UPGRADING LOW INCOME URBAN SETTLEMENTS

COUNTRY ASSESSMENT REPORT

GHANA

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The World Bank
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Abbreviations and Acronyms

ADRP	Accra District Rehabilitation Project
AMA	Accra Metropolitan Assembly
CA	Cities Alliance
CIUP	Community Infrastructure Improvement Project
DD	Detailed Design
DUR	Department of Urban Roads
ECG	Electricity supply Corporation of Ghana
ECOWAS	Economic grouping of West African countries
FS	Feasibility Study
GAMA	Greater Accra Metropolitan Area
GHA	Ghana Highways Authority
GOG	Government of Ghana
GWSC	Ghana Water and Sewerage Corporation (now Ghana Water Supply Company)
IA	Implementing Agency
IDA	International Development Association
KMA	Kumasi Metropolitan Assembly
LGPSU	Local Government Project Support Unit
MLGRUD	Ministry of Local Government and Rural and Urban Development
NTF	Norwegian Trust Funds
O&M	Operation and Maintenance
PNDC	Provisional National Defense Council
PWP	Priority Works Project
SAEA	Shama Ahanta East Metropolitan Assembly (Sekondi -Takoradi)
SGO	Surveyor General's Office
UESP	Urban Environmental Sanitation Project
UUN	Urban Upgrading Network

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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.

Acknowledgements

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 West Africa, Ghana is a relatively small country bordered in the north and northwest by Burkina Faso, in the east by Togo and in the west by Ivory Coast. The Gulf of Guinea lies to the south. The area is approximately 238,500 square kilometers and the population is approximately 18 million giving an overall population density of 75 persons per square kilometer. Ghana is a lowland country except for a range of hills on its eastern border. Several rivers and streams cross the sandy coastal plain. The Volta River in the east was dammed with the Akosombo Dam, forming one of the largest lakes in the world. The hydroelectric scheme at the dam generates much of Ghana's electricity. The climate is tropical with annual rainfall ranging from about 1,000 mm in the north to 2000 mm in the south. The harmattan, a dry desert wind, blows from December to March.

Ghana is a republic and is a member of the West African economic grouping of countries (ECOWAS). The economy is largely based on agriculture. Ghana was once the world's largest producer of cacao. Mining, logging, fishing and light industry are also key industries. The Gross National Product per capita is about US$400.

Following independence from Britain in 1957, the economy of Ghana weakened, resulting in a lack of investment in the provision of new and maintenance of existing infrastructure. This led to a situation of extremely poor municipal infrastructure and urban services throughout the country. In 1992, a new constitution saw the return of the country to democratic rule and multi-party elections were held in 1996 and again in 2000. With the adoption of more market-oriented policies and support of the international community, Ghana's economy and infrastructure have, in recent years, begun to improve.

1.2 Urbanization

As with many African countries in the region Ghana is rapidly urbanizing. In 1997, about 6.7 million people, an estimated 37 percent of the total population, lived in urban areas. It is estimated that some 1.9 million urban residents live below the poverty line.

Economic growth in Ghana is bringing about a transition from a predominantly rural to a predominantly urban society. Since 1970, the urban population has consistently grown at a higher rate than the national population. The proportion of the total population living in urban areas rose from 26 percent in 1965 to 35 percent in 1993. At the current urban growth rate of about 4.2 percent per annum the urban population will double in 17 years.

Within the ten regions of the country there are a total of 5 cities, 36 towns councils and 185 designated urban areas. Ghana is currently pursuing a policy of decentralization and the Local Government Act of 1993 established 110 Assemblies (either Metropolitan, Municipal or District Assemblies).

Accra, the capital city, has a population of approximately 2.2 million and accounts for about 25 percent of the urban population. Accra and Kumasi together contain over 40 percent of the total urban population. Regionally, about 60 percent of the urban population is concentrated in Greater Accra and the Ashanti and Eastern Regions, all three of which are located in Southern Ghana.

The Greater Accra Metropolitan Area (GAMA) includes the cities of Accra and Tema (Ghana's new port town some 20 km to the east of Accra) both of which are located on the south coast. GAMA accounts for approximately 20 percent of GDP and employs about 10 percent of the national work force (one-third of the national urban work force). Accra and Tema house the majority of Ghana's industries, from micro-enterprises to large plants. Major financial institutions, government ministries, parastatals, and multi-national corporations have their head offices in Accra. Tema is Ghana's primary port, handling about 75 of all goods shipments.

1.3 Problems

Almost one million urban dwellers in Ghana's three main cities reside in communities covering some 3,000 hectares. To upgrade basic infrastructure in these areas would require an investment of approximately US$75 million at today's costs. Investment required would equate to about US$80 per capita for the current population.

Typical problems in Ghana's urban areas include:

- Existing low-income communities that continue to expand and densify due to Ghana's complex land ownership and land allocation process. This has made it difficult to address housing issues for low-income households.
- The Local Government system is in a state of flux with decentralization underway and there is still insufficient focus by Local Assemblies on the upgrading of poor areas.
- There is some experience of upgrading but still few systems, policies, procedures and recognition of "affordability-based" planning and guidelines on cost recovery, etc.
- Parts of the communities are inaccessible by vehicle due to the poor state of primary, secondary and tertiary access roads.
- Water supply systems are generally available in low-income communities but only about half of the properties have individual connections.
- Sanitation and drainage are both generally very poor and there is still widespread use of communal toilet facilities and use of bucket latrines.
- There is little maintenance culture.

2.0 CURRENT SITUATION

Accra Region

2.1 Housing Characteristics and Location

Accra developed inland from the Gulf of Guinea and the old coastal settlements close to downtown Accra (e.g., Jamestown) are now extremely dense (around 1,000 person/ha). There are many substantial buildings in such areas, some of historical merit, but infrastructure and general housing and environmental conditions are generally poor. Migrants have tended to settle in newer, poorer areas often close to watercourses, prone to flooding and with poor sanitation. Accra does not have a sewerage system (other than a small system serving a few commercial properties in the city) and thus all areas rely on on-plot or communal facilities. Communal pit latrine facilities are common in Accra and other cities and the bucket or pan system of human waste disposal has not yet been eliminated

New development (much of it middle and higher-income development) is taking place all around Accra with land generally being allocated through traditional channels, with development largely uncontrolled, and with little infrastructure provision. This "peri-urban" development is already leading to environmental problems and is placing a great strain on infrastructure and service delivery agencies.

A study carried out in the early 1990s identified 21 infrastructure–deficient low-income communities in Accra (Annex B – item 9).

2.2. Profile of Low-income Community Residents.

It is estimated that at least 1.5 million urban dwellers in Ghana can be classified as poor. They tend to cluster in identifiable areas of Ghana's major cities. To date, these areas have developed through a mix of formal development and traditional development (e.g., land allocated by local chiefs). The majority of the urban poor lives in these areas and pays rent to other "legal" householders, often for a room, in areas with poor housing stock and few urban services. Compound style living is also common in many of these areas sometimes with up to 20 families living in one or two rooms and sharing toilet facilities.

About one third of the low-income population of Accra lacks access to piped water and purchases water from vendors, according to a 1991 household survey. These households pay about four times as much for water as households with access to metered or unmetered piped water supplied by the Ghana Water and Sewerage Corporation (GWSC). The cost of purchasing water from vendors can come to 10 percent of the monthly income of a low-income household. This, together with the irregularity of water supplies and low levels of health education, constrains the amount of daily water use by the urban poor for drinking, cooking and hygiene.

A 1993 study found that of the 16 significant diseases in Accra, 13 are linked to poor housing and ventilation, an unsanitary environment, contaminated drinking water, poor drainage and lack of facilities for waste disposal. The higher occurrence of disease in low-income areas means greater loss in work days and a higher outlay of expenditure for medical attention for the poor than for those living in better physical environments.

3.0 POLICY CONTEXT AND INSTITUTIONAL FRAMEWORK

3.1 Policy Context

PNDC Law No. 207 (1988) initiated a shift in the structure of governmental authority whereby the central government devolved to local government Assemblies the responsibility for policy formulation, planning, and implementation with respect to, among other things: community development, town planning, public works, roads and streets, markets, sanitation, and motor parks. This shift of authority occurred in two directions: vertically from 22 central government ministerial departments to District Assemblies; and horizontally, at the local government level, from Government of Ghana (GOG) staff performing executive functions to members of District Assemblies performing legislative functions. Two thirds of the members of each District Assembly are elected.

The Local Government Act of 1993, which replaced Law 207, gives District Assemblies the power to "exercise political and administrative authority in the District (and) provide guidance, give direction to,

and supervise all other administrative authorities in the District" (Article 10). The 1993 Act does not mention specific sectoral functions of local Assemblies; but it devolves to them responsibility for "the overall development of the District," "the development of basic infrastructure," "the provision of municipal works and services," and the "management of human settlements and the environment," among other activities. The 1993 Act also refines the structure of local governments by distinguishing among three different types: Metropolitan Assemblies (requiring at least 250,000 population); Municipal Assemblies (requiring at least 95,000 population); and District Assemblies (which must have at least 75,000 people within their boundaries).

3.2 Institutional Framework.

The Ministry of Local Government and Rural Development (MLGRD) has the mandate to:

- develop policies and legislation with respect to local government;
- supervise and monitor local administration;
- assist local governments in drafting by-laws (and vetting them);
- monitor the financial performance of the local governments and promote internal auditing of their accounts;
- provide guidelines to local governments with respect to revenue collection;
- promote capacity-building of local governments;
- provide guidelines and technical assistance for the delivery of environmental sanitation services; and
- facilitate the provision of offices and residential accommodation for local government staff.

In addition, in the absence of actual implementation of composite budgeting, the MLGRD serves as an interlocutor between local governments and international donor agencies. To assist in the preparation and implementation of donor-supported projects, a Local Government Project Support Unit (LGPSU) was formed in the MLGRD. The Ministry of Works and Housing is responsible for implementing the first generation of World Bank supported urban projects but despite being nominally responsible for housing policy it in fact does very little in this field.

The Metropolitan, Municipal and District Assemblies are autonomous local governments with legislative and executive powers. They are empowered to prepare and approve their annual budgets, to raise revenues from taxes and fees, to borrow funds, to acquire land, and to provide basic services and local infrastructure. A Letter of Local Government Development Policy prepared by the Ministry of Local Government and Rural Development focused on two key points. First, Local Governments should eventually be able to employ their own staff who are accountable to them and, second, the Assemblies should have discretion in the selection of projects to be financed with revenues of the District Assemblies Common Fund. The Assemblies are responsible for local planning, development control, provision of local roads, drainage and solid waste management plus other environmental health functions.

Upgrading projects are essentially about the provision of improved infrastructure (in some countries associated sub-components such as micro-credit schemes are also included), rather than the provisions of housing (i.e., top structures), and thus Assemblies have a particular interest in upgrading policy. The Ghana Water Supply Company (GWSC) is responsible for water supply, the Ghana Electricity Supply Corporation (ECG) for electricity supply and street lighting, and the Department of Urban Roads (DUR), through its Urban Roads Units, for urban roads. Arterial roads are the responsibility of the Ghana Highways Authority (GHA).

4.0 UPGRADING PROJECTS AND PROGRAMS

4.1 Summary of Upgrading Policy

Ghana has no stated upgrading policy but the government has given tacit approval to the upgrading of predominantly low-income urban communities by including upgrading components in various urban development projects implemented since the mid-1980s. Both central and local governments have recognized the benefits of the upgrading approach. Currently, the Government and the World Bank are considering a Greater Accra Project for which the central focus would be the upgrading of infrastructure deficient low-income communities.

4.2 Overview of Initiatives

Evolution of upgrading in Ghana, 1985-1996

In 1985, the World Bank began to support the Government of Ghana, through the Technical Services Center of the Ministry of Works and Housing, with a pilot infrastructure upgrading project in the East Maamobi community of Accra, under the *Accra District Rehabilitation Project (ADRP)*. This first exercise to test the integrated multi-sector approach to infrastructure provision in Ghana's urban poor communities improved the lives of over 19,000 people living in an area of 30 hectares at a somewhat high cost of approximately US$80 per capita or approximately US$47,500 per hectare. Through the provision of basic infrastructure, such as roads, footpaths and drainage, the communities became accessible and the incidence of flooding was reduced. Additional water supply points and communal pit latrines improved the sanitation and contributed to a healthier environment in the communities. Government reaction following scheme completion was favorable, and further schemes were planned.

The subsequent initiatives were carried out between 1988 and 1996 in single communities in Accra under the *Priority Works Project (PWP)* (see 4.7) and the *Urban 2 Project* (see 4.7), namely in Ashaiman (70,000 people in 109 ha) in Tema; West Nima (36,000 people in 54 ha) in Accra; Ward E (32,000 in 59 ha) in Tamale; and Suame Magazine (70,000 people in 142 ha) in Kumasi. Kumasi's program was different from the other upgrading schemes as it improved an informal commercial area occupied largely by motor fitters and mechanics. To implement the program, an integrated multi-sectoral approach was used. The projects had an immediate and visible impact.

The Urban Environmental Sanitation Project (UESP), 1997

The Urban Environmental Sanitation Project (UESP), which commenced in 1997, supported primary drainage, citywide sanitation and solid waste management components, and launched a new generation of community infrastructure upgrading initiatives in Ghana. The Community Infrastructure Upgrading Project (CIUP) component of the UESP included the concept of cost-per-hectare limits and functional standards to keep a check of costs while still providing an adequate level of upgrading. The project also embraced community participation and sustainable maintenance arrangements focusing on a "bottom-up" approach involving the beneficiary communities. The Ministry of Local Government and Rural Development was the responsible parent ministry and, most importantly, for the first time in a World Bank supported project in Ghana, UESP gave local governments the responsibility for managing the implementation process. Another innovation was that it required local governments to contribute 10

percent of the capital costs, thereby promoting greater interest and ownership of the schemes as well as making them more concerned with actual costs.

4.3 Objectives and Approach

The objectives of the upgrading components in Ghana to date have been to increase the health, general well-being and productivity of low-income communities by providing basic infrastructure and improving municipal services. The first generation of projects in 1985-96 were very much "top down" initiatives designed and fully funded by central government. The recent UESP project which included upgrading adopted a much more participatory approach. The planning and design process (see Section 5.0) involved the respective communities and identified, through consultations with beneficiaries, works to be done within a broad "menu" of options. Facilities and Management Plans were prepared and signed off on by community management committees

There have been a number of upgrading initiatives in Ghana over the past 15 years. All have followed the basic community wide multi-sectoral (or integrated) infrastructure typology without cost recovery (see Annex D). The approach has been to upgrade the community-wide "engineering infrastructure" to improve efficiency to and within the areas being upgraded. This encourages residents to help themselves and to invest in the housing stock. It also stimulates local economic development, which, in turn, assists in the alleviation of poverty and improves the efficiency of the city generally.

The upgrading projects have not addressed social infrastructure facilities (e.g., schools, health clinics), security of tenure, direct cost recovery or micro-credit schemes. The upgrading efforts have been subsidized by central government with, in the case of UESP, additional contributions from local government. The UESP, however, strove to involve communities throughout the identification, planning, design and implementation process much more so than in earlier projects. The seven settlements selected in the three cities were chosen because they have the most acute infrastructure, environmental and health problems, as well as specific settlement dwellers who were willing to commit, participate and contribute to the upgrading proposals and community structure.

4.4 Land Ownership and Administration

Land ownership and administration is complex in Ghana with the formal (modern) system attempting to function in tandem with the traditional system whereby local chiefs allocate land. Although the latter is more the accepted practice in rural areas, it also applies in urban areas particularly the growing peri-urban areas. Major impediments to efficient planning and the functioning of a land and housing market include the institutional arrangements between a number of different agencies, access to land, mapping, land management, titling, conveyancing and deeds registration. The Urban 2 Project attempted to address some of the issues by improving mapping capabilities as well as land titling and administration while acknowledging that this required a long-term vision. The objective of the Land Administration Pilot Project was to establish a system for issuing new land titles in accordance with the Land Title Registration Law of 1986. Some positive results have emerged in that major obstacles have been identified and regular inter-agency meetings to improve coordination have been introduced. However, much remains to be done. The UESP proposed to continue these modest efforts by strengthening field operations and records management of the Land Title Registry and by establishing a small unit in the Survey Department for the production of registry maps and registry plans employing digital methods.

However, the critical allocation problem in urban areas has not been addressed and this is exacerbating weak planning and development controls and leading to unchecked urban sprawl. Successive upgrading projects have not attempted to address land tenure issues and bring land allocation and plot sales into the cost recovery equation. Land issues are such that they need to be addressed at a wider national and sub-national level not through upgrading projects.

Because of the legal complexities, a decision was taken to move forward with infrastructure upgrading acknowledging that land administration and management issues need to be resolved at the national level and that this would take a long time.

4.5 Design Principles and Guidelines for Upgrading

Early upgrading projects attempted to provide infrastructure to appropriate standards in order to keep costs down. They also took a multi-sectoral approach with regard to carrying out of the works, bundling all public works into one major contract for the predominantly network infrastructure. This approach also has the advantage of reducing costs and avoiding coordination problems as it places this in the hands of the contractors. However the new generation of upgrading projects, launched with the UESP, sought to extend and improve on earlier upgrading efforts. While keeping to appropriate functional standards, these projects introduced the concept of cost-per-hectare limits to keep check on costs while still providing an adequate level of service (see section 5.0). They also embraced more current practice with regard to community participation.

4.6 Community Participation

In 1996, the proposed UESP acknowledged more current thinking with regard to community participation. Since then, project communities have been involved at key stages in deciding their priorities, within project limits, and they were parties to the Facilities and Management Plans produced for each community in conjunction with the planning and design consultants. Minimal resettlement was a design objective but where some houses required removal to enable infrastructure to be provided, resettlement and compensation arrangements were discussed with and approved by the communities.

4.7 Financial Aspects

The costs and coverage for the first generation of upgrading schemes compared with the most recent (UESP) are shown in the following table. The UESP included cost per hectare limits as a design parameter and this is reflected in the costs and the area able to be upgraded within a given budget.

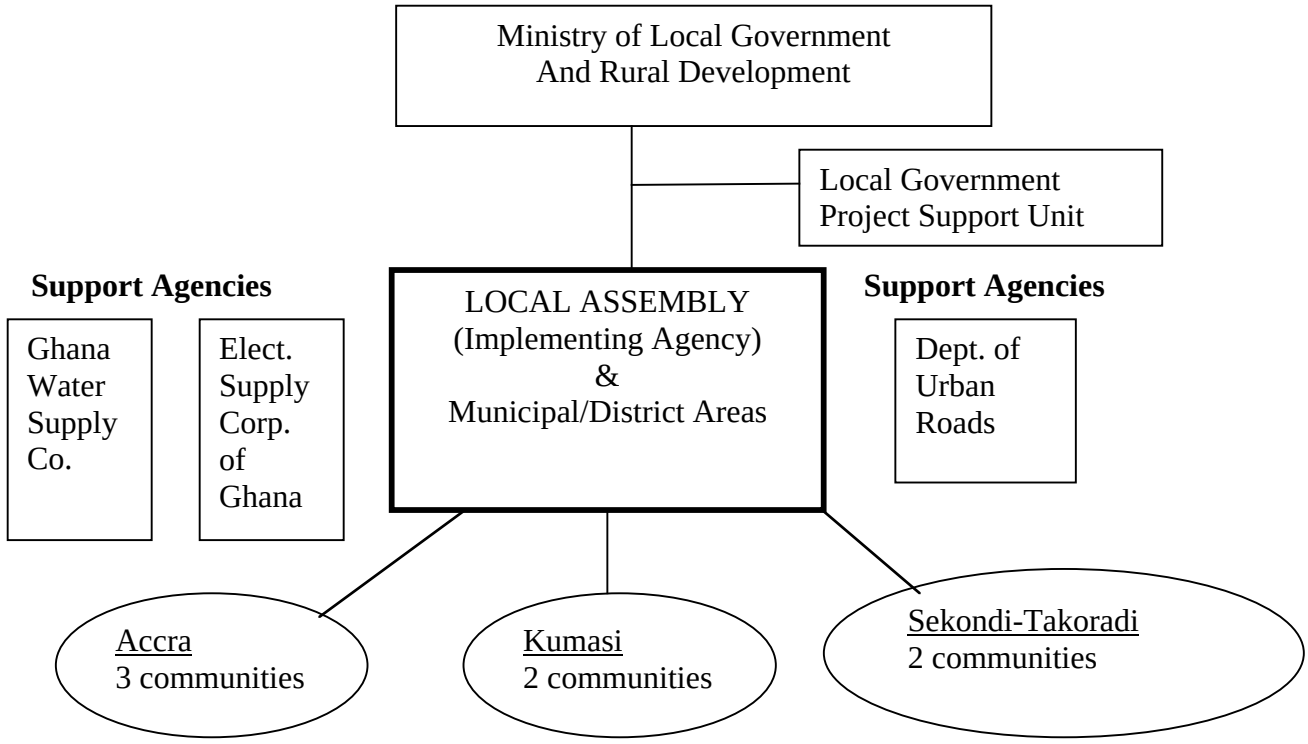
Project	Population	Hectares	Total Cost (US$)	Cost/capita (US$)	Cost/hectare (US$)
ADRP	19,200	30	1,580,000	82	53,000
PWP	70,480	104	4,508,000	64	43,500
Urban Two	88,960	160	8,865,000	100	55,400
UESP	264,600	527.5	13,960,000	52	26,500

4.8 Overview of Implementation Arrangements

Early projects were essentially central government projects and were planned, designed and managed by the Technical Services Center of the Ministry of Works and Housing with consulting assistance. The City and Municipal Councils of the time were not involved. Introduction of the decentralization policy and the strengthening of the Ministry of Local Government and Rural Development and the establishment of its Local Government Project Support Unit changed this. Overall project management for upgrading under UESP was vested in the MLGRD but with day-to-day management carried out by the respective Assembly through its small project units established for the task. Under UESP, each Assembly was responsible for procurement and management of the upgrading works, supported by local consultants (see Figure 1).

In all projects, works have been packaged together for efficiency gains, in line with the multi-sectoral approach. Local contractors have been engaged to carry out the works. This has been an important factor as local contractors have a better understanding of a community's needs and circumstances. Usually, one large contract is packaged for the network infrastructure although minor stand-alone works have been tendered separately and small contractors are encouraged to participate in the bidding.

Figure 1 – Institutional Linkages for Upgrading Schemes (UESP)



4.9 Operation and Maintenance

In the early projects, little attention was given to the future operation and maintenance (O&M) requirements on the assumption that this would be taken care of by the responsible agencies. In reality,

little funding is available for operation and maintenance for trunk infrastructure let alone the secondary and tertiary infrastructure provided under the upgrading projects.

New initiatives to try to ensure better operation and maintenance in the future were agreed under the UESP. The funding and execution of simple O&M activities (e.g. tertiary drain maintenance) could be carried out by communities themselves. Private contractors could undertake other O&M. The Management Committees in each community were established to ensure that the responsible authorities carried out necessary periodic maintenance and that the Committees could organize routine and emergency maintenance of tertiary infrastructure directly.

Operation and maintenance costs were to be covered by the respective communities through user charges, property taxes and other contributions that might be raised from community efforts. For water supply and street lighting, the responsible utility agencies (GWSC and ECG respectively), were to operate and maintain the systems after taking them over following the end of their defects liability periods, with funding from existing tariff revenues. It was envisaged that the community standpipes would be franchised to private operators or community groups that would be responsible for standpipe operation, sale of water, and payment of the GWSC water bill. Street lighting was to be maintained by private contractors engaged by ECG as was now the norm.

For roads and drainage, major periodic maintenance (i.e., resurfacing and major structural repairs) was to be carried out by the urban roads units in the respective Assemblies. However, routine maintenance of roads and drains could be organized within the communities and carried out by the communities themselves or small contractors organized by the respective sub-metropolitan structures with budgets channeled through the respective Assemblies. The respective Assemblies agreed to allocate such sums each year to the respective sub-metropolitan structures for routine maintenance of roads and drains for the beneficiary communities commencing in Year 3 of the project.

5.0 CASE STUDY

Community Infrastructure Upgrading Project (CIUP) of the UESP

Improving the living conditions of under-serviced communities in Ghana's cities has involved the provision and/or improvement of basic municipal infrastructure and services that are: (i) planned and designed by local consultants to functional least cost standards; (ii) constructed by local contractors; and (iii) funded by central government with some assistance from the local governments in question. The project has had efficiency gains in the management of the construction process by using local consultants and established local contractors who become an important interface with the communities during implementation and who often sub-contract to small-scale contractors or community groups. Once completed, the upgraded infrastructure has been taken over by the responsible authorities for operations and maintenance.

The UESP was thus kept as simple as possible for ease of design and implementation. Consequently, it has been completed close to planned time schedules, within estimated costs, and to good standards of workmanship. Investment in housing stock and small business by the people themselves is already occurring in the upgraded communities demonstrating a positive effect of upgrading.

Seven communities in three cities, Accra, Kumasi and Sekondi-Takoradi, were upgraded as part of the Upgrading Component of the UESP. The infrastructure provided in the upgrading schemes is predominantly network infrastructure and thus is area-sensitive rather than population or density-sensitive. Experience has shown that planning to per hectare costs limits is more meaningful than planning to per capita limits.

The program included the following improvements:

- Paving main roads (up to 6 m wide depending on function) and open channel-lined storm drains.
- Limiting water supply reticulation systems to serve standpipes at 1 per 5 ha with some house connections on payment of standards fee to the water authority.
- Rehabilitating existing public toilet facilities.
- Communal solid waste containers to suit citywide system and hardstandings for containers.
- Basic street lighting.
- Preparing a resettlement plan for involuntary resettlement and the replacement of demolished structures and/or compensation to be paid before the works commence.

The project followed ten basic principles that were adopted and used throughout the planning and design process. Approximately 265,000 people, residing in about 530 hectares, benefited from the UESP upgrade.

The Ten Basic Principles of the Community Improvement Upgrading Project are:

1. Communities to be selected on the basis of infrastructure deficiency.
2. Improvements to meet functional standards with maximum cost limits based on per hectare targets.
3. Improvements to be based on a “menu” of basic infrastructure and services.
4. Program to be balanced for impact and visibility reasons.
5. A commitment to fund operation and maintenance by assemblies/communities is required.
6. An “environmental infrastructure fund” to be introduced for additional tertiary infrastructure, accessed only if the communities or groups within them match the funds.
7. Program proposals, community management, maintenance arrangements, etc. to be set out in a Facilities and Management Plan to which the community has to agree.
8. The local Assemblies must contribute 10 percent of capital costs.
9. The support of a complementary citywide sanitation program, which includes rehabilitation of communal latrine facilities, and a matching grant program for individual facilities.
10. Essential trunk infrastructure should exist or be provided in complementary programs.

The Planning and Design Process

The Initial Survey Stage involved the identification of focus groups in each community, household surveys, preparation of a database, and group stakeholder discussions leading to agreement on general principles and scope of the program.

This was followed by the Planning and Preliminary Engineering Design Stage, which included base mapping, the development and costing of functional standards, an assessment of trunk infrastructure needs, extrapolation of unit costs to arrive at an approximate cost estimation, as well as the assessment of the potential for community involvement during the implementation process. During this stage, preliminary proposals and cost estimates for O&M were developed. Government and parastatal

authorities that would be responsible for taking over responsibility for O&M of the infrastructure were brought into the discussions to agree on standards and layouts. Community infrastructure proposals, costs and O&M responsibilities were set out in a Facilities and Management Plan which was agreed upon and signed by the various stakeholders.

The Detailed Engineering Stage included discussing and seeking the agreement of communities and stakeholders to the program content, and incorporating reasonable modifications to preliminary proposals for the implementation modalities. Detailed engineering plans, bid documents and final cost estimates were also prepared.

Under the auspices of the sub-metropolitan structure, Joint Management Committees were formed. They included representatives of formal government departments, as well as community groups (e.g. youth groups, women groups and religious associations). Following design by consultants, the local governments of Accra, Kumasi and Sekondi-Takoradi (the Metropolitan Assemblies) became responsible for the project implementation including procurement and supervision. In each participating city a Project Support Team, consisting of a Coordinator, a Sanitary Engineer and an Accounting Officer, helped to coordinate and manage the different sites. Support was also made available from the Local Government Project Support Unit in the MLGRD.

Contractors were engaged to carry out the main works. One large contract package for the network infrastructure in each community was decided upon for efficiency and management reasons. For minor "stand alone" works (e.g., bin hard standings) other small local contracts were bid for and awarded. Each Assembly was responsible for procurement and management of the contracts, supported by local consultants. Generally the performance was encouraging from Assembly Project Support Teams, consultants and contractors alike. Assemblies made their contributions and works were completed to a good standard and close to schedule and cost.

Costs and Financing

Based on preliminary studies, the overall cost guide developed for upgrading in the UESP was US$25,000 per hectare. It was found that this figure could achieve significant improvement in infrastructure for a typical package of sub-components. The project planned the upgrading of 37 km of road, 59 km of drains, 39 km of water pipe (50mm – 150mm) plus 400+ standpipes, as well as the rehabilitation of 20 public toilet facilities, 3,000 streetlights and 130 solid waste containers and hardstandings.

The summary data and costs are detailed below:

Summary Data and Costs - Plan

Communities	Area (Ha)	Population	Dwellings	Density	Cost/ha (US$)	Cost/Cap (US$)	Total Cost (US$)
Accra							
Sukura	52.5	22,700	631	432	22,918	53	1,203,177
Old Teshie	101.5	38,500	1068	379	14,918	40	1,521,300
West Maamobi	88	34,200	814	389	18,083	47	1,591,344
Kumasi							
Aboabo	73	52,300	716	716	27,608	39	2,015,367

Anloga	75	45,800	611	611	25,215	41	1,891,124
Sekondi-Takoradi							
Effia Zongo	57	33,900	595	424	17,240	29	982,690
Kwesimintsim	80.5	37,200	462	600	17,497	38	1,408,515
TOTALS	527.5	264,600	4,726	Av.502	Av.22,132		11,674,869

In total, the project costs were estimated at US$11.6 million. The Assemblies contributed 10 percent of the total costs, the GOG 13 percent, while the IDA loan covered 77 percent.

Although the UESP is considered successful by most beneficiaries, government officials, donor officials and the public at large, there are two major issues that need to be addressed in the future in subsequent upgrading projects and other parallel initiatives.

The first is cost recovery. The UESP and earlier schemes have been subsidized by central government with, in the case of the UESP, some contribution from local government. Thus sustainability questions are raised regarding whether the government can afford to adopt a similar approach with regard to infrastructure provision across all of Ghana's urban poor communities. If not, then consideration needs to be given to devising a sustainable but at the same time equitable arrangement for recouping at least some of the capital outlay.

This could be achieved by addressing the second issue: tenure. To date tenure issues have not been addressed partly because of land administration complexities but also because the urban poor in Ghana do not always see the need for more formal security (i.e., some form of formal land title) as their most critical need. However, where land issues are clearer and the issue of formal title, as part of an upgrading scheme, is a possibility, then this also provides an opportunity to recover costs for the upgraded infrastructure through the sale of plots. If this is not possible then recouping costs in other ways should also be considered, for example through betterment levies or through the property tax system.

6.0 LESSONS LEARNED

6.1 Summary

The success of the programs to date has led the Government of Ghana and the World Bank to consider the preparation of an Urban Upgrading Project for the Greater Accra Metropolitan Area, which could set the stage for a national upgrading program.

6.2 Impact

The upgrading schemes in Ghana have resulted in a dramatic improvement in environmental and sanitation conditions in the communities:

- Improved solid waste collection has reduced the accumulation of garbage in areas where children play, and parents cook and clean their dishes and utensils.
- Improved drainage has lead to reduced flooding in most areas, thereby slowing the spread of waterborne diseases. Although no systematic effort has been made to measure the impact of upgrading on health in these areas, significant health benefits are thought to have accrued.
- Paved streets and improved access to communities have resulted in a proliferation of small businesses and kiosks in areas that previously used to be repositories of trash and human waste.
- Upgrading has motivated individual households to invest more in improving their shelter structures, and to do more to maintain their improved environments.
- The introduction of street lighting in some areas has reduced the incidence of crime.
- In all the upgraded areas, communities appear more buoyant and economic activity has been stimulated.

The benefits of upgrading extend beyond the specific areas upgraded. For example, people from the areas around Maamobi use the communal toilets, waste containers and running water facilities in the upgraded areas. Project staff believe that the number of people from outside the project area who also benefit from the project's impact amounts to a further 10 percent.

The impact of upgrading in Kumasi has been of a different nature. Suame Magazine, the "Mechanicsville" of Ghana, is a densely populated area where informal mechanics and motor fitters set up shop. The winding streets were dusty and filled with holes, there was no running water or proper sanitation facilities, and flooding was a regular problem. Yet, this area housed about 60,000 workers who worked day in and day out in the dirt and squalor providing much needed automotive services to Kumasi and its surrounding areas. The upgrading of Suame Magazine has improved tremendously the sanitary conditions of the works, and given a huge boost to business as any car or truck can now navigate the paved roads and the mechanics can now rely on electricity to operate heavy-duty equipment. As a result of the upgrading, the area draws workers from other parts of the country in search of work or seeking to learn an automotive trade.

The impact of the upgrading schemes in Ghana has been such that they have fostered political support, with residents not only praising these schemes to local politicians but also asking why more could not be done. The government, in turn, has recognized that the upgrading approach is a vital way to addressing the many problems of Ghana's poor urban communities in a cost effective manner within a reasonable timeframe.

6.3 Lessons Learned

Specific lessons learned from upgrading schemes carried out in Ghana to date are summarized below.

1) Advanced planning in the design of infrastructure to ensure easy add-on of expanded services is critical. A first wave approach of providing minimum basic infrastructure will allow the program to quickly reach large numbers of the population. This way, the community can experience the benefits and can better organize to participate in subsequent stages. With incremental follow-up, other infrastructure

and social services, such as health and education facilities, and income generation activities, can be built on this foundation.

2) The lowest cost options should be actively sought to allow greater coverage with limited resources. This can be achieved through utilizing appropriate functional standards for infrastructure; developing reasonable resettlement packages (not overgenerous ones that stimulate people's desire to be resettled), and not compromising on cost targets.

3) Large scale programs cannot be carried out without the active involvement and fiscal commitment of local authorities. Greater efforts to increase local government revenues and recover the costs of upgrading should be built into the program.

4) Enhanced cost recovery efforts should include a plan to address land security/ownership (including registration and titling) to allow the government to recoup at least part of the cost of upgrading. Property valuation rolls should be kept up to date and the efficiency of property tax collection improved, possibly with the use of the private sector. Betterment taxes could also be considered, but within a context of equity and ability-to-pay of residents.

5) Realistic programs for improving citywide O&M by local governments need to be developed. Ad-hoc maintenance programs, driven and funded by the communities themselves, cannot support a scaled-up program in full. In the long term, the bodies legally charged with the task should be responsible for O&M. Financing the start-up costs of a revitalized O&M program could be considered as a component of the program.

6) Planning for the expansion of the primary networks in conjunction with the upgrading of smaller communities will be critical to ensuring a functioning infrastructure delivery system. A large-scale upgrading program will invariably put great pressures on a city's primary infrastructure and services networks.

7) Any large-scale program should establish a robust mechanism for monitoring progress and measuring the impact of its interventions. A clearer picture of the true value of upgrading would be garnered with greater efforts to (a) determine baseline data on access to services (both infrastructure and social services such as health and education), on employment, on incomes, etc.; and (b) establish schemes to monitor the impact of upgrading schemes, particularly the social impact.

7.0 CHALLENGES AND PROPOSED NEXT STEPS

It is estimated that US$100 million at today's costs could substantially address basic tertiary infrastructure requirements in Ghana's poor urban communities. Taking into account implementation capacity considerations this could be achieved within 15-20 years. However the need to provide for off-site infrastructure (primary and secondary) requirements to serve existing communities as well as to address urban growth must also be considered.

Given the success of the upgrading projects to date, the next urban project agreed upon by the Government of Ghana and the World Bank should focus on upgrading infrastructure in the majority of infrastructure-deficient poor communities in greater Accra together with the critical primary

infrastructure necessary to serve it. This new *Urban Upgrading Project* could lead to a national upgrading program covering all cities and towns in Ghana.

In addition to the upgrading of low-income communities in the established areas of Ghana's cities and towns, a major challenge facing Ghana's central and local government officials, traditional leaders and communities will be how to deal with the growing peri-urban settlements. These areas, which house many very high-income as well as low-income residents, are largely unserviced but contribute little to the provision and upkeep of either basic lifeline services or to citywide facilities. Responsibility for these areas remains weak and unclear.

Annex A

Country and City – Basic Data

Ref	Country-Ghana	Data
1	Area	239,000sq. km
2	Population	18 million approx.
3	Urban Population	6.7 million approx.
4	Population Living Below Poverty Line	5.6 million approx.
5	Popn without safe water & sanitation	40 percent approx.
6	Capital City	Accra
7	Number of Cities	5
8	Number of Towns	36
9	Number of Urban Settlements	185
10	Number of Local Governments (Assemblies)	110
9	GDP per capita	300
	Accra	
1	Area	
2	Population	2.2 million approx.

Annex B

Bibliography of Key Documents Studied

Ref	Report/Doc. Title	Author	Date	Content Summary
1	Staff Appraisal Report-Accra District Rehabilitation Project	World Bank	Jan. 1984	Describes the first Bank supported upgrading component in Ghana
2	Staff Appraisal Report-Priority Works Project	World Bank	Dec. 1987	Describes the second Bank supported upgrading component in Ghana
3	Staff Appraisal Report-Urban II Project	World Bank	May 1990	Describes the third Bank supported upgrading component in Ghana
4	Strengthening Local Initiative and Build Local Capacity-Sector Study	World Bank	Oct. 1992	To support decentralization, the clarification of roles, the identification of priorities including infrastructure
5	Urban Development Strategy Review	World Bank	Sept. 1994	A strategy to address economic, poverty, capacity building and environmental dimensions of urban development in Ghana
6	Staff Appraisal Report-Urban Environmental Sanitation Project	World Bank	Mar 1996	Describes the most recent Bank supported upgrading component in Ghana
7	Various reports by The Consortium, the planning and design consultants for UESP upgrading component	The Consortium	1995 to 1999	Details of the planning, design, procurement, implementation of the UESP upgrading component
8	Facilities and management Plans for all 7 UESP communities	The Consortium	1996 to 1997	Set out what is to be done in communities and who is to do what and general agreements
9	Urban II Preparatory Studies- Accra Residential and Market Upgrading Study Reports	Bidex Consult et al	1991	Results of identification and surveys of Accra's low-income communities

Annex C

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Annex D

Summary of Upgrading Typologies (All countries in SSA)

	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.	

(continued on next page)

4	Integrated Infrastructure without cost recovery (INCRNT)	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 (SNCRNT)	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