SIERRA LEONE

Public Expenditure Review for Water and Sanitation 2002 to 2009

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Abbreviations and Acronyms

ACF  Action Contre Faim (NGO)
CLTS  Community-led Total Sanitation
DRID  Department for International Development
(Department for International Development)
DHS  Demographic and Health Survey
DSDP Decentralized Service Delivery Project
EC  European Commission
ECA  Economic Commission for Africa
EHA  Environmental Health Assistant
EHD  Environmental Health Division
FCC  Freetown City Council
FWSC  Freetown Water and Sewerage Company
GBAA  Government Budgeting and Accountability Act
GDP  Gross Domestic Product
HIPC  Highly Indebted Poor Countries
IDB  Islamic Development Bank
IFMIS Integrated Financial Management Information System
JICA  Japanese Investment Cooperation Agency
JMP  Joint Monitoring Program (UNICEF/WHO)
LC  Local Council
LGFD  Local Government Finance Division
M&E  Monitoring and Evaluation
MDAs Ministries, Departments, and Agencies
MDG  Millennium Development Goal
MEWR  Ministry of Energy and Water Resources
MEYS  Ministry of Education, Youth and Sports
MHS  Ministry of Health and Sanitation
MIALGRD Ministry of Internal Affairs, Local Government, and Rural Development
MICS  Multi Indicator Cluster Survey
MOFED Ministry of Finance and Economic Development
MTEF  Medium-Term Expenditure Framework
NGO  Non-Governmental Organization
NRA  National Revenue Authority
PER  Public Expenditure Review
PFM  Public Financial Management
PRSP  Poverty Reduction Strategy Paper
SALWACO  Sierra Leone Water Company
TA  Technical Assistance
UK  United Kingdom
UN  United Nations
UNDP  United Nations Development Program
UNICEF  United Nations International Children’s Fund
WATSAN  Water, Sanitation
WHO  World Health Organization
WSD  Water Supply Division, Ministry of Energy and Water Resources
WSS  Water Supply and Sanitation

Currency Equivalents
(Exchange Rate Effective as of April 4, 2010)

Currency Unit = Leone
US$1.00 = Le 4,000
Fiscal Year: January 1 – December 31
This report was written by a team consisting of Meike van Ginneken (Task Team Leader), Anthony Bennett (Public Financial Management Consultant), and Darrell Thompson (Water and Sanitation Consultant). Joachim Boko (Consultant) contributed to the analysis, specifically benchmarking Sierra Leone to other countries in Africa. This review was financed by the Water Partnership Program. In Sierra Leone, many officers and sources were extremely helpful, in particular, Dr Eng Yassin M’shana (DFID consultant to the Ministry of Energy and Water Resources), Wusum Koroma, (Director, Ministry of Energy and Water Resources, Water Services Division), and Francis Moijue (Executive Engineer, Ministry of Energy and Water Resources, Water Services Division), and Thomas Amara (Manager of Environmental Health in the Ministry of Health and Sanitation). The team would also like to thank peer reviewers including Mike Webster, Waqar Haider, Cyrus Talabi, Diego Rodriguez, and Kwabena Amankwah-Ayeh.
This review focuses on how public expenditure translates into the delivery of water supply and sanitation services in rural and urban areas in Sierra Leone. It describes the legal and institutional framework for the allocation of resources, assesses access to WSS services and past sector performance, and analyzes public expenditure in the sector, including the factors affecting the efficiency of use of resources, and makes recommendations.

Water supply includes the supply, distribution, and usage of water for drinking, food preparation, and hygiene. Sanitation is defined as the sanitary disposal of liquid waste and the promotion of hygienic practices.

The review covers the period from 2002 to 2009, a period of reconstructing after a decade of upheavals. Since 2002, democracy and a stable environment for development have been re-established in the country, especially since the 2007 presidential elections. Sierra Leone remains one of the poorest countries in the world.

Access to Water and Sanitation Remains Low

Access to improved water sources and adequate sanitation hardly improved from 2002 to 2008. In 2008, 50 percent of the population had access to potable water and 13 percent had access to improved sanitation. Sierra Leone is unlikely to reach the Millennium Development Goal (MDG) targets on halving the number of people without access to improved water sources and sanitation by 2015.

Urban water utilities have not kept up with rapid population growth during the period of civil unrest. Urban areas are better served than rural one, with more than 80 percent of urban dwellers having access to improved water sources. In Freetown, 38 percent of properties have house connections, in addition to over 500 stand posts. From 2002 to 2009, revenue collection of the Guma Valley Water Company (GVWC) (responsible for water provision in Freetown) covered 61 percent of total expenditures. From 2005 to 2009, only 11 percent of the water produced by GVWC was paid for because of low billing and collection ratios. The Sierra Leone Water Company (SALWACO) provides services to a small percentage of the population in a number of secondary towns, while most households get water from dug wells, which are often unprotected.

Access to rural water supply was 35 percent in 2008 and has not improved very much over the period of the review. Protected dug wells and public tap/standpipes are the main access sources for rural dwellers. More than 40 percent of the rural population draws their drinking water from surface water, exposing them to health threats.

In 2008, only 26 percent of the urban population had improved (not shared) sanitation facilities, mainly pit latrines with slab. Urban sanitation has suffered from a lack of prioritization and a lack of clear assignment of responsibilities. Under the Local Government Act, urban sanitation is devolved to Freetown City Council (FCC) and the various city councils in the provinces. However, the corresponding personnel and budgets have been retained by central agencies.

Access to sanitation in rural areas was approximately 6 percent between 2000 and 2008. The responsibility for sanitation is devolved to local councils, with the Water and Sanitation Unit of the Ministry of Health and Sanitation undertaking hygiene education programs and training District Sanitary Inspectors. The Water and Sanitation Unit lacks institutional capacity. Few local councils have a dedicated sanitation department or another well defined leader in the subsector.
A Changing Policy Environment and Uncompleted Decentralization

Changes in the national water supply and sanitation (WSS) policy in Sierra Leone have resulted in frequent shifts in responsibilities and lack of capacity. Institutional changes have mostly followed political changes. The challenge going forward will be to fully implement the current policies while sorting out the (limited) inconsistencies with other pieces of legislation. It will be important that the sector has adequate time for implementation, to build capacity, and to align funding to responsibilities.

The devolution of water supply responsibilities as prescribed in the 2004 Local Government Act has not been implemented due to lack of capacity in the local council administrations, resistance of central ministries, and inconsistencies among various laws. With the ongoing decentralization process, further institutional reforms are foreseen in the framework of the new National Water and Sanitation Policy (NWSP) and the Local Government Act, with more responsibilities being devolved to local governments which should play an increasing role in water supply and sanitation service delivery.

The 2007 National Water and Sanitation Policy (NWSP) provides a basis to improve services, although the responsibility for sanitation is not well-defined. This review confirms that NWSP can provide a basis to consolidate the sector framework. Responsibilities for water supply are defined, but responsibilities for sanitation are dispersed and are not well-defined, and there is no corresponding lead agency for sanitation.

Expenditure Does not Cover Investment Needs

Over the period 2002–2009, total sector expenditure was US$50 million over eight years, or US$6 million per year. Public expenditure on WSS represented 1.8 percent of total public expenditure and equaled 0.2 percent of Gross Domestic Product. Both of those percentages are comparable to the average for sub-Saharan African countries.

Investment needs to reach the MDGs far exceed the current level of public expenditure in Sierra Leone. Estimates differ widely with regard to what investment is needed to achieve the national targets for access to water and sanitation by 2015 vary between US$195.5 million (Water and Sanitation Program Country Status Overview) and US$520 million (DFID/UNICEF WASH project). Even without taking into account the need to finance recurrent investments, current public expenditure only covers between 10 and 25 percent of these investment needs.

The vast majority of sector spending is for water supply with only a small percentage (<10%) allocated to sanitation. Financing to rural water supply is estimated at approximately sixty percent of public expenditure in the review period—nearly all of it from donors. Due to limited data availability, spatial allocation of public expenditures could not be analyzed.

Since 2006, the Ministry of Finance and Economic Development (MOFED) has made small grants to district councils for rural water supply, but these transfers have been unpredictable and have fallen short of budgets. These transfers represent two percent of public expenditures in the sector between 2006 and 2009. Funding has been negotiated annually depending on total government resources. Transfers have been delayed as local councils failed to meet release conditions. The execution rate of transfers is 71 percent. There are indications that local councils have not always used tied grants for WSS expenditures.

The Majority of Funds Come from Donors

Four fifths of public expenditure in the period 2002–2009 was financed by external donor financing, with the share of donor spending decreasing in recent years. This level of donor dependency is in line with other Sub-Saharan countries. WSS expenditures funded from external sources peaked in 2006. Spending from internal resources has varied between $0.6 million and $1.7 million a year. While a considerable part of internal financing has gone to recurrent expenditures, donor resources were mainly used to fund capital spending. Most internal sources went to urban areas, while donor financing was more focused on rural areas.

Many households have invested their own money to construct on-site facilities (e.g. dug wells and pit latrines) that account for the vast majority of current access. Cost recovery from households for network services has not covered operating costs. There is no formal private
sector financing in the WSS sector and data on expenditures by informal private providers are not available.

**Budget Execution is Lower than in other Sub-Saharan Countries**

Average budget execution for the Consolidated Budget for 2002 to 2009 is 39.4 percent. The execution ratio of external resources and trend cannot be calculated due to data limitations. Execution rates have been lower in the water and sanitation sector than in other priority and poverty reduction sectors in Sierra Leone. The budget execution rate for water and sanitation is below the execution rate in other Sub-Saharan countries, which averages approximately 60%.

The low execution rate of the planned WSS budget is not in line with government policy to protect ‘poverty reducing’ or ‘pro-poor’ spending from budget cuts. All WSS spending was included in the definition of poverty reducing expenditure during the 2002 HIPC (Highly Indebted Poor Countries) Decision Point discussions. Nevertheless, these expenditures have not been protected; rather the reverse happened. In 2007, expenditures on poverty reducing programs reached only 57 percent of the budgeted amount while all other spending reached 72 percent of the budgeted amount.

Issues at various points of budget execution cause unpredictable delays and is damaging progress in the sector. Delays in the release of funds occur from both the government and donors. Lack of capacity in line ministries and local councils limits sector ex ante project appraisal and ex post project evaluation. Another major cause of delay is lack of procurement skills and project management capacity, both in budget agencies and in the private sector. Expenditure arrears are significant across government departments but the amount of WSS arrears is not known. The unpredictability and delays in the budget chain cause cost overruns and discourage providers from bidding for government contracts.

**The Way Forward – Focus on Implementation**

Maintaining current access rates have absorbed a large part of public expenditure because of population growth and relocation, rehabilitation needs of crumbling infrastructure, and lack of cost recovery. Between 1990 and 2015, Sierra Leone’s population is expected to increase by 80 percent, from four million to seven million. Just maintaining the same access rate would require provision of access to water supplies for 1.6 million additional people and to sanitation for 0.4 million additional people. Further, the years of conflict have resulted in the destruction of many facilities and caused large groups of population to move, which means that they need services in different places than before. In urban areas, during the period of civil unrest, water supply facilities have not kept up with rapid urbanization. Years of conflict and neglect of maintenance have caused infrastructure to crumble. As a result, part of public expenditure has to be used to ensure that current levels of services are continued. The lack of cost recovery means that part of public expenditure is used to cover recurrent costs.

Progress in the water and sanitation sector in the coming years will require action on multiple fronts taking into account the limited financial, human and technical capacities of the Government of Sierra Leone. The challenges of rapidly improving water and sanitation services are enormous compared to the available resources. However, recent progress on public financial management systems, as well as sector policies and legislation, provide a good basis for the coming years.

The challenge for the water and sanitation sector in Sierra Leone is to break the current status quo and to move to a reformed sector. The clarification of the institutional framework for public expenditures in the sector is a pre-condition for sharper focus in funding allocations.

Recommendations of this review focus on implementing existing policy frameworks rather than inventing new strategies:

- Improved monitoring and evaluation
- A sharper focus in the allocation of funding
- Improved governmental capacity to use its funds more efficiently
- More and better donor financing

**Improved Monitoring is Required for Better Allocation and Implementation**

Accountability, better allocation, and achieving efficiency in sector performance require well-functioning systems for monitoring and evaluation. This means building reporting systems that measure the efficacy and efficiency
expenditure in achieving measurable outcomes in terms of access, quality, and sustainability of services. Evaluations could provide valuable information on what works and what does not, and provide information for the design of future programs.

**Better measurement and monitoring starts with standardizing definitions.** This review was complicated by some inconsistencies in the way that different agencies measure and report performance. Standardization of definitions will require the development input forms, templates, and standard output reports.

The Integrated Financial Management Information System (IFMIS) should be fully implemented. Much progress has been made in a relatively short amount of time, but there is still room for improvement.

**A Sharper Focus on the Allocation of Funding to Extend Services to the Unserved**

Water and sanitation expenditures should be better protected from budget cuts as they are considered ‘poverty reducing’ or ‘pro-poor’ spending.

A more explicit allocation of resources, including choices between rural and urban services and water supply and sanitation, would improve service delivery. For water supply, the greatest needs are in rural areas, and transfers to local councils for rural water supply could be increased from their current levels. This should go hand in hand with decreasing central ministerial budgets as responsibilities are devolved. While sanitation facilities might be largely financed by households in the coming years, public financing for sanitation marketing and hygiene education provides high returns on investment. With a revised focus for resource allocations, a lead agency for sanitation could be chosen, capacities built, and budget provided.

Freeing public resources will require increasing cost recovery from those who can pay. Promoting better maintenance of existing assets can reduce the need for rehabilitation. The sector cannot develop sustainably without the wealthy paying for their services so public resources can be targeted to the poor. Low utility tariffs are a major issue. However, before making changes to the tariffs, utilities should address their low billing and collection ratios. Promoting better maintenance of existing assets can reduce allocation of spending to rehabilitation and thus increase the budget available for extending access.

**Improved Capacity of the Government to Use its Funds More Efficiently**

Capacities in WSS project cycle management should be developed at different levels of government, including procurement, disbursement, and auditing functions. Better planned projects and improved procurements will decrease the number of abandoned works and reduce delays. Increasing capacities in project appraisal and implementation will improve budget absorption capacities at different levels of government. Project estimates should integrate capital construction costs, rehabilitation costs, and operating and maintenance costs, since they all have to be funded. Capacity problems are especially urgent in local government authorities.

**More and Better Donor Financing to Increase Results**

Donors should follow the Government of Sierra Leone’s (GoSL) leadership and commitment to the sector. Donor funding is critical to supplement the internal resources already flowing into the sector, as WSS funding needs cannot be met by the government alone. Donor funding commitments for the coming years are a good start.

Donor harmonization and pooling of resources can improve efficiency of funding and optimize the use of limited GoSL capacities. Donors should increase the speed and predictability of the release of funds. Pooling resources is likely to be most effective when it is combined with measures that generate the economies of scale of such pooling through harmonization of procurement, disbursement, and monitoring procedures, and coordination of the different donor contributions. As a first step, development partners should consider forming a sector donor group to harmonize their approaches and monitoring and evaluation impacts.
1. Introduction

Sierra Leone, a West African country located between Liberia and Guinea, has a total population of 5.8 million, growing at an annual rate of 2.3 percent. Of this, 38 percent lives in urban areas, defined as communities of more than 2,000. The country covers a total of 71,740 square kilometers.

Sierra Leone is reconstructing after a decade of upheavals, but social indicators are still very low. Over the past years (and especially during 1990–2002) Sierra Leone suffered from political upheavals and a brutal civil war accompanied by displacement of millions of people and widespread destruction of infrastructure. Since 2002, democracy and a stable environment for development have been re-established in the country, especially since the 2007 presidential elections. But Sierra Leone is still one of the poorest countries in the world. According to the UNDP’s Human Development Index, it was ranked 180 out of 182 countries in 2009. Life expectancy at birth is 47 years, among the five lowest in the world. Gross domestic product (in purchase power parity) was $809 per capita in 2009; again among the lowest in the world. In 2007, 48 percent of Sierra Leoneans were living below the poverty line.

The purpose of this Public Expenditure Review (PER) is to gain insights into how public expenditure translates into actual delivery of water and sanitation services in rural and urban areas in Sierra Leone. The review covers the period 2002 to 2009. It describes the legal and institutional framework for the allocation of resources, assesses access to WSS services and past sector performance, and analyzes public expenditure in the sector, including the factors affecting the efficiency of use of resources, and makes recommendations.

This review covers water supply and sanitation. Water supply is defined as the supply, distribution, and usage of water for drinking, food preparation, and hygiene. Sanitation is defined as the sanitary disposal of liquid waste and the promotion of hygienic practices. Solid waste management is not included in this review. The review does not cover water resource management, including hydro-power, industrial, agricultural, and recreational uses of water, and river basin management.

1 In some cases where the mandate of agencies responsible for sanitation covers liquid and solid waste inseparably, solid waste expenditure has been included—his is specified in the text.
1.1 Methodology and Data

This PER combines a review of literature and government documents with interviews and consultations with sector actors. The methodology started with a desk review. The team then worked in Sierra Leone March 14–27, 2010, interviewing stakeholders and officials from central government agencies, three service providers, and six development partners, and collecting data. The PER team visited a sample of three city councils (CC) (Bo CC, Kenema CC, and Makeni CC), and three district councils (DC) (Bo DC, Kenema DC, and Bombali DC) and met some senior administrators, councilors, SALWACO staff, staff from the Ministry of Energy and Water Resources, Water Supply Division (MEWR-WSD), Freetown City Council, and the Local Government Finance Division (LGFD) of the Ministry of Finance and Economic Development. Further information collection continued until the first draft report was issued in November, 2010. The report went through two rounds of reviews within the World Bank, and additional work was done during the reviews to incorporate the comments received. A list of people interviewed is attached in Annex 5. A bibliography is attached as Annex 6.

The methodology aims to be comprehensive in the sense that it tries to cover relevant budgetary and non-budgetary sources of water sector spending. Budget and expenditure estimates are recorded in nominal terms for the period from 2002 to 2009. Some of the more detailed breakdowns are not available for the years prior to introduction of the Integrated Financial Management Information System (IFMIS) in 2005. IFMIS data have been preferred to LGFD or Local Council (LC) data, as these are the basis for the official public accounts. Data from before 2005 are provided where appropriate. The IFMIS is not yet fully used which makes identification of WSS expenditures problematic. The expenditure analysis includes three programs that can be directly identified with WSS in the IFMIS.

The Development Assistance Database (DAD) has been used to obtain donor data from 2004 onwards. The DAD is an on-line, open access database, managed by the Development Assistance Coordination Office in MOFED. The DAD captures commitments and expenditure fairly completely, although with some classification issues. The DAD has been collecting aid data irrespective of project management arrangements since 2004. It is believed to be fairly complete in recent years, at least up to 2008, though 2009 entries may not be complete. This database counts water and sanitation as a single sector. However, some WSS expenditure is classified under other functional categories e.g. the World Bank Power and Water project is categorized under Infrastructure. Where necessary, donor data were obtained directly from the respective donor agency country offices.

Public expenditure breakdown by subsector has been tricky. Some expenditure (such as subsidies to SALWACO) could easily be identified as water supply. However, some projects cover both water supply and sanitation and cannot be easily identified by subsector.

The comparison of actual expenditure with budget forecasts is plagued by data gaps and discrepancies that have not been resolved. Only execution rates of government spending from internal resources could be analyzed. With regard to external funding, budget figures are incomplete. The proportion that is on budget is not known. Actual expenditures from external funds are entirely omitted from the Public Accounts. In the DAD, there are no data on donor project funding before the database was set up in 2004, and attempts to obtain missing data direct from donor offices were only partially successful.

Overall, the data collection process raised a number of methodological issues that were addressed as carefully as possible. First, data availability and quality dictate to a large extent what type of analysis of budget allocation and expenditure can be conducted. Second, it was important to avoid double-counting of transfers from central government to parastatals and sub-nationals by careful matching-up of the accounts. This was especially critical as the period from 2005 to 2009 was a transitional period in which water supply and sanitation was officially devolved to local councils, but remained de facto very centralized. Special care was paid to indicate the quality of data and to avoid a false sense of precision.

Notwithstanding these efforts, it is important to note the data limitations in Sierra Leone, a fragile state with limited government capacity. The period covered in this public expenditure review follows the end of a devastating decade-long war in 2002. The period was also characterized by a number of subsequent reforms, both in the water supply sector and in public financial management.
1.2 Reading this Report

The rest of this report is structured as follows:

- Chapter 2 of this report describes the setting of the water and sanitation sector. It consists of a review of the sector strategy, the legal and institutional framework and the roles and responsibilities of various government institutions.

- Chapter 3 covers the performance of the water and sanitation sector. It looks into the level of access to improved water sources and sanitation facilities, as well as to sector performance in various subsectors.

- Chapter 4 identifies and classifies sector expenditures. It looks into how much is being spent and from which sources, the allocation of spending by subsector and area, as well as the efficiency of spending. It benchmarks public expenditure in WSS to that in other African countries and compares current expenditure to investment needs.

- Chapter 5 examines budget execution and analyzes the various parts of the budget execution chain to explore the obstacles for better budget allocation and execution.

- Finally, Chapter 6 sets out the conclusions and recommendations coming from the analysis and answers the question of how public expenditure can translate into better water and sanitation services in Sierra Leone.
Sierra Leone has ample fresh water resources but low access to potable water and sanitation services. Average annual rainfall ranges between 5000 mm in Freetown (the capital, on the coast) and 2500 mm in the North East. The wet season is from May to October, and the dry season from November to April. Total actual renewable water resources per inhabitant were estimated at 30,960 cubic meters per year in 2004. However, as in many other sub-Saharan African countries, access to improved water and sanitation services is very low. Indicators on water supply in Sierra Leone reveal that in 2008, 50.5 percent of the total population had access to improved drinking water; 81.3 percent in urban areas, only 35.2 percent in rural areas. Access to improved sanitation facilities is limited to 26 percent in urban areas and to 6.5 percent in rural areas.

The drinking water and sanitation sector is a relatively small water user in Sierra Leone. There is no recent data on water use in Sierra Leone. However, a study done by Food and Agriculture Organization (FAO) indicated that the total water withdrawal in 2000 was near 380 million cubic meters. Of this, use in agriculture through irrigation accounted for 93 percent, domestic consumption for 5 percent, and industrial use for 2 percent.

Increasing access to safe water supply and adequate hygiene and sanitation services can reduce morbidity and mortality rate, especially among children. Diseases transmitted through water and excrement are the second leading cause of death among children worldwide. According to the World Health Organization, improved water supply reduces diarrhea morbidity by between 6 and 25 percent, while improved sanitation reduces this morbidity by 32 percent. Lack of access to water and sanitation causes loss in productivity due to illness and malnutrition. Deaths from diarrhea related to poor water and sanitation quality represent 15 percent of all deaths among children under 5-year in developing countries. Diarrheal diseases caused by lack of water, sanitation, and hygiene leads to 16 200 deaths per year in Sierra Leone, and accounts for 12 percent of the burden of disease in the country.

2. Sector Background

The Millennium Development Goals (MDGs) for water and sanitation are as follows:

Halve by 2015 the percentage of people without sustainable access to improved water supply, taking 1990 as the base year. In 1990, 52 percent of the population (then just under 4 million) did not have access to safe drinking water. So the target for Sierra Leone is to reduce this to 26 percent, or to provide 74 percent of the population access to improved water supply, by 2015.

Halve by 2015 the percentage of people without sustainable access to improved sanitation, taking 1990 as the base year. In 1990, 87 percent of the population of Sierra Leone did not have improved sanitation. As such, the target is to reduce this to 43.5 percent, or to provide access to improved sanitation to 56.5 percent of the population by 2015.

The successive Poverty Reduction Strategies (PRSP I and PRSP II) recognize the importance of water supply and

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2. Sector Background

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2 FAO. Aquastat 2005: Sierra Leone Country profile.
4 http://www.who.int/quantifying_ehimpacts/national/countryprofile/sierraleone.pdf
sanitation. It is clearly recognized that water and sanitation are of prime importance for economic development and for the country to reach most of the MDGs. The national goals are expressed in Vision 2025 and the Second Poverty Reduction Strategy Paper—Agenda for Change—2008–2012. The PRSP says:

The water and sanitation sector is important, as the provision of adequate and sustainable water and sanitation services are central to any poverty reduction strategy. Targets set under the previous PRSP were not met, while the main issues of limited capacity, a lack of consistent water resources data, sector programming and a comprehensive M&E framework remain. Sierra Leone faces increasing challenges of water sector management, as a consequence of the lack of water policy, organized legal, regulatory and institutional frameworks and deficiency in both urban and rural water supply. The objective of the government is to ensure an integrated and effective management of water resources in order to increase access to basic water and sanitation services. In the medium term emphasis will be laid on water resources management and the provision of adequate water and sanitation facilities.

The national WSS policy has changed several times over the period of this PER following political changes. In 2005, a WSS policy and an implementation plan were developed out of the Poverty Reduction Strategy Paper process and two national consultative forums in September 2004 and February 2005. Following the change of government in August 2007, the policy statement was superseded by the National Water and Sanitation Policy (NWSP), issued by the Ministry of Energy and Power in 2008. The 2008 WASH (Water, Sanitation and Hygiene) strategy was prepared with stakeholder participation and aimed for greater alignment with the Vision 2025, PRSP objectives and the MDGs. Following a Cabinet reshuffle in 2009, the incoming Minister of Energy and Water Resources commissioned a fresh examination of the Policy statement. A re-edited version, dated March 2010, is expected to be submitted soon for Cabinet and Parliamentary approval.

The National Water and Sanitation Policy includes national targets for water and sanitation. The NWSP adopts the MDG target to provide access to improved water supply to 74 percent of the population by 2015. For sanitation, the National Water and Sanitation Policy sets a target of providing 66 percent of the population with ‘adequate’ sanitation by 2015, as defined in the Policy. The objectives of the Policy include:

- To develop a comprehensive framework for management of water resources and sustainable development of water supply and sanitation services within an effective legal and institutional framework.
- To address cross-sectoral interests in water resources through integrated and participatory approaches in the planning, development, and management of the water resources.
- To improve the provision of safe water supplies and sanitation facilities in urban and rural areas through a coordinated approach.
- To ensure stakeholder participation in the management of water resources and in the planning, construction, ownership, operation and maintenance of community based domestic water supply schemes in rural areas.
- To put in place implementation strategies for sustainable development and management of water resources in the gradual changing role of the government from a major service provider to that of coordinator, policy, and guideline formulator.

2.2 Legal framework

A number of laws regulate the provision of water supply and sanitation services in Sierra Leone. The most important are:

- The Water (Control and Supply) Act, 1963, provides for all water in declared supply areas to be owned by the government. The Act established the Water Supply Division of the Ministry of Energy and Power in 2008. The 2008 WASH (Water, Sanitation and Hygiene) strategy was prepared with stakeholder participation and aimed for greater alignment with the Vision 2025, PRSP objectives and the MDGs. Following a Cabinet reshuffle in 2009, the incoming Minister of Energy and Water Resources commissioned a fresh examination of the Policy statement. A re-edited version, dated March 2010, is expected to be submitted soon for Cabinet and Parliamentary approval.
- The Public Health Ordinance, 1960, which created the Environmental Health Division of the Ministry of Health and Sanitation to oversee sanitation services.
- The Guma Valley Water Act, 1961, which established the GVWC to supply water to Freetown.
- The Forestry Regulation Act, 2001, which created Forest Reserves to protect water sources and catchment areas.

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6 The NWSP definition of ‘adequate’ sanitation includes shared improved facilities, contrary to the MDG definition of ‘improved’ sanitation that excludes all shared facilities (see Chapter 3).
2.3 Roles and Responsibilities

Responsibilities for various activities in WSS frequently shift and formal responsibilities are not always carried out for lack of funds, technical capacity, or political will. From 1963 to 2001, the WSD was responsible for all water supplies outside Freetown. A Rural Water Supply Unit was established within the Division in 1981. Provincial urban water supply responsibility was transferred to the Sierra Leone Water Company (SALWACO) in 2001. Responsibility for water supply was officially decentralized to local governments under the Local Government Act in 2004, although implementation of the LGA has been slow.

The Ministry of Energy and Water Resources is the overall authority and lead government institution on all water and water-related issues. It is responsible for the formulation of water policies, and their implementation, monitoring and evaluation, including drinking water for both urban and rural populations. It is also responsible for sector coordination, cross-sectoral planning, and sourcing funds for water projects. In the future, it will implement the proposed Water Resource Management Act and provide the secretariat to the National Water Resources Board.

Water supply in urban areas is provided by two public utilities. The Guma Valley Water Company (GVWC) in Freetown was established in 1961. The company was scheduled for privatization under the National Commission for Privatization Act, 2002 but this has not happened. Sierra Leone Water Company was established in 2001 to provide water supply to other communities of 5,000 or more. However, in practice it only provides limited services in a few towns.

Responsibilities for rural water supply are in flux due to ongoing decentralization. Over time, the ongoing decentralization process in the country may significantly impact the provision of rural water services, but it has been slow to date.

Responsibilities for sanitation are dispersed and not well defined. The current institutional framework creates confusion over whether sanitation responsibility should fall under the MHS, Environmental Protection Agency, the ministry responsible for Local Government, or MEWR (National Policy, paragraph 1.7.2). The Water Supply Division in MEWR is responsible for maintenance of the sewerage system in Freetown, while the responsibility for liquid waste management in Freetown (pit latrines and septic tanks) lies with Freetown City Council (FCC).

The devolution of water supply responsibilities as prescribed in the 2004 Local Government Act has not been implemented due to lack of capacity in the local councils, resistance of central ministries, and inconsistencies between various laws. It is worth noting that at this point of time, none of the scheduled WSS activities have been devolved to the local councils. Central agencies such as SALWACO, WSD, and MHS-EHD are decentralized and maintain a presence in each district. Additionally, the inconsistencies between the Local Government Act and other legislation have undermined the devolution process.

Further institutional reforms are foreseen under the National Water and Sanitation Policy. The WSD will become a Water Department and implement the new mandate of MEWR. Responsibility for delivery of services will be moved to the two operating companies, and the regulatory function will move to the proposed Regulatory Authority. The Water Department will have sections for: (i) policy, research

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8 This differs from the definition by Statistics SL (population> 2,000), and could lead to inconsistencies in the planning and monitoring data.
and planning; (ii) urban water supply and sewerage; (iii) rural water supply; and (iv) water resource management.

Donor agencies play an important role in the WSS sector and do not always fully align with GoSL policies. Almost all donors are signatories to the 2005 Paris Declaration on Aid Effectiveness and the 2008 Accra Agenda for Action. In the earlier years of this review, donors pursued their own agendas in WSS in the absence of a clear national strategy and program. The introduction of the National Water and Sanitation Policy provides a framework for harmonization. However, this is still work in progress. Indeed, under the Sierra Leone Aid Policy, the key objective is to assert GoSL leadership in aid coordination, harmonization, and alignment in order to ensure that aid is used effectively in the pursuit of government priorities, to strengthen the institutions of the state, and in a way that promotes an effective division of labor among donors.9

Non-Governmental Organizations (NGOs) play an important role in WSS service provision in rural areas, though there is no aggregated data on their activities. There are many NGOs active in the water and sanitation sector in Sierra Leone. They include Oxfam GB, GOAL/SL, Concern Worldwide, Action Contre la Faim (ACF), Action Aid, Catholic Relief Services and PLAN Sierra Leone, several of which have participated in Community-Led Total Sanitation programs and other water supply and sanitation initiatives.

The domestic private sector in the sector consists almost entirely of small-scale enterprises. There is no formal private sector participation in the water supply sector in Sierra Leone but many households get their water supply from small scale providers (e.g. carts, vendors) that either get their water from a utility network or directly from a source (private borehole, surface water source). Small scale providers also play a role in the sanitation sector, including masons that built latrines and companies that empty sludge from pits and septic tanks.

This chapter first discusses access to improved water sources (paragraph 3.1) and the performance of Sierra Leone’s urban and rural water supply sector (paragraph 3.2 and 3.3). It then continues to discuss access to sanitation (paragraph 3.4). It ends with a discussion on urban and rural sanitation sector performance (paragraph 3.5 and 3.6).

3.1 Access to Improved Water Sources

Access to improved drinking water sources has fluctuated between 47 percent and 57 percent in the period under review (2002–2009). These fluctuations are mostly caused by differences in measurement techniques. For instance, the drop between the MICS2 survey (54 percent access in 2000) and the MICS3 survey (47 percent in 2005) has been attributed to better trained enumerators and better access to certain areas, leading to more accurate data than had been collected before. Improved water sources are defined as those relatively free of disease-causing pathogens and include: piped water into dwelling/yard/plot, public taps/standpipes, boreholes or tube wells, protected dug wells, protected springs, and rain water.

Access to improved water sources is considerably higher in urban areas than in rural areas. The 2008 Demographic and Health Survey (DHS) found that 81.3 percent of urban households get their water from improved sources while in the rural areas the figure is 35.1 percent (see Table 2. Data are in line with the MICS3 data from 2005). Only 7.1 percent of households in Sierra Leone have a water connection on their premises.

Approximately 40 percent of the population in rural areas gets their drinking water from an unprotected surface water source. In some parts of the country, for example in Kenema in the east, water is taken from streams originating at high elevations, which is generally of good quality. By contrast, in the south eastern region of the country where the topography is relatively flat, water often comes from polluted rivers or from standing pools. This puts the rural population at a high exposure to waterborne diseases such as cholera and typhoid. People in rural areas spent more time on getting water than urban dwellers (see Table 3).

Water quality is a problem—mainly due to bacteriological contamination—but data are scarce. A country wide study in 2008 on water quality funded by UNICEF showed that wells were more susceptible to bacterial contamination than boreholes and protected springs. It comes as no surprise that every year just after the start of the rains there is an outbreak of diarrhea-related diseases in many parts of the country. Borehole water samples show high concentration of metals such as manganese and iron. There is no regular or routine testing of public water supply, except in Freetown where the Guma Valley Water Company (GVWC) tests its own supply but no bacteriological testing is performed. There is a

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Data source</td>
<td>Statistics SL</td>
<td>MICS2</td>
<td>SOWC</td>
<td>Census</td>
<td>MICS3</td>
<td>DHS</td>
</tr>
<tr>
<td>Use of improved water sources</td>
<td>35</td>
<td>54</td>
<td>57</td>
<td>53</td>
<td>47</td>
<td>50</td>
</tr>
</tbody>
</table>

Sources: Statistics SL, MICS2, SOWC, 2004 census, MICS3, 2008 DHS.
Table 2: Use of Type of Water Facilities in Sierra Leone (percentage of population)

<table>
<thead>
<tr>
<th>Source of drinking water</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved source</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piped water into dwelling/yard/plot</td>
<td>19.3</td>
<td>1.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Public tap/standpipe</td>
<td>24.3</td>
<td>6.9</td>
<td>12.7</td>
</tr>
<tr>
<td>Tube well or borehole</td>
<td>5.9</td>
<td>6.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Protected dug well</td>
<td>30.1</td>
<td>19.9</td>
<td>23.3</td>
</tr>
<tr>
<td>Protected spring</td>
<td>1.6</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Total Improved Source</td>
<td>81.3</td>
<td>35.1</td>
<td>50.3</td>
</tr>
<tr>
<td>Non-improved source</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unprotected dug wells</td>
<td>10.8</td>
<td>15.1</td>
<td>13.7</td>
</tr>
<tr>
<td>Unprotected spring</td>
<td>2.8</td>
<td>9.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Tanker truck/cart with small tank</td>
<td>0.1</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Surface water</td>
<td>4.3</td>
<td>40.1</td>
<td>28.3</td>
</tr>
<tr>
<td>Bottled water, improved source for cooking/washing</td>
<td>0.4</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Bottled water, non-improved source for cooking/washing*</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Non-improved source</td>
<td>18.0</td>
<td>64.6</td>
<td>49.2</td>
</tr>
<tr>
<td>Missing</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>


* Because the quality of bottled water is not known, households using bottled water for drinking are classified as using improved or non-improved source according to their water source for cooking and washing.

Table 3: Time to Obtain Drinking Water (round trip) (percentage of population)

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water on premises</td>
<td>30.7</td>
<td>4.5</td>
<td>13.1</td>
</tr>
<tr>
<td>Less than 30 minutes</td>
<td>33.0</td>
<td>58.5</td>
<td>50.1</td>
</tr>
<tr>
<td>30 minutes or longer</td>
<td>32.0</td>
<td>28.2</td>
<td>29.5</td>
</tr>
<tr>
<td>Percentage using an appropriate treatment method</td>
<td>16.1</td>
<td>4.2</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Source: DHS 2008.

National access figures hide large regional differences. The West Region, which includes Freetown, has long been favored in economic development and has higher access to services than the rest of the country (see Figure 1). The bias towards Freetown can also be seen in the analysis of public expenditure.

Sierra Leone is unlikely to reach the MDG target on halving the number of people without access to improved water sources by 2015. A steep acceleration in providing additional people with access to water services will be required to reach the MDG target of providing 74 percent of the population with access to improved water in 2015 (see Figure 2). The large access gap between rural and urban areas implies that much effort has to go into improving access in the rural areas. Further, it should be noted that many of the urban water supply systems are in a serious state of
3.2 Urban Water Supply Sector Performance

Two utility companies provide water supply and sanitation services in urban areas in Sierra Leone: the Guma Valley Water Company (GVWC) and the Sierra Leone Water Company (SALWACO).

3.2.1 Guma Valley Water Company

Water supply facilities have not kept up with rapid population growth during the period of civil unrest. In the capital city of Freetown, 38 percent of properties have house connections. In addition, the Guma Valley Water Company has over 500 stand posts in Freetown. Almost no customers get a 24-hour supply. The average daily output of the Guma Dam (18 million gallons/day) does not meet all the demands of the population in the city. In 2006, the rains were late and the reservoir was practically emptied. Climate change is likely to increase rainfall variability.

Over the period from 2002 to 2009, actual revenue collection of the Guma Valley Water Company covered only 61 percent of total expenditures. GVWC is a registered company that maintains its accounts on an accrual basis, and submits annual audited accounts in accordance with international standards. Its financial policy is to be self-sustaining through water tariffs and it receives no GoSL subsidy. However, over the years GVWC has failed to be financially viable; its revenue is severely reduced by low billing and non-payment of bills, combined with low tariffs. GVWC data show that for the period from 2006 to 2009, only 10 percent of the water produced was paid for (see Table 4). The cash shortfall was made up by World Bank loans, of which Le 47.4 billion (US$16 million) were written off in 2007. For more information on GVWC see Annex 2.

The billing ratio has improved from under 10 percent in 2006 to 30 percent in 2009. Although billing has improved, 70 percent of water produced is still not billed (see Figure 3). It is not possible to separate out the losses due to leakages, theft and non-billing from company records. In 2008, leakages were estimated at 45 percent of the distribution input. Stand posts in Freetown provide water for free. Earlier payment systems (e.g. levy of water rates on all households within 100 yards of a stand post, monthly payment cards costing Le 1,500 (US$0.55) per month) was abandoned in 2006. Only 2,000–3,000 out of 18,000 have functioning meters and are billed on usage while the rest are billed monthly on a fixed tariff.

Freetown tariffs are only a quarter of tariffs for similar urban water supplies in West Africa. The domestic tariff in October 2006 is shown below (Table 5).

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Table 4: Guma Valley Water Company Efficiency (in millions liters)

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water production</td>
<td>34,504</td>
<td>29,631</td>
<td>27,267</td>
<td>26,321</td>
</tr>
<tr>
<td>Loss by leakages, theft, and non-billing</td>
<td>31,713</td>
<td>24,921</td>
<td>19,102</td>
<td>18,520</td>
</tr>
<tr>
<td>Water billed (million liters)</td>
<td>2,791</td>
<td>4,710</td>
<td>8,165</td>
<td>7,801</td>
</tr>
<tr>
<td>Water billed (US$000)</td>
<td>3,100</td>
<td>4,900</td>
<td>4,500</td>
<td>3,600</td>
</tr>
<tr>
<td>Bill collections (US$000)</td>
<td>1,800</td>
<td>2,200</td>
<td>2,300</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Source: GVWC management reports.
Note: Figures on losses and consumption are not reliable. No figures are available for the years 2002–2005. Note that these figures do not agree with the financial summary from the audited accounts (Annex 2).

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Sources: Statistics SL, MICS2, SOWC, 2004 census, MICS3, 2008 DHS.

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Only half of the amounts billed are collected due to a culture of non-payment. At the close of 2009, arrears were almost Le 9 billion (US$3 million). An analysis as of December 2008 showed that arrears by residential customers comprised 30 percent, by commercial/industrial customers comprised 57 percent, by government, 12 percent, and by other institutions, 1 percent. GVWC is trying to improve its bills collection from government institutions by presenting unpaid bills directly to MOFED for direct payment out of the ministries’ budget allocations.

3.2.2 Sierra Leone Water Company (SALWACO)

SALWACO provides services to a small percentage of the population in a number of secondary towns while most households get water from dug wells, which are often unprotected. SALWACO is caught in a vicious circle of low payment and bad services. Householders are unwilling to pay for bad services, which are due, in turn, to irregular power supply to the pumps and the high cost of generator fuel for a low customer base. As a consequence, the utility cannot invest in improving services. This problem is particularly severe in those systems that require pumping, such as in the town of Bo. In other towns (e.g. Kenema and Makeni) supply is gravity fed and operating costs are lower. Tariffs are universal across the country. Coverage varies from 1.5 percent (Bo) to 14.9 percent (Lungi) (see Table 6).

SALWACO has been under nearly constant reform ever since its establishment in 2001. SALWACO was established in 2001 as a statutory body under MEWR. During its first few years, management was contracted out. A Board of Directors was established in December 2006 and a Director General recruited in May 2007. Since then, an organiza-

### Table 5: Freetown Domestic Water Tariffs, October 2006 (US$)

<table>
<thead>
<tr>
<th>Monthly demand charge, on size of connection</th>
<th>½”</th>
<th>¾”</th>
<th>1”</th>
<th>&gt;1”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly volume charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–9.09 m³</td>
<td>0.10/m³</td>
<td>0.12/m³</td>
<td>0.19/m³</td>
<td>0.24/m³</td>
</tr>
<tr>
<td>9.09–13.64 m³</td>
<td>0.12/m³</td>
<td>0.15/m³</td>
<td>0.20/m³</td>
<td>0.26/m³</td>
</tr>
<tr>
<td>13.64–27.28 m³</td>
<td>0.15/m³</td>
<td>0.19/m³</td>
<td>0.24/m³</td>
<td>0.30/m³</td>
</tr>
<tr>
<td>27.28+</td>
<td>0.24/m³</td>
<td>0.30/m³</td>
<td>0.36/m³</td>
<td>0.43/m³</td>
</tr>
<tr>
<td>Energy-related surcharge – by area</td>
<td>from $0.04–$0.12/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GVWC.

### Table 6: SALWACO Performance in Provincial Towns, 2008

<table>
<thead>
<tr>
<th>Town</th>
<th>Number of houses</th>
<th>Number of functioning house connections</th>
<th>% houses connected</th>
<th>Number of stand posts</th>
<th>Number of stand posts working</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bo</td>
<td>8,012</td>
<td>122</td>
<td>1.5%</td>
<td>20</td>
<td>Nil</td>
</tr>
<tr>
<td>Kenema</td>
<td>8,000</td>
<td>850</td>
<td>10.6%</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Makeni</td>
<td>3,932</td>
<td>141</td>
<td>3.6%</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Lungi</td>
<td>2,350</td>
<td>350</td>
<td>14.9%</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>Koidu/New Sembelun</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Kabala</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22,294</td>
<td>1,463</td>
<td>6.6%</td>
<td>84</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: SALWACO.
tional structure and salary structure have been established, procedures and manuals have been written, assets and liabilities have been inventoried, and the accounts and audit brought up to date. Of a total staff of 178, 126 are decentralized to the regional offices in Bo, Kenema, Makeni and Lungi.\textsuperscript{12}

3.3 Rural Water Supply Sector Performance

Progress in rural areas has been obstructed because of the slow decentralization of responsibilities and resources to local councils. The WSD has a decentralized structure with about 160 staff decentralized to 13 district councils to provide technical support to local councils. The district staff report to the MEWR head office in Freetown, not to their respective councils. Both the LGA and the NWSP envisage the discontinuation of WSD operations in the districts. This implies the transfer of their operational personnel and budget to local councils. It is not expected that SALWACO and the Environmental Health Division (EHD) will devolve their functions or personnel.

There are various guidelines on the construction of wells and latrines. The WSD-MEWR has a drawing of a typical well and the Ministry of Health and Sanitation (MHS) produced in 2009 guidelines for the construction of wells and latrines. SALWACO has its own guidelines. The National Policy refers to the need to get stakeholders to agree on the basic level of service for rural water supply in terms of per capita consumption, maximum distance of water points, and persons served per outlet.

Changing responsibilities and weak accountability have hindered effective rural water supply service delivery. From 1963 to 2001, the WSD was responsible for all water supplies outside Freetown. A Rural Water Supply Unit was established within the Division in 1981. Rural water supplies were devolved under the Local Government Act, 2004. However, local governments were not provided with the human or financial resources to take up their new responsibilities. WSD provides technical support to the local councils through a decentralized structure with about 160 staff, including 80 technical staff, decentralized to 13 district councils.

SALWACO has constructed rural water supply facilities in the past years as the implementing agency for the rural WSS sub-component of the World Bank Power and Water project, despite its lack of a formal mandate. As of February 2010, 120 boreholes had been completed with hand pumps (against a target of 200) and 145 hand-dug wells (out of 430). The completed facilities will provide safe water to about 150,000 rural people in the towns of Bo, Bombali, Kenema, and Tonkolili. An independent review found many shortcomings in the work done, and contracts were suspended pending correction of faults.

3.4 Use of Improved Sanitation Facilities

Access to improved sanitation is low but changes in definitions make it impossible to observe trends over time. In 2008, only just over ten percent of households in Sierra Leone had access to improved, not shared sanitation facilities. An improved sanitation facility is one that hygienically separates human excreta from human contact. The main change in definition over time has been the inclusion or exclusion of shared facilities. For instance, 29 percent of the improved sanitation reported in the MICS3 survey refers to shared facilities (See Table 7). This follows the NWSP definition of ‘adequate’ sanitation, which is described as the provision and maintenance of systems or facilities of disposing of human excreta, waste water, and household refuse, which are acceptable and affordable to the Sierra Leone communities. This definition includes shared facilities where the technology is acceptable. The 2008 DHS survey followed the UNICEF/WHO Joint Monitoring Program (JMP) definition of improved sanitation that excludes shared facilities of any type. These disparities among definitions of access make it impossible to determine change over time.

<table>
<thead>
<tr>
<th>Table 7: Access to Sanitation (in percentage of population)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data source</strong></td>
</tr>
<tr>
<td>Statistics SL</td>
</tr>
<tr>
<td>MICS2</td>
</tr>
<tr>
<td>SOWC</td>
</tr>
<tr>
<td>MICS3</td>
</tr>
<tr>
<td>DHS</td>
</tr>
</tbody>
</table>

Sources: Statistics SL, MICS2, SOWC, MICS3, and DHS.

\textsuperscript{12} Philip Lansana (August 2008) An Overview of SALWACO.
Access to sanitation is nearly non-existent in rural areas, while one quarter of urban dwellers has access to improved sanitary facilities. In urban areas, 26.1 percent of the population has access to improved sanitation. Only 0.1 percent of Sierra Leoneans are connected to the only sewage system in the country—an approximately 4 kilometer-long system serving the Freetown Central Business District. Others are served by on-site facilities, such as flush toilet to septic tank or pit latrine or just pit latrines. Only 6.5 percent of the rural population has access to improved sanitation. This is of great concern, especially as 30.1 percent are practicing open defecation. Poor sanitation and lack of hygienic practices greatly increase the risk of infection by water borne diseases (See Table 8).

There are huge regional disparities in access to sanitation. According to the MICS3 survey (which includes shared facilities), the highest percentage of the population using sanitary means of excreta disposal is the Western region, at 71 percent, while the lowest was the Eastern region, at 20 percent (Figure 4).

### Table 8: Sanitation Access by Type of Facility in 2008 (in percentage of population)

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved, not shared</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flush/pour flush to</td>
<td>0.3</td>
<td>0</td>
<td>0.1</td>
</tr>
<tr>
<td>piped sewer system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flush/pour flush to</td>
<td>8.0</td>
<td>0.1</td>
<td>2.7</td>
</tr>
<tr>
<td>septic tank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flush/pour flush to</td>
<td>1.3</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>pit latrine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilated improved</td>
<td>6.5</td>
<td>2.3</td>
<td>3.7</td>
</tr>
<tr>
<td>(VIP) latrine</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Pit latrine with slab  | 10.0  | 4.1   | 6.0   | Total improved, not shared facility 26.1 6.5 13.0

<table>
<thead>
<tr>
<th>Non-improved facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any facility shared</td>
</tr>
<tr>
<td>with other households</td>
</tr>
<tr>
<td>Flush/pour flush not</td>
</tr>
<tr>
<td>to sewer/septic tank/pit</td>
</tr>
<tr>
<td>latrine</td>
</tr>
<tr>
<td>Pit latrine without</td>
</tr>
<tr>
<td>slabs/open pit</td>
</tr>
<tr>
<td>Bucket</td>
</tr>
<tr>
<td>Hanging toilet/hanging</td>
</tr>
<tr>
<td>latrine</td>
</tr>
<tr>
<td>No facility/bush/field/stream/river</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Non-improved facility</td>
</tr>
</tbody>
</table>

Source: DHS 2008.

**Figure 4: Type of Household Sanitation Facility Used, by Region** (% of households, includes shared facilities)

Despite measurement issues, it is clear that Sierra Leone will meet neither the MDG sanitation target nor the national sanitation target by 2015. The difference in definition between ‘adequate’ sanitation (NWSP—including shared facilities) and ‘improved’ sanitation (JMP—excluding shared facilities) and the changes in measurements for the various household surveys, together make it hard to exactly define how big the gap is to achieve national and international standards. However, Sierra Leone is not on track to reach the sanitation targets under either of these definitions.

**Figure 5: Trend in Access to Sanitation and Trendline to Reach MDG and National Target** (in percentage of population)

Sources: Statistics SL, MICS2. SDNC. MICS3, and DHS.
3.5 Urban Sanitation Sector Performance

In 2008, only 26 percent of the urban population had improved (not shared) facilities, mainly pit latrines with slab. The only sewerage network service in the country is a short length of sewer in downtown Freetown for which no one takes responsibility. Non-network services consist of sludge removal. The Freetown City Council, the Army, and Police each have vehicles for desludging septic tanks and latrines. Apart from these, there are two or three commercial operators within the City of Freetown. These tend to serve mainly commercial, institutional and the more affluent domestic properties because of high demand. The vehicles are second-hand and suffer frequent breakdowns by lack of spare parts. Charges range from US$50 – US$100, depending on the size of pits and distance from the sludge disposal site. There is only one site for faecal sludge disposal in Freetown, located at Kingtom near the solid waste disposal site. The existing sludge disposal facilities consist of two parallel lagoons designed for intermittent operation. The site is, however, in need of complete renovation or reconstruction. The majority of latrines are cleared manually as many pits are unlined and prone to collapse if mechanical equipment is used. Emptying is usually done by small unregulated groups. Sludge removed is buried within the owner’s compound. This could pose significant health or environmental hazard especially in the event of flooding.

Urban sanitation has suffered from a lack of prioritization and a lack of clear assignment of responsibilities. Until recently, sanitation was not a popular subject at any level and tended to be identified with the removal of solid waste, with little attention to liquid waste. In addition, there has been confusion on whether responsibility should fall under the Ministry of Health, Environment Commission, local government, or the Ministry responsible for water. Under the Local Government Act, urban sanitation is devolved to the Freetown City Council and the various city councils in the provinces. However, the corresponding personnel and budgets have been retained by central agencies. The existing capacity and skills, though inadequate, have not been devolved. The lack of organizational clarity is matched by a lack of performance data for this subsector.

3.6 Rural Sanitation Sector Performance

Besides the households themselves, the Environmental Health Division (EHD) of the Ministry of Health and Sanitation (MHS) is the main sanitation service provider. It consists of a number of units, including the Housing and Vector Control Unit, which undertakes inspections of houses and compounds with regard to maintenance of latrines and elimination of mosquito breeding grounds. There is also a Water and Sanitation Unit, which undertakes hygiene education programs and trains District Sanitary Inspectors, who are responsible for monitoring outbreaks of disease and taking preventive measures. The Unit is responsible also for water quality testing, but lacks capacity. The EHD also fields Environmental Health Assistants (EHA) at 178 Community Health Centers. At present, there are 135 EHAs in post, though the National Health Sector Strategic Plan 2010–2105 estimated the need for EHAs at some 300.

Despite MHS’ overall responsibility for sanitation and devolution to the LCs, safe excreta disposal has been relatively neglected. District Health Departments preach good hygiene but do not enable it, nor is there any central government grant for this purpose. Sanitation is still seen in terms of garbage disposal and a purely urban need. As such, few LCs, if any, have a Sanitation Department. The solid waste grant which is provided to each of the LCs by the central government is actually managed in various ways: by the Health Department, Health Committee, District Medical Officer, District Health Management Team or Environmental Health Officer. Some LCs, such as in Bo, Kono, and Koinadugu, have WATSAN Committees at the district level. Although it has no mandate in rural areas, SALWACO has constructed rural sanitation facilities in the past years as an implementing agency for the rural WSS sub-component of the World Bank Power and Water project. To date, 84 institutional latrines for schools, hospitals and markets have been completed (out of a target of 100) and 2,000 household latrines (out of 2,240). These have provided adequate sanitation facilities to 40,200 people (against a target of 50,000). Community training had been given to 569 persons against a target of 630.

It is too early to measure results of the Community-Led Total Sanitation (CLTS) approach that the government adopted for rural areas in 2008, with support from UNICEF and NGOs. Communities are sensitized to the need for good sanitation and encouraged to build their own latrines. This approach is based on affordability.
by individual household and avoids subsidies, which have proven ineffective and unsustainable. The program targets whole communities, promoting the need for full community participation in initiating latrine construction, use and maintenance in addition to good hygiene practices such as hand washing. The development and use of local materials in the construction of pit latrines is also encouraged. The approach is supported by the 2008–2012 PRSP. Started in 2008, after one year 442 communities were declared open defecation-free. However, it is too early to tell whether these results can be scaled up and are sustainable over time.
4. Public Expenditure on Water and Sanitation

This chapter inventories budgeted and actual expenditure on water and sanitation (paragraph 4.1 and 4.2). A distinction is made between internal and external resources (paragraph 4.3). Paragraph 4.4 analyzes the allocation of public expenditure on water and sanitation. This includes looking at how much is being spent in rural areas and in urban areas, on water supply and on sanitation, on recurrent costs and on capital expenditure. The chapter closes by putting public expenditure on water and sanitation in Sierra Leone in a broader perspective, benchmarking it to other African countries (paragraph 4.5) and by comparing it to investment needs to achieve the MDGs (paragraph 4.6).

4.1 How Much is Budgeted for Water and Sanitation?

Total GoSL WSS sector budget was US$24.9 million over eight years, or about US$3 million per year. These figures include the central government Consolidated Fund (CF) managed by the Accountant General. Over 80 percent of the budget is allocated to MEWR Water Services Department (see Table 9).

The Integrated Financial Management Information System (IFMIS) is not yet fully utilized which makes identification of WSS expenditures problematic. The IFMIS classifies expenditures by chief ministry, department, or agency (MDAs), division of an MDA, program (mainly organisational unit within a division), source of funds, district (where expenditures can be identified with particular districts), and object code (economic classification). There is also room in the accounts code for a classification according to the categories used in the PRSP, but this is not yet in use for budget execution.

The expenditure analysis includes three programs that can be directly identified with WSS in the IFMIS. The IFMIS categories included are:

13 From June 2005. Before then the Accountant General operated the Financial Management and Accounting System, which classified expenditures by division, program and object, but not by district or source of funds.

<table>
<thead>
<tr>
<th>Table 9: GoSL Budget for the Water and Sanitation Sector between 2002 and 2009 (in Le million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget line</td>
</tr>
<tr>
<td>MEWR Water Services Department, code 406-0002</td>
</tr>
<tr>
<td>MOFED Rural Water Services Grant to Local Councils, code 701-2019</td>
</tr>
<tr>
<td>MHS Environmental Health (Sanit) &amp; Entomology, code 304-2005</td>
</tr>
<tr>
<td>TOTAL in million Leones</td>
</tr>
<tr>
<td>In US$ (000)</td>
</tr>
</tbody>
</table>

MEWR Water Services Department, code 406-0002
MOFED Rural Water Services Grant to Local Councils, code 701-2019
MHS Environmental Health (Sanitation) & Entomology, code 304-2005

The expenditure analysis excludes cross-sectoral programs for which WSS expenditures cannot be defined. WSS expenditures cannot be identified in these divisions/programs and have not been represented in the expenditure analysis. The following divisions or programs (that include a relatively small number of activities relating to WSS) have not been taken into account:

- Ministry of Youth, Education, and Sports (MEYS) Primary, Secondary, and Tertiary Education, which include expenditures on construction/rehabilitation of WSS facilities in schools and other educational institutions
- Ministry of Health and Sanitation, Primary, Secondary and Tertiary Health Care, which include expenditures on construction/rehabilitation of WSS facilities in clinics and hospitals
- Sierra Leone Environmental Protection Agency
- Ministry of Mineral Resources, part of Geological Surveys Division 403-02
- Ministry of Internal Affairs, Local Government, and Rural Development (MIALGRD), part of Community Development Directorate 107-00
- Ministry of Lands, Country Planning and the Environment, part of Surveys and Lands program 306-0003
- Ministry of Agriculture and Food Security, part of Land and Water Development Division 401-04

- Ministry of Transport and Aviation, part of Meteorological Services program, 404-0202

4.2 How Much is being Spent?

Total sector expenditure was US$51 million over eight years, or US$6 million per year. These figures include the central government Consolidated Fund managed by the Accountant General, funds provided by donor agencies under agreements to which GoSL is a signatory, and expenditures from local councils from their own revenues. General government spending on WSS has been increasing since 2002 in absolute value.

Public expenditure on WSS 2002–2009 represented 2.4 percent of total public expenditure and 0.2 percent of gross domestic product. As Table 10 shows, expenditure on WSS as a share of total government expenditure peaked in 2006 and has since stabilized at around 2.0 percent. As a share of GDP, WSS expenditure peaked also in 2006 and has since stabilized at around 0.2 percent (Figure 6).

4.3 Sources of Funding

From 2002 to 2009, approximately 81 percent of WSS expenditures were funded from external sources. The Consolidated Fund15 funded about 19 percent of all sector

---

### Table 10: Public Expenditure in Water and Sanitation Sector between 2002 and 2009 (in Le million)

<table>
<thead>
<tr>
<th>Expenditure category</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEWR</td>
<td>3,597</td>
<td>3,554</td>
<td>3,954</td>
<td>1,911</td>
<td>2,124</td>
<td>1,492</td>
<td>2,471</td>
<td>3,535</td>
<td>22,638</td>
</tr>
<tr>
<td>MHS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>214</td>
<td>253</td>
<td>438</td>
<td></td>
<td>905</td>
</tr>
<tr>
<td>Local council expenditure*</td>
<td>214</td>
<td>253</td>
<td>438</td>
<td>700</td>
<td>82</td>
<td>785</td>
<td>787</td>
<td></td>
<td>2,354</td>
</tr>
<tr>
<td>Total internal resources</td>
<td>3,597</td>
<td>3,554</td>
<td>3,954</td>
<td>1,911</td>
<td>2,824</td>
<td>1,787</td>
<td>3,509</td>
<td>4,760</td>
<td>25,897</td>
</tr>
<tr>
<td>External resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td></td>
<td></td>
<td>4,670</td>
<td>15,852</td>
<td>38,587</td>
<td>24,426</td>
<td>18,553</td>
<td>22,564</td>
<td>124,651</td>
</tr>
<tr>
<td>TOTAL WSS (in million Leones)</td>
<td>3,597</td>
<td>3,554</td>
<td>8,624</td>
<td>17,763</td>
<td>41,410</td>
<td>26,214</td>
<td>22,062</td>
<td>27,324</td>
<td>150,561</td>
</tr>
<tr>
<td>TOTAL WSS (in US$000)</td>
<td>$1,713</td>
<td>$1,516</td>
<td>$3,193</td>
<td>$6,147</td>
<td>$13,873</td>
<td>$8,782</td>
<td>$7,401</td>
<td>$8,036</td>
<td>$50,768</td>
</tr>
</tbody>
</table>

Sources: Government accounts, Development Assistance Database and donor country offices.

* Actual expenditure by local councils. Since 2006, MOFED has made small grants to the 13 district councils for rural water supply. However, the expenditure of local councils on water and sanitation does not always equal the amounts of transfers provided.

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14 This Division includes units for water and sanitation (education and sensitization only), vector control and compound inspection, and medical waste disposal.
15 The Consolidated budget includes budget support received from donors.
spending with grants to local governments representing less than two percent of all sector spending. Since 2007, the trend has been an increasing national share, rising to 18 percent in 2009, based on provisional data (see Figure 7).

Government allocations to WSS have increased over time. Government priorities, as expressed in Medium-Term Expenditure Frameworks (MTEFs) and annual budgets, have not always been followed. However, there is a clear trend to increased allocations and expenditure on water and sanitation since 2007. While it was below US$ 1 million before 2007, government expenditure reached US$ 1.4 million in 2009. The MTEF 2010–2012 indicates a continued climb in internal resources.

WSS expenditures funded from external sources peaked in 2006. Donor spending in the sector has sharply grown between 2003 and 2006 from almost nothing to US$ 13 million in 2006. After that, as the country became more stable, donor funding was significantly reduced. On average, donor spending in the sector has been close to six million a year. All donor funding has been grants, except for a World Bank credit to GVWC. This could not be repaid and the World Bank provided a $15.9 million debt relief to GVWC. It is too early to tell whether the drop in donor financing between 2007 and 2009 is indicative of a long-term trend, or whether it is an anomaly. Significant forward commitments have been made by some donors.

DFID was the largest donor for the period under review, followed by the World Bank and UNICEF. Ten donors provided significant sector financing to Sierra Leone in this period, either through the GoSL or through NGOs (see Figure 8).

Figure 6: Water and Sanitation Sector Weight in Total Public Expenditure and GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>% of total expenditure</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>2003</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>2004</td>
<td>1.6</td>
<td>0.1</td>
</tr>
<tr>
<td>2005</td>
<td>2.9</td>
<td>0.2</td>
</tr>
<tr>
<td>2006</td>
<td>4.5</td>
<td>0.4</td>
</tr>
<tr>
<td>2007</td>
<td>3.3</td>
<td>0.2</td>
</tr>
<tr>
<td>2008</td>
<td>2.0</td>
<td>0.2</td>
</tr>
<tr>
<td>2009</td>
<td>1.9</td>
<td>0.2</td>
</tr>
</tbody>
</table>


Figure 7: Donor Spending and Government Spending between 2002 and 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Government spending (US$ thousands)</th>
<th>Donor spending (US$ thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1,713.4</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>1,515.7</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>1,463.9</td>
<td>1,728.9</td>
</tr>
<tr>
<td>2005</td>
<td>651.3</td>
<td>5,485.2</td>
</tr>
<tr>
<td>2006</td>
<td>953.5</td>
<td>13,027.3</td>
</tr>
<tr>
<td>2007</td>
<td>598.8</td>
<td>6,223.7</td>
</tr>
<tr>
<td>2008</td>
<td>1177.4</td>
<td>7,401.1</td>
</tr>
<tr>
<td>2009</td>
<td>1339.9</td>
<td>8,036.4</td>
</tr>
</tbody>
</table>

Private Sector Financing and Cost Recovery

Cost recovery from household network services has not covered operating costs. Over the eight years 2002–2009, GVWC collected US$30.7 million from Freetown customers, and SALWACO collected US$0.7 million in other towns. These amounts covered only part of their costs (see paragraph 3.2.1 above). Going forward, the NWSP (sec. 3.2.10) states that tariffs will be adjusted to recover operating costs, and mechanisms established to ensure timely payment of water bills. However, increasing tariffs, billing, and collection at the same time might be politically unattainable. In rural areas, donor agencies have generally constructed water and sanitation facilities without cost recovery.

However, household investments in on-site services are considerable. Considerably more households in urban areas report having access to water supply in household surveys than the number of household connections by GVWC and SALWACO. This reflects the fact that many households have dug wells or built other water facilities using their own resources. For sanitation, households have also made investments in pit latrines and septic tanks—which account for the vast majority of current access.

There is no formal private sector financing in the WSS sector and data on expenditures by informal private providers are not available. The NWSP envisages private sector participation (PSP) in development and provision of WSS services, particularly in Freetown. However, given the current operating losses of GVWC, private operators will probably only step forward if tariffs are increased or government subsidies are provided. Even then it would be more likely that a PSP arrangement in Freetown would focus on bringing private know-how rather than private capital, for instance through a management contract or an affermage.

4.4 How is Spending Allocated?

Despite data problems, it is clear that water supply receives the vast majority of sector spending, with only a small percentage (less than 10%) allocated to sanitation. While some expenditures could easily be identified as water supply, others cover both water supply and sanitation and cannot be easily identified by subsector. This comes as no surprise as the sanitation sector is dominated by household on-site facilities (latrines, septic tanks) which are generally financed from household expenditure. Sewerage and wastewater treatment (normally financed from public budgets) are virtually non-existent. Unlike the water supply subsector, for which leadership and coordination responsibilities are unambiguously attached to the Ministry of Energy and Water Supply, fragmented responsibilities and lack of clear leadership among different ministries characterizes the sanitation subsector, which may partly explain why so little funding went to the subsector. It was not possible to further classify WSS expenses by functional categories.16

Approximately sixty percent of public expenditure in the review period was targeted at rural water supply, nearly all of it from donors. Local council transfers for rural water supply represented less than eight percent of the Consolidated Fund WSS budget and less than two percent of total public expenditure (combined internal and external resources). A part of the Consolidated Budget spent by MEWR and MHS will have been spent on rural water supply, although it is impossible to determine exactly how much. However, the total MEWR and MHS budget accounts for only a few percentage points of the Consolidated Budget. At least

16 WSS cuts across three COFOG functions and six sub-functions as follows (705 Environmental protection, including 7051 Waste management; 7052 Waste water management; 7053 Pollution abatement; 706 Housing and community amenities including 7062 Community development and 7063 Water supply, and 707 Health, including 7074 Public health services)
60 percent of donor financing was targeted at rural areas during the review period.\footnote{Due to limited data availability, spatial allocation of public expenditures could not be analyzed.} However, there are good indications that most of the water supply subsector funding went to urban areas covered by SALWACO and GVWC. Per capita public expenditure is higher in the Western Region, likely because Freetown is located there.

Grants to SALWACO fund provincial town water supplies and account for 76 percent of Consolidated Fund expenditures for 2005–2009. Approximately 20 percent of the Consolidated Funds expenditure is on salaries. GVWC (which supplies water in Freetown) has not been funded from the CF. Subsidies from the CF were mainly used to cover operating losses rather than being targeted at network expansion. Donor financing was not biased towards urban areas but generally followed population spread between urban and rural areas.

Most internal resources went toward recurrent expenditures, while most donor financing went toward capital expenditure,\footnote{Approximately 20 percent of the Consolidated Funds expenditure is on salaries. GVWC (which supplies water in Freetown) has not been funded from the CF. Subsidies from the CF were mainly used to cover operating losses rather than being targeted at network expansion. Donor financing was not biased towards urban areas but generally followed population spread between urban and rural areas.} which means that approximately 80 percent of total WSS expenditures went toward capital expenditure. For internal resources, public spending analysis is only possible for the years 2006 to 2009. For these years only one percent of expenditures could be identified as capital expenditure, while the overwhelming portion of expenditures could be identified as recurrent. For external resources, no data are available the split between recurrent and capital expenditures. However, given that most donor policies exclude funding for recurrent expenditures, one can assume that most external funding went to capital. While an 80–20 split between capital and recurrent expenditures is not unreasonable, the de facto division between internal resources for recurrent expenditure and external resources for capital expenditure leaves the country WSS capital base vulnerable to changes in available donor resources.

### 4.5 Benchmarking WSS Public Expenditures in Sierra Leone

#### 4.5.1 Benchmarking WSS Sector to other Priority Sectors

Public expenditures on water and sanitation is considerably lower than that in other priority sectors, but internal financing resources has been relatively stable. Along with expanding basic education, health, and affordable housing for the poor, increasing access to water and sanitation facilities is among the GoSL’s development priorities, as expressed in the 2005 poverty reduction strategy paper. While public spending on education and health sectors has been substantial over the review period, the share of public resources spent on water supply and sanitation remained relatively low. Figure 9 compares public expenditure on WSS to that on health. Public expenditure on health between 2003 and 2008, as a share of GDP, was on average seven times the public expenditure on water and sanitation. However, while health expenditure has fluctuated a lot, WSS expenditure has been relatively stable.

**Execution rates have been lower in the water and sanitation sector than in other priority and poverty reduction sectors.** A comparison of spending efficiency in the WSS sector to that in all poverty reducing sectors shows that execution rates have been lower for WSS than for poverty reduction sectors.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure9}
\caption{Public Expenditure in WSS Sector as Compared to the Health Sector}
\end{figure}

#### Table 1: WSS Expenditures Compared to Health Expenditures

<table>
<thead>
<tr>
<th>Year</th>
<th>Health Expenditures</th>
<th>WSS Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>2003</td>
<td>2.3</td>
<td>0.1</td>
</tr>
<tr>
<td>2004</td>
<td>1.5</td>
<td>0.1</td>
</tr>
<tr>
<td>2005</td>
<td>1.9</td>
<td>0.2</td>
</tr>
<tr>
<td>2006</td>
<td>1.5</td>
<td>0.4</td>
</tr>
<tr>
<td>2007</td>
<td>0.9</td>
<td>0.2</td>
</tr>
<tr>
<td>2008</td>
<td>1.3</td>
<td>0.2</td>
</tr>
</tbody>
</table>


\footnote{The 60 percent includes an unknown amount of sanitation financing. Another 25 percent of donor financing was identified as urban WSS, while 15 percent could not be identified.}

\footnote{Though the Government Budgeting and Accountability Act, 2005, requires integrated budgeting and accounting (recurrent and development together), this has not yet been achieved, as donor agencies are unable to report project expenditures in the IFMIS classification, which includes GFS-compliant economic and functional classifications. This issue is being addressed in the Integrated Public Financial Management (PFM) Reform Program.}
reducing spending as a whole in every year except 2004 (see Table 11). Disbursement rates for the overall GoSL budget were high, with disbursement of over 100 percent for years 2004 and 2005, and of 95 percent for 2006.

### 4.5.2 Benchmarking Sierra Leone to other African Countries

Public expenditure on WSS in Sierra Leone as a percentage of GDP is comparable to other sub-Saharan African countries. Public expenditure in the Sierra Leone water and sanitation sector was compared with other countries for which comparable WSS public expenditure reviews were also conducted, including Togo, Republic of Congo, Democratic Republic of Congo, Tanzania, Central African Republic and Mozambique (Figure 10). Public expenditure on WSS in Sierra Leone as a percentage of total government expenditure was also about the average for sub-Saharan Africa.

**Figure 10: WSS Public Expenditures in Selected African Countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>Water Supply and Sanitation</th>
<th>Priority Poverty Reducing Sectors</th>
<th>Overall budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central African Rep.</td>
<td>0.15</td>
<td>0.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>0.8</td>
<td>1.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Togo</td>
<td>0.2</td>
<td>0.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.4</td>
<td>0.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Democ. Rep. of Congo</td>
<td>0.2</td>
<td>0.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>0.2</td>
<td>0.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Mozambique</td>
<td>0.6</td>
<td>1.1</td>
<td>3.1</td>
</tr>
</tbody>
</table>

**Figure 11: Shares of Internal and External Financing in WSS Expenditures in a few African Countries**

The part of public expenditure (less than 20 percent on average over the period 2002–2008) for water and sanitation in Sierra Leone is financed from internal resources is about the average of the reviewed countries (Figure 11).

**4.5.3 Comparing Public Expenditure in Sierra Leone to Investment Needs**

Investment needs to reach the MDGs far exceed the current level of public expenditure in Sierra Leone. Estimates differ widely with regard to what investment is needed to achieve the MDGs. Investment needs to meet the national...
targets for access to water and sanitation by 2015 vary between US$195.5 million (Water and Sanitation Program Country Status Overview) and US$520 million (DFID/UNICEF WASH project). Using WSP Country Overview assumptions, but including inflation\textsuperscript{19} and gross of household and other non-government investment, the team estimates capital needs, excluding development of new supplies, rehabilitation of old systems, operating and maintenance costs, and capacity building costs, at US$397.6 million (Annex 4), or US$57 million a year. A DFID study has developed an investment plan and financial plan for water and sanitation in Freetown. This totals to US$328.9 million over a period of 10 years, with the Orugu dam taking the lion’s share. These rough estimates translate to an annual investment requirement between US$40 million to US$100 million over a period of five years (from now to 2015). Even without taking into account the need to finance recurrent investments, current public expenditure only covers between 10 and 25 percent of these investment needs.

\textsuperscript{19} Estimates in nominal terms should include inflation (since this also has to be funded). Inflation of domestic prices is partly offset by depreciation of the Leone. In the team’s estimate, a discounted rate of 5 percent per annum has been used.
This chapter examines budget execution (paragraph 5.1). It then analyzes the budget execution chain to explore the obstacles for better budget allocation and execution (paragraph 5.2).

### 5.1 Budget Execution

Average WSS sector budget execution of the consolidated fund stands at 40 percent. In every year in the review period, expenditure fell short of budget, with the biggest shortfalls in 2002, 2005, and 2007 (the latter an election year when GoSL was unable to meet the conditions for budget support and did not get the expected grants from its principal donors.) (see figure 12). Expenditure deviations appear to be driven mainly by resource availability and a desire to protect or augment administrative expenses. However, the trend is towards lower variance. In 2009, budget variance was 42 percent below budget (ie. the budget execution rate was 58 percent). These budget execution rates should be treated with caution because of data gaps, especially on external funding.

![Figure 12: Budget Execution Rates](image)


The budget execution for the grants to local councils was 71 percent over the period from 2006 (initial year) to 2009. This means that the budget execution rate was higher than that of the Consolidated Fund. No trend can be distinguished in budget execution rates for grants to local councils, as they varied from year to year. It should be noted that these grants are very small for now. Though the data are uncertain, local council spending on water and sanitation was 8 percent more than the transfers from the central government over the period.

The budget variance is not in line with government policy to protect ‘poverty reducing’ or ‘pro-poor’ spending from budget cuts. All WSS spending (grants to SALWACO, WSD domestic development expenditure, grants to LCs, and MHS-EHD expenditure, but not the administrative costs of the WSD) were included in the definition of poverty reducing expenditure during the 2002 HIPC Decision Point discussions. Following the re-establishment of local government in 2004, transfers to local councils have been included. Nevertheless, these expenditures have not been protected; rather the reverse. In 2007, expenditures on poverty reducing programs reached only 57 percent of the budgeted amount while all other spending reached 72 percent of the budgeted amount.20 Budget execution did not improve in 2008, as the fourth quarter transfer to local councils was not made. Improvement was seen only in 2009. It has been recommended that transfers to the LCs be made statutory transfers that could be pegged to a share of revenue in the same manner as the transfers to The National Revenue Authority (NRA) or the Road Fund.21

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20 This calculation omits salaries, statutory transfers to NRA and the Road Fund, interest, and externally funded project expenditure.

5.1.1 Transfers to Local Councils
Since 2006, MOFED has made small grants to the 13 district councils for rural water supply. The allocation is based on two criteria: the rural population (60 per cent weight) and the proportion without access to safe water (40 percent weight). During the transition period (2004–2008), the transfer system focused on recurrent non-salary expenditures of the services devolved to the LCs. Devolving salaries and capital expenditure is still an issue.

The transfers to local councils do not equal pre-devolution levels of central government expenditure and central government budgets have not decreased after de jure devolution. The Local Government Act stipulated that from 2004 to 2008, the central government must provide the LCs with tied grants that were sufficient to maintain each service at its pre-devolution standard, and thereafter at “an appropriate standard.” The problem with this statutory obligation has been that the pre-devolution level of expenditure could not be determined, as ministry expenditures are not classified by activity. A more calculable requirement is that annual changes to total grants should be not less than changes to the budgets of the central government. This has not been respected on individual services. Total government expenditure has grown at an average 16.7 percent a year from 2006 to 2009, while the rural water grant has crept up only 4.6 percent per annum over the same period. It is noted that the budget of the central ministry for water (MEWR) has increased rather than decreased since devolution officially started in 2005.

Local council transfers are unpredictable and have fallen short of budgets. Despite the transparency of formula-based allocations, actual transfers to LCs have always fallen short and have been highly variable and unpredictable. Funding varies each year according to the resources allocated to central government functions, and transfers are negotiated annually, also depending on total government resources. Release of each quarter’s transfer is contingent on: (i) sufficiency of overall resources; (ii) protection of this ‘priority’ expenditure against competing claims; and (iii) receipt by LGFD of the LC’s accounts for the previous quarter (and any other fiduciary conditions). Where accounts are late, transfers are delayed. If a transfer is delayed into the following year, there is confusion as to the appropriate period in which it is accounted.

WSS grants are not always used for WSS expenditures. A further disconnect from policy occurs at the LC level, where grants have not always been fully used or have been used for other purposes. The Callen Report comments that the LCs have not actively expressed discontent with the allocations formulae as they may be able to disregard them to some degree. The Report also found that LCs play a very minor role in determining budgeted allocations within sectors.

Going forward, a new donor-funded program to supplement government transfers is multiplying resources going into rural water supply. Starting in the first quarter of 2010, the Decentralized Service Delivery Program (DSDP) transfers directly to LC bank accounts a total of US$6.4 million over two years as a supplement to the rural water supply grant. Grants for education, health, and solid waste management will also be supplemented. Transfers will be made at a set date each quarter irrespective of the timing or amount of GoSL grants, but will use the same formula as for the GoSL grants. These funds will be commingled with GoSL funds, and expended and reported on using LC systems. The only conditions are: (i) expenditures must be within the plans and budgets approved by the Councils and consistent with national strategies/plans; (ii) transfers will depend on prior receipt (by LGFD) of expenditure returns for the previous quarter; and (iii) expenditures must be of a recurrent nature. Though capital investments are excluded, these resources should enable local councils to improve the performance of their existing facilities, and thus contribute to achieving national goals and the MDGs.

5.2 Analysis of Budget Execution Chain
The Government of Sierra Leone has made significant improvements to its public financial management system over the past few years. From 2002 to 2008, many of the public reforms were targeted to the improvement of budget allocation and the budget execution chain. These
reforms were needed as more than a decade of civil war not only destroyed infrastructure but also the human capacities of the government to properly manage its finances. The most significant of these reforms over the period are:

- Enactment of the Local Government Act of 2004 which re-established 19 local councils.
- Enactment of the Public Procurement Act of 2004 replacing a centralized and wasteful procurement system.
- Rolling out of the IFMIS to a number of Ministries, Departments, and Agencies (MDAs).
- Establishment of new institutions such as the National Revenue Authority and Internal Audit Units in MDAs.

Despite the noticeable improvements in the budget execution chain over the past few years, a number of hindering factors continue to impede efficient and effective budget execution. The most significant of them are delays, low project cycle management capacities, and expenditure arrears.

5.2.1 Delays

Unreliable and delayed funding is damaging WSS progress. Progress of WSS development programs, as in other sectors, is delayed by unreliable and delayed donor and government funding. Even though substantial improvements were noted in the budget execution chain, MDAs usually experienced delays and uncertainties with the timing and overall availability of funds for non-salary expenditures. Delays in the approval of the budget by the Parliament hampered planning and timely spending on sector strategic objectives. Over the review period, it was only in 2006 (for the 2007–2009 MTEF) that the budget was approved on time. For the other years, budget approval what granted by Parliament only in the second quarter, which restricted spending abilities of MDAs. Donor practices are also of significant hindrance to budget execution in GoSL in general, and in the water and sanitation sector in particular. Over the review period, there was significant volatility in donor disbursements, which decrease the ability of MDAs to spend. This is damaging to project efficiency and to contractor relations. Costs rise with inflation and with stop-start resource management. Cost overruns are frequent in works contracts. Donor funding (replenishment of special accounts) typically goes through a dozen signatures before funds are transferred and can take over a month, as few signatories delegate their responsibilities while they are away.26 Delays in counterpart funding also result in project slowdowns. Budgets tend to underestimate counterpart funding requirements. In addition, budgeted revenues and grants often fall short so that budgeted counterpart funds cannot be provided. This can trigger a substantial reduction in external financing since projects are often geared at a ratio of 3 to 1.27

Internal transfers are also unreliable. The subsidy from MEWR to SALWACO is released piecemeal and is often very late. Grants to LCs are paid by the Accountant General directly to the sector bank accounts in each LC. These used to require hundreds of signatures for each grant each quarter, but a simpler procedure has recently been introduced.

5.2.2 Project Cycle Management

Project appraisal and evaluation are required by law. At the central government level, the Government Budgeting and Accountability Act (GBAA), section 42, makes the Vote Controller (executive head of each ministry, department or agency) responsible for the sound evaluation of projects. The annual budget circular calls for the submission of a Medium-Term Expenditure Framework and a budget from each MDA. An appraisal template is provided for the submission of each new project proposal. MDAs are required to justify the need for the project in terms of consistency with the PRSP and show that the proposed project is the most effective modality to implement the related policies. The template also requires detailed technical and costing estimates based on previous similar project performance and current market prices. Local councils are required by the LGA (sections 85–89) to prepare development plans consultatively, starting at

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28 For example, a withdrawal application to World Bank is processed by the implementing agency, project implementation unit, the Permanent Secretary and Minister in the responsible line ministry, the External Affairs Division of MOFED, the Financial Secretary or Principal Deputy FS in MOFED, the Expenditure and Contract Management Committee, the Accountant General, and World Bank offices in Chennai and Washington. Delays in MEWR are said to be longer than delays in MOFED or World Bank.

ward level. They must be consistent with national plans, but there are no formal requirements for project appraisal.

Lack of capacity in line ministries and local councils limits sector ex ante project appraisal and ex post project evaluation as well as also project implementation. A recent UNDP report indicates that “weaknesses in human resources are major constraints on WSS in Sierra Leone at all levels.”

Years of unrest have caused a flight of professionals from the sector. Beyond the lack of skills, at all levels the number of management and technical professionals is far below the requirements. Craftsmen and operators and others are another category where the insufficiency of human resources handicaps the project cycle management. The biggest gaps are within the technical professionals, craftsmen, and operators categories. For example, in 2005 only 180 technical professionals (seniors and juniors) and 50 operators and others were in post, compared to a requirement of 913 and 1,565, respectively.

The World Bank 2009 Public Expenditure Review (PER) recommends wider training in project management, the establishment of a central agency dedicated to project appraisal, and changes to the legal framework to ensure that only projects meeting minimum criteria are included in the budget. Project proposals should be within expenditure ceilings approved by the Cabinet for each MDA. Among other things, proposals should show that they have been through appropriate consultation with stakeholders, safeguards have been applied (such as environmental impact assessment) where relevant, public and private sector roles should have been considered, and proposals should be accompanied by procurement plans.

Poor project management and procurement contribute to delays in implementation. A major cause of delay is lack of procurement skills and project management capacity, both in budget agencies and in the private sector. For instance, standard price contracts were given by a project implementation unit to each contractor to dig 40 wells, but some wells cost more than others (due to remoteness or difficulty of access); some contractors ran out of funds and abandoned their contracts. Mobilization advances of 30 percent are given, but contractors find it difficult to get bridging finance to complete their contracts. There is also a lack of technical capacity.

5.2.3 Expenditure Arrears

Expenditure arrears are significant across government departments but the amount of WSS arrears is not known. Expenditure arrears are defined as expenditures that are due for payment, i.e. goods or services have been received or work has been done, and invoices have been received, but they are not yet paid. This is partly because the verification and payment process takes time, so normally there will be a small stock of arrears. Of greater concern, payments may be deliberately delayed, usually for lack of funds. The effect, in a cash-based accounting and reporting system as in GoSL and the LCs, is that expenditure is understated. Also, late payment discourages suppliers from bidding for government contracts and increases contract prices over time. It is not known how big a problem this is with respect to the water and sanitation sector. The central government makes transfers to the LCs and to SALWACO, but it does not count unpaid transfers as arrears, as transfers are not specific legal obligations. The budget does not create a legal obligation to pay; it is only one condition on which payment may be made. At the level of the LC, it is illegal to make commitments before funds are available to pay, but late transfers from central government have commonly led to situations where the administration makes informal contracts with local suppliers and promises to pay when funds are received. This supplier credit is not reported centrally nor monitored by LGFD, and there are no summary data.

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6. Conclusion and Recommendations
How Can Public Expenditure Translate into Better Water and Sanitation Services?

This review shows that despite increases in public sector spending, access to improved water sources and adequate sanitation has hardly improved in the 2002–2009 period. Sierra Leone is unlikely to reach the MDG targets on halving the number of people without access to improved water sources and sanitation by 2015. Access to improved water sources is uneven across the country, with urban areas being by far better covered than rural areas. Access to adequate sanitation is even more critically uneven.

Total sector expenditure will have to escalate to reach the national and MDG targets on water and sanitation. All estimates indicate a major gap between total needs and committed sources of public funds. Given the huge gap between investment needs and current expenditure, Sierra Leone will not be able to afford rapid extension of water and sanitation services without harmonized support of donors. The Government of Sierra Leone has to be commended for its strong initiative since 2007 in formulating a National Water and Sanitation Policy with participation by all the stakeholders. However, the share of its internal resources dedicated to water and sanitation is at the bottom end when compared to other African countries. Donor financing peaked in 2006 and has fallen as the country became more stable.

Water and sanitation expenditures have not been protected from budget cuts. In 2002, the GoSL agreed to protect ‘poverty reducing’ or ‘pro-poor’ spending from budget cuts as part of the HIPC Decision Point discussions. Water and sanitation is included in the definition of ‘pro-poor’ spending. Nevertheless, these expenditures have not been protected, rather the reverse. In 2007, expenditures on poverty reducing programs reached only 57 percent of the budgeted amount while all other spending reached 72 percent of the budgeted amount.31

6.1 Running While Standing Still
Part of public expenditure in the water and sanitation sector has been used to keep up with population growth and displacement. In 1990, Sierra Leone’s population was just under four million. In 2015, total population is projected to be just over 7 million—an 80 percent increase. The MDG targets and GoSL targets are expressed in decreasing the proportion of people without services. Just maintaining the same access rate between 1990 and 2015 requires the provision of water supply access to 1.6 million additional people and provision of sanitation to 0.4 million additional people. The years of conflict have caused large groups of population to move, resulting in the need for new services in different places.

In urban areas, water supply facilities have not kept up with rapid urbanization during the period of civil unrest. In Freetown, GVWC provides services to only part of the population and does not cover its operating expenditure. SALWACO, the utility for other urban centers, serves only a fraction of their population.

Years of conflict and neglect of maintenance have caused infrastructure to crumble—as a result, part of public expenditure has to be used to ensure that current level of services is continued.

6.2 Targeting
Nearly all expenditure from internal resources is for recurrent expenditure, which creates a strong dependency on donors for the expansion of services. The capital/current split divides expenditures between those where the benefits

31 This calculation omits salaries, statutory transfers to NRA and the Road Fund, interest, and externally funded project expenditure.
last more than a year and those where benefits are received during the year. However, these categories should be used with some caution as a part of development expenditure may be operating costs (current expenditure) that are funded by donors or rehabilitation expenditures.

The lack of cost recovery from urban users means that part of public expenditure is in fact a consumer subsidy. A large part of consolidated budget funding (76 percent) was spent on SALWACO grants while SALWACO provides services to a very small percentage of the population of Sierra Leone.

Financing for rural water supply accounted for an estimated 60 percent of public expenditure in the review period—nearly all of it from donors. At least 60 percent of donor financing was targeted at rural areas during the review period. Less than five percent of internal resources were focused on rural areas, including the local council transfers for rural water supply that represented two percent of Consolidated Fund budget.

For rural water supply, the ongoing decentralization process has led to confusing responsibilities, resulting in a virtual standstill in the sector. Even though they are expected to increase in the future, transfers to local councils have fallen short of budget. Local council transfers for rural water supply represented only seven percent of the Consolidated Fund expenditure. It is noted that the budget of the central ministry for water (MEWR) has increased rather than decreased since devolution has officially started in 2005.

Sanitation receives only a small part of public expenditure. This comes as no surprise as the sanitation sector is dominated by household on-site facilities (latrines, septic tanks) that are generally financed from household expenditure. Sewerage and wastewater treatment (normally financed from public budgets) are virtually non-existent.

### 6.3 Efficiency of Expenditure

The fact that less than half of the Consolidated Fund budget is disbursed is an indicator that budget efficiency requires improvement. Average budget execution of the Consolidated Fund stands at 40 percent. The budget execution for the grants to local councils was 71 percent over the period 2006–2009.

The lack of capacity in sector ministries and local councils is an obstacle for timely and targeted budget execution in all steps of the budget chain. Predictability of the water supply and sanitation sector is a problem, as is traceability of public expenditures. Delays are from both the government and donors and are due to lengthy procedures from each side, thus putting at risk progress in the sector. Further in the chain, obstacles include lack of sector planning, weak or absent project appraisal, slow procurement, late payment of providers, and expenditure arrears. Arrears discourage providers from bidding for government contracts, which decreases the competitiveness of prices. These problems might increase if responsibilities are further devolved without training of local councils.

Responsibilities for various activities in WSS frequently shifted in the review period and formal responsibilities are not met for lack of funds, technical capacity, or political will. The devolution of water supply responsibilities as prescribed in the 2004 Local Government Act has not been implemented due to lack of capacity in the local council administrations, resistance of central ministries, and inconsistencies among various laws.

The National Water and Sanitation Policy provides a basis to consolidate the sector framework. The challenge will be to implement the policy, while sorting out the (limited) inconsistencies with other pieces of legislation.

Responsibilities for sanitation are dispersed and not well defined. Unlike the water supply subsector for which leadership and coordination responsibilities are unambiguously attached to the Ministry of Energy and Water Supply, fragmented responsibilities and lack of clear leadership among different ministries may partly explain why so little funding went to the sanitation subsector. In rural areas, the community-led total sanitation (CLTS) approach might be a way of increasing access, but it is too early to measure results. In urban areas, there is a need to clarify responsibilities for on-site facilities (latrines, septic tanks). These are bound to be the key to increasing access in a country as poor as Sierra Leone. Also, the responsibility for the operation and maintenance of the Freetown sewerage network should be clarified.

### 6.4 Recommendations – Breaking the Status Quo

Progress in water and sanitation will require actions on multiple fronts taking into account the limited financial, human, and technical capacities of the Government of
Sierra Leone. The challenges of rapidly improving water and sanitation services are enormous compared to the available resources. However, recent progress on public financial management systems as well as sector policies and legislation provide a good basis for the coming years.

The challenge for the water and sanitation sector in Sierra Leone is to break the current status quo and to move to a reformed sector. The clarification of the institutional framework for public expenditures in the sector is a condition precedent to a sharper focus in the allocation of funding.

The recommendations below focus on implementing existing policy frameworks rather than inventing new strategies. These entry points are grouped into four categories:

- Improve monitoring and evaluation
- A sharper focus in the allocation of funding
- Improving the capacity of the government to use its funds more efficiently
- More and better donor financing

6.4.1 Improve Monitoring and Evaluation

The lack of good data not only limits the conclusions that can be drawn from this review, more importantly, it limits the government in planning its WSS interventions according to its stated policy objectives.

Accountability, better allocation, and achieving efficiency in sector performance require well-functioning systems for monitoring and evaluation. This means building reporting systems that measure the efficacy and efficiency of such programs in achieving measurable outcomes with respect to access, quality, and sustainability of services. Evaluations could provide valuable information on what works and what does not and provide information for the design of future programs.

Better measurement and monitoring starts with standardizing definitions. This review was complicated by some inconsistencies in the way that different agencies measure and report performance. For instance, the indicators for urban and rural areas vary. There are differences between MICS, WHO/UNICEF, and NWSP definitions of improved and adequate sanitation. Standardization of definitions requires the development of standard input forms, templates, and output reports.

6.4.2 A Sharper Focus in the Allocation of Funding

Increasing cost recovery from those who can pay is overdue. Under-pricing of utility tariffs is a major issue. However, before making any changes to the tariffs, utilities should first address their low billing and collection efficiencies. The sector cannot develop sustainably without the relatively wealthy paying for their pipe-borne water so public resources can be better targeted to the poor.

The GoSL should make a more explicit allocation of resources including choices between rural and urban service and water supply and sanitation. Transfers to local councils for rural water supply should be increased from their current level. This will require decreasing budgets of central ministries as their responsibilities are devolved.

Promoting better maintenance of existing assets can reduce allocation of spending to rehabilitation and maintenance and increase the budget resources available for extending access. The low levels of quality of service have resulted in high spending on rehabilitation and maintenance. The introduction of more transparent and performance-based transfers to water utilities is a priority.

Water and sanitation expenditures should be better protected from budget cuts as it is a considered ‘poverty reducing’ or ‘pro-poor’ spending.

While sanitation facilities might be mainly financed by households in the coming years, public financing for sanitation marketing and hygiene education provides high returns on investment. Relatively limited government expenditure on sanitation marketing could mobilize urban- and peri-urban households to contribute to the development and implementation of the low-cost sanitation schemes. A lead agency for sanitation should be chosen, capacities built, and budget provided. Given scarce domestic resources, the GoSL should promote low-cost sanitation technologies and schemes to allow a greater number of households to take advantage of public expenditures and thus maximize the public health benefits that this can generate. The example of the CLTS experience started by UNICEF...
in a number of communities should be endorsed by GoSL and complemented with other similar schemes.

6.4.3 Improving the Capacity of the Government to Use Its Funds More Efficiently

To increase the efficiency of public expenditure and ensure improved access to services, the government will have to: (i) improve sector planning and its linkages to the budget process; (ii) increase the accountability of sector agencies, and (iii) improve implementation of procurement, disbursement, auditing, and monitoring arrangements to ensure more efficient use of resources.

Improve sector planning and its linkages to the budget process

Increased budgetary discipline and close monitoring of public expenditures is required to improve efficient allocation of public expenditure in the sector. In the absence of budgetary discipline, it will be hard for local councils and public utility companies to effectively plan investments in the sector. Increased budgetary discipline will increase predictability and reduce delays and payment arrears. Better coordination between national and sub-national government planning processes and the annual budget formulation process is especially essential in a decentralized environment where the responsibility for water and sanitation services has been transferred to local councils.

Planning and monitoring should integrate capital and recurrent costs. In this connection, project estimates should integrate capital construction costs, rehabilitation costs, and operating and maintenance costs, since all need to be funded.

Clarify responsibilities and increase accountability of sector agencies

The devolution of water and sanitation services to local government and the corresponding decentralization of human and financial resources prescribed in the Local Government Act should be implemented fully. Decentralization is based on the proposition that local governments are closer to the citizens, are more informed of local preferences, and can respond to them more quickly and efficiently than central government MDAs. Accountability may be strengthened also through District WATSAN Committees and other monitoring bodies such as the District Budget Oversight Committees.

The National Water and Sanitation Policy and Act should be implemented fully. This review confirms that NWSP can provide a basis to consolidate the sectoral framework. It will be important that the sector is given the time to implement this policy instead of adopting more—and sometimes conflicting—policies as in the period under review. The Freetown Water and Sanitation Company (FWSC) that will take over all water and sanitation responsibilities in Freetown should be accountable to the Freetown City Council. The ambiguous mandate and accountability of SALWACO, and the responsibilities for water and sanitation in all urban centers outside Freetown, should be clarified to avoid unbudgeted subsidies draining scarce public resources.

Responsibility for sanitation should be defined clearly and unambiguously. While the lead agency for water resources management and water supply has been defined unambiguously as the MEWR Water Department (the Water Supply Division), there is no corresponding lead agency for sanitation. The community-led total sanitation (CLTS) approach that was adopted for rural areas in 2008 is a good start.

Improve implementation of procurement, disbursement, auditing and monitoring arrangements to ensure more efficient use of resources.

Capacities should be developed at different levels of government in WSS project cycle management, including procurement, disbursement, and auditing functions. Better planned project and improved procurements will decrease the abandonment of works and reduce delays. Increasing capacities in project appraisal and implementation will improve budget absorption capacities at different levels of government. Capacity problems are especially urgent in local government authorities.

Decrease unpredictability of financial resources

Overcoming the unpredictability of financial resources requires increasing stable revenue over the medium or long term, but some shorter term measures can help. As suggested by the Sierra Public Expenditure Review report, 2010, a number of short-term actions can be taken to reduce vulnerability to the unpredictability of financial resources, especially donor financing.32 These includes better planning that ensures that each planned project is desired by the MEWR and local governments, and avoid projects that are “donor driven” to the extent they would not be implemented

without donor pressure. Also, the complexity of project designs should be in line with capacities on the ground, while at the same time project can be used to improved institutional capacity to plan and implement projects in the WSS sector in a learning-by-doing mode. Better planning will also help to reduce delays and cost escalations by avoiding arrears to suppliers and contractors.

6.4.4 More and Better Donor Financing

The GoSL should take the lead in developing an aid co-ordination platform in which concerns about donor harmonization and coordination should be addressed. Donor funding is critical for the sector as internal resources are already flowing in but funding needs cannot be fully met by the government alone. The donor commitments for funding for the coming years are a good start, but commitment and disbursement are two different things. Resource mobilization efforts should be intensified to capture donor funding. To avoid delays associated with donor procedures, counterpart financing requirements must be clear and be met on time.

Donor harmonization and pooling of resources can improve efficiency of funding and optimize the use of limited GoSL capacities. Pooling resources is likely to be most effective when it is combined with measures that generate the economies of scale of such pooling through harmonization of procurement, disbursement, and monitoring procedures. Donors’ own performance in managing these funds can also improve, by harmonizing procurement, disbursement, and reporting requirements (which will alleviate some of the capacity constraints in the different sector agencies), and improvements in the release of funds. As a first step, development partners should consider forming a WATSAN Donor Working Group to harmonize their approaches and monitoring and evaluation machinery. This will reduce the risk of conflicting advice and recommendations from donors and reduce the transaction costs of their aid. The donors should also consider the further step of bundling their support into a co-financed or parallel-financed program following a Sector Wide Approach (SWAp), as well as the use of output-based aid approaches to improve targeting and efficiency of donor programs.
Annexes
## Annex 1

### Budgets for Water and Sanitation in Sierra Leone and Expenditure 2002–2009

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### Budgets for Water and Sanitation in Sierra Leone and Expenditure 2002–2009 (Continued)

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<td>8,182.8</td>
<td>6,223.7</td>
<td>6,636.5</td>
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<td>41,284.4</td>
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<td>Grand total US $000</td>
<td>1,713.4</td>
<td>1,515.7</td>
<td>3,192.8</td>
<td>6,146.5</td>
<td>13,980.8</td>
<td>8,781.6</td>
<td>7,401.1</td>
<td>8,036.5</td>
<td></td>
<td>50,768.4</td>
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<tr>
<td>Credibility of GOSL budgets (deviation/budget %)</td>
<td>–79.4%</td>
<td>–39.1%</td>
<td>–9.9%</td>
<td>–8.4%</td>
<td>–43.9%</td>
<td>–71.7%</td>
<td>–49.2%</td>
<td>–42.2%</td>
<td>–60.6%</td>
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<td>Sources of funds</td>
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<td>GOSL</td>
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<td>1,515.7</td>
<td>1,463.9</td>
<td>661.3</td>
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<td>8,182.8</td>
<td>6,223.7</td>
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<td>41,284.4</td>
</tr>
<tr>
<td>Total</td>
<td>1,713.4</td>
<td>1,515.7</td>
<td>3,192.8</td>
<td>6,146.5</td>
<td>13,980.8</td>
<td>8,781.6</td>
<td>7,401.1</td>
<td>8,036.5</td>
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<td>50,768.4</td>
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<tr>
<td>% breakdown of sources</td>
<td>%</td>
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<td>%</td>
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## Annex 2


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<td>Direct Expenses</td>
<td>2,893,124</td>
<td>3,612,638</td>
<td>3,773,325</td>
<td>4,063,022</td>
<td>4,596,920</td>
<td>4,469,935</td>
<td>5,467,113</td>
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<td>Depreciation</td>
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<td>4,765,041</td>
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<td>Administrative Expenses</td>
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<td>2,209,562</td>
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<td>Bad Debts Provisions</td>
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<td>4,720,714</td>
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<td>Exchange Loss</td>
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<td>129,558</td>
<td>2,010,611</td>
<td>24,745,691</td>
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<td><strong>Total Operating Expenses</strong></td>
<td><strong>8,226,090</strong></td>
<td><strong>15,649,556</strong></td>
<td><strong>41,009,063</strong></td>
<td><strong>29,126,529</strong></td>
<td><strong>24,618,986</strong></td>
<td><strong>25,923,027</strong></td>
<td><strong>30,231,395</strong></td>
<td><strong>43,598,112</strong></td>
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<td>Capital Expenditures</td>
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<td>716,642</td>
<td>313,734</td>
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<td>353,342</td>
<td>750,891</td>
<td>1,825,625</td>
<td>4,348,496</td>
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<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>12,165,967</strong></td>
<td><strong>16,366,198</strong></td>
<td><strong>41,322,797</strong></td>
<td><strong>31,010,320</strong></td>
<td><strong>29,972,328</strong></td>
<td><strong>26,673,918</strong></td>
<td><strong>32,057,020</strong></td>
<td><strong>47,946,608</strong></td>
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<tr>
<td>Total Expenditures (cash basis, excl. income tax to GoSL)</td>
<td>9,122,275</td>
<td>5,665,578</td>
<td>24,638,879</td>
<td>17,081,427</td>
<td>18,706,825</td>
<td>9,975,919</td>
<td>18,415,427</td>
<td>39,464,425</td>
<td>142,970,755</td>
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<tr>
<td>Total Revenue (received from customers, cash basis)</td>
<td>4,003,618</td>
<td>13,236,838</td>
<td>5,202,648</td>
<td>6,364,726</td>
<td>10,142,581</td>
<td>13,315,595</td>
<td>20,545,777</td>
<td>14,385,969</td>
<td>87,397,752</td>
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<tr>
<td><strong>Total Revenue</strong></td>
<td>1,907,4</td>
<td>5,644.7</td>
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<td>3,491.8</td>
<td>4,460.8</td>
<td>6,892.2</td>
<td>4,231.2</td>
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<td>WB Debt Relief</td>
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<td>—</td>
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## Annex 3

### SALWACO Revenue, Expenditure and Cash Flows 2002–2009 (*in million Leones*)

<table>
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<tr>
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<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>636.1</td>
<td>298.6</td>
<td>337.4</td>
<td>332.1</td>
<td>386.8</td>
<td>279.4</td>
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<td><strong>Cost of Sales</strong></td>
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<td>470.5</td>
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<td><strong>GOSL Grant from MEWR</strong></td>
<td>3,348.6</td>
<td>2,379.0</td>
<td>1,556.0</td>
<td>1,035.9</td>
<td>2,723.3</td>
<td>2,711.0</td>
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<td>13,753.8</td>
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<td><strong>Operating Expenses</strong></td>
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<td>2,723.8</td>
<td>2,163.6</td>
<td>1,436.2</td>
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<td><strong>Interest</strong></td>
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<td>9.4</td>
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<td><strong>Net Profit or Loss</strong></td>
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<td>-526.2</td>
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<td>97.0</td>
<td>193.2</td>
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<td><strong>Depreciation</strong></td>
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<td>337.8</td>
<td>354.8</td>
<td>364.3</td>
<td>143.1</td>
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<td>1,540.5</td>
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<td><strong>Decrease in Inventory</strong></td>
<td>132.3</td>
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<td><strong>Decrease in Receivables</strong></td>
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<td><strong>Increase in Payables</strong></td>
<td>-41.4</td>
<td>243.0</td>
<td>110.3</td>
<td>21.3</td>
<td>18.0</td>
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<td><strong>Capital Expenditure</strong></td>
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<td>81.0</td>
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<td>106.7</td>
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<td><strong>Revenue on Cash Basis, Excl. Grant</strong></td>
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<td>297.2</td>
<td>318.6</td>
<td>324.4</td>
<td>162.0</td>
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<td>1,954.7</td>
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<td>2,958.6</td>
<td>2,797.3</td>
<td>15,695.1</td>
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<td><strong>Cash Surplus/Deficit before Grant</strong></td>
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<td>0.0</td>
<td>-3,373.8</td>
<td>-2,355.3</td>
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<td><strong>Revenue excl. Grant (US$000)</strong></td>
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<td>107.6</td>
<td>108.7</td>
<td>54.3</td>
<td>82.2</td>
<td>700.6</td>
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Note: Audit reports for the years 2004–2008 were prepared by PKF and audited accounts all approved by the Board in January 2010.

For the years 2004–2006, the auditors did not see documentation for Le 2.3 bn expenditure, which remained unclassified in the Accounts Controls over revenue were inadequate.
Annex 4: Persons met

**African Development Bank**
Abdul P.A. Bangura, Infrastructure Specialist

**Bo City Council**
Emmanuel Deoud, Deputy Chief Administrator
Eric Moosa, Environmental Health Officer

**Bo District Council**
Matthew Mannah Margao, Chairman
Joseph Bindi, Deputy Chairman
Josaye Bangali, Chief Administrator

**Bombali District Council**
Mohamed Osman Marrah, Chief Administrator

**Department for International Development, UK**
Yassin M’shana, Consultant to Ministry of Energy and Water Resources
Mari-Ama Gborie, Assistant Program Manager, Human Development Team

**European Commission**
Ritchie Jones, Program Manager

**Freetown City Council**
Bowenson F. Phillips, Chief Administrator
Koroma, Accountant

**Freetown Waste Management Company**
Tamba Charles, General Manager
Sheikh Sesay Operations Manager
Komba Mara, Accountant

**Guma Valley Water Company**
Ibrahim B. Wilson, General Manager
Bankoleh Mansaray, Deputy General Manager
Raymond Williams, Chief Engineer
George Saquee, Project Manager
J.J. Yilly, Ag Finance Manager

**Ministry of Energy and Water Resources, Water Services Division**
Wusum Koroma, Director
Francis Moijue, Executive Engineer (from Saata Associates)
Joseph D. Mahayei, World Bank Project Coordinator
Andrew Musa, World Bank Project Accountant
Madu Jalloh, World Bank Monitoring and Evaluation Officer

**Ministry of Health**
Thomas Amara, Manager Environmental Health Division
Bankole Deen, Head, Water and Sanitation Unit, EHD
John Tommy, Head, Medical Waste Unit, EHD

**Ministry of Internal Affairs, Local Government and Rural Development**
Alhassan Kanu, Director, Decentralization Secretariat
S.A. Tejan Rogers, M & E Manager, Decentralization Secretariat
Jonathan Kpakiwa, Capacity Building Manager, Decentralization Secretariat
Floyd Alex Davis, Legal and Governance Manager, Decentralization Secretariat

**Ministry of Finance and Economic Development**
Hawa Musa, Development Branch
Raymond Coker, Assistant Accountant General
Adams Kargbo, Director, Local Government Finance Division
Alpha Umaru Jalloh, Senior Economist, Local Government Finance Division
Alimamy Kabba, Local Government Finance Division

**Oxfam**
Emmanuel Gaima, Country Director
Sierra Leone Water Company
Philip K. Lansana, Director General
Samuel Bangura, Finance Director
Victor J.O. Hastings-Spaine, Technical Director
Junisa Fofana, Regional Engineer, Bo Office
Lloyd Becker, Project Engineer, Kenema Office
A.K. Kargbo, Station Manager, Makeni Treatment Plant

**UNICEF**
Victor Kinyanjui, WASH Project Manager
Arnold Cole, WES Specialist

**World Bank**
Engilbert Gudmundsson, Country Manager
Yao Badjo, Task Team Leader
Brendan Glynn, Decentralization Consultant
Annex 5: Documents


European Commission, UNEP and others (2008) Roadmaps for Water Management in West Africa, Case Studies from the Gambia, Guinea-Bissau and Sierra Leone


Government of Sierra Leone (2009) Sierra Leone Demographic and Health Survey, July


Government of Sierra Leone, Development Aid Coordination Office (2009) Aid Policy, November


Government of Sierra Leone, Local Government Finance Department, various Monitoring Reports

Government of Sierra Leone, Detailed Revenue and Expenditure Estimates 2002–2010


SALWACO (2008) A Overview of the Sierra Leone Water Company


World Bank (2009) Project Appraisal Document…for a Decentralized Service Delivery Program

World Bank (2009) Decentralization, Democracy and Development: Recent Experience from Sierra Leone, edited by Yongmei Zhou


World Bank (2010) Sierra Leone Public Expenditure Review, March
