMK150,000 (USD30) per month.[11]

Figure 90. Informal advertisement for rooms to rent on a roadside in Kalingalinga. **Photo** © UN-Habitat

10.3 FORMAL AND INFORMAL HOUSING PRICES

Table 65. Median cost of dwellings built or bought since 1990 (inflated to 2011 prices)

Median	Lusaka	Kitwe	Livingstone
High cost	ZMK133,579,405 (USDUSD26,716)	ZMK46,563,911 (USDUSD9,313)	ZMK11,780,309 (USD2,356)
Medium cost	ZMK136,010,125 (USD27,202)	ZMK5,244,238 (USD1,049)	-
Low cost site and services	ZMK51,169,767 (USD10,234)	-	-
Low cost formal	ZMK15,960,725 (USD3,192)	ZMK192,366 (USD38)	ZMK171,008 (USD34)
Informal settlement	ZMK3,020,108 (USD604)	-	ZMK31,783,887 (USD6,357)

Source: Profile sample survey, September 2011

The general impression gained from tables 65. and 66. is that very low prices have been paid at the median by households who have acquired dwellings since 1990, even when CPI numbers are used to inflate the prices to 2011 levels. Only in the high and medium cost sectors in Lusaka are median prices above USD10,000.

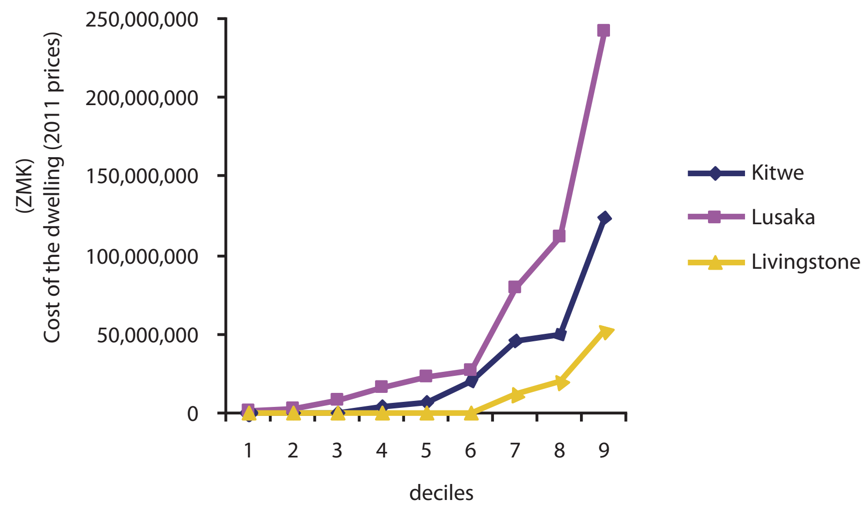
The very low median cost of dwellings in the low-cost formal sector (less than USD40) is owing to the sale of institutional housing which greatly undervalued the properties sold, many of them being free except for transaction costs.

Table 66. Cost of dwellings built or bought since 1990 in Lusaka, Kitwe and Livingstone (means and medians)

	Kitwe	Lusaka	Livingstone
Number of responses	22	32	18
Mean	93,412,857	92,059,356	12,607,497
ZMK and (USD)	(18,683)	(18,412)	(2,521)
Median	6,427,456	22,650,813	171,008
ZMK and (USD)	(1,285)	(4,530)	(34)

Source: UN-Habitat sample survey, September 2011.

Figure 91. Cost of dwellings built or bought since 1990 (deciles)



The deciles in figure 91 show how the top 30 per cent in Lusaka have paid much more than the rest; the lower 60 per cent paid less than ZMK25 million (USD5,000) while the upper 30 per cent paid more than ZMK120 million (USD24,000). The proportionate differences are similar in Kitwe and Livingstone but at much lower price levels. In Livingstone, only the top ten per cent have paid ZMK50 million (USD10,000) or more at 2011 prices.

National Housing Bond Trust two-bedroom low-cost dwellings cost between ZMK270-330 million (USD54-67,000) to build and high cost are ZMK500-750 million (USD100-150,000).[12] Payment must be made in three installments (65 per cent, 35 per cent and 5 per cent) within 105 days. Thus, a first payment of ZMK150 million is needed for a low-cost house and few can raise this amount. These are much higher than the figures paid by the 2011 survey sample except at the very top end of the market.

Formal building costs are given by Dr Francis Ndilila as USD1,000 per square metre for high cost, more than USD500 per square metre for medium cost and less than USD500 per square metre for low-cost. To all those, should be added USD5,000 per room for services. A developer in Livingstone, estimates building costs in low-cost housing at ZMK1.5 million (USD300) per square metre. The buildings department of the Ministry of Transport, Works, Supply and Communications uses a rate per square metre of USD250 (ZMK1.25 million) in costing their low-cost housing projects.[13] Thus, a three room, 35 square metre low-cost dwelling would cost between USD8,750 and USD17,500 (ZMK44 million to ZMK88 million) to build.

In high cost housing, the roof costs about 15 per cent of construction costs, in low-cost housing it would be up to 30 per cent.

Table 67. shows that dwellings for sale in the national daily papers are mainly concentrated in the high-cost sector selling at between ZMK400 million and 1.2 billion (USD80,000 and USD240,000) and upwards of USD30,000 per bedroom. The few in medium- and low-cost neighbourhoods are advertised, mainly for between ZMK100 million and 300 million (USD20,000 to USD60,000).

The few outside Lusaka in the national newspapers are much cheaper at between ZMK75 million and ZMK280 million (USD15-56,000). It is interesting to note former institutional housing in Matero (Lusaka) and Chimwemwe (Kitwe) being ZMK100-150 million (USD20-30,000).

The NGOs currently involved with people living in poverty are building for much less than the above. People's Process housing being built in Livingstone costs ZMK12 million (USD2,400) for a two room dwelling with 'sweat equity'.[14] Land was obtained from Livingstone council for its intrinsic value of ZMK150,000 (USD30) per plot in 2009. To repay the loan, residents must pay ZMK200,000 (USD40) per month but the People's Process know that they need to build for one fourth this if most of their clientele are to be able to afford to own dwellings.

Habitat for Humanity (HfH) manage to enable households to construct dwellings for a little more than the People's Process but still well below formal costs. A 40 square metre HfH house in Ndola costs ZMK15 million (USD3,000) in materials (USD75 per square metre), in Lusaka it costs ZMK21 million (USD4,250; USD105 per square metre). When the owner builds the dwelling, there are no other costs except the shadow cost of their time.

Table 67. Dwellings for sale in Zambia's daily papers, September/ October, 2011

		K million	USD	K millions	USD
Lusaka					
Olympia Extension	3 bedroomed executive house/ servants quarters	1,200	240,000	400	80,000
Makeni Bonaventure	3 bedroomed house/servants quarter	950	190,000	317	63,333
Barlastone Park	5 Bedrooms on 2 Ha.	850	170,000	170	34,000
Chalala	3 bed rooms	450	90,000	150	30,000
President's Housing initiative	2 Bed rooms with extension	400	80,000	200	40,000
Woodlands extension	No information	400	80,000	-	-
BMN Estate Mungwi Road	3 bedrooms incomplete	350	70,000	117	23,333
Chilenje South	2 bed rooms	280	56,000	140	28,000
Meanwood	3 bed rooms, built to roof level	160	32,000	53	10,667
Matero	2 bedrooms	150	30,000	75	15,000
Matero former council house	No information	100	20,000	-	-
Kanyama off Mumbwa Road	3 bed rooms with cottage	100	20,000	33	6,667
Chainda	No information	90	18,000	-	-
Zingalume	2 bedrooms	35	7,000	18	3,500
Chisamba					
Chisamba Fringille	4 Bedrooms	280	56,000	70	14,000
Kitwe					
Chimwemwe	3 bed rooms	125	25,000	42	8,333
Choma					
Masuku Road	3 bed rooms	280	56,000	93	18,667
Kapiri Mposhi	2 bed rooms	75	15,000	38	7,500
Kafue					
Kafue Shikoswe	3 bedrooms	100	20,000	33	6,667

SOME NGOS ARE MANAGING TO BUILD DOWN TO THE LOW EARNINGS IN ZAMBIA BUT IT OFTEN INVOLVES UNSUSTAINABLE LAND AND INTEREST RATES SUBSIDIES; THEIR DWELLINGS COST BETWEEN USD2,400 AND USD4,250 WITH 'SWEAT EQUITY'.

Table 68. Median cost of extensions built since 1990 (Kwacha and USD inflated to 2011 prices)

	Lusaka		Kitwe		Livingstone	
	K	USD	K	USD	K	USD
High cost	43,408,128	8,682	294,452,994	58,891	.	.
Medium cost	13,590,488	2,718	17,223,033	3,445	.	.
Low cost site and services	10,837,848	2,168	.		.	.
Low cost formal	33,898,858	6,780	7,760,652	1,552	10,837,848	2,168
Informal settlement	8,521,016	1,704	3,251,355		3,000,000	600

Source: Profile sample survey September, 2011

Table 68. shows some of the ability and willingness of residents to invest more in their dwellings over the last twenty years. Extensions to existing housing can be a very important component of housing supply in developing cities. Its enablement can offer a great deal of new housing goods on land that is already owned and serviced. Extension activity is mostly in the under USD10,000 bracket (as with spending on buying the dwelling). The comparatively large amounts spent in the low cost formal sector in Lusaka (almost USD7,000) shows how better-off households are occupying the former institutional dwellings and 'gentrifying' them. The median investment in extending dwellings here is more than twice the median cost of buying them. The pattern of median costs of extensions shows that microfinance loans of USD2,000 to USDUSD5,000 could address much of the extension activity.

10.4 HOUSING MARKET REGULATIONS

The Surveyors Institute of Zambia (SIZ) registers and monitors all Real Estate Agents in Zambia.[15] They have a Chapter for Land Economists and Valuation Surveyors. Owing to inadequate representation from the SIZ, real estate professionals have formed the Association of Real Estate Agents, a fairly recent player in the market and still struggling with issues of legitimacy among a multiple players in the real estate market.

10.5 ACTORS AND MARKET INSTITUTIONS

Commercial housing developers

There are several medium- and high-cost developments in urban Zambia at present. The following are just a sample.

Meanwood Development Corporation[16]

Meanwood Property Development Corporation Ltd and Galaunia Farms Ltd have been developing Vorna Valley which comprises a thousand plots of 1,000, 2,000 and 4,000 square metres, costing ZMK25 million, ZMK48 million and ZMK85 million (USD5,000, USD9,600 and USD17,000). The area is intended for "elegant high quality houses similar to Kabulonga, Sunningdale, Chudleigh and Roma". Buyers will be required to build high quality three to four bedroomed dwellings of 150 square metres and more, depending on the plot size. Prospective buyers may buy and amalgamate adjoining plots. Full payment is required at the time of purchase.

Figure 92. Dwelling at Meanwood Vorna Valley.
Photo © UN-Habitat/Daniel Phiri

Figure 93. Dwelling at Meanwood Vorna Valley.
Photo © UN-Habitat/Daniel Phiri

A second joint project is situated at Kwamwena Village where 7,500 residential plots for a Low to Medium Cost Housing Project are being laid out for sale. The area is intended for "low to medium cost houses similar to Woodlands Extension, Chelston, Kabwata and Emmasdale." Prospective buyers will be required to build two, three or four bedroom dwellings of 70 square metres to 200 square metres, depending on plot size. Costs per plot are ZMK10 million (USD2,000) for 400 square metres, ZMK12.5 million (USD2,500) for 500 square metres and ZMK15 million (USD3,000) for 600 square metres. All are expected to be paid in cash. Prospective buyers are expected to raise their own finance through loans from their employers, commercial banks and building societies but Meanwood Finance Corporation Ltd offers a loan over three years subject to a deposit of 20 per cent.

For their money, the plot buyers receive basic road infrastructure, a cadastral survey and title deeds. Construction must be completed in four years. Both these schemes fit generally into the price ranges shown in the newspapers.

Lilayi Development Holdings

The Lilayi scheme provides Low to Medium Cost Housing in which the company provides a fully serviced dwelling and mortgage financing. The dwellings range from 40 square metres on a 200 square metre plot to 97 square metres on a 400 square metre plot. Prices range from ZMK170 million to ZMK285 million (USD34,000 to USD57,000). The finance available is a mortgage for 15 years at 14 per cent per annum fixed rate, but it requires the borrower to save for the down-payment in a specially created savings account.[17] It will be instructive to see how buyers take to 200 square metre plots, 88 square metres less than the current legal minimum.

The Lilayi Housing Estates project has a diverse range of partners including local financial and service institutions and several international development agencies including USAID, OPIC (a US Government agency), and FMO, a Dutch development bank, all of whom contributed or guaranteed loan funding. These partners have leant credibility to the development and influenced local partner involvement.[18] This project provides a perfect example of how international development agencies can become involved in what seems to be a good development for low-income households but one which does not actually address the needs of the majority poor.

Nkonge[19] reports that there is an issue of "If we had that amount of money, we would not buy that" about the Lilayi scheme. The developers appear to have assumed that Zambian households have poor market information and calculated that the offer of a financial package would make up for the relatively poor value the dwellings represent.

Northgate Gardens, Lusaka

Northgate Gardens is a joint NHA, China Jiangxi, Shelter Afriques and MKP (a Malaysian Property Development Company) development[20] close to the Great North Road. Prices start at ZMK300 million (USD60,000) for an 86 square metres two-bedroom dwelling with double carport. The other house type is 125 square metres, three-bedroom.

Financing for purchasers is available from Stanbic through a loan with the following features:

- Minimum loan amount of ZMK180million (USD36,000);
- No maximum loan amount;
- Repay the loan over a period 20 years;

Figure 94. A pair of semi-detached one bedroom show houses of 40 square metres for Lilayi. **Photo** © UN-Habitat/Daniel Phiri

Figure 95. Two-bedroom dwelling show house for Lilayi **Photo** © UN-Habitat/Daniel Phiri

- Repayments are monthly and up to 35-40 per cent of salary;
- Up to 85% of the purchase price.

The following requirements are stated:

- Letter from employer and at least one year of continuous employment;
- roof of address;
- Proof of income (payslip, rental income, directors fees, other sustainable income);
- Proof of identity (NRC or Passport);
- Marriage certificate (for joint applicants);
- Aged between 21 and 55;
- Letter of offer from the agent and NHA-CJI;
- Certified copy of title deed;
- Valuation report from bank approved valuers;
- Short-term and life insurance;
- Non Stanbic account holders will need six months bank statements and two passport size photographs.[21]

It is evident that these formal-sector estates are targeted at a middle-class clientele who have formal, regular, attestable incomes sufficient to support a substantial loan. They will also need to have a car as the locations are far from most employment.

Householders and contractors

As in most of Sub-Saharan Africa, the major providers of housing in urban Zambia in 2011 are the householders who decide to build and their contractors who carry out the work. This process is outlined in chapters 4 and 9. It takes place mostly outside of formal systems of land supply, housing finance and infrastructure provision. The contractor uses low-cost, locally available materials assembled in small-scale technologies. Such housing rarely comes onto the market for sale but many dwellings built this way are rented out.

Landlords

Since the sale of institutional housing, most landlords in Zambia have only a few dwellings, there are few of the large private-sector landlords common in Nairobi, for example. There are many landlords who are building extra dwellings beside or behind the main dwelling in former council, mine or government housing. This 'backyard shack' development, as it is referred to in South Africa and Zimbabwe,[22] provides cheap housing for many households and uses the large plots more efficiently than before. Many landlords gained that status by buying a former institutional dwelling, either as the sitting tenant or from the original purchaser. They then rented out the dwelling. Landlords in peri-urban neighbourhoods are likely to live close by; as a respondent put it "the houses in Chaisa are owned by people who live here."

Estate agents and brokerage

Estate agency was declared illegal in 1975 but, since the enactment of the Lands Act 1995, estate agency has revived. There are 18 formal estate agents listed on the web version of the Yellow Pages of Zambia[23] and many in the informal sector scattered around the cities and towns. In 2010-11, estate agents formed an Association to regulate the business and ensure professional standards.

In the high- and medium-cost formal neighbourhoods, owners who want to rent them out can either advertise in the national newspapers or engage an estate agent who will look for suitable tenants.

Muchindu[24] found that about one third of households in his sample only took two to four months to find rental housing. Many even found dwellings within a month. Finding housing to rent or buy in the private market is dependent on informal connections and personal relationships. Most renters in Muchindu's sample first heard of a vacancy through relatives or friends; only in a few instances do people access a house through agents or the media. In contrast. the public/institutional housing is accessed through formal channels and procedures though there is undoubtedly some favouritism in the process.[25]

A registered estate agent interviewed in Matero reported that he charges the seller five per cent of the sale price for finding a buyer. Most of his business is in finding rooms for renters and tenants for landlords. The prospective tenant pays a ZMK50,000 to100,000 (USD10-20) per room finder's fee per viewing. He does not charge landlords as they could by-pass the agent by advertising for themselves. An unscrupulous agent can show many rooms that are not suitable to raise many finder's fees per successful search. The rental market has a quick turnover when a vacancy occurs. Agents are registered with the Ministry of Commerce.

Figure 96. Formal sector estate agent's sign.
Photo © UN-Habitat/Daniel Phiri

Figure 97. Estate agent's signs, Matero, Lusaka. Photo © UN-Habitat

10.6 CAPACITY NEEDS ASSESSMENT

There are many capacity needs issues in the operation of the housing market. The growth of the informal sector agents, who are, nevertheless likely to be registered as companies, shows that the capacity to create places to advertise rentals and sales are likely to expand with the market. The main issue appears to be that the lower end of the market is being left to informal land supply which, without any guidance, will occur on whatever land becomes available.

There may be shortages of urban land in some places in the future as large numbers of households require new urban housing. To prevent land speculation becoming a problem, raising the price of land artificially, supply should be planned for well ahead so that delivery can be timely and at the right price. The delivery of serviced or serviceable plots for sale for over 60,000 dwellings per annum will require a market capacity far above that which currently exists. It is clear that training and registration of estate brokerage professionals is likely to be important.

10.7 CROSS-CUTTING ISSUES: GENDER, HIV-AIDS, YOUTH

The housing market in Zambia is heavily skewed towards the rich. The widely different provision in the form of central locations, plot areas and servicing, and the concentration of all formal sector supply in higher-cost provision, greatly favour the higher income groups. The poor are left out of the formal housing market and have only the relatively crowded and poorly-serviced informal sector in which to seek accommodation.

The provision of the Rent Act to allow landlords to evict tenants if the dwelling is required for close family members is an important protection for weaker members of extended families. Many elderly people, young adults, people living with HIV/AIDS, and other vulnerable people need the accommodation that can be freed up if rented rooms can be brought back into the family. However, many of the tenants of such rooms may also be form the same group so there will be losers as well as winners.

10.8 BRIEF CONCLUSION

There are two markets in urban Zambia, a formal one, operated through formal estate agents and sometimes paying in US dollars, and an informal one operated by informal agents and little known outside its current customers. Both are relatively new as estate agency was banned until 1991 and land had no commercial value. Most estate agents concentrate on selling land and renting dwellings. The sales market is fairly small at all levels.

Following the sale of institutional housing, many owners have sold or rented out their property and moved elsewhere on the proceeds, often into peri-urban areas. Some gentrification is occurring in well-located informal areas.

Serviced plot prices in Lusaka of between USD10 and USD20 per square metre and dwellings selling for medians of USD18,000 in both Lusaka and Kitwe (since 1990, at 2011 prices) do not offer any support for the commonly-held belief that serviced land and housing is expensive in Zambia. Rentals are also not as high as popularly believed. In Lusaka, dwellings rent for USD33-56 per room per month in informal areas and USD200-600 per room per month in the medium cost neighbourhoods. Earnings are too low to afford it but housing cannot be fairly said to be expensive.

Some NGOs, Habitat for Humanity and People's Process are managing to build down to the low earnings in Zambia but it often involves some unsustainable practices such as free land or subsidized interest rates. Their dwellings cost between USD2,400 and USD4,250 with 'sweat equity'.

Large developers are building estates on the edge of some urban areas for the rising middle class. They tend to attract attention but do little to solve the housing issues of the majority.

ENDNOTES

1. Muchindu (2007).
2. Mwango (2006).
3. Interview with Adrian Nsefu, chairperson of Chaisa RDC.
4. Net of interest.
5. Muchindu (2007).
6. UN-Habitat (2005).
7. Muchindu (2007).
8. This is stipulated as a valid reason for evicting a tenant in the Rent Act, 1972, and is required if owners are to have enough confidence to rent out rooms which may later be needed by their children or other close relatives. In societies in which a parent feels responsible for providing children with their future accommodation, and where elderly relatives or orphaned nephews and nieces must be taken in when need arises, such provisions are vital to an active rent market. What can happen without this was graphically presented by Wheaton (1980) with reference to Cairo's constrained rental stock.
9. Muchindu (2007).
10. UN-Habitat (2005).
11. Personal communication with profile personnel, 2011.
12. Interview wit a developer in Livingstone, October, 2011.
13. Interview with the Senior Architect, Buildings Department, Lusaka, October 2011.
14. Sweat equity is the expression used for the hours of work self-builders put into the construction of their dwelling; by their sweat (labour), they are adding equity (value).
15. Personal communication with Bwalya Shilengwa, Wescom Property Group, Kitwe, January, 2010. An Act will follow setting out the terms of regulation.
16. Meanwood and Galaunia Farms joint venture. www.meanwood.co.zm.
17. Tembo (2007).
18. Tembo (2007).
19. Personal communication, Lusaka, October 2011.
20. Telephone Interview with Bwalya Masabo, Architect, NHA.
21. http://www.northgategardens.net/zambia_mortgage.html.
22. Crankshaw et al. (2000) Lemanski, (2009) and Tipple (2000). Despite being called 'shacks' these are usually built in masonry.
23. http://zambiabook.com/en/business-services/estate-agents/ accessed 11th August, 2011.
24. Muchindu (2007).
25. Muchindu (2007).

11

RECOMMENDATIONS AND WAYS FORWARD

In this chapter, the profile draws inputs from the November 2011, Stakeholders' Workshop (figure 98) and from the issues discussed in the earlier chapters in an attempt to identify directions for priority actions.

THE NEED FOR LOW COST HOUSING IS SO GREAT THAT 'BUSINESS AS USUAL' IS NOT ENOUGH; THERE MUST BE A NEW PARADIGM OF POLICY BASED ON VIGOROUS LOW-COST SUPPLY.

11.1 LEGAL AND REGULATORY FRAMEWORK

Establish a New National Housing Policy based on provision of 1.3 million new dwellings by 2030.

Figure 98. A group working to develop priorities for action, Lusaka Workshop, November, 2011. **Photo** © UN-Habitat/Matthew French

The need for new housing is so great that 'business as usual' is not an option. The profile has demonstrated the need for 1.3 million new dwellings costing between USD10,000 and USD40,000 each to accommodate the new urban households between 2000 and 2030. They would require about 87,000 Ha if all were on 12m x 25m (300 square metre) plots and 60 per cent of the land was taken up with plots, 40 per cent with roads, other neighbourhood uses and incidental open spaces.

Table 69. The annual scale of urban housing needed, 2011 to 2030

	Need/ provision 2011-2030	per working year	per working week	per working day	per working hour	Minutes per dwelling
Need 2001-2030	1,373,770	45,792	916	153	19	3.14
Provision 2001-2011	122,100	11,100	222	37	5	12.97
Required provision 2011-2030	1,251,670	65,877	1,318	220	27	2.19
Plus 45,500 shortfall in 2000	1,297,170	68,272	1,365	228	28	2.11

The production rate required demands a rate of supply of around one every two minutes of the working day over that long period. A new National Housing Policy should be underpinned by further research on the housing sector, which could include a rural housing profile to compliment this urban profile.

Upgrade informal and peri-urban neighbourhoods

In situ upgrading should be given first priority in housing supply. Informal neighbourhoods represent a significant stock of housing and this stock represents a cost-effective and relatively straightforward opportunity to increase the supply of adequate housing. The emphasis for interventions by government, councils and NGOs should largely be in regularisation of title, assistance with finance for dwelling improvement, and supply of infrastructure. These should all be done in an incremental participatory manner involving the communities, CBOs, and the private sector.

Although all structures in urban areas are required to conform to planning and building standards, the majority of dwellings in informal settlements do not conform to these standards. This is one area where research in indigenous building materials and methods would help to evolve patterns of housing that conform to people's needs. As long as they meet the requisite health and safety standards, such materials could be sourced locally and affordable for the majority.[1]

A REVISED NATIONAL HOUSING POLICY SHOULD GIVE PRIORITY TO UPGRADING INFORMAL AND PERI-URBAN NEIGHBOURHOODS.

Review the Housing (Statutory and Improvement Areas) Act and Planning Law: continuing need for reduced standards in Improvement Areas

There should be urgent application of the provisions of the HSIA to the remaining illegal settlements where there are no impediments to their regularisation.[2] As Statutory and Improvement Areas are being brought under the same conditions as other areas by the new Urban and Regional Planning Bill, their requirements should shape the minimum standards required under the new regulations. Amendment of the Local Government (Urban Building and Drainage) Regulations of 1968 should recognise more flexible building standards and materials. Cheaper local materials can still satisfy health and safety requirements, particularly for Improvement Areas and informal settlements. Most home-owners in Improvement Areas would find current building regulations too expensive to fulfil. Thus, when the new regulations are framed, they must include low-cost building technologies such as stabilised mud blocks.[3]

Consider the creation of a new ministry devoted to housing

Experience shows that having the housing sector managed by a dedicated institution with a mandate and authority to decide on policies and investments is likely to bring the best from the housing sector and maximise its impact and strengthen the backward and forward linkages with other parts of the economy, In addition, to establish interface with other public policies and inter-sector coordination. In Zambia, the task of housing supply is so important to the future of its cities that the functions of enabling the supply of a dwelling every two minutes would be best supported by a dedicated Ministry of Housing. The staffing of the housing component in MLGH is grossly inadequate to cope with its duties. The NHA should be directly answerable to the new ministry of housing.The lack of a clear definition and understanding of housing, MLGHand how many staff are appropriate are challenges in themselves, affecting housing planning and development at strategic policy level. This could however be overcome through better coordination of all concerned departments in the MLGH.

Clarify roles of NHA and district councils

The NHA has a legal mandate in the upgrading of squatter settlements but has been sidelined over the last decade, mainly through inadequate government funding. Government should allow the NHA to play its role in the management of urban housing and land by ensuring that implementation of the NHP is handled by NHA and requisite funding is provided.[4] The part of the NHA's mission involved with improving informal settlements should be brought into clear focus and resources concentrate there.

The district councils' roles with respect to housing supply and policy-making should be clarified and fitted alongside that of the NHA.

Recognise and commit to the right to adequate housing in national legislation

It is recommended that the Constitution be reviewed with a view to enabling progressive measures with respect to both housing developments and property ownership. Current customary provisions lend themselves to discriminatory interpretations and need to be significantly re-drafted in line with the current and increasing needs to house the Zambian population.

As part of enabling housing legislation, it is important for the Government of Zambia to recognise and commit to the right to adequate housing, specifically to following internationally agreed criteria:

- Legal security of tenure, and the right not to be forcibly evicted;
- Availability of services, materials, facilities and infrastructure;
- Affordability;
- Habitability;
- Accessibility;
- Location; and
- Cultural adequacy.[5]

The right to adequate housing should not be interpreted in a narrow or restrictive sense which equates it with, for example, the shelter provided by merely having a roof over one's head or views shelter exclusively as a commodity. Rather it should be seen as the right to live somewhere in security, peace and dignity.

Improve the ability of households afford housing

Owner occupation is regarded as the apex tenure by most governments in Sub-Saharan Africa and Zambia is no exception. The common expectation for owning a dwelling includes a serviced plot on the edge of a city, with a three or four-roomed dwelling upon it. Fulfilling this expectation is not expensive in Zambia in comparison with other Sub-Saharan African countries or elsewhere in the world. It is, however, too expensive, indeed, entirely unreachable, for most households because their incomes are too low. Many households rent a dwelling or a suite of rooms. This is likely to be a significant tenure form into the future. As with owner-occupied housing, the affordability of rental housing is largely dependent on the cost of housing and incomes of the households occupying it. Thus, it is not treated differently within the profile with respect to households' ability to afford it.

In housing policy, it is important that effort is devoted to the cause of a problem rather than to tinkering round the edges of the issue. In the case of housing cost, most dwellings in Zambia are built of relatively inexpensive materials and are of simple construction, put together by low-paid labour, by firms with very low overheads. It is unlikely that they could be much more cheaply built. There are some worthwhile savings to be made by reducing plot sizes significantly and by using local, earth-based materials but both are currently not allowed by the Building Regulations. But, in general, these are probably the only economies available in Zambia. Thus, concentration on building more cheaply is unlikely to be very successful in improving housing affordability. The key issue is in increasing household incomes so that the low-cost housing that can be provided and can be afforded. One way to do this is to increase the number of (especially low-cost) dwellings being built, by all actors in the housing supply process, as housing provision is very good for development[6] and can add large numbers of jobs and stimulate economic activity, especially for the poor.[7]

Increase densities

There are huge areas in all the cities and many of the towns in Zambia that are grossly underused because of the redundancy of low-density plot sizes. Areas such as Nkana West and East in Kitwe illustrate the point perfectly. Old high-cost dwellings occupy 40m x 60m plots only a few 100 metres from the city centre and the Nkana mine complex. Although a few have been changed to commercial use, fewer have been redeveloped to use the space more economically and there is little incentive to do so. Such low-density space use is expensive, it creates an artificial shortage of land for residential development close to employment areas, and is unsustainable for the city as it unnecessarily increases infrastructure provision costs, and lengthens essential journeys.

Such plots should be redeveloped with high density housing types and commercial buildings through incentives. Guidelines should be developed to simplify the process both for applicants and council officials and, in parallel, there could be a rapidly rising scale of property taxes per square metre of plot. For the first 300 square metres, say, the current rate per square metre might be charged. Above that, double could be charged per square metre at 301-600, quadruple at 601-900, and eight times at 901+. Thus, if a household values their space, they can pay for it and the rest of urban society would receive the benefit. If they do not value the space, they should be allowed to subdivide and sell off or develop the plot with more intensive use.

11.2 LAND FOR HOUSING

Need for land by 2030

As shown in chapter 5, there is a need for 1.3 million new dwellings between 2011 and 2030. Angel shows how, when cities have recently doubled in size, they have tripled in area.[8] Unless the inexorable lowering of densities is to be combated, it will be increasingly difficult to service and travel around large cities. At 30 dwellings per Ha, the current densities of both council-built housing and informal settlements in both Lusaka and Kitwe, a total of 48,000 hectares of land would be required for the urban growth up to 2030. At the suggested 15 dwellings per hectare of FoNDP, 96,000 hectares would be required. On to this should be added at least 40 per cent for the other urban uses – these figures are only residential area sizes.

Improve land management

It will be important to simplify and streamline land management and land allocation to reduce the high transaction costs. Among measures to achieve this are likely to be

- Computerising the land records and systems;
- Translating the forms into local languages;
- Decentralising the land administration system;
- Encouraging openness and transparency against corruption.

The institutions in land policy and management require capacity-building. This should be done through

- Training more land surveyors and relevant staff;
- Computerising the land records and systems;
- Increasing the attractiveness of careers in land surveying and registration.

UN-Habitat[9] recommends stricter supervision and independent auditing of land allocation in local councils through submission of annual returns to the Lands Tribunal, Administrator General or other autonomous body.

Improve rights to land and property

The right to adequate housing, which includes access to land, services, affordability etc. (see CESCR General Comment no. 4) should be explicitly recognised in the Constitution. On behalf of Civil Society in general, ZLA puts forward the following proposals which have relevance to housing:

- "Land that had been converted from customary land to state land should revert to customary land once the use for which it had been acquired was no longer in effect.
- Land can remain vested in the President as long as an independent Lands Commission is created to administer land (instead of the Commissioner of Lands acting on behalf of the President).
- There must be equality between customary land tenure and leasehold tenure.
- Traditional institutions (chiefs) should be given legal powers to administer land through transparent, accountable and well-structured arrangements accessible to all at the local level."[10]

Neither the Constitution nor the Land Act of 1995 recognise squatter's rights. There is no provision in Zambian law for an occupier of land to apply for legal title after a number of years (adverse possession); only those on customary land and in Improvement Areas are allowed to regularise their title. There are no formal safeguards relating to the protection of women's rights in the land law. These need to be addressed.

The 30 per cent affirmative allocation principle should be monitored to ensure that the policy is effectively implemented. There should be a presumption of joint title for any plot of land and/or dwelling that is shared by both spouses, but that can be changed into sole title if both wish it. Such a rule gives better protection to women's interest than currently exists.[11]

Customary land should be included in the Intestate Succession Act, including the recognition of a widow's right to inherit the family dwelling rather than simply have a life interest in it. The current situation is contrary to international human rights law and fails to recognise women's contribution to the realisation of such an asset.[12]

There should be a national policy to allow orphans and vulnerable children to inherit and own property. Indeed, HIV/AIDS strategies should be a focus in all national housing policy.[13]

UN-Habitat recommends that Land Tribunal officials and judges dealing with land, housing and inheritance cases need to undergo training on being accessible to the poor and on the plight of widows, so that they can ensure that widows fully understand what they agree on during the court session. There should be increased coordination between ministries regarding land, housing and gender issues.[14]

Consider revising the cadastral system

As cadastral surveying is an expensive, "gold standard" system, Zambia should consider reviewing it. Plot holders should have enough security cheaply and quickly (customary title or a sectional title) rather than full security at high expense and transaction costs. The simpler survey requirements for site and service and improvement areas could be extended elsewhere without the need for significant changes to the institutional structures involved.[15]

Utilise land as a means of funding development

Along with reducing transaction costs through, among others, increasing sectional titles, it is possible to use land price as a means to offer cross-subsidies from the better-off to poorer households, perhaps upon a pro-poor category of plots. In addition, urban and infrastructure development can be funded through capturing land value, e.g., through appropriate land taxation, effectively enforced and collected.

Improve liaison with customary land holders in peri-urban areas

As some of the future urban development is likely to occur on their land, customary land owners should be brought into the planning process. It is important to have some agreements about development on customary land so that areas for commercial, industrial, and institutional uses can be reserved and that development does not stray onto unsuitable land.This is likely to require:

- Increasing the proportion of statutory land in Zambia from only 6 per cent;
- Negotiating with the House of Chiefs on a protocol for expansion of city boundaries into customary land;
- Sufficient auditing to restrict malpractice by chiefs.

There is an urgent need for good liaison between district councils and their neighbouring customary authorities to plan the scale, direction and nature of urban growth as it crosses district boundaries. A land audit should be conducted to provide information on who owns leaseholds on customary land. The extension of district boundaries into customary land may also be considered, especially if liaison does not work.

Synchronise roles in land allocation

Local Authorities, in collaboration with major land owners, land-holding communities and service providers, should synchronise local land allocation policies and draw up plans for major urban expansions to provide land for housing in large tracts with plot layouts and trunk services (major roads and preliminary water supply) provided ahead of demand. They should focus on supplying land that can be further serviced, incrementally, after the initial development of dwellings.

All urban local authorities must be funded to carry out updated integrated development plans and implement them. The bulk supply of infrastructure may be possible through the LDF but other means, such as Private Public Partnerships, should also be considered.

Revise land use planning and neighbourhood design

The new Urban and Regional Planning Bill gives an opportunity to revise the current plot regulations to reduce their size considerably It should aim to distribute land more equitably than in the past with plot sizes redefined as maxima rather than minima as encouragement for higher residential densities. Thus, high density estates might have a minimum density which reflects a maximum plot size of 300 square metres and low density neighbourhoods, 600 square metres. Such plots are still very large by international standards and should be reviewed regularly to ensure that city densities are increasing.

Fiscal encouragement should be given to holders of large plots to subdivide and redevelop them to increase the density within the existing urban footprint. As discussed above, one way would be to establish graded property rates so that owners of large plots (larger than the chosen maximum plot size for high density areas) pay much more per square metre than those on small plots, increasing exponentially. Encourage two- or three-storey development but few low-income households are likely to want to live without an entrance on ground level. Most keep a garden where they grow a few vegetables either for their own supply or to supplement their income.

University courses need to be supported with a view to increasing land-use planning competence to a level that it can keep up with urban development.

11.3 FINANCE FOR HOUSING

The need for finance by 2030

The requirement to enable 1.3 million new dwellings between 2011 and 2030 generates a huge demand for appropriate finance. Costing them at USD10-40,000 each, they would require between USD0.51 billion and USD2.06 billion (ZMK2.55 and ZMK10.28 trillion) of housing finance per annum, plus an additional amount for improving the existing stock. Thus, per annum borrowing to finance the building is between three and 13 per cent of the 2010 annual national GDP of USD16.2 billion and, indeed, short of the NHP target of 15 per cent of GDP annually. It is between 18 and 74 per cent of the 2009 national gross fixed capital formation (GFCF or USD2.8 billion).[16]

Financing policies must, therefore, be realistic about affordability and scale. Such levels of investment, mostly to be leveraged from the households sector, require very effective lending at low loan values. It will be a major challenge for the finance and micro-finance sectors.

Develop the mortgage market

The mortgages end of the finance market is only likely to be useful to the few at the top of the income scale. In order to maintain its sustainability, there is a need for an apex housing fund to provide long term funding to housing finance institutions. To support this, government should seek cheaper funds for housing finance than the banks can borrow.

Mortgages must be made available so that all who can afford them can access them. In addition, the number of bankable dwellings should be extended through encouraging councils to approve mortgages under their headleases in Improvement Areas. In addition, it should be made easier to obtain full leaseholds so that as many dwellings as possible become bankable.

More commercial banks could offer construction loans. Many well-to-do Zambians own land upon which they could borrow to build or buy a dwelling. In addition, refinancing can be used either to upgrade existing dwellings or to purchase dwellings to rent out.[17]

Change the approach to reach the poor: micro-financing for housing

While housing finance institutions focus on offering mortgages to a relatively small group of high net-worth households, the vast demand for housing within Zambia's middle and low-income households will remain outside the current spread of mortgage values and carry potentially high transaction costs. The focus must be on the low-income majority and, thus, on housing micro-finance to provide small loans on short maturities linked with the incremental building processes. Also, there is a need for housing improvement loans to provide, for example, a roof, wall protection, a sanitary latrine, or an extra room. These would be more helpful than extending mortgages down the market. ROSCAs may be a way into other savings groups approaches.

Government should encourage banks to support micro-lenders and to develop knowledge and skills in non-conventional housing financing. Incentives, such as tax rebates, should be provided to housing finance providers who lend to genuinely low-income households. HFIs should pay closer attention to alternative housing financing mechanisms (smaller, non-mortgage instruments) and finance for incremental construction.[18]

The demand for loans of a few thousand dollars is likely to be huge over the next decades. It represents a huge potential market for housing micro-financiers.

Utilise Pension / Provident Fund-backed housing finance

Even though most salaried employees earn very little, the aggregate of their pension and provident funds offers the largest untapped source of capital usable for housing purchase and improvement by thousands of formal sector employees. Given the low average returns on pension investments and the high and rapidly escalating costs of housing, using the investment to buy housing today could offer pension and provident fund members significant benefits.[19] The total fund is, however, only about USD600 million, less than one year's need for housing finance between 2011 and 2030.

Establish finance techniques and capacity building in finance

There is a general lack of expertise in the complexities of housing finance amongst many key financial players, including in areas such as credit criteria and assessment, housing loan portfolio risk management, and micro-lending prospects and pitfalls. The nascent Microfinance Sector Council in Zambia should be supported with capacity-building inputs.[20]

Monitor development packaging (supply-driven housing financing)

Recently, in Zambia and elsewhere in Africa, there has been a growth in the belief that only through major developments such as new towns and large managed 'communities' can sufficient housing be produced. These developments may be less effective than governments hope and should be monitored and assessed for their efficiency, effectiveness, value for money and ultimate impact in addressing housing need.[21]

Establish affirmative financing

Accompanying the 30 per cent allocation of statutory land plots to women, there should be an affirmative credit programme. Without credit, women who are allocated unserviced, undeveloped land cannot develop it, to assure the title, before the deadline for development expires.[22]

Support financing of rental housing

Renting is likely to remain a major tenure form. It not only provides low-cost housing solutions but also helps owners to pay for owner-occupied housing by renting out a room or two. Thus, financing rental housing is as important as assisting owner-occupation. Finance should be available to encourage the building of rental housing and for home-owners to build rooms for rent.

11.4 INFRASTRUCTURE PROVISION FOR HOUSING

The need for infrastructure by 2030: The main challenges for infrastructure are two-fold:

1. To service the many thousand currently unserviced dwellings as soon as possible.
2. To service new neighbourhoods containing 1.3 million new dwellings by 2030.

Review standards of provision

Providers and regulators should review current standards and then establish and enforce affordable and incremental supply standards for each service in light of current and future demand levels. This is especially important for appropriate means of infrastructure provision in informal neighbourhoods and their equivalent in the future supply. There should be a focus on appropriate technologies for the people and neighbourhoods rather than extending existing service technologies.

The focus should be on providing the service at affordable cost to all rather than extending the current technology to a few. This will probably require that services are supplied to all new areas to minimal supply standards capable of improving over time. Furthermore, pro-active minimal trunk servicing of new areas before development should be required but plot-level servicing can come after occupation. The way forward may be to fit trunk infrastructure on grids ahead of development and in-fill neighbourhood services after early development.[23]

Improve co-ordination among service providers

New levels of service in the future will require providers to increase efficiency and change their operational paradigms. Policy should be focused on need rather than the supply institutions. A variety of suppliers, such as householders, communities, private companies and small businesses should be encouraged and enabled to provide, manage and maintain infrastructure.

Customary land suppliers should also be involved in planning and implementation when their land is affected. Such changes will require different skills from the engineering focus of current infrastructure provision. Where necessary, new institutions that focus on servicing low-income neighbourhoods should be created.

Infrastructure providers the world over are notorious for not co-ordinating their efforts. Often, infrastructure suppliers do not communicate with each other, leading to wasted effort and money when, say, a road must be resurfaced after pipes have been laid across it. It is important, however, that the providers of water, sanitation services, waste management, roads and drainage, and power talk to each other and co-ordinate their activities.

If all neighbourhoods are to be serviced in the future, it is essential to establish city-level cross-sectoral infrastructure planning and implementation across providers of all services. In addition, acts which govern service provision should be harmonised.

Increase community participation in infrastructure supply

When communities control and manage infrastructure, they tend to look after it, breakdowns are fixed quickly and complaints can be handled locally. Furthermore, any profits assist the local area. There are many examples of community-operated infrastructure both in Zambia and elsewhere which could profitably be extended in new areas.

Community contracts have proved successful for waste management within the settlements.[24] Community service provision options are likely to be useful in currently unserviced neighbourhoods but must not rely on un-paid (community) work to implement this. The ILO differentiates between major works, for which payment is necessary, and minor works (those immediately connected with the dwelling) for which it is not.[25] Sustainable provision should involve the beneficiaries in planning and provision in order to instill commitment.

Engender sustainable finance and pricing mechanisms

There is currently a problem that infrastructure suppliers are generally underfinanced, especially for extending their networks. It is important, therefore, to improve the financing and capacity of institutions to deliver services at an adequate level for all. They need access to affordable financing.

Infrastructure finance strategies, especially the high up-front supply threshold cost, should be reviewed and modified to increase coverage. The major need is to provide the best possible service at an affordable price (say 10 per cent of dwelling cost for full servicing – around USD1,000-4,000 per dwelling). It is vital to allow providers to charge sustainable prices to include up-front supply, maintenance, replacement and system expansion costs within tariffs in order to increase demand for formal supply. In addition, prices charged should be based on maintaining an economically sustainable supply and must not be reduced for political reasons. When new suppliers take over, payments must made to current providers rather than past providers. The regulators must co-operate with service providers in maintaining their sustainability.

Provide the most effective infrastructure rather than extending existing networks

As cities expand in area, the extension of an existing reticulation may not be the most effective way of providing a service. Similarly, if different source of a service can be found, they should be capable of utilisation even if they are innovative. Thus, bore-holes may be more effective than extending the water mains;[26] composting toilets may out-perform water closets and sewerage; solar power may replace a conventional electrical connection.

Address technology issues in infrastructure provision

The major technological priorities are improving access to affordable and appropriate potable water supplies, minimising pollution of water supplies, and improving sanitation. There is a need to prevent pollution of ground water and simultaneously improve environmental performance of sanitation and waste management generally. Thus, on-site and composting should be extended.

Where they are present, old sewer systems should be rehabilitated but their replacement should only be considered when other forms, especially septic tank systems, can be shown to be unfeasible.

Improvements in the supply of access roads, solid waste management and electricity supply to households are urgently required. There is a need to develop appropriate means of funding for solid-waste disposal and recycling systems.

11.5 CONSTRUCTION MATERIALS FOR THE HOUSING STOCK

New households will generate a demand for construction materials for 68,500 new dwellings per annum. It is important that policies focus on improving the quality of dwellings costing between USD10,000 and USD40,000, including land and infrastructure.

As with the regulatory framework on land, that for construction materials and technologies should ensure that it is appropriate for rapid supply of low-cost dwellings by informal sector contractors.

Revise building regulations for more affordable housing

It is vital that new building regulations and standards are introduced which are appropriate for the socio-economic conditions of urban Zambia. Currently building materials regulations are material-specific but they ought to be replaced by performance-based standards in which any material that fulfils the stipulated performance criteria is acceptable. This will allow easy inclusion of innovative materials which currently have to be licensed by the NCC one by one.

Once they have been developed, they should be enforced effectively, especially by strengthening the role of building inspectors. In addition, consumer protection measures should be instigated. New regulations should not be 'borrowed' from other countries but developed to suit the climate, affordability and cultural norms in Zambia.

Improve opportunities for local extracting and manufacture of materials

Policies to assist materials production should concentrate on materials suitable for low cost housing (in a range of USD3,300 and USD17,000 per room). To this end, government should legalise and encourage the manufacture, use and social acceptability of earth-based traditional building materials and technologies. Using them for high profile government contracts would help greatly. Alongside the encouragement, there should also be measures to develop sustainable use of current local materials sources.

The popularity of burnt brick construction in Zambia calls for sustainable forestry to support the supply of wood for small-scale burning of bricks.

The existing research findings from universities, NGOs and R&D institutions such as the National Council for Scientific Research should be disseminated to industry and entrepreneurs. In addition, information centres should be established in the provinces (perhaps in district council offices) where samples of materials, information on sources of supply (including mapping of material sources), and advice on their use are available to the public.

Improve conditions, products and profitability in the informal sector materials supply

The local manufacture of currently imported building materials and machinery for the production of local building materials is an important target for enabling strategies in Zambia. It could greatly increase the efficiency of the construction materials sector. Current and new local materials suppliers might be helped through encouraging co-operatives, offering advice on quality, training, front-end finance, re-usable energy resources, marketing, etc. The aim is to improve the quality and efficiency of the informal contractors supplying low-cost, local building materials, without reducing their productivity.

11.6 CONSTRUCTION LABOUR

Improve construction skills and increase the supply of jobs

A significant increase in production of dwellings is likely to generate increasing demand for building workers. Although it is quite difficult to predict the number of new jobs which the construction of 1.3 million new dwellings by 2030 (68,500 per annum) will bring, calculations made in chapter 9 suggests that between 24,600 and 32,600 new jobs will be generated directly in construction of housing. In addition, it is likely that between 50,000 and 65,000 jobs would be created in other sectors through backward linkages. Increasing employment in housing supply should be a key development strategy for urban Zambia. This means that the housing supply system can be used to improve labour-intensive employment and, therefore, incomes at the bottom of the market.

Improve efficiency of small-scale construction firms and trades-people

Although they build most urban housing in Zambia, little is done to assist small-scale contractors. Business development assistance and front-end finance should be available to small-scale construction firms and artisans, at market interest rates to improve their viability and efficiency. The National Association of Small Scale Contractors should be strengthened to ensure better organisation and capacity building and training of small contractors. Micro-financing might be the best context for this. Loans could be conditional on improving methods of operation including using labour-intensive methods, improving working conditions and paying taxes.

As with those in building materials supply, the focus should be on improving the performance of informal sector contractors without reducing their competitiveness. The emphasis should be on working with informal contractors to improve their efficiency and profitability rather than resisting their current efforts until they formalise. Government tendering procedures should include more informal contractors, perhaps by lowering the threshold of legality for firms. This would also mean that more workers are protected by 'decent work' regulations.[27] Copies of the employment laws should be made available to all construction workers through site notices and regular information on the media.

Develop training to supply sufficient trades-people to build 1.3 million new dwellings

The need for more skilled workers is an obvious one, even with current levels of production. A major increase in supply not only generates many jobs but also exposes skills shortages. In order to improve worker efficiency in order to create best value for money in construction, training is required both on and off the job.

An improved system of work force development is required in the industry through both apprenticeships and college courses (and these should be linked through day release, etc.). An especially urgent need is training in site supervision skills. Training and vocational programmes should be linked to business development and support programmes so that a graduate trainee has tools and opportunities at the end of the course.[28]

Construction courses in Trades and Skills Training Institutes and universities and other inputs should concentrate on the skills, labour, etc., needed for low cost housing. There is a need for promotion of gender equality and training of women in construction and encouraging women to own and manage construction firms. Continual professional development opportunities should be available to informal sector contractors.

11.7 HOUSING MARKET

Remove any hidden subsidies from public-private-partnerships except for the lowest income groups

Currently, subsidies of public money are offered to developers who build for the highest echelons in Zambian society. They are hidden from public view because they are given as free or subsidised housing to key senior staff, administration of joint projects through NHA at no cost, cheap or free land, and the availability of loans, etc., unavailable to the general public. There is a need for more equity, transparency and accountability in the use of public resources.

In future, subsidies should be transparent and directed to the poorest in society or withdrawn altogether. Continuing them as a perquisite for the rich and powerful is inequitable and contrary to the enabling approach.

ENDNOTES

1. UN-Habitat (2005).
2. UN-Habitat (2005).
3. UN-Habitat (2005).
4. UN-Habitat (2005).
5. UN-Habitat and UNHCR (2009).
6. Tipple (1995).
7. UNCHS/ILO (1995).
8. Angel et al. (2005).
9. UN-Habitat (2005).
10. Caritas Zambia and Zambia Land Alliance (2009).
11. UN-Habitat (2005).
12. UN-Habitat (2005).
13. UN-Habitat (2005).
14. UN-Habitat (2005).
15. UN-Habitat (2005).
16. Index Mundi, http://www.indexmundi.com/facts/zambia/gross-fixed-capital-formation accessed 30 October, 2011.
17. Gardner (2007).
18. Gardner (2007).
19. Gardner (2007).
20. Gardner (2007).
21. Gardner (2007).
22. UN-Habitat (2005).
23. Angel (2008).
24. World Bank (2002).
25. See UNCHS/ILO (1995), Lyby et al. (1992).
26. Cohen (2004).
27. See UNCHS/ILO (1995).
28. See UNCHS/ILO (1995) for examples of courses ending with grants of tools and small contracts for work.

ANNEXES

Annex 1: Housing Sector Performance Constraints Matrix

	Land	Infrastructure	Housing Finance	Building Materials & Construction	Labour and Employment
Institutional & Organisational Framework	A1. There are two distinct sets of institutions; customary and statutory acting in parallel. The Lands Registry is centralised and does not co-ordinate with other stakeholders, especially the customary land holders. Base maps and land use plans tend to be out of date. Local authorities cannot generate adequate new plans. Lack of information on available land. Outdated and conflicting legislation on land. Lack of law enforcement through political interference and inadequate capacity.	A2. Existing institutions are currently inadequate for full service provision. Institutional providers have no budget for extending services so cannot structure how housing development should proceed. Providers are trying to provide services within government-controlled prices. Major infrastructure provision and maintenance relies on periodic success in bidding for international assistance. There is a lack of co-ordination among various service providers Roles, duties and objectives are not well defined. Providers have no capital to extend their networks. This generates only ad-hoc extension to networks.	A3. There are very few institutions in housing finance. They only provide loans to a very few households at very high cost. Micro-finance institutions have not generally moved into housing finance. Finance only available to those within the cumbersome titling system. No intermediate institutions for finance No Public-Private-Partnerships.	A4. Institutions are focused on the tiny formal sector and on controlling quality, not on improving housing supply for the majority. Little institutional assistance is given to builders or suppliers. There is poor coordination between the MLGH, the Local Authorities and key players in housing provision. Informal building is not recognised in urban areas. Government does not promote local materials.	A5. Informal training takes place in apprenticeship which does not grant any formal certificates. Workers are, therefore, limited in their search for employment. There are no available grading systems for artisans. There is a lack of opportunity for formal advancement. Trained artisans are stuck in short-contract employment.

Regulatory & Legal Framework	B1. Land registration is being introduced but is slow and costly. The cadastral system is too cumbersome. Planning and building control departments have too few resources to enforce standards or conditions on planning/ building permissions. Planning standards are too high and, as a consequence, formal plots are too large There are too many steps in the land allocation and development processes. Many land titles are not 'bankable'. Lack of formal planning by LAs. Lack of land audit. Inadequate human, technical and financial capacity. Manual record keeping.	B2. Regulatory systems are out of date and are operating in an inappropriate context. Providers are required to supply connections to customers at unsustainable prices. Lack of staff and political will to ensure regulatory institutions carry out their mandates. Centralised regulatory systems. Outdated regulations on such matters as septic tank/ water supply separation. Poor capacity to address new technologies. Frequent flouting of regulations as demand outstrips formal supply.	B3. Customary title does not allow financing so mortgages are only relevant to a few formal-sector dwellings each year. Housing finance institutions require very high down-payments and income requirements for mortgages. Formal sector developers tend to require half payment up-front and the rest by completion. Regulatory systems are restrictive and require updating.	B4. Most people in the informal sector overlook the need to seek building permits because the process is too long and costly, and permits are not issued on time. Standards and materials specifications date from 1968. Local authorities cannot regulate building construction effectively. Green materials are not promoted. There is inadequate control of asbestos and other toxic materials. Land tenure in informal settlements does not encourage good building standards. The public is generally not aware of the regulatory framework.	B5. The construction industry is very difficult to regulate. There is little protection for workers in shelter provision, especially in the dominant informal sector. The very high regulatory requirements for formal small scale contractors prevents them from tendering for some types of jobs in the construction industry. There is no finance specifically for the construction industry so contractors borrow on the informal market. There is no link at scale between formal and informal industries Government wage policy is a disincentive for employment.

Supply	C1. There is little liaison between formal and customary authorities who provide much of the land for low-income households at the urban fringes. Serviced public land around urban centres is virtually all allocated. Much well located land in Lusaka cannot be developed because of underlying dolomite. Formal sector land systems are too cumbersome and expensive, to cope with current and likely urban growth. There is a lack of forward land-use planning at a realistic scale to meet supply need. Poor information dissemination by local authorities. High transaction costs. Difficulty of providing land on a cost recovery basis. Inadequate funds to LAs for housing	C2. Water and sanitation supply prices are controlled at less than sustainable levels. Only the few formal estates are serviced ahead of occupation. Most new neighbourhoods are very poorly serviced. Mains supplies of water and central services for waste management are inadequate. Even though infrastructure may be installed, supply is intermittent in many neighbourhoods. There is a serious lack of funds for expansion and upgrading. In Lusaka, dolomite prevents servicing in many areas. There is a serious level of system loss in water supplies. Many peri-urban residents use unsafe water supplies. Supplies of electricity and access roads are poor.	C3. There is no housing finance available at the level that most households need. Only high interest rate mortgages are available. High cost of loans is a constraint on supply. Insufficient domestic mobilisation of finance.	C4. Formal construction systems are cumbersome and too expensive for most households. The informal construction sector fills in the gap cheaply. However, a lack of front-end finance reduces its efficiency unnecessarily. There are few demonstrations at scale of alternative building materials. Little investment (e.g., tax incentives) in local materials manufacture. The supply of locally manufactured affordable approved and tested materials is slow and uneven. Poor access to local materials in Lusaka.	C5. There is a shortage of trained artisans/ technicians/ professionals, including in construction supervision. Some contractors use foreign labour. Labour availability is unlikely to be sufficient for a major expansion of housing supply. Little is done to assist small contractors, building materials manufacturers, etc. There are too few trade schools. There is a lack of supervisory personnel. Many skilled workers are lost owing to HIV/ AIDS. The risk of AIDS is increased in the formal sector construction owing to mobility. There are no labour supply contractors.

Demand	D1. The cadastral survey system is too expensive for most households. This encourages householders to remain in the customary sector. Housing in urban core areas is being replaced by commercial uses but there is little increase in intensity of land use. State control of vacant land tends to slow down development. Forfeiture procedures are very slow Land speculation locks up land for development. Large plots. Illegal allocations.	D2. Up-front payments for fitting services to new plots appears to reduce demand. Demand from informal areas only tends to be dealt with when some crisis occurs or an international agency pays. Former non-profit-based supply has influenced willingness to pay for services. The strong demand for charcoal raises environmental issues. Poor information about service providers. Service charges are very high for most households.	D3. Low income levels affect demand. High cost of borrowing. Growth of contract employment removes many people from funding available. Lending requirements are too stringent to attract borrowers. Poor financial education.	D4. There seem to be few problems in accessing building materials. Many materials and components imported, sometimes of poor quality. Import substitution is possible in many areas.	D5. Labour cost is high. Zambian artisans are often not as well trained as those from neighbouring countries.
Policy	E1. Customary land practices are enshrined in the constitution alongside formal land registration. The land policy does not tackle the real need for rapid and appropriate land supply. There is a formal land tax (property rates) system but levels and collection rates are inadequate to finance the development of the cities. The registration of land has been legislated for but does not seem to have made much difference to supply. Poor information and dissemination and no monitoring of land alienation. Lack of political will to enforce policy effectively. No pro-poor policy on land.	E2. Pricing policies give infrastructure providers no motivation or ability to extend the reach of services or to provide service to low-income customers or peripheral areas. Connection costs must be paid for up-front by consumers. Price control (e.g., by NAWASCO) defeats the benefits likely from privatised services. Though budgets dedicate funding, it is not forthcoming for infrastructure. Policy is not fulfilled owing to human and financial capacity issues in infrastructure providers.	E3. Lack of priority on housing finance in government policy. Insufficient budget to implement National Housing Policy measures.	E4. The policy focus is on formal institutions and regulation of the industry rather than improving the participation of the informal sector in housing supply. There is a lack of new directions in policy and some overlap in institutional mandates. Lack of policy promoting alternative/green/ local materials or energy standards. Poor enforcement of policy on materials standards and construction regulations.	E5. There is no national policy on employment in the construction industry. Labour policy concentrates on the formal sector. Rights under labour laws are frequently breached in the construction industry. Poor enforcement of policy on professional builders.

Implementation arrangements & instruments	F1. Inadequate funding to district councils. Lack of effective city-level plans. Minimum plot sizes are large and increase the cost of serviced land. There are new planning regulations for slightly smaller plots going through the approval process. Informal settlements might provide a better guide to acceptable densities. Outdated legislation. Lack of co-ordination among stakeholders.	F2. There is a lack of coordination among service providers. Implementation instruments are in place but are not followed. Capacity issues prevent fulfilment of need and policies. Lack of trust between providers and customers. In some areas, payments are made to current providers rather than past providers.	F3. Lack of political will. High interest rates prevail when global rates are historically low. No implementation of the NHP.	F4. Much existing research lies unused in the institutions. Standards are too expensive for most households in Zambia to fulfil. Poor enforcement of regulations. Little regulation of building materials standards.	F5. Construction labour and jobs do not seem to be a key problem at current levels of supply but are likely to lead to shortages if housing provision is to meet needs. The industry relies on informal labour. There is no implementation of regulations and policies.
Institutional capacity	G1. Lack of capacity for effective forward planning, adequate land allocation, surveying, registration, etc. Land registry is slow and centralised. Local authorities are unable to plan adequately owing to lack of staff and resources. Local authorities cannot enforce current regulations owing to lack of resources. Tax revenue are reduced through poor collection rates.	G2. Urgent need for recapitalising service providers. Service providers are inadequately staffed and funded for the duties they must fulfil. There is a lack of capacity both to provide infrastructure and to regulate the private sector participation. Government ministries tend not to pay for services they consume.	G3. Formal-sector institutions do not lend to a majority. There is a lack of innovative housing finance products. Lack of capital input for onward lending. Lack of intermediary institutions.	G4. Local building materials and construction institutions lack capacity to cope with a very large increase in housing supply. There is a lack of information exchange in the sector. There is inadequate capacity in, among others, materials testing, building inspection, manufacturing of good quality products.	G5. The training institutions are inadequate to provide enough construction professionals at all levels for the design, contracting and construction processes.

Affordability & price-to-income issues	H1. The formal land access system is not affordable for the majority of Zambians. Formal serviced land is too expensive for most households even though it is very cheap by international standards. The customary system surrounding urban district boundaries works well for most prospective owners. Low income in formal and informal employment.	H2. Poor servicing leads to high unit prices, e.g., water bought by the bucket, ineffective servicing, e.g., dumping rather than waste control, and poor health, from contamination by human waste. Pricing down to affordability of consumers leaves service providers inadequately funded. Low household incomes. Pricing excludes future development costs.	H3. There is a major shortfall between mortgage finance and affordability. Interest rates are very high. Lusaka has very different affordability issues from the rest of the urban areas. Most houses are not 'bankable' so it is difficult to release equity from them. Difficulty in assessing informal sector incomes makes affordability calculations unreliable. Incomes are low viz-a-viz costs of construction and services.	H4. Building for most households is very cheap in an international context but quite expensive in relation to local wages. Formal sector construction standards are completely out of most households' affordability, and are likely to remain so. Construction firms have affordability issues owing to a lack of front-end finance. Very high standards are demanded by regulations. Finance is only available on rigid conditions. There are no incentives to develop local materials.	H5. The cost of construction labour seems to be low so presents little problem for supply. A major increase in provision of housing may force wages up, especially for masons, reducing the chance of keeping house prices down. The low pay discourages quality work; instead workers want to finish quickly and move on to the next contract. Jobs pay too little to afford better-than-basic housing. Construction work is hard and not very safe.

Annex 2: Housing Sector Performance Priority Action Plan

	Land	Infrastructure	Housing Finance	Building Materials & Construction Sector	Labour and Employment
Institutional & Organisational Framework	I1. Computerise land procedures and systems. Customary land owners should be brought into the planning process with sufficient auditing to restrict malpractice. All urban local authorities must be funded to carry out updated integrated development plans and implement them. A land audit should be conducted. Negotiate with the House of Chiefs on expansion of city boundaries.	I2. Establish city-level cross-sectoral infrastructure planning and implementation. Encourage other suppliers such as communities and private companies. Allow servicing agencies to charge prices which reflect the cost of provision. Rehabilitate or replace old sewer systems. Improve waste management. Create new institutions that focus on servicing low-income neighbourhoods. Engage communities in water supply monitoring. PPP for supply and management. Form district water boards.	I3. Encourage banks to support micro-lenders. Increase the emphasis on housing micro-finance as the main need. Set up an apex housing fund to provide long term funding to housing finance institutions. Incentives, such as tax rebates, should be provided to housing finance providers who lend to the low-income.	I4. Focus on institutions and regulations to improve the quality and efficiency of the informal contractors supplying low-income housing and low-cost, local building materials, without reducing their productivity. Improve co-ordination among the various stakeholders.	I5. Increasing employment in housing supply should be a key development strategy for urban Zambia. Improve collaboration between formal and informal systems of training and recruitment of labour and contractors. Issue apprenticeship certificates through the vocational training institutes. Need system to develop manpower in the industry

Regulatory & Legal Framework	J1. Streamline land allocation to reduce the high transaction costs; translate forms into local languages. The new Urban and Regional Planning Bill should be enacted and implemented as soon as possible. Relevant legislation should be harmonised. Areas subject to commercial pressures should be rezoned for mixed development. Remove monopoly power on rezoning from the Minister and vest it in Local Authorities. Streamline land management. Simplify procedures. for acquiring and developing.	J2. Provide means for infrastructure provision in informal neighbourhoods. Review and enforce affordable and incremental supply standards for each service. Harmonise the Acts which govern service provision. Regulate the drilling of boreholes to avoid contaminated supplies. Review regulations in light of current and future demand levels.	J3. Improve some titles to full leasehold so that they are bankable. Encourage councils to approve mortgages in Improvement Areas.	J4. Develop appropriate building standards for the socio-economic conditions of urban Zambia. Legalise and encourage the manufacture, use and acceptability of earth-based traditional building materials and technologies. Strengthen the supervisory role of building inspectors. Map and promote local materials resources in Zambia.	J5. Improve tendering procedures to include more informal contractors. Lower the threshold of legality for firms so that more workers are protected by 'decent work' regulations. Work with the informal sector to improve performance. Improve consumer protection measures. Make employment laws available to all construction workers through site notices and regular information on the media.

Supply	K1. Local Authorities, in collaboration with land-holding communities and service providers, should provide land for housing in large tracts with plot layouts, trunk services (major roads and preliminary water supply) ahead of demand. Redefine the minimum plot sizes. Increase proportion of state land.	K2. Focus on providing the service at affordable cost to all rather than extending the current technology to a few. Upgrade existing poorly-serviced neighbourhoods. Service all new areas to minimal supply standards capable of improving over time. Examine finance strategies to increase coverage. Provide an enabling environment for public-private partnerships (PPP) and other private sector activity in infrastructure. Consider extending community service provision options in unserviced neighbourhoods. Introduce tiered tariffs and cross-subsidies. Improved sanitation is a major priority. Improve supply of access roads.	K3. Make mortgages available so that all who can afford them can access them. Providers should provide small loans on short maturities linked with the incremental building processes. Housing improvement loans to provide, for example, a roof, wall protection, a sanitary latrine, or an extra room, should be more helpful than extending mortgages down the market. Government to facilitate PPP for low-cost housing	K4. Consider local manufacture of imported building materials and machinery for the production of local building materials. Improve efficiency of the local materials suppliers through assisting co-operatives, advice on quality, re-usable energy resources, marketing, etc. Improve informal-sector performance through training, front-end finance and business advice. Establish information centres in the regions where samples of materials, information on sources of supply, and advice on their use are available to the public.	K5. Focus on improving the performance of informal sector contractors without reducing their competitiveness. Use the housing supply system to improve labour-intensive employment. Increase the supply of trained artisans. Encourage formal training as part of informal sector apprenticeships (through day release, etc.) Improve informal-sector access to training, qualifications, and continual professional development opportunities

Demand	L1. To meet the demand for enough land for 1.3 million new dwellings and all the associated uses, sufficient new land must be allocated and developed between 2010 and 2030. The actual amount within the range depends on decisions about plot size. Consider two-storey development. Distribute land more equitably than in the past. Offer subsidies/ wavers for the poor. Restrict land tenure for foreigners to five years renewable. Encourage partnerships between locals and foreigners on holding land.	L2. Many thousand currently unserviced dwellings require servicing as soon as possible. Services are needed for neighbourhoods and housing containing 1.3 million new dwellings by 2030. Provide affordable financing to service providers. Consider including up-front supply costs in tariffs in order to increase demand for formal supply.	L3. Requirement for between USD USD 0.51 billion and 2.06 billion (ZMK2.55 and 10.28 trillion) p.a. to satisfy housing need, plus an additional amount for improving existing stock. Renting is likely to remain a major tenure form soencourage home-owners to build rooms for rent.Grant tax exemption for community organisations building low-cost housing.	L4. Enable owners and contractors to catch up on the large backlog of improvement and maintenance of the existing housing stock. Mobilise local community for access to equipment and local materials Increase public acceptance of alternative building materials. Import substitution is possible in many areas.	L5. There will be increasing demand for building workers –24,600 -32,600 new jobs . It is likely that between 50,000 and 65,000 jobs in other sectors through backward linkages.

Policy	M1. Focus on supplying land that can be serviced incrementally after initial development of dwellings. Opt for enough security cheaply and quickly (customary land or a sectional title) rather than full security at high expense and transaction cost. Ease subdividing existing large plots for higher density residential uses. Encourage higher residential densities. Modernise land policy. Publicise land policy. Enhance advocacy.	M2. Focus on upgrading existing unserviced neighbourhoods. Require pro-active minimal trunk servicing of new areas before development but allow plot-level servicing after occupation. Provide the best service at an affordable price (say 10 per cent of dwelling cost for full servicing (USD1,000-4,000 per dwelling). Promote environmentally-friendly infrastructure. Allow providers to charge sustainable prices. Make policy that is focused on need rather than the supply institutions. Involve the beneficiaries in services planning and provision.	M3. Provide financial encouragement for housing provision for renting. Review the NHP to improve strategies on low-cost housing. Make funding for low-cost housing delivery available through a bidding process.	M4. Increase efficiency of small-scale construction and building materials sectors. Develop sustainable use of current local materials sources. Increase production of local building materials. Improve microfinance for small construction firms. Concentrate on materials, etc., needed for low cost housing (in a range of USD3,300 and 17,000 per room) Improve enforcement of policy on materials standards. Improve consumer protection.	M5. Support small-scale construction firms and artisans with business development assistance and front-end construction finance. More incentives to local firms, employers who upgrade skills. Improve apprenticeships and skills training. Concentrate on skills, labour, etc., needed for low cost housing. Promotion of gender equality and training of women in construction and encouraging women to own and manage construction firms.

Implementation arrangements & instruments	N1. Local authorities should draw up plans for major urban expansions in collaboration with major land owners and land-holding communities. Improve liaison between customary land holders and planners to synchronise plans for new neighbourhoods. Introduce systems of capturing land value, e.g., appropriate land taxation, to finance infrastructure investments. Increase funding to local authorities for land surveys, etc. Decentralise the land management system.	N2. New levels of service in the future will require providers to increase efficiency and change their operational paradigms. Collaborate with customary land and housing suppliers. Fit trunk infrastructure on grids ahead of development and in-fill neighbourhood services after early development. Choose appropriate technologies for the area rather than extending existing service technologies. Collaborate across providers. Involve communities in infrastructure improvement planning and execution but do not rely on un-paid (community) work to implement this.	N3. Increase funding for labour-intensive, small construction firms and artisans. Improve bankability of land. Promote ROSCAs as part of savings groups approaches. Finance settlement upgrading. Government finance to assist registered community groups. Government to seek cheaper funds for housing finance.	N4. Develop appropriate building regulations and standards. Develop finance for small firms and to encourage sustainable building materials production. Support NGOs promoting self-building.	N5. Encourage on-the-job training through apprenticeships linked to college courses. Promote training and vocational programmes linked to business development and support programmes. Provide loans for construction firms and individual artisans. Increase funding for labour-intensive, small construction firms and artisans.

Institutional capacity	O1. Increase land-use planning competence to a level that it can keep up with development. Train more land surveyors and relevant staff. Promote capacity-building in land policy and management. Increase the attractiveness of careers in land surveying and registration. Computerise deed registration. Decentralise land administration. Encourage openness and transparency against corruption.	O2. Improve the financing and capacity of institutions to deliver services at an adequate level for all. Providers must be allowed to charge at cost for supply. Providers should collaborate with neighbourhoods and householders to supply services. Improvements in waste management and electricity supply to households are urgently required. Ensure that payments are made to current providers rather than past providers. Involve small businesses in management and maintenance.	O3. Develop knowledge and skills in non-conventional housing financing. Existing formal banking institutions are irrelevant for most people's housing needs so establish some that are relevant for a majority. Develop customised and differentiated financial products and capacity to manage them. Recapitalise council to service housing land.	O4. Develop better dissemination for existing research and development findings. Research findings from university should be disseminated to industry/ entrepreneurs.	O5. Increase training in construction and supervision skills. Encourage provisions for 'decent work' in the construction industry. Training of communities in self-build skills.

Affordability & price-to-income issues	P1. Focus on reducing transaction costs through, among others, increasing sectional titles. Introduce a pro-poor category of plots. Fund the bulk supply of infrastructure through the LDF.	P2. Promote affordable and appropriate sanitation systems, including on-site and composting. Focus resources on improving access to potable water and minimizing pollution of water supplies from latrines. Establish means of funding solid-waste disposal and recycling systems. Empower communities to pay service charges by assisting their livelihood improvement.	P3. The focus must be on the low-income majority. Policies must be realistic about affordability and scale; aimed at enabling 1.3 million new dwellings between 2010 and 2030 costing USD10-40,000 each. Offer various incremental loans adapted to gradual building processes. Establish alternative financial institutions for low-cost housing. Fund alternative ways of providing water and sanitation.	P4. Focus on improving the quality of dwellings costing USD10,000-40,000.. Provide front-end financing to small construction firms and artisans at market interest rates. Micro-financing might be the best context for this. Provide loans to construction materials start-up companies.	P5. Improve employment and earnings for all levels of construction workers. Improve worker efficiency to create best value for money in construction especially by training local builders and self-builders.

ANNEX 3: KEY INFORMANTS AND PEOPLE AND ORGANISATIONS THAT ATTENDED THE STAKEHOLDER WORKSHOP

A Chatuuerdi	Finance Building Society
Adrian Nsefu	Fed Ward Development Committee
Albert Halwampa	Zambia Institute for Policy Analysis and Research
Alfred Nyambose	Provincial Local Government Office – Central Province
Anastazia Banda	Survey Department
Andrew Ose Phiri	Afrospace Architects
Banda Amos	Project Engineer, Technology Development and Advisory Unit
Barbra Kohlo	Swedish Cooperative Centre
Bishop Janet Hart	CDF Chairperson, Livingstone City Council
Bornwell L Luanga	Kitwe City Council
Brian Nakaanda	Citizens Economic Empowerment Commission (CEEC)
Bwalya Masabo	Architect, NHA
Bwalya Shilengwa	Wescom Property Group, Kitwe
Catherine Mlauzi	Zambia Homeless Federation
Cathyryn Mwanamwambwa	Regional Programme Director, CARE Zambia
Charity Mpande Nanda	Ndola City Council
Chibesa Namwinga	Acting Director of Development, Kitwe City Council
Chintu Patrick James	National Council for Construction
Christopher Chola	Assistant Manager Rates, Lusaka City Council
Clement Chisanga	Director Planning, Livingstone City Council
Concepta Musonda	Deputy Director of Housing and Social Services, Lusaka CC
Daniel A Phiri	Consultant/UN-Habitat
Dauti Chisanga	Government Valuation Department - MLGH
Douglas Katengo	PJP Associates LTD - Architects
Dr T Kusanthan	Department of Gender Studies
Emmanuel G Ngini	Ministry of Home Affairs
Emmanuel M Chanda	E.I.Z (Southern Region)
Ezekiel Mulenga	Lilayi Housing Estate
Forster M. Nasilele	Council Secretary - Chibombo

Francis Ndilila	Ndilila Associates
Fred Chungu	Coordinator, Network of People Living with HIV (NZP+)
George Ndongwe	Managing Director, Lusaka Water and Sewerage Company Ltd
Gibson Shamambo	Zambia Low-Cost Housing Development Fund
Grace Mtonga	Civic Forum on Housing and Habitat
Graham Tipple	UN-Habitat international consultant
Gregory Mwanza	PPU - MOFNP
Helen Sikazwe	Property and ESTATES Officer, Zambia National Building Society
Henry Machina	Zambia Land Alliance
Isaac Nkhata	Project Manager Ground Rent, Lusaka City Council Peri Urban Section
Jane Bota Karima	Credit Manager, Finance Bank
Jane Muila	First National Bank Zambia
John Kayuni	Registrar of Lands
Joseph Sakala	Zambia Environmental Protection Management Agency
Joseph Shikabonga	University of Zambia, School of Engineering
Joseph Zulu	Investment Manager – Public Service Pension Fund
Joseph Zulu	Ndola City Council
Joseph Zulu	Deputy Director of Planning Livingstone City Council
Judith A Mwila	Families are Nations
Kalumba Chikonde	Finance Building Society
Kasanda C Brown	E.I.Z (Southern Region)
Kayuni John	Lands and Deeds
Kenneth Maseka	Informal building contractor, Chaisa
Kingsley Chinkuli	FQML
Kufekisa Mukamba	Association for Land Development (ALD)
Lombe Mbalashi	Legal Officer, Compliance and Conveyance, ZCCM Investments Holdings plc
Loti Ngwata	Town Planning Officer, Livingstone City Council
Love Mtesa	CUTS International
M Banda	ZIPAR
Makine Kusano	City Planning Adviser JICA Dispatch for Capacity Development Program
Margaret Chelemu	Lusaka Blasting and Jobbing Ent Ltd

Margaret Lombe	People's Process
Martha Mutizhe-Kangwa	Zambia National Building Society
Mary D Majula	Human Settlements of Zambia
Matthew French	UN-Habitat
Maurice Chitondo	National Housing Authority
Maxwell Zulu	Provincial Planner SPPH – Lusaka Province
Michael K Kabungo	Lusaka City Council
Miniva Chibuye	Jesuit Centre for Theological Reflection
Mphangela Nkonge	
Mr Nsama	Zambia Land Alliance
Wilma Muchitu	UNZA
Mukombo J Tambatamba	EIZ
Mulambwa Imasiku	Technology Development and Advisory Unit, University of Zambia
Mundashi Alexander Mwango	Head of Department of Architecture, Copperbelt University
Musoli J M Kashinga	Habitat for Humanity
Musunka Silungwe	Honorary Secretary, Zambia Institute of Architects
Mwila Kasase Zulu	Ministry of Finance
N Mwansa (Mrs)	Branch Manager FBZ, Kitwe
Nathan K Zimba	Family Lifestyle Eqiupp Ministries
Nathan Mawele	Assistant Legal Officer Lusaka City Council
Nelson Ncube	People's Process
Ngoza Munthali	NPPI – MOFNP
Noah Kagdu	Joy FM
O'Brien Siame Katai	MLGEEEP
Orlean Y Moyo	Zambia Low-Cost Housing Development Fund
Paul Makasa	Ministry of Finance
Peter Lubambo	MLGHEEP
Petronella Siaka	National Director, Habitat for Humanity
Prudence Mafute	Zambia Institute for Policy Analysis and Research
Raphael L Mwanza	Ministry of Health
Richard Zulu	UNZA/Institute of Economic and Social Research

S Krishamurthy	Finance Building Society
Sharon Phiri	Consultant, Homenet, Zambia
Sheila Shimwambwa-Mudenda	Head, Demography, Central Statistical Office
Silumesi Siyanga	Ndola City Council
Simataa Christabel	National Heritage Conservation Commission
Sundaih Siamuunzwide	Ecobank Zambia Ltd
Susan Hunter	STEPS OVC
Syakayuwa Chipo	Swedish Cooperative Centre
Sylvester Mashamba	Executive Director, National Council for Construction
Yvonne M Siyeni	Lusaka Water and Sewerage Company

REFERENCES

A

Angel, S. (2008). "An arterial grid of dirt roads." Cities 25(3): 146-62.

Angel, S., S. C. Sheppard and D. L. Civco (2005). The Dynamics of Global Urban Expansion. Washington D.C, The World Bank, Transport and Urban Development Department.

B

Bamberger, M., B. Sanyal and N. Valverde (1982). Evaluation of sites and services projects: the experience from Lusaka, Zambia, Washington DC.: The World Bank.

Bank of Zambia (2004a). Brochure. Lusaka, Bank of Zambia.

Bank of Zambia (2004b). Financial Sector Development Plan. Lusaka, Bank of Zambia.

C

Caritas Zambia and Zambia Land Alliance (2009). Civil society's recommendations to the Lands and Property chapter of the draft Constitution. Lusaka, Caritas Zambia and Zambia Land Alliance.

Central Statistical Office (2003). 2000 Census of Population and Housing, population projections report. Accra, Central Statistical Office, Republic of Zambia.

Central Statistical Office (2004). Living Conditions Monitoring Survey Report, 2002/3. Lusaka, Living Conditions Monitoring Branch, CSO.

Central Statistical Office (2009). Zambia Demographic and Health Survey. Lusaka, CSO, Ministry of Health, Tropical Diseases Research Centre and University of Zambia.

Central Statistical Office (2011a). 2010 Census of Population and Housing: presentation of preliminary results. Lusaka, Government of Zambia.

Central Statistical Office (2011b). Living Conditions Monitoring Survey Report, 2006. Lusaka, Living Conditions Monitoring Branch, CSO.

Central Statistical Office (not dated). 2000 Census of Population and Housing, Housing and household characteristics: analytical report. Accra, Central Statistical Office, Republic of Zambia.

Central Statistical Office, Ministry of Health, Tropical Diseases Research Centre and Macro International Inc. (2009). Zambia Demographic and Health Survey, 2007. Calverton, Maryland, USA, CSO and Macro International Inc.

Chapoto, A., T. S. Jayne and N. Mason (2007). Security of Widows' Access to Land in the Era of HIV/AIDS: Panel Survey Evidence from Zambia, Ministry of Agriculture & Cooperatives. Lansing and Lusaka, Agricultural Consultative Forum, Michigan State University and Lusaka, Zambia, Policy Synthesis, Food Security Research Project 22.

Chibuye, M. (2011). Interrogating urban poverty lines: the case of Zambia. London, IIED Human Settlements Working Paper Series, Poverty Reduction in Urban Areas - 30.

Chifunda, C. (2003). Earth construction: a potential sustainable alternative building method for urban dwellings in Zambia, Unpublished dissertation, Loughborough University.

Chiumya, C. (2010). The regulation of microfinance in Zambia. International Conference on Microfinance Regulations: Who Benefits?, Dhaka, 15-17 March, Microcredit Regulatory Authority.

Cohen, M. (2004). Draft report for chapter 1 of the Global Report on Human Settlements, 2005. Unpublished manuscript, New York, The New School University.

Crankshaw, O., A. G. Gilbert and A. Morris (2000). "Backyard Soweto." International Journal of Urban and Regional Research 24(4): 841-57.

D

Dagdeviren, H. (2008). "Waiting for miracles: the commercialization of urban water services in Zambia." Development and Change 39(1): 101-21.

E

Economic Commission for Africa (2005). The statistical estimation of poverty duration and transitions in Zambia. Addis Ababa, Economic Commission for Africa.

F

Finance Building Society (FBS) (2010). FBS Brochure: Build your dream home kwacha by kwacha. Lusaka, Finance Building Society.

G

Gardner, D. (2007). Access to housing finance in Africa: exploring the issues, Zambia. Pretoria, FinMark Trust.

Government of Northern Rhodesia (1935). Report of the Commission on Appointed to enquire into the disturbances in the Copperbelt of Northern Rhodesia. Lusaka, Government Printer.

Government of Northern Rhodesia (1944). Report of the Commission on Administration and Finances of Native Locations in Urban Areas (the Eccles Commission). Lusaka, Government Printer.

H

Hansen, J. T. (1992). "Gender and housing: the case of domestic service in Lusaka, Zambia." Africa 62(2): 248-65.

Hydroplan (2009). "Identification study for an EC support to the Zambian Aviation Sector under the 10th EDF." Infinity Business Media Ltd. (not dated). "Achieving Business Excellence."Infinity Business Media Ltd Retrieved 14th June, 2011, from http://www.bus-ex.com/article/lafarge-cement-zambia

K

Kamete, A. Y. (2007). "Cold-hearted, negligent and spineless? Planning, planners and the rejection of 'filth' in urban Zimbabwe." International Planning Studies 12(2): 153-71.

Kasongo, B. A. and A. G. Tipple (1990). "An analysis of policy towards squatters in Kitwe, Zambia." Third World Planning Review 12(2, May).

Kazimbaya-Senkwe, B. M. and S. C. Guy (2007). "Back to the future? Privatisation and the domestication of water in the Copperblet Province of Zambia, 1900-2000." Geoforum 38: 869-85.

Keller, B. (2000). Women's Access to land in Zambia. . International Federation of Surveyors (FIG) Commission of (Cadastre and Land Management) Task Force on Women's Access to Land. Koln, Germany.
Kitwe City Council (1976). Low Cost Housing in Kitwe: its characteristics and implications on housing policy. Kitwe, The City Engineer's Department, KCC.

L

Larsson, S. (2005). Fact Finding Mission on Revision of Legislation Related to Spatial Planning in Zambia. Stockholm, SIDA.

Lemanski, C. (2009). "Augmented informality: South Africa's backyard dwellings as a by-product of formal housing policies." Habitat International 33: 472-84.

Lusaka City Council. (2003). "Strategic Municipal Solid Waste Management Plan for Lusaka City." Retrieved 14th July, 2011, from http://www.wmu-lusaka.gov.zm/files/strategy/strategy.pdf
Lusaka City Council and Environmental Council of Zambia (2008). Lusaka city State of Environment Outlook report. Lusaka, LCC and ECZ.

Lusaka City Council and UN-Habitat (2004). NEPAD City Framework Profile for Lusaka City. Lusaka and Nairobi, LCC and UN-Habitat.

Lyby, E., J. Connolly, C. Mukunya, S. Higobero and V. Ocaya (1992). Employment generation in urban works programmes in Uganda, Geneva: International Labour Organisation.
Machina, H. (2002). Women's Land Rights in Zambia: Policy Provisions, Legal Framework and Constraints. . Paper presented at the Regional Conference on Women's Land Rights, Harare, Zimbabwe, 26 - 30 May.

M

Makasa, P. (2003). Housing and Urban Development Initiatives as a means towards alleviation of Poverty: The Case of the presidential Housing Initiative in Zambia. Madina, Ghana, Paper for Institute of Local Government Studies

Makasa, P. (2010). The 1996 Zambia National Housing Policy. Delft, Delft Centre for Sustainable Urban Areas, Delft University of Technology.

Makundi, M. J. (1992). "Raising capital for housing finance: the Zambian case." Housing Finance International(December): 2-32.

Martin, R. (1976). "Towards a new architecture." In situ: Journal of the Zambian Institute of Architects.

Martin, R. (1983). Upgrading. People, poverty and shelter: problems of self-help housing in the Third World. R. J. Skinner and M. J. Rodell. London, Methuen.

Mashamba, S. (1997). The construction industry in Zambia: opportunities and constraints under the Structural Adjustment Programme and the Enabling Shelter Strategy. School of Architecture. Newcastle upon Tyne, University of Newcastle. Doctoral dissertation.

Mashamba, S. (2008). Translating Commodity Price Boom Revenues into Development in Zambia: Implications of the increased commodity revenues for the Zambian Construction Industry. Lusaka, National Council for Construction.

Mashamba, S. (2010). National Council for Construction and corruption in the Zambian Construction Industry. Paper Presentation.

Mashamba, S. (not dated-a). "Developments in the Zambian construction industry and the role of Universities."Copperbelt University Retrieved 18th July, 2011, from http://asocsa.org/documents/DrSylvesterMashamba_DevelopmentsInTheZambianConstructionIndustryAndTheRoleOfUniversties.pdf

Mashamba, S. (not dated-b). The National Council for Construction (NCC) and corruption in the Zambian construction industry, National Council for Construction, Powerpoint presentation.

Matibini, P. (2003). Land Tenure Initiative - A Legal Assessment. Lusaka, Lusaka City Council.

Matongo, M. (2010). Kamatipa Enumeration Report. Lusaka, Zambia Homeless and Poor People's Federation and People's Process on Housing and Poverty in Zambia.

Milimo, J. T. (1990). Differential Impacts of Zambia's Macro-Economic and Sectoral Policies on Agricultural Production by Female and Male Farmers. Lusaka, A Consultancy Report for the Women's Section of the National Commission for Development Planning.

Ministry of Health and National Aids Council (2008). Zambia Country Report: Multi-sectoral AIDS Response Monitoring and Evaluation Biennial Report, 2006-2007. Lusaka, Ministry of Health and National Aids Council.

Ministry of Lands. (2002). "The Draft Land Policy. Lusaka, Zambia. ."Ministry of Lands, from http://www.sarpn.org.za/documents/d0000626/P591-Land_Policy.pdf

Ministry of Local Government and Housing (1980). The Planning Standards Guidelines. Lusaka, Department of Town and Country Planning, Ministry of Local Government and Housing.

Ministry of Local Government and Housing (2001). Urban Restructuring and Water Supply Project: Community Demonstration Component: End of Project Assessment. Lusaka, Ministry of Local Government and Housing.

Ministry of Local Government and Housing (2008). Discussion Document: Revision of Legislation Related to Spatial Planning in Zambia. Lusaka, Ministry of Local Government and Housing.

Ministry of Local Government and Housing (2009). Urban and Regional Planning Bill. Lusaka, Ministry of Local Government and Housing.

Ministry of Local Government and Housing, Lusaka City Council and Japan International Cooperation Agency (2009). The study on comprehensive urban development plan for the City of Lusaka in the Republic of Zambia: Final Report. Volume III, Pre-feasibility study of priority projects. Lusaka, Japan International Cooperation Agency, Kri International Corp. Nippon Koei Co Ltd., Japan Engineering Consultants Co Ltd.

Muchima, M. J. (2004). Housing Microfinance: An Alternative for Low-income Households in Zambia. MSc Programme in Urban Housing Management. Rotterdam, Lund University and IHS.

Muchindu, M. W. (2007). Consequences of the Privatization of Public Housing to the Accessibility and Affordability of Housing for Public Workers in Lusaka. Rotterdam, IHS, Erasmus University. Master's dissertation in Urban Management and Development.

Mulenga, C. L. (2002). The case of Lusaka. Understanding slums, case studies for the Global Report on Human Settlements. Nairobi, UN-Habitat.

Mulenga, S. P. (1981). National development programmes and land problems in Zambia. The role of a surveyor in developing countries, with particular reference to Central and Southern Africa. CASLE, Report of the proceedings of a CASLE regional seminar held in Malawi on 31 March-3 April, Commonwealth Association of Surveying and Land Economy: 96-101.

Mulwanda, M. and E. Mutale (1994). "Never mind the people, the shanties must go: the politics of urban land in Zambia." Cities 11(5): 303-11.

Mushota, C. (2000). "A Housing Scheme in Zambia - Construction process of the PHI housing scheme."Workshop paper Retrieved February, 2005, from http://www.hdm.lth.serrRAINING/Postgrad/papers/index.html.

Mutale, E. (2004). The management of urban development in Zambia. Aldershot, Ashgate.

Mutambo, I. (2003). Sustainable Microfinance for the Urban Poor: a Case of Kitwe. Kitwe, The Copperbelt University. Unpublished dissertation.

Mutangadura, G. B. (2004). Women and Land Tenure Rights in Southern Africa: A human rights-based approach. Land in Africa: Market Asset, or Secure Livelihood?, Westminster, London, 8-9 November.

Mwango, M. A. (2006). Informal housing delivery: assessing its potential contribution in formulating enablinglow income housing standards: the case of Kamatipa settlement in Kitwe, Zambia. School of Architecture, Planning and Housing. Durban, University of KwaZulu-Natal. Master of Housing dissertation.

N

National Housing Authority (1975). Self help in action: a study of site and service schemes in Zambia. Lusaka, Research Study Number 2, National Housing Authority.

Nippon Koei Co. and Global Link Management Inc. (2001). The Study on Environmental Improvement of Unplanned Urban Settlements in Lusaka. Vols. 1, 2, & 3. Lusaka, JICA and Ministry of Local Government and Housing.

O

OHCHR. (not dated). "Zambia - Overview of the current Housing Rights situation and related activities."Office of the High Commissioner for Human Rights   Retrieved 6th June, 2011.

P

Phiri, D. A. (2005). Delivering land, infrastructure and urban services for property development in Zambia. Paper presented at the International Conference on:" Investment Opportunities in Zambia: Towards Integration of African Property Markets, Lusaka, Business Week and Bitrust Real Estate and Financial Services.

Phiri, M. (not dated: post 2008). Rental Housing in Zambia: An Option for Improving National Housing Conditions. Unpublished paper.

Republic of Zambia (1996). National Housing Policy. Lusaka, Ministry of Local Government and Housing.

Republic of Zambia (2004). National Youth Policy. Lusaka, Department of Youth Development: Lusaka.

Republic of Zambia. (2005). "Baseline Survey on Women's Access to Agricultural Land in Zambia Final Research Report."Gender in Development Division, produced in partnership with Zambia Land Alliance & Dan Church Aid, from http://www.landcoalition.org/pdf/zla_women_Feb05.pdf.

Republic of Zambia (2006). Vision 2030: a prosperous middle-income nation by 2030. Lusaka, Ministry of Finance and National Planning.

Republic of Zambia (2007). National Rural Water Supply and Sanitation Programme 2006-2015. Lusaka, Ministry of Local Government and Housing.

Republic of Zambia (2011). Sixth National Development Plan. Lusaka, Ministry of Finance and National Planning.

Republic of Zambia (not dated (2004?)). Housing and Household Characteristics, analytical report. 2000 Census of Population and Housing. Lusaka, Central Statistical Office.

S

Safege-Technum / Tractebel Engineering (2010). Formulation Study for an EC Support to the Zambian Aviation Sector under the 10th EDF. . Framework Contract Beneficiaries 2009. Lot 2 - Transport and Infrastructures. Specific Contract N° 2009/223857. Brussels European Commission.

Sanyal, B. (1981). "Who gets what, where, why and how: a critical look at the housing subsidies in Zambia." Development and Change 12: 409-40.

Schlyter, A. (1990). Twenty Years in George: A Longitudinal Study of a Housing Area in Lusaka, Zambia. Lund, The National Swedish Institute for Building Research.

Schlyter, A. (1995). Slum and squatter settlements in Zambia. Housing the poor: policy and practice in developing countries. B. C. Aldrich and R. S. Sandhu. New Delhi, Vistaar Publications.

Schlyter, A. (2002). Privatisation of public housing and exclusion of women: a case study of Lusaka, Zambia. Gender and Housing in Southern Africa: Emerging Issues. A. Larsson, E. R. M. Mapetla and A. Schlyter. Roma, University of Lesoto, Institute for Southern African Studies.

Shezongo-Macmillan, J. (2005). Women's property rights in Zambia. A paper presented to the Strategic Litigation Workshop, Johannesburg, 14-18 August.

Simons, H. J. (1979). Zambia's urban situation. Development in Zambia. B. Turok. London, Zed Press: 1-25.

Simumba, V. M. (1993). "Konkola groundwater: a source of domestic water supply to Chililabombwe District, Zambia "International Mine Water Symposium, Zambia Retrieved 17th October, 2011, from http://www.imwa.info/bibliographie/1993_p_683-689.pdf.

Swatuk, L. A. (2002). "The new water architecture in Southern Africa: reflections on current trends in light of 'Rio + 10." International Affairs 78(3): 507-30.

T

Tembo, M. (2007). Redefining the "Enabling Environment": Reform in Housing Production for the Low-Moderate Income Market - A Case of the Commercial Developer in Lusaka, Zambia. Rotterdam, IHS, Erasmus University Master's dissertation in Urban Management and Development.

Tipple, A. G. (1976). "Self-help housing policies in a Zambian mining town." Urban Studies 13: 167-9.

Tipple, A. G. (1979). Low cost housing policies in the Copper Towns of Northern Rhodesia/Zambia: an historical perspective. Collected Papers 4. A. V. Akeroyd and C. R. Hill, Centre for Southern African Studies, University of York.

Tipple, A. G. (1981). "Colonial housing policy and the 'African Towns' of the Copperbelt: beginnings of self help." African Urban Studies 11(Fall): 65-85.

Tipple, A. G. (1995). "Dear Mr President, housing is good for development." Norsk Geografisk Tidsschrift 49(4): 175-86.

Tipple, A. G. (2000). Extending themselves: user initiated transformations of government built housing in developing countries. Liverpool, Liverpool University Press.

Tipple, A. G., D. Korboe and G. Garrod (1997). "Income and wealth in house ownership studies in urban Ghana." Housing Studies 12(1): 111-26.

Tipple, G. and S. Speak (2009). The hidden millions: homelessness in developing countries. London, Routledge.

Tweedale, G. and P. Hansen (2000). Magic Mineral to Killer Dust: Turner & Newall and the asbestos hazard. London, Oxford University Press.

U

UN-Habitat (2004). Key Urban Indicators Regional Urban Sector Profile Study for Policy inputs for Urban Poverty Reduction in Africa and the Arab States Global Urban Observatory. Nairobi, UN-Habitat.

UN-Habitat (2005). Land tenure, housing rights and gender - National and urban framework: Zambia. Law, Land Tenure and Gender Review Series: Southern Africa. Nairobi, UN-Habitat.

UN-Habitat (2007). Zambia: Lusaka urban profile. Nairobi, UN-Habitat.

UN-Habitat (2009a). Zambia urban profile. Nairobi, UN-Habitat.

UN-Habitat (2009b). Zambia: Kitwe urban profile. Nairobi, UN-Habitat.

UN-Habitat (2009c). Zambia: Livingstone city profile. Nairobi, UN-Habitat.

UN-Habitat (2010). Malawi urban housing sector profile. Nairobi, UN-Habitat.

UN-Habitat (2011a). Global Report on Human Settlements: Cities and Climate Change. London and Nairobi, Earthscan.

UN-Habitat (2011b). Land In Support of Sustainable Urbanisation. Third African Ministerial Conference on Housing and Urban Development, Bamako, Mali, 22-24 November.

UN-Habitat (forthcoming, 2011). Ghana Urban Housing Sector Profile. Nairobi, UN-Habitat.

UN-Habitat and UNHCR (2009). The Right to Adequate Housing. Fact Sheet No. 21/Rev.1. Geneva, United Nations.

UNCHS/ILO (1995). Shelter Provision and Employment Generation, United Nations Centre for Human Settlements (Habitat), Nairobi; International Labour Office, Geneva.

W

Wheaton, W. C. (1980). Development and infrastructure in the Greater Cairo Region, Mimeo prepared for the World Bank, Cambridge, MA.

Women and Law in Southern Africa (WLSA) (2007). Zambia: Evaluation Report on the viability of the proposed approach to address violations of women's human rights in the context of HIV and AIDS. Lusaka, Women and Law in Southern Africa.

World Bank (2002). Upgrading low income urban settlements: country assessment report - Zambia. Washington DC, The World Bank African Technical Unit 1 & 2.

Z

Zambia Business Survey (2010). Brochure: the profile and productivity of Zambian businesses. Lusaka, FinMark, Zambia Business Forum, GRZ, Public Sector Development Programme and the World Bank.

Zambia Homeless and Poor People's Federation (2010). Lusaka City Profile. Lusaka, Zambia Homeless and Poor People's Federation

Zambia Land Alliance (2011). Land Matters. Lusaka, Zambia Land Alliance.

ZHPPF/PPHPZ (2011a). Kalundu View Enumeration Lusaka, Zambia Homeless and Poor People's Federation and People's Process on Housing and Poverty in Zambia.

ZHPPF/PPHPZ (2011b). Katuya Enumeration Report. Lusaka, Zambia Homeless and Poor People's Federation and People's Process on Housing and Poverty in Zambia.

Ziss, R. and G. Schiller (Year). Employment and income effects of housing construction in Ghana, paper presented at an International Seminar on Housing and Employment as a Decision-Making Nexus in Urban Development, Berlin (West), November.

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