UPGRADING LOW INCOME URBAN SETTLEMENTS

COUNTRY ASSESSMENT REPORT

ZAMBIA

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The World Bank
AFTU 1 & 2

Abbreviations and Acronyms

ABO	Area Based Organization
AFTU1	Africa Technical Unit 1 (World Bank)
BHN	Basic Human Needs
CBO	Community Based Organization
DANIDA	Danish International Development Agency
DISS	Department of Infrastructure Support Services (in MLGH)
DfID	Department for International Development (British Aid)
EPM	Environmental Planning and Management
GRZ	Government of the Republic of Zambia
GTZ	Deutsche Gesellschaft fur Technische Zusammenarbeit (German Aid)
IA	Irish Aid now Ireland Aid
JICA	Japanese International Cooperation Agency (Japanese Aid)
LCC	Lusaka City Council
LUSSP	Lusaka Upgrading and Sites and Services Project
LWSC	Lusaka Water and Sewerage Company
MLGH	Ministry of Local Government and Housing
NCDP	National Commission for Development Planning
PROSPECT	Program of Support for Poverty Elimination and Community Transformation
PUSH	Peri-Urban Self Help Project
RDC	Residents Development Committee
SCP	Sustainable Cities Program
SLP	Sustainable Lusaka Program
UNCHS	United Nations Center for Human Settlements
UNDP	United Nations Development Program
URWSP	Urban Restructuring and Water Supply Project
ZESCO	Zambia Electricity Supply Company
ZK	Zambian Kwacha

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FOREWORD

Background to Study

The *Africa: Regional Urban Upgrading Initiative*, financed in part by a grant from the Norwegian Trust Fund, is examining and selectively supporting urban upgrading programs in Sub-Saharan Africa through a variety of interventions. One component of the initiative focuses on distilling lessons from three decades of urban development and upgrading programs in the region. Specifically, the objective of this component is to assess what worked and what did not work in previous programs for upgrading low-income settlements in Africa, and to identify ways in which interventions aimed at delivering services to the poor can be better designed and targeted.

As a first step, rapid assessment reports were commissioned for five Anglophone countries (Ghana, Namibia, Swaziland, Tanzania and Zambia) and five Francophone countries (Burkina Faso, Cameroon, Cote d'Ivoire, Mali and Senegal). Each of the ten Country Assessment Reports provides an overview of the history of upgrading programs and policies in a given country and presents project or community specific case studies to identify lessons learned. Taken together, these ten reports offer insight into the nature and diversity of upgrading approaches in Africa and highlight some of the challenges in and lessons learned about delivering services to the poor.

Acknowledgments

This paper is one of a series of ten country assessment reports. The study was managed by Sumila Gulyani and Sylvie Debomy, under the direction of Alan Carroll, Catherine Farvacque-Vitkovic, Jeffrey Racki (Sector Manager, AFTU1) and Letitia Obeng (Sector Manager, AFTU2). Funding was provided by the Norwegian Trust Fund for Environmentally and Socially Sustainable Development (NTF-ESSD) and the Africa Technical Department (AFT). Alicia Casalis and Chris Banes conducted the field work for the five Francophone and five Anglophone countries, respectively, and also prepared the draft reports for each of their five countries. Genevieve Connors provided extensive comments and was responsible for restructuring and finalizing the reports. Nine of the reports were edited by Lisa Van Wagner and the Zambia report was edited by Nita Congress.

1.0 BACKGROUND

1.1 The Country

Located in south-central Africa, Zambia is a landlocked country surrounded by the Democratic Republic of the Congo and Tanzania to the north; Zimbabwe, Botswana, and the Caprivi Strip of Namibia to the south; Malawi to the east; and Angola to the west. It has an area of approximately 753,000 square kilometers and a population of about 10 million, for a total population density of approximately 13 persons per square kilometer. Most of Zambia is high plateau with a flat or gently undulating terrain. Elevations average 1,000 meters to 1,400 meters; mountains in the northeast exceed 2,000 meters. This high elevation makes for a subtropical climate, and average temperatures range from 17°C in July to 22°C in January.

Zambia is divided into nine provinces. Its capital and largest city is Lusaka, which is also a province. Lusaka has a population of almost 1.3 million, with population densities of up to 1,500 persons per hectare and an average population density of approximately 150 persons per hectare.

Zambia gained its independence from Britain in 1964. It is today one of the most industrialized countries in Africa, renowned for its copper ore resources, which are processed in the country and whose export made Zambia relatively rich during the 1960s and early 1970s. However, nationalization of the copper mines, years of under-investment in the mines, inexperienced management, and a fall in the world price of copper led to an economic decline beginning in the mid-1970s. Extensive borrowing has made Zambia one of the most highly indebted nations in the world relative to national output and exports, and in 1990, it was classified as a low-income country. Even though most of the mines have since been divested and private investment in the mines is ongoing, the country remains impoverished, with a per capita GDP of approximately US$410.

Table 1 summarizes basic data on Zambia and Lusaka.

Table 1. Country and Capital Basic Facts

Zambia	
Area	753,000 sq. km
Population	10 million (approx.)
Urban population	3.8 million (approx) (38%)
Population living in poverty (<US$1 per day)	80%
Urban local governments	10
GDP US$ per capita	410
Lusaka	
Area (province)	21,896 sq. km
Area (urban district)	360 sq. km
Population	1.3 million (approx.)
Population without safe water	12%
Population without adequate toilet facility	30%
Number of households	267,000
Number of informal settlements	37
Population in informal settlements	800,000

1.2 Urbanization

Zambia is the third most highly urbanized country in Sub-Saharan Africa. Of its total population, over 40 percent is estimated to live in urban areas. The country has eight major towns with populations in excess of 150,000; most of these are in the Copperbelt province.

During the 1960s and 1970s, the production and export of copper led to an expansion of the urban economy. Zambia experienced high levels of rural-urban migration, as citizens sought to benefit from urban-based employment opportunities and subsidized food and infrastructure. Lusaka was—and continues to be—the main destination for rural migrants, closely followed by the Copperbelt province. The remaining provinces are largely agriculture-oriented and do not attract large numbers of migrants. A relatively new immigration phenomenon is the influx of refugees from neighboring countries which have experienced or are experiencing conflict.

Zambia's economic decline has eroded many of the benefits of urban living. Recent poverty assessment reports estimate that almost 80 percent of the urban population lives below the poverty line. Poverty and HIV/AIDS have led to decreased urban growth rates in recent years of between 5 and 6 percent.

The city of Lusaka covers an area of 360 square kilometers (the total municipal area is approximately 423 square kilometers). Much of this area is underutilized, and over 20 square kilometers have not yet been urbanized. There is thus room for expansion. About 70 percent of Lusaka's population lives in poor, unplanned settlements comprising 20 percent of the city's residential land.

1.3 Problems

During the copper boom that followed the country's independence, Zambia's cities developed quickly and, from a spatial viewpoint, inefficiently. Previously, towns were not intended to be permanent homes for the majority of the country's workers; thus, legal tenure and the provision of housing and amenities for informal residents were not priorities. With prosperity and rapid urbanization, the republic's new government installed sophisticated and costly urban infrastructure, confident that copper export earnings would provide for its support and maintenance. In fact, however, the infrastructure soon became dilapidated, and operation and maintenance costs—let alone those for debt service—remain unrecovered.

The years of central planning created another, perhaps more significant problem: the development of a culture of dependence on the state and the top-down provision of services, which has resulted in citizens not expecting or wanting to pay for services enjoyed and consumed. Zambia's 1991 Local Government Act attempted to reverse this centralization, giving the country's 22 city and municipal authorities greater autonomy and responsibilities. However, it did not provide concomitant resources, thus continuing the decline of urban infrastructure and services.

In parallel, poverty and the lack of a sustainable housing policy have led to urban growth being absorbed into informal settlements. The ever-increasing poverty (a recent study showed that in Lusaka's Kamanga settlement, the lowest income group—which was one-third of the population—spent over 90 percent of its income on food alone) means that, even if willing, many do not have the ability to pay for the level of service offered. Thus housing is not affordable and authorities have few resources with which to improve or maintain infrastructure and services. The housing, health, and environmental conditions in the growing informal settlements of Zambia's cities consequently are extremely poor.

2.0 CURRENT SITUATION[1]

Lusaka

2.1 Housing Characteristics and Location

Lusaka's total housing stock stands at approximately 300,000 units. Of this, 10 percent, or 30,000 units, is formal housing—i.e., formal dwellings on individual stands, in blocks of flats, or on agricultural holdings—accommodating 30 percent (340,000) of the city's population on about 80 percent of the residential land. The remaining 90 percent consists of squatter units, accommodating about 70 percent of the city's population on less than 20 percent of its residential land. These informal settlements consist mainly of structures made of substandard materials. In the poor settlements, between 35 and 40 percent of the residents own houses; the remainder are tenants.

There are 37 informal settlements in and around Lusaka, made up of 9 old sites and services settlements and 28 squatter settlements, of which 13 have not been regularized (or "declared") to date. These are located predominantly to the north, northwest, and south of the central business district. Basic data on all 37 settlements, including their current status, are included in Annex A.

In 1999, the Ministry of Local Government and Housing declared 10 further informal urban settlements as "improvement areas" under terms of the Housing (Statutory and Improved Areas) Act.

2.2 Profile of Low-Income Community Residents

The Status Quo report of the Lusaka Integrated Development Plan provides further information on Lusaka's informal settlements:

- The ongoing urbanization trend is causing growth in informal settlements at a rate of 12 percent per year.
- Poverty levels are worse in informal settlements than elsewhere in the city.
- Health is generally very poor.
- Female-headed households are 18 percent of all households in the Lusaka province; these generally represent the poorest proportion of the population.
- Informal employment is estimated at about 65 percent and unemployment at 28 percent in the informal settlements.
- Household income for almost 70 percent of households is less than ZK150,000 per month (US$40).
- Approximately 45 percent of household expenditures are spent on food and 12 percent on housing.

[1]The data in this section pertain to Lusaka only and are taken, except where noted, from the Lusaka Integrated Development Plan completed in 2000.

- Approximately 35 percent of households have their own tap, and 41 percent use public taps; the remainder often use unsafe water.

- Approximately 44 percent of households have access to electricity.

- Thirty percent of households use shared pit latrines.

Furthermore, in July 1997, the Research Unit of the Lusaka City Council (LCC), with Irish Aid assistance, carried out a community profiling survey of nine unplanned settlements. Using participatory urban appraisal methods, the exercise aimed to acquire both qualitative and quantitative data on 9 of Lusaka's 13 illegal settlements to facilitate the formulation of strategies and programs through a participatory process. In summary, the survey found the following:

- There is significant informal trading activity (by approximately 25 percent of household heads).

- About 12 percent of household heads reported that they were unemployed.

- Over 80 percent of the households surveyed have monthly incomes less than ZK100,000 (US$50 in 1997).

- Approximately 11 percent of respondents had never attended school; 41 percent had completed primary education; 18 percent, junior secondary school; and 15 percent, senior secondary school. Education up to this level is rarely sufficient to obtain entry to formal employment.

- Water is supplied from the Lusaka Water and Sewerage Company's (LWSC's) piped supply, boreholes, or hand-dug wells: the former source is erratic, while many of the standposts have been vandalized; the piped supply and boreholes are unsafe.

- Less than 50 percent of survey respondents said they paid for the water they use.

- Over 80 percent of the respondents said water distribution is poor.

- Over 90 percent use basic unprotected pit latrines, which pollute the groundwater drawn from the shallow wells; over 60 percent of households share latrines.

- There is no systematic waste collection.

- Mean household size is six persons.

- Houses are mostly informal, are not made from plans, and are generally built by the resident(s).

- Construction is predominantly concrete block walls and corrugated iron or asbestos sheet roofs.

- Over 65 percent of survey respondents said they own their plot or house, but only about 12 percent actually have title deeds to the land; thus, the owners do not have security of tenure.

- Roads are of unpaved gravel and in poor condition with no drains; many are impassable in the rainy season.

- For improvement, 65 percent of surveyed residents preferred an upgrading option and 30 percent a relocation option, provided a fully serviced plot and house were provided.

- The issues cited by residents were, in rank order: illegality of residence and the general lack of water, school, roads, sewerage/drainage/sanitation, security, building space, clinic, community center, employment, and loans.

3.0 POLICY CONTEXT AND INSTITUTIONAL FRAMEWORK

3.1 Policy Context

National

In general, there appears to be a sufficient policy and legislative framework in Zambia regarding the legalization of unplanned and informal settlements; additionally, both the central and local governments acknowledge the need to recognize and regularize such settlements. The way this regularization presently works in Zambia is as follows. Currently, the majority of land on which informal settlements are situated is publicly owned. These settlements must be recognized by municipal administrations and regularized (declared) by the national government, through the Ministry of Local Government and Housing (MLGH), so that occupiers of plots within them can obtain tenure. The Department of Physical Planning and Housing in the MLGH considers regularizing an unplanned/informal settlement if (1) 60 percent or more of the land on which the settlement is located is publicly owned, (2) the settlement has been in existence since 1974, (3) development for which the land is zoned on the development plan is not imminent, and (4) 50 percent or more of the dwelling structures in the settlement are constructed of conventional materials. Normally, after a settlement is declared an "improvement area," the city council is able to issue 30-year occupancy rights. Most occupants of houses in informal settlements deem this to be an acceptable form of tenure that gives them adequate security. The 30-year occupancy license is renewable.

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. For example, the National Housing Authority Act, Cap 426, gives the National Housing Authority sole responsibility for managing Zambia's housing portfolio; this approach should be reviewed with an eye toward allowing for private sector competition in the supply of goods and services. Similarly, the 1975 Housing (Statutory and Improvement Areas) Act, Cap 441, has major weaknesses with regard to its restrictions on private sector participation in housing schemes. This Act provides for the control and improvement of housing (statutory housing areas and improvement areas) and is considered the principal legislative document on upgrading regulations; it also provides for the issuance of certificates of title and occupancy licenses, which give security of tenure. The act precludes other laws from applying to areas of its jurisdiction, however. Amendments are needed to bring the act in line with market-oriented housing delivery mechanisms and to better address the unplanned settlement situation. The Land (Conservation of Titles) Act, Cap 289, also requires immediate review to ensure an efficient land administration system.

More recent legislative and policy developments include a National Housing Policy unveiled by the MLGH in 1996, which sets forth an ambitious set of objectives, including allocation of at least 15 percent of the national annual budget to housing to support a sustainable housing development program; 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.[2] At present, however, it appears that few of these objectives are being achieved.

The Department of Physical Planning and Housing within the MLGH is also currently drafting terms of reference to aid in formulating a peri-urban strategy policy. To date, a Peri-Urban Water Supply and Sanitation Strategy has been developed with UNDP-World Bank assistance, but important issues of access, drainage, solid waste management, community facilities, and land and tenure still need to be considered.

In sum, various attempts have been made, in terms of legislation and policy, to regularize (or declare) informal settlements and bring them into the fabric of the towns and cities, but progress in the implementation of regularization schemes has been slow and hampered by financial and human resource constraints at both the national and local government levels. Numerous government requirements also appear to hamper the provision of basic infrastructure and services to appropriate, affordable standards and the granting of secure tenure to existing informal settlement occupiers.

Role of Local Government

It is recognized in Zambia that the physical planning of housing is very much a local government matter. To this end, local authorities are responsible, under the 1991 Local Government Act, for the following functions:

- creating capacity in order to provide necessary services,
- setting local housing delivery goals,
- creating and allocating land for housing purposes,
- providing and maintaining infrastructure services to open up land for housing development,
- enforcing building standards,
- regulating land-use and controlling development,
- establishing and managing upgrading and site and service schemes,
- providing community and recreational facilities in residential areas,

[2] Other legislation includes: The Local Government Act of 1991 (provides for Council By-Laws); The Public Health Act of 1930 (provides Public Health Regulations but is over-ruled by the Housing Act CAP441); The Town and Country Planning Act 1962, Cap 475 (provides for land use planning and standards, development plans, sub-division of land and building regulations); The Land Survey Act (provides for the control and registration of cadastral information); The Land Acquisition Act (provides for compulsory acquisition with compensation or in the public interest); The Building Societies Act (provides for the financing of housing); The Employment Act (provides for linking employment with the provision of housing); The Rent Act (provides for the control of rent); The Rating Act (provides for municipal rating for local government).

- constructing low-cost housing and selling it (or existing housing) at market rates.

Additionally, local planning authorities ensure that land for housing is identified and planned for in good time and that appropriate planning standards are in place for the quick and efficient development of housing.

3.2 Institutional Framework

Various agencies are responsible for providing, operating, and maintaining infrastructure and services in Zambia's urban areas. At the national level, the MLGH, through its Department of Physical Planning and Housing, is responsible for identifying "housing and improvement areas." The MLGH's Department of Infrastructure Support Services is responsible for the management of donor projects that support infrastructure development, improvement, and rehabilitation.

Local authorities are responsible for the management and provision of council-owned housing and informal settlements. In Lusaka, there are two directorates under the City Council's Housing and Social Services Department, one for conventional housing and the other for peri-urban housing. All informal settlements fall under the Peri-Urban Housing Directorate. Other city councils have housing and social services or community services departments that are responsible for informal/unplanned settlements. City and town councils are responsible for local planning, development control, provision of local roads, drainage and solid waste management plus other environmental health functions. Water, sewerage, and sewage treatment are now the responsibility of commercial utilities, established in Lusaka some years ago but only very recently established (July 2000) in other towns and cities on a regional basis (e.g., there are three commercial utilities covering the Copperbelt).

4.0 UPGRADING PROJECTS AND PROGRAMS

4.1 Summary of Upgrading Policy

Various donors and NGOs, together with local administrations, are attempting to address some of the problems related to upgrading in Zambia and are implementing a number of well-intentioned initiatives, particularly in Lusaka and the community demonstration projects in the Copperbelt. These initiatives are not, however, framed within an overall national policy for low-income, unplanned/informal settlements. It is likely that greater efficiencies and more consistency would come from initiatives being guided by an overall policy and by a clear strategy for implementing that policy. Issues addressed would need to include land, tenure, landlord/tenant rights, standards, service levels, coverage, community participation, operation and maintenance, as well as cost recovery and sustainability.

4.2 Overview of Upgrading Initiatives

Since the late 1970s, when the first major scheme was enacted, Zambia has had a long history of initiatives to improve infrastructure, services, the environment, and the general quality of life in its unplanned/informal or "peri-urban" settlements. Many such programs are ongoing, supported by various donors and NGOs as well as by the central government (MLGH) and local authorities (primarily Lusaka

City Council). Most have been carried out in Lusaka, as it is the largest city with the most low-income settlements. Key aspects of some of the schemes are discussed below.

The World Bank-financed Lusaka Squatter Upgrading and Sites and Services Project, completed in 1981, supported what was probably the first upgrading scheme in Sub-Saharan Africa and provided more than 30,000 new and improved shelter sites in informal settlements in the city. It took a multi-sectoral approach to address housing and housing-related issues for the urban poor. However, it did not achieve financially sustainable operations, no maintenance capability was established, and associated institutional reforms were not fully realized. Moreover, although significant capital investment was expended on infrastructure, there was little community involvement throughout the process— a not uncommon approach at that time. What the project did demonstrate was that, where a large concentration of well-serviced houses was provided in Lusaka, economic activities in the informal sector emerged. The granting of legal status to the participating compounds enabled them to become centers of economic activity. On the other hand, because plots were allocated through the local authority system, political patronage became a major allocation criterion. This practice apparently has led to the removal of some councilors in the Lusaka City Council (LCC) and the establishment of the Land Commission. The significance of regularizing land tenure is a critical lesson to be learned from the Lusaka project. Another lesson is that the delivery of public services failed for a variety of reasons, including the following: (1) service levels were not based on what residents wanted, (2) technical norms were often unrealistically high, (3) community organizations were expected to operate and maintain facilities although they were not consulted during the planning and implementation process, and (4) cost recovery measures had no sanctions to deal with defaulters.

Another early scheme was the Kalingalinga Upgrading scheme funded by the German Technical Assistance (GTZ) and implemented in collaboration with the LCC. This resulted in an upgrading manual, which highlighted lessons learned. Experience from this project showed that the percentage of homes owned by females dropped after upgrading, indicating that women who could not afford to upgrade their houses either moved out of the settlement or became renters.

Yet another early initiative was supported by Irish Aid and CARE Zambia, in conjunction with the LCC. This scheme focused on the Kamanga compound in Lusaka and emphasized community participation and capacity building. Experience in Kamanga was that land title issues were of critical importance to residents and were a factor in their decisions on participation in upgrading activities. The Kamanga Upgrading Project tried to encourage debate in the community on landlord-tenant rights to facilitate community decision- making on the subject of upgrading. This proved to be difficult as political issues came to bear and it was confirmed that any policy on plot allocation would need to be weighed against the advantage of council-created regulations, which are standardized and objective, against community-agreed guidelines acceptable to residents and fitting local circumstances and in particular taking account of access by vulnerable groups.

In the mid-1980s, a working group was established, driven by Irish Aid and comprising the National Commission for Development Planning, the Lusaka City Council, and CARE Zambia, which aimed to provide proposals for policy guidelines for urban upgrading schemes based on a study of interventions in the field up to that time. In 1994, this working group produced an Urban Upgrading Policy Guidelines Paper in response to a review of the Kamanga project. In 1998 an NGO-donor forum was established to help coordinate and guide the efforts of donors, the government, local authorities, and NGOs in supporting development particularly affecting the urban poor.

The World Food Programme (WFP) supported a Peri-Urban Self-Help (PUSH) project that initiated a food-for-work approach for infrastructure upgrading. The more comprehensive, integrated upgrading initiatives attempted in Kamanga and the PUSH initiatives, because of their complexity, were apparently considered by some, to have continued the "top down" approach, and to have achieved limited success. Thus a move to the planning and implementation of more sectoral initiatives appears to have been adopted.

In 1994, after the WFP project, a needs assessment involving communities indicated that water was a top priority, more from a cost viewpoint than a health viewpoint. People were most concerned about the time required to collect water and the fact that it often had to be drawn by the poor at night when it was available. Thus a new program commenced, focusing on water supply and micro-finance. The Program of Support for Poverty Elimination and Community Transformation (PROSPECT) was driven by CARE Zambia, with support from ODA (now DiFD), and involved the LCC. Working with the Residents Development Committee in Chipata compound, a community-managed water supply scheme has since been completed and is now operational (see Section 5.0). A major review of the scheme was carried out in March 2000.

In parallel with the Chipata scheme, CARE has been involved in upgrading in the George compound where both ODA and JICA have also supported upgrading (predominantly water), but with some environmental health, initiatives. They have also been involved in the Jack, Chibolya, and Kanyama compounds, where a sectoral approach (water supply plus a micro-finance program) is again being followed.

In 1997, the Sustainable Lusaka Programme (SLP) commenced under the UNDP's Sustainable Cities Program. The program's development objectives were to provide, through an environmental planning and management approach, opportunities for poor communities to initiate activities for poverty alleviation through environmental improvement activities and build capacity at the community level for participation in environmental projects. The program is supported by Ireland Aid, International Labour Organization, Danida, and UNCHS (Habitat). Demonstration projects are being carried out in Ngombe, Kamanga, and Mandevu/Marapodi. SLP is also assisting with water projects in Linda and Bauleni, along with a solid waste project in Kalinginga and a housing material project in Kamanga.

In 1998, GRZ and JICA signed an agreement for the latter to support improvements in eight unplanned urban settlements in Lusaka (see section 5.0). The eight compounds were Bauleni, Chainda, Chazanga, Chibolya, Freedom, Kalikiliki, N'gombe, and Old Kanyama. The support was to include the formulation of action plans, guidelines for living environment improvement, and priority projects for short-term development. JICA is also assisting with a water supply project in the George compound. An evaluation of the first three pilot projects (Bauleni, Chibloya, and N'gombe) was carried out in February 2001. The JICA guidelines for approaching the upgrading of unplanned settlements favor an integrated approach to infrastructure/service improvements.

No new upgrading projects are currently envisaged; however, a Community Enabling Fund has been established, supported by Ireland Aid and UNDP, through which new community upgrading projects might be channeled. CARE has established a similar community fund. Guidelines for the funds require communities to contribute cash and/or labor and to manage infrastructure (even if it is part of the city network); this management and maintenance should be in perpetuity.

Outside of Lusaka, under the URWSP supported by the World Bank, a community demonstration component has recently been completed that has provided water supply improvements in six peri-urban

communities in the Copperbelt. Principles for project design included the need for water and sanitation projects to be community generated within the technical, financial, and managerial capacity of the communities, and that municipal "partners" should also be supported. Criteria for participation included the need for communities to provide any cost over a budget ceiling, which at the time was fixed at US$25 per capita, to focus communities on the need for prudence when choosing their desired service level and supply. The works were identified from settlement technical plans prepared by consultants following a participatory process. From these plans, the type of water supply (i.e., borehole, shallow wells, connection to existing municipal supply) to be extended to and within the peri-urban areas was agreed upon. Communities did not choose sanitation.

Consultants then designed the schemes, and contractors carried out construction. The Resident Development Committees (RDCs) within the respective communities are to operate and maintain the schemes. Support to the RDCs has come from facilitation consultants as well as the council's community development departments. A number of communities chose to connect to the municipal supplies and are supplied in bulk from such systems. Others chose borehole systems or shallow well systems (where municipal supply was not available). The municipal supplies are now the responsibility of the newly established commercial utilities (three in the Copperbelt province). These commercial utilities have an interest in those communities to which the commercial utilities are to supply in bulk. Understandable concerns have been raised about the competence of the RDCs to manage systems that include pumping facilities, reservoirs, and considerable reticulation systems—and indeed as to whether this is the appropriate long-term approach. The communities are not small (e.g., Racecourse in Kitwe covers 4 square kilometers with 20,000 people). Out of this demonstration project and other experiences, the MLGH and Water Sector Reform Unit, in collaboration with the UNDP/World Bank Water and Sanitation program has prepared a report on peri-urban water supply and sanitation strategy.

Finally, CARE International has undertaken another initiative that aims to strengthen capacities and refine approaches both within and outside CARE to achieve lasting livelihood improvements through good urban programming. This initiative is called Urban INSAKA (Initiative for Sharing Knowledge in Action) and includes networking, orientation and training, research and documentation, and technical assistance to new and existing urban programs.

4.3 Upgrading Typology and Approach

The objectives for upgrading unplanned communities are now similar across all projects supported by various donors and NGOs. The involvement of communities in deciding, and helping provide, what is required in their respective communities and the provision of solutions that are affordable and thus better able to be sustained, seem to be accepted by most.

Despite this commonality of objective, there presently appears to be no consensus on what approach or typology to adopt on a large scale to address all of Lusaka's (and other cities') low-income, informal/unplanned settlement upgrading needs in a reasonable time frame. The most commonly applied typology in Zambia appears to be the sectoral, subsidized model without cost recovery (see Annex E). It does not address land tenure but provides for scheme management, with subsequent operation and maintenance being the responsibility of the beneficiary community. The JICA scheme (see Section 5.2) is more multisectoral, which international experience has shown to have considerable advantages, but which is more difficult to plan and implement from an institutional standpoint.

4.4 Process of Regularization

A key (and relatively rare) feature of upgrading in Zambia is that land tenure issues are being addressed. As noted earlier, informal communities have to be declared an improvement area before they can be deemed legal and occupiers able to secure a 30-year occupancy right. There is presently a relatively high level of "ownership" in many unplanned communities, and 30 out of 37 informal/unplanned settlements around Lusaka have already been regularized or declared— albeit occupiers may not have any formal papers. However, the potential for recouping at least part of the capital costs of provision in return for occupier leases has either not been considered or, if it has, not been pursued.

4.5 Design Principles, Standards, and Guidelines for Upgrading

There do not appear to be common standards or guidelines for upgrading in Zambia. Instead, each project has developed its own principles, approaches, and upgrading typology. What "standards" do exist appear to be unnecessarily high for low-income consumers; certainly, they produce infrastructure for whose maintenance and construction loan debt servicing are not affordable by either national or local government or by the majority of citizens. All schemes have, however, embraced key objectives for upgrading such as active community participation, resettlement without compensation, and the need for upgrading initiatives to stimulate economic development. Most accept the need for improvement across all sectors, but actual and perceived implementation difficulties mean that most projects still adopt a sectoral approach to meeting these needs.

4.6 Community Participation

The concept of community participation is well understood and has been adopted for all upgrading schemes embarked upon in recent years. An example of what communities are prepared to and can do has been demonstrated in the CARE-supported Chipata Community Water Scheme (see Section 5.0). The Sustainable Lusaka Program focuses on capacity building at the community level to assist communities in planning, implementing, and managing sustainable environmental programs. This long history of and successful experience with community participation should be a positive factor in any effort to scale up upgrading initiatives.

4.7 Financial Aspects

The upgrading of declared and regularized low-income, unplanned/informal settlements tends to follow a government "subsidy" approach. In most projects, no attempt is made to recover any of the capital costs of infrastructure provision, down to the secondary and tertiary or local infrastructure. The replicability of most of the current approaches to upgrading Zambia's unplanned/informal settlements is thus questionable and can only work where government has funds (often supplied by donors) to finance a subsidy. Given the extreme poverty that exists, this approach—which is also prevalent in Ghana and many other places may be unavoidable. It is therefore critical that the standards and service levels provided do not exceed what is necessary to serve particular communities.

4.8 Overview of Implementation Arrangements

In Lusaka, the LCC has generally been the responsible agency for implementing upgrading initiatives, and acknowledges the need to focus on informal/unplanned or peri-urban settlements. Its housing department partnered with donors in the early schemes and continues to support upgrading initiatives. The SLP is operated out of the LCC, and the JICA study team works with the peri-urban unit of the Housing Department of the Council. The LCC is also involved with CARE. The LCC Research Unit, with Irish Aid support, carried out the community profiling of nine unplanned settlements in 1997.

Outside Lusaka, city council community affairs departments liase with communities (e.g., under the UWWSP in the Copperbelt); the MLGH is also involved. Under the URWSP, the Department of Infrastructure Support Services (DISS) within MLGH is the responsible implementing agency. It has appointed consultants and awarded contracts for construction.

4.9 Operations and Maintenance

As in other cities in the region, maintenance of infrastructure and services in poor urban settlements in Lusaka is inadequate at best and usually nonexistent. A major argument for increased community participation is that this creates a better chance of adequate maintenance in the future. In fact, community water schemes in Lusaka have as a key element the condition of their being managed by the community after their installation; this includes technical, financial, and responsibility for customer relations. Also, the eight JICA-supported upgrading projects include community training in maintenance skills.

What does appear to be lacking, however, is a mechanism to ensure that sufficient funds are generated for adequate maintenance including replacement. Also needed is a review, modification, and strengthening of the formal systems that generate revenues for maintenance of such nonremunerative infrastructure as roads, drainage, and sanitation (e.g., user charges and property taxes), along with a review of the system for allocating central revenues to local bodies for infrastructure (capital works) provision.

In summary, Zambia, like other countries with low-cost recovery of capital costs, must—apart from adopting low technical standards—ensure that upgraded infrastructure and services can be operated and maintained. Thus, funds for adequate operation and maintenance—including replacement—must be generated either through community structures or through local authority and commercial utility structures. One option is to grant residents secure tenure, and, where the city operates a property tax system, to rate properties in order to generate revenues for operations and maintenance.

5.0 CASE STUDIES

This section presents two representative case studies of ongoing upgrading projects in Lusaka.

Chipata Community Water Supply Scheme

Description

The Chipata Community Water Supply Scheme, which commenced operation in mid-1997, is one of several projects supported by CARE under its PROSPECT initiative. Chipata covers some 1,000 hectares and has a population of approximately 45,000 (about 10,000 households). The Chipata compound is a squatter settlement and was declared an improvement area under the Housing (Statutory and Improvement Area) Act. The community considered water supply to be its highest priority need, and a scheme was developed by the stakeholders. The scheme proposed three boreholes (located within the community area) supplying a distribution center (comprised of three ground tanks, a small pumping station, and an overhead reservoir and chlorination facility) which was to supply 40 communal water points by gravity. CARE provided the infrastructure and the whole scheme is being managed by the community with CARE and LCC support.

Construction is now completed, and one borehole is now in operation. Water is supplied for two hours in the morning and two in the evening, and residents collect water from the standpoints. There are no individual connections to the system. The system is managed by the community (48 staff are engaged). People must register before being able to draw water from the system. An initial registration fee of ZK6,000 is required, along with a monthly payment of ZK3,000. Each user is issued a quantity used card; when water is collected, the standpoint operator ticks the card to indicate that the user has taken his/her seven buckets for the day. An office has been established within the compound from where the scheme is managed and the Revenue section of this office collects payments and carries out the accounting functions (i.e., takes and accounts for user payments as well as pays bills such as the electricity bill from ZESCO). Monthly bills average approximately ZK640,000 per month (ZESCO and others). Total outgoings for all operational costs are estimated to be about ZK8 million per month that is similar to the revenues collected. At present no repair and replacement funds are accruing. Of the 10,000 households only about 3,000 are said to be participating. Reasons are that some poorer families are sharing cards and also others are being supplied (illegally and without payment to LWSC) from the LWSC mains supply that runs through part of Chipata.

Outcomes and Evaluation

An evaluation of the water supply scheme was carried out early in 2000 as CARE-PROSPECT was reducing its day-to-day involvement in the scheme. This assessment identified issues, arrived at conclusions, and made suggestions, which were subsequently discussed in a workshop with all stakeholders. The issues identified revolved around operational topics and wider conceptual issues (e.g., other sectoral needs, linkages with other sectors, tenure, etc.) were not addressed at this time. Identified needs included the following: (1) a tiered system/differential tariff, with people paying nearer to what they consumed rather than a flat rate of supply and payment; (2) flexible payment arrangements to help the disadvantaged; (3) establishing a replacement fund, as the scheme is presently not viable in the longer term; (4) involving LWSC more when agreeing on tariffs to ensure consistency and compatibility with other areas; and (5) establishing a trust to own and manage the scheme, due to legal uncertainties.

Issues

Apart from the management issues addressed in the evaluation, several other items clearly need to be considered before embarking on similar schemes. These are outlined below.

- Insufficient revenue has thus far prevented the initial concept of allowing about 5 percent of water revenues to be made available for other sector investments in Chipata.

- Although availability of water has improved, there has been no concomitant improvement in sanitation; up to 50 households are said to share one latrine in some areas of Chipata.

- A site visit made in the rainy season highlighted the poor state of roads and drainage and the difficulty people were having in accessing their properties. This points to the fundamental shortcoming of the one-sector approach to upgrading.

- Related, a water point inspected was constructed in the middle of one of the dirt access roads, making it very difficult for vehicles to pass even in the dry season. Thus, while gains have been made in community water supply, little visible impact and improvement in other areas is evident.

A citywide issue relates to institutional arrangements in the water sector. Given that LWSC is a recently established water supply company in Lusaka and that informal/unplanned communities make up about 20 percent of the city's and about 70 percent of its population, the Chipata model—in which ABOs or RDCs become the water supply body for the respective community—may not make for a replicable or efficient approach in the long term.

Pilot Projects in Bauleni, Chibolya and N'Gombe Communities

Description

In 1998 JICA, MLGH, and LCC agreed to perform a study on environmental improvements in unplanned urban settlements in Lusaka. The study aimed to prepare action plans and guidelines for effective service delivery, and short-term pilot projects.

Programs and Pilot Projects

JICA-appointed consultants produced an Inception Report in April 1999. Following this, social surveys in eight unplanned settlements were carried out. Next, three communities were selected for pilot projects based on their community organization and on the LCC presence and donor presence in the communities. Based on a needs assessment by the RDC, several kinds of pilot projects were conceived and ultimately matched to the target communities. The following table outlines the nine pilot projects implemented (the numbers in the boxes represent the nine pilot projects).

Project Sector	Details	Bauleni (50,000 pop)	Chibolya (24,200 pop)	N'gombe (40,000 pop)
Water Supply		1. Part of eastern hill area, Zone 8 & 13	5. Part of central area, Zone 4 & 5	SLP started pilot project with 70m deep borehole
Road & Drainage	Road and side ditches	PUSH improved major roads in 1998	Expensive due outfall and rocky geology	9. 1st priority road of 630m
Income generation		2. Micro-credit for 100 h/h	PROSPECT plans	HUZA is working
Health and sanitation	4.1. Environmental health and sanitation education program	3. Community Health Education	6. Community health education & school health service	
Health and sanitation (cont'd)	4.2 Home latrine development program	4. A part of eastern hill area, Zone 8 and 13	7. Demonstration public toilet	
Education	Community school enhancement	French Aid assisting here	8. Community school with two classrooms	ZOCS and Church assisting here

Guidelines and Action Area Plans

As the project guidelines strongly recommended an integrated approach, the action area plans developed by the study team in the eight settlements included water supply, community/home ventilated improvement pit (VIP) toilets with health education, garbage management, community schools, roads and drainage and income generation. These priority projects also included those that were being addressed by other donors/NGOs as well as by JICA. Summaries of the priority projects proposed in the eight settlements are set out in Annex B. The total development costs are estimated at approximately US$25.7 million. Due to financial constraints, further prioritization would need to be made.

Outcomes and Evaluation

The pilot projects were evaluated in late 2000 by a JICA evaluation team in terms of efficiency, effectiveness, impact, relevance, and sustainability. The evaluation results were fairly detailed; many were technically specific. The following technical outcomes are worth noting in the present context of determining the most important items to consider in scaling up upgrading initiatives:

- Support to, and training of, communities in "soft" areas is critical (e.g., for water supply, management and simple accounting systems, operation and maintenance activities).
- Community health education and school-based health education proved effective and should be expanded and linked to sanitation programs.
- Home toilet schemes are needed because of ground pollution and use of shallow wells, but their construction requires subsidies.
- The micro-finance scheme had significant impact, but issues involving the revolving fund, interest rates, and general sustainability need to be resolved.
- Great potential exists for involving small community operators in local refuse collection within communities.

Issues

Firstly it is unclear what is proposed in terms of cost recovery, whether beneficiaries are to make any contribution to capital costs (it appears none) and what is proposed for operation and maintenance costs. Linked with this is the question of standards - what are the minimum standards/service levels that are functional and affordable by the beneficiaries and how has the balance between sectoral interventions and investment between communities been arrived at? Also what debate took place with communities on standards, costs, willingness to pay etc.?

It is also useful to differentiate between "trunk," "bulk," or "primary" infrastructure and secondary, tertiary, or "local" infrastructure. Trunk infrastructure (e.g., water treatment works or major distributor road) is normally paid for by governments and financed through taxes. It is unreasonable to expect the poor to contribute directly for this. Thus upgrading schemes should be very clear on what is trunk and what is local infrastructure and what should be included in the cost recovery mechanisms. However if the capital costs for all infrastructure (trunk and local) for upgrading schemes are to be funded on a "grant" basis (as the CARE and JICA schemes), is this affordable by government and donors for all needy communities and, if not, is it setting the correct precedent?

6.0 LESSONS LEARNED

This section summarizes the lessons identified, by project, in evaluation reports.

6.1 Lusaka Squatter Upgrading and Sites and Services Project

- Delivery of public services was of limited success for a variety of reasons including:

    a) service levels not based on what residents wanted;
    b) technical norms were often unrealistically high;
    c) community organizations were expected to operate and maintain facilities although they were not consulted during the planning and implementation process;
    d) cost recovery measures had no sanctions to deal with defaulters.

- Granting of land title stimulated economic development in area.

- Allocation of plots through the local authority system was subject to local political interference.

- Service levels/standards need to be based on what residents actually want, not on what others think they want.

- Technically norms should not be unrealistically high.

- Community organizations should not be expected to operate and maintain facilities where they have not been involved in the planning and implementation process.

- Where cost recovery measures exist, there also have to be sanctions for non-payment of dues.

6.2 PUSH Project

- Top-down approaches are not well received by communities and lead to simple sectoral interventions based on high priority network service needs over community needs.

6.3 George Compound Water Scheme (JICA)

- Communities should be involved in the development process from the outset and time should be taken to elicit standards/service levels that communities actually want and are willing to pay for.
- People do have strong views about the level of service they want.
- Very high investment costs (US$300 per capita) for water alone with little or no capital cost recovery; unlikely to be replicable.

6.4 Kamanga Compound Water Scheme (Irish Aid)

- Communities responsible for maintenance of schemes but difficulties in collecting dues, especially with maintenance requirements increasing over time.
- Provision of water before cost recovery modalities were agreed created difficulties.

6.5 Chipata Community Water Project (CARE)

- More realism is required in scheme feasibility studies, especially in terms of gauging the likely number of consumers.
- Water scheme appears to be technically successful and community is managing it well, but the overall visible and environmental impact in the community is limited.

6.6 Pilot Project in Three Unplanned Urban Settlements (JICA)

- If communities are to be expected to manage infrastructure facilities then training in “soft” skills such as accounting as well as maintenance is critical.
- Community health and school based health programs are required and should be linked with community sanitation programs.
- Micro-finance programs have had significant impact but revolving fund modalities and interest rates are critical for sustainability.
- Home toilet schemes are required but need to be subsidized.

7.0 CHALLENGES AND PROPOSED NEXT STEPS

7.1 Overview

Numerous past and ongoing initiatives have addressed the upgrading of informal settlements in Lusaka and, to a much lesser extent, Zambia's other cities. In more recent years, support agencies (i.e., donors and NGOs) have seemed to make more of an effort to work together—or at least to keep each other informed on what is happening and to get some measure of consistency in upgrading programs. Because informal settlements in Lusaka are generally very large, a number of different donors and NGOs are at work therein, making this coordination and consistency critical.

Current initiatives are largely sectoral in nature—that is, they begin by addressing only one or two sectors in some detail (e.g., the Chipata Community Water Scheme) with the remaining sectors to follow sequentially or progressively. This approach assumes (1) that sufficient funds for progressive improvements will be available and (2) that time is not a particular constraint. These assumptions may not hold; additionally, it can be argued that certain sectors should not be addressed in isolation (e.g., improving water supply without sanitation improvements is unwise, as is improving roads without drainage; similarly, improving drainage without improvement in solid waste collection usually means drainage improvements are of limited benefit).

Carrying out works together often avoids one sectoral initiative being disrupted by a subsequent initiative (e.g., the old story of a newly constructed road being excavated to lay a new water main). Thus, apart from the need for upgrading schemes to be visible and to create an impact to assist community and government "buy–in" hence improving the chance of sustainability (e.g., for maintenance, communities paying dues and authorities making budgets) there are also strong technical arguments for a more comprehensive sectoral or integrated approach to upgrading.

The recently competed Lusaka Integrated Development Plan (LIDP) provides a good database for Lusaka as well as a means for analysis; moreover, it proposes many development strategies and mechanisms for their delivery. It also has a useful and interesting list of issues identified by community representatives. More specific initial tasks in the planning for upgrading programs that reinforce a number of these strategies and proposals for their delivery included in the LIDP are set out below.

7.2 National

Task 1 – Policy for Low Income (Unplanned/Informal/Peri-urban) Communities

A review of planning and housing policy and legislation and framing of proposals to better enable central government departments, local governments, utility undertakings and communities themselves to respond to community needs. Following this review, a policy for upgrading such areas should be framed with concrete implementation strategies.

7.3 City Level

Task 1- Declaration of settlements

Of the 37 informal settlements, 13 are still not "regularized" and are thus "illegal." For all sites not considered to be hazardous, LCC should request MLGH to regularize and "declare" the settlements as improvement areas under the relevant legislation.

Task 2- Socioeconomic/Basic Data Collection and Dimensioning of Problem

Building on the profiling done in nine settlements by the LCC in 1997 a similar, expanded exercise should be carried out in all settlements to ascertain the magnitude of upgrading needs. The exercise should be expanded to include not only socioeconomic information but demographic and physical data including an inventory of existing infrastructure and its condition. A service level/standards matrix should also be prepared and costed (i.e., cost/ha, cost/cap, cost/hh). With this and data on population, households, and physical area, order of magnitude costs and budgets may be determined for different service level provision scenarios. This would be a positive first step in dialogue with donors to organize major funding for such programs.

Task 3- Local policies and legislation

Review existing local policies, by-laws, regulations etc. governing unplanned/informal settlements and propose amendments which should be embraced in a new "peri-urban" policy, the drafting of which MLGH is currently seeking support for.

ANNEX A

LOW-INCOME COMMUNITIES OR UNPLANNED/INFORMAL SETTLEMENTS IN LUSAKA

	Name	Area (Ha)	Legal Status	Type	Donors	NGOs	Projects
1	Bauleni	128.16	Declared	Squatter	JICA, CfD	WFP	EIUUS, PUSH
2	Chainda	63.00	Declared	Squatter	JICA	World Vision, WFP	EIUUS, PUSH
3	Chaisa		Declared	Squatter			
4	Chawama		Declared	Squatter			
5	Chawama W.		Declared	Site & Service			
6	Chazanga	30.41	Declared	Squatter	JICA	CARE	EIUUS, PROSPECT
7	Chibolya	46.00	Declared	Squatter	JICA	CARE	EIUUS PROSPECT HUZA
8	Chikolokoso		Declared	Squatter			
9	Chipata		Declared	Squatter		CARE	PROSPECT
10	Chunga		Declared	Site & Service			
11	Desai		Declared	Squatter			
12	Freedom		Not Declared	Squatter	JICA		EIUUS
13	Garden Exis.		Declared	Squatter			
14	Garden N&S		Declared	Squatter			
15	George		Declared	Squatter	JICA, DfID		Community Water
16	Jack		Declared	Squatter			
17	John Howard		Not Declared	Squatter			
18	John Laing		Not Declared	Squatter			
19	Kabanana		Declared	Site & Service			
20	Kalikiliki	60.85	Declared	Squatter	JICA		EIUUS
21	Kalingalinga		Declared	Squatter	GTZ (old)		
22	Kamanga	28.69	Declared	Squatter	IA,UNDP	CARE	
23	Kamwala/Kabwata		Declared	Site & Service			
24	Kaunda Sq. Stage 1&2		Declared	Site & Service			
25	Lilanda & Lilanda W.		Declared	Site & Service			
26	Linda		Not Declared	Squatter			
27	Marapodi/Mandevu	140.66	Declared	Squatter			
28	Matero E. Emmasdale		Declared	Site & Service			
29	Mazyopa		Not Declared	Squatter			
30	Misisi/Frank		Not Declared	Squatter			
31	Mtendere		Declared	Squatter			
32	Ngo'ombe	91.26	Declared	Squatter	JICA, UNDP		EIUUS, ZOCS, SLP
33	New Kanyama		Declared	Site & Service			
34	Nyerere/Cook		Not Declared	Squatter			
35	Old Kanyama		Declared	Squatter	JICA	CARE	EIUUS,

							PROSPECT
36	Paradise		Declared	Squatter			
37	Soweto		Declared	Squatter			

NB. Those settlements with areas shown were the latest “declared” (i.e., legalized) settlements (1999).

ANNEX B

ENVIRONMENTAL IMPROVEMENT IN EIGHT UNPLANNED URBAN SETTLEMENTS IN LUSAKA (JICA)-PROJECTS AND COSTS

(US$'000)

UUS	WS	SAN	CS	SW	RD	IG.	GCS	TOTAL
Bauleni	4,919	519	130	15	1,408			6,991
Chainda		239	120					359
Chazanga		436	122		433			991
Chibolya		401			969	41		1,411
Freedom	2,698	259	120	15	248	46		3,386
Kalikiliki	3,595	330	126	15	298	43		4,407
N'gombe	4,645	344			855			5,844
Old Kanyama		425			1,788			2,213
TOTAL	15,857	2,953	618	45	5,999	130	95	25,697

Legend

Project Components
WS-Water Supply
SAN- Sanitation
CS-Community School
SW-Solid Waste
RD- Roads & Drainage
IC-Income Generation
GCS-General Community Support
HE- Health Education

Projects
EIUUS – Environmental Improvement of Unplanned Urban Settlements (JICA)
PUSH –Peri-urban Self Help (WFP, ??)
PROSPECT – Program of Support for Poverty Elimination and Community Transformation (CARE)

ANNEX C

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ANNEX D

BIBLIOGRAPHY - KEY DOCUMENTS STUDIED

No	Title	Authors	Date	Contents
1	Urban Upgrading – Policy Guidelines Paper	Irish Aid	Appr 1994	Based on first generation of upgrading schemes supported by World Bank, GTZ and more specifically Irish Aid/CARE/LCC in Kamanga, Lusaka provided proposals for policy guideline formulation
2	Sustainable Lusaka Program Report	UNDP/LCC	2000	Outlines objectives, resources, management and eval. of 1999 SLP
3	CARE-PROPECT – Review of the PROSPECT approach to Community Management of Water Supply	Price-Waterhouse Coopers	Mar. 2000	Evaluation of the Chipata Community Water Scheme prior to NGO withdrawal
4	Lusaka City Council Community Profiling Survey of Nine Unplanned Settlements	Research Unit - Lusaka City Council	July 1997	Basic social planning survey.
5	The Study on Environmental Improvements of Unplanned Urban Settlements in Lusaka	Nippon Koei Co. Ltd. for JICA/ MLGH	Apr. 1999	Inception Report outlining consultants program for assignment for the preparation of action plans guidelines and short term programs and projects for 8 unplanned settlements in Lusaka
6	The Study on Environmental Improvements of Unplanned Urban Settlements in Lusaka	Nippon Koei Co. Ltd. for JICA/ MLGH	Feb. 2001	Interim Report (2) on consultants program for the preparation of action plans guidelines and short term programs and projects for 8 unplanned settlements (compounds) in Lusaka
7	Water Supply Improvement in Bauleni and Chibolya			
8	Urban Restructuring and Water Supply Project	World Bank	Apr. 1985	Staff Appraisal Report
9	Lusaka City Council -Water Supply and Sanitation-Situation Analysis Report	LCC/UNDP/IA	Dec 1999	Issues, Constraints and Possible Options
10	Lusaka City Council - Solid Waste Management-Situation Analysis Report	LCC/UNDP/IA	Sep 1999	Issues, Constraints and Possible Options
11	JICA Water Project-George Compound Lusaka Joint JICA/ODA Evaluation Report	Judy White, Economic Consultant to ODA	Dec 1996	Assessment of objectives met, sustainability and recommendations for improvement and development
12	Lusaka Integrated Development Plan – Final Report	V3 Consulting Engineers & associates	June 2000	Status Quo Report and Development Framework Report

ANNEX E

SUMMARY OF UPGRADING TYPOLOGIES (ALL COUNTRIES IN SSA)

In general scheme typologies might range from the "classic" model (e.g., Swaziland), where the cost of infrastructure is regained from the existing beneficiaries by offering them 99 year leasehold title to their existing plots (often with some physical adjustments) the cost of which covers the cost of infrastructure improved, through the multi-sectoral "infrastructure" model without cost recovery (e.g., Ghana), a largely government subsidized typology which does not address land tenure and cost recovery issues to the single sector without cost recovery or land tenure. Thus affordability issues range from those affecting the individual through communities, to local government and central government, with each typology having different affordability considerations for the respective stakeholders.

	Typology	Description of Typology/Method/Approach	Advantages/ Disadvantages	Examples in following countries in SSA
1	Classic – plots sold (CS)	Comprehensive, multi-sectoral, integrated with land title/plot title given and based on cost recovery with plots priced to cover capital cost of infrastructure provision calculate on a "saleable square meter basis and plots priced according to size. Plots become "legal" and ultimately contribute to costs for maintenance through formal local taxation system (e.g., property rates)	Advantage Sustainable (covers capital costs) and "legalizes" beneficiaries, bringing them into the city and into payment for O&M Disadvantage Complex and time-consuming and expensive for low income and thus protection for "destitutes" required.	Swaziland Namibia
2	Classic-plots rented (CR)	Comprehensive, multi-sectoral, integrated with no land title/plot title given but a rental agreement and rentals based on partial capital cost recovery over time through rent	Advantages Legalizes beneficiaries and gives them some security. Provides a formal housing option for those unable to afford. Disadvantages Long term financing required and housing management by LA of Housing Authority needed.	Namibia
3	Integrated Infrastructure with cost recovery (ICRNT)	Comprehensive, multi-sectoral, integrated but with tenure issues not addressed and with capital cost recovery via a betterment levy or similar payment for infrastructure provided.	Advantages Sustainable. Disadvantages Loses opportunity to give beneficiaries secure tenure.	
4	Integrated Infrastructure without cost recovery (INCRT)	Comprehensive, multi-sectoral, integrated but with tenure issues not addressed and without capital cost recovery thus a government-subsidized approach.	Advantages Comparatively quick and easy to implement. Disadvantages Subsidized.	Ghana Tanzania
5	Sectoral with cost recovery (SCRNT)	Single sector (usually) but with tenure issues not addressed but capital costs recovered from beneficiaries direct.	Advantages Comparatively quick and easy to implement Disadvantages Loses opportunity to give secure title, to create a visible impact thus encouraging people to maintain infrastructure provided. Can create and imbalance in infrastructure	

			provision and create inefficiencies in future with piecemeal provision and disruption and waste.	
6	Sectoral without cost recovery (SNCRT)	Single sector (usually) but with tenure issues not addressed and without capital cost recovery thus a government/utility subsidized approach	Advantages An improvement in service level in sector(s) upgraded Disadvantages As for above plus relies on subsidy.	Zambia (formal upgrading cannot take place without area being declared)