



An AMCOW Country Status Overview

# Water Supply and Sanitation in Sierra Leone

Turning Finance into  
Services for 2015  
and Beyond



The first round of Country Status Overviews (CSO1) published in 2006 benchmarked the preparedness of sectors of 16 countries in Africa to meet the WSS MDGs based on their medium-term spending plans and a set of 'success factors' selected from regional experience. Combined with a process of national stakeholder consultation, this prompted countries to ask whether they had those 'success factors' in place and, if not, whether they should put them in place.

The second round of Country Status Overviews (CSO2) has built on both the method and the process developed in CSO1. The 'success factors' have been supplemented with additional factors drawn from country and regional analysis to develop the CSO2 scorecard. Together these reflect the essential steps, functions and results in translating finance into services through government systems—in line with Paris Principles for aid effectiveness. The data and summary assessments have been drawn from local data sources and compared with internationally reported data, and, wherever possible, the assessments have been subject to broad-based consultations with lead government agencies and country sector stakeholders, including donor institutions.

This second set of 32 Country Status Overviews (CSO2) on water supply and sanitation was commissioned by the African Ministers' Council on Water (AMCOW). Development of the CSO2 was led by the World Bank administered Water and Sanitation Program (WSP) in collaboration with the African Development Bank (AfDB), the United Nations Children's Fund (UNICEF), the World Bank and the World Health Organization (WHO).

This report was produced in collaboration with the Government of Sierra Leone and other stakeholders during 2009/10. Some sources cited may be informal documents that are not readily available.

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## Strategic Overview

Sierra Leone saw a civil war in the 1990s which put most of its water supply and sanitation infrastructure out of service. Postconflict reform has advanced steadily to create an enabling framework for accelerated water and sanitation service delivery in line with good practice. The Local Government Act (2004) is devolving water supply functions to local councils. A new National Water and Sanitation Policy recommends major reforms which include: (a) shifting government focus from implementer to policy making and facilitation; (b) creation of a National Water Resources Board with responsibility for water resources management; (c) establishment of a regime for regulating water supply and sewerage services which effectively balances economic, financial, and social objectives; and (d) enactment of a new Water Law which creates a legislative framework for all those involved in the sector—public and private, present and future—and supersedes outdated water-related legislation.

National targets for water supply and sanitation are 74 percent and 66 percent, respectively, as stated in the National Water and Sanitation Policy. The same targets apply in both rural and urban subsectors. The latest estimate for water supply coverage from the Joint Monitoring Programme (JMP) (2008) is 49 percent, achieved mainly in urban areas (86 percent coverage, as opposed to 26 percent in rural areas). The high rate of urban coverage is, however, contested by sector stakeholders, who argue that it is overly optimistic and does not factor in the poor quality of water supplied through sources that are labeled 'improved'. The 2008 coverage estimate for improved sanitation is 13 percent (based on the JMP definition which excludes shared facilities). Historic coverage figures indicate that if past rates of delivery continue, both the water and sanitation targets will be missed by a very wide margin.

An annual investment of US\$164 million is needed for new urban and rural water supply facilities, and rehabilitation of existing facilities. Compared with anticipated public financing, the projected minimum deficit totals over US\$130 million per year for the water supply subsectors. For sanitation the annual capital investment requirement is US\$40 million. In rural sanitation the emphasis on Community-Led Total Sanitation (CLTS) with its no-subsidy approach means public expenditure will mainly go to support information, education and communication ('software') interventions, with capital costs in theory financed by users. However, it is not clear that sufficient resources are being committed to software, meaning actual household contributions could be well below what is required. In urban sanitation, with a much lower expected user contribution, and higher investment requirements, there is a projected annual deficit of US\$26 million per year.

Whilst these funding gaps are significant, recent moves towards developing a well-articulated investment plan and transparent and accountable systems for procurement and utilization may, in fact, see more investment flowing to the sector.

While these efforts to improve the enabling environment are helping to support the development of new infrastructure in Sierra Leone, mechanisms for sustaining services are inadequate, in particular for the maintenance of existing water supply facilities, and the development of markets for sanitation goods and services in rural areas.

This second AMCOW Country Status Overview (CSO2) has been produced in collaboration with the Government of Sierra Leone and other stakeholders.

**Agreed priority actions to tackle these challenges, and ensure finance is effectively turned into services, are:**

**Sectorwide**

- Implement institutional arrangements as envisaged in the policy.
- Resolve and strengthen the institutional home and champion for sanitation.
- Undertake extensive capacity-building (manpower and logistics) for sector institutions.
- Prepare medium- to long-term Sector Investment Plans to achieve national targets.
- Prepare a Millennium Development Goals' Action Plan and market to get interest from the donor community, nongovernmental organizations, the private sector, and consumers.
- Continue to increase sector funding and improve fund utilization rates.
- Agree to definitions for sector indicators and targets to aid planning, budgeting, and measurement of impact.
- Undertake nationally consolidated reporting on water and sanitation.
- Improve water quality monitoring to understand relevance of survey coverage data.

**Rural water supply**

- Increase subsector funding, through public (including donor) and user contributions whilst rapidly improving the current absorptive capacities.
- Rapidly implement the practice of community ownership and management.
- Actively build the capacity of the private sector to enable it to provide goods and services.
- Develop appropriate strategies and guidelines to support the implementation of interventions.

**Urban water supply**

- Undertake preparation of an Urban Water Sub-Sector Investment Plan, with details on financing requirements, mix of funds and achieving financial equilibrium.
- Speed up reform of the sector to improve efficiency of cost recovery.
- Set realistic tariffs to recover a substantial portion of production cost.

**Rural sanitation and hygiene**

- Increase the budget for sanitation, in particular for strengthening institutions and undertaking community sensitization programs.
- Complement CLTS with microfinancing to assure uptake.
- Undertake continuous monitoring of uptake of CLTS.

**Urban sanitation and hygiene**

- Prepare an urban sanitation plan and strategy for achieving targets.
- Increase budgetary support for both operations and maintenance of existing facilities and for capital investments in sewerage.
- Clearly define strategy for addressing sanitation and hygiene in poor and peri-urban communities.





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## Acronyms and Abbreviations

AfDB	African Development Bank	MDAs	Ministries, Departments, and Agencies
AMCOW	African Ministers' Council on Water	MDGs	Millennium Development Goals
BADEA	Arab Bank for Development in Africa	MICS	Multiple Indicator Cluster Survey
CAPEX	Capital expenditure	MoE	Ministry of Education
CLTS	Community-Led Total Sanitation	MoEWR	Ministry of Energy and Water Resources
CSO2	Country Status Overviews (second round)	MoFED	Ministry of Finance and Economic Development
CWS	Community Water Committees		
DEHO	District Environmental Health Officers	MoHS	Ministry of Health and Sanitation
DfID	Department for International Development	MoIALGRD	Ministry of Internal Affairs, Local Government and Rural Development
DHS	Demographic and Health Survey		
DRA	Demand responsive approach	MTEF	Medium-Term Expenditure Framework
DWSC	District Water and Sanitation Committees	NGO	Nongovernmental organization
EHD	Environmental Health Department	NWRB	National Water Resources Board
EU	European Union	NWSP	National Water Supply Policy
EWRA	Energy and Water Regulatory Authority	O&M	Operations and maintenance
GDP	Gross domestic product	OPEX	Operations expenditure
GNI	Gross national income	PRSP	Poverty Reduction Strategy Paper
GoSL	Government of Sierra Leone	RSH	Rural sanitation and hygiene
GVWC	Guma Valley Water Company	RWS	Rural water supply
HH	Household	SALWACO	Sierra Leone Water Company
IDB	Islamic Development Bank	SWAp	Sector-Wide Approach
IFMIS	Integrated Financial Information Management System	UNDP	United Nations Development Programme
(I)NGO	(International) Nongovernmental organization	UNICEF	United Nations Children's Fund
JICA	Japan International Cooperation Agency	USH	Urban sanitation and hygiene
JMP	Joint Monitoring Programme (UNICEF/WHO)	UWS	Urban water supply
LIC	Low-income country	WASH	Water, Sanitation and Hygiene
M&E	Monitoring and evaluation	WATSAN	Water and Sanitation
		WHO	World Health Organization
		WSP	Water and Sanitation Program
		WSS	Water supply and sanitation

Exchange rate: US\$1 = Leone 3,975.<sup>1</sup>



# 1. Introduction

The African Ministers Council on Water (AMCOW) commissioned the production of a second round of Country Status Overviews (CSOs) to better understand what underpins progress in water supply and sanitation and what its member governments can do to accelerate that progress across countries in Sub-Saharan Africa (SSA).<sup>2</sup> The African Ministers' Council on Water (AMCOW) delegated this task to the World Bank's Water and Sanitation Program and the African Development Bank who are implementing it in close partnership with UNICEF and WHO in over 30 countries across SSA. This CSO2 report has been produced in collaboration with the Government of Sierra Leone and other stakeholders during 2009/10.

The analysis aims to help countries assess their own service delivery pathways for turning finance into water supply and sanitation services in each of four subsectors: rural and urban water supply, and rural and urban sanitation and hygiene. The CSO2 analysis has three main components: a review of past coverage; a costing model to assess the adequacy of future investments; and a scorecard which allows diagnosis of particular bottlenecks along the service delivery pathway. The CSO2's contribution is to answer not only whether past trends and future finance are sufficient to meet sector targets, but what specific issues need to be addressed to ensure finance is effectively turned into accelerated coverage in water supply and sanitation. In this spirit, specific priority actions have been identified through consultation. A synthesis report, available separately, presents best practice and shared learning to help realize these priority actions.

## 2. Sector Overview: Coverage and Finance Trends

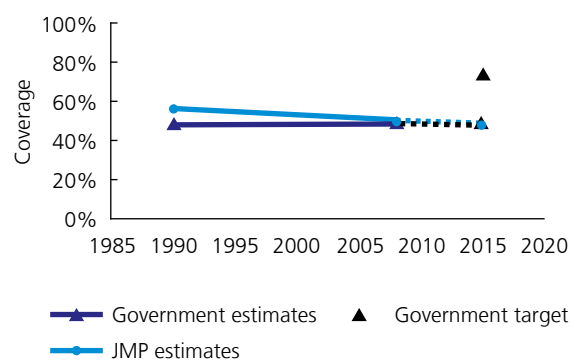
### Coverage: Assessing Past Progress

National targets for water supply and sanitation are 74 percent and 66 percent, respectively, as stated in the 2008 National Water and Sanitation Policy, with the same targets applied in urban and rural areas alike. In the absence of up-to-date national estimates of coverage, the latest estimates from the Joint Monitoring Programme (JMP) provide the best indication of sector progress.<sup>3</sup> According to the JMP coverage for water supply reached 49 percent in 2008: while an impressive 86 percent of the urban population is estimated to have access to an improved source of drinking water, coverage is only 26 percent in rural areas. The high urban coverage is, however, contested by sector stakeholders, who argue that it is overly optimistic and does not take into account the poor quality of water supplied in urban areas through sources that are nonetheless considered improved, such as protected wells which are used by over 30 percent of the urban population.<sup>4</sup> According to the JMP, improved sanitation coverage stood at 13 percent in 2008 (24 percent in urban areas, 6 percent in rural areas) which excludes those accessing shared facilities (Figure 1). Open defecation in rural areas is high, estimated at 46 percent of the population.

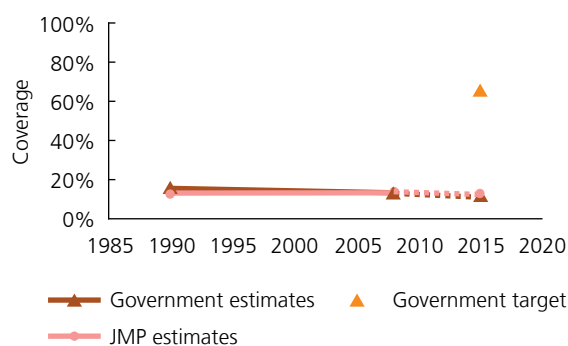
Establishing how far this represents progress, and establishing the internationally recognized Millennium Development Goal (MDG) targets from JMP data, is complicated by the lack of JMP estimates of coverage in 1990. Due to insufficient household surveys, the JMP trendline is extrapolated only as far back as 1994, and is flat from 1994 to 1998. As Figure 1 indicates, extrapolating the 1998–2008 trendline forward portrays a continued decline in coverage for water supply, and a slight upward trend for sanitation. In both cases, coverage in 2015 is set to fall well below the national targets unless significant acceleration occurs. At the same time, the lack of a 1990 baseline precludes calculation of the internationally recognized MDG target, to halve, by 2105, the proportion of people without access, *relative to 1990 levels*. Comparing *national* estimates of coverage in 1990 to the 2008 JMP estimates gives a different picture—a slight upward trend in the case of water supply, and a slight decline in sanitation coverage. Again, however, the sector targets remain a distant prospect without significant acceleration (Figure 1). Some argue that the targets for the rural subsectors, in particular, may be too optimistic given the current access figures.

**Figure 1**  
Progress in water supply and sanitation coverage

#### Water supply



#### Sanitation



Sources: JMP 2010 Update; Government of Sierra Leone Water Supply Division, National Water Policy.

## Investment Requirements: Testing the Sufficiency of Finance

The CSO2 costing tool was used to estimate the investment required to meet the government targets, of 74 percent for water supply and 66 percent for sanitation, from the JMP access figures for 2008. In the absence of national unit cost figures for use in the model, regional proxies were adapted taking into account that the country is emerging from conflict. Population figures used are based on those used by the JMP (themselves derived from UN Population Department data); the technology mix was estimated using information from the Ministry of Energy and Water Resources (MoEWR). The investment requirements are compared against anticipated investments from the Government of Sierra Leone (GoSL), donors, and users, to establish the gap in financing which the country will need to address.

The annual capital investment requirement to meet the national targets for Sierra Leone for both rural and urban water supply is estimated at US\$164 million. Anticipated public funding of US\$28 million per year is currently expected to leverage limited user contributions (10 percent of capital costs in the rural subsector) leaving a gap of over US\$130 million per year to be filled (Figure 2).

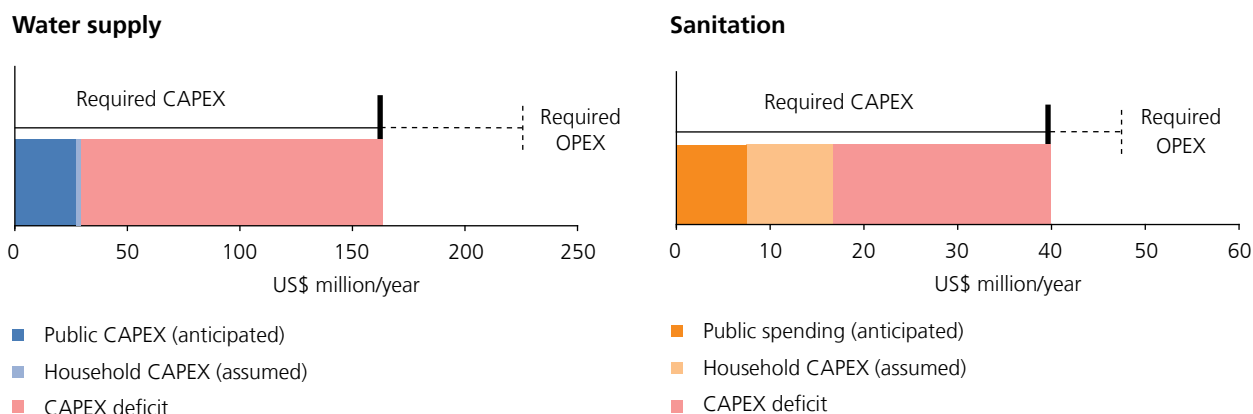
For sanitation capital investments ('hardware'), an estimated US\$40 million per year is required. In the urban subsector it is assumed that 25 percent of the hardware costs of sanitation will be borne by households, but this

is constrained by limited anticipated public 'seed finance'. In the rural subsector users are expected to meet 100 percent of hardware costs under a Community-Led Total Sanitation (CLTS) approach, with public funding primarily engaged in awareness creation, sensitization, and capacity building. These 'software' activities are assumed to be covered under recurrent expenditure and are not factored into the requirements calculated using the model.<sup>5</sup> The model also does not include estimates of the cost of innovative financing schemes, which the GoSL is expected to support, such as a revolving fund or underwriting the management fees and collection efficiency losses expected in microfinance schemes. It is not clear for what purpose (hardware, software or financing schemes) the currently anticipated public funds for sanitation will be used. The extent of anticipated financing depicted in Figure 2 should thus be treated with caution, particularly the substantial expected household contributions that will depend on the quality of government promotion and facilitation.

In addition to the reliance on user contributions, which are somewhat uncertain, it should be underscored that if different (and perhaps more realistic) coverage figures are applied to the model then the financing deficit would increase substantially.<sup>6</sup>

In Sierra Leone, as in many countries, there is an implicit assumption that operations and maintenance (O&M) costs will be recovered from users. In reality this is not achieved. If any of the annual operations expenditure (OPEX) has to be subsidized from the public purse, for example to

**Figure 2**  
Required vs. anticipated (public) and assumed (household) expenditure for water supply



**Table 1**  
Coverage and investment figures<sup>7</sup>

	Coverage		Target 2015	Population requiring access	CAPEX requirements		Anticipated public CAPEX			Assumed HH CAPEX	Total deficit
	1990	2008			Total	Public	Domestic	External	Total		
	%	%	%	'000/year	US\$ million/year						
Rural water supply	32%	26%	74%	215	63	57	6	11	17	2	44
Urban water supply	82%	86%	74%	86	101	101	2	9	11	0	90
<b>Water supply total</b>	<b>48%</b>	<b>49%</b>	<b>74%</b>	<b>302</b>	<b>164</b>	<b>158</b>	<b>8</b>	<b>20</b>	<b>28</b>	<b>2</b>	<b>134</b>
Rural sanitation	2%	6%	66%	277	8	0	0	3	3	8	–
Urban sanitation	45%	24%	66%	235	32	24	0	5	5	2	26
<b>Sanitation total</b>	<b>16%</b>	<b>13%</b>	<b>66%</b>	<b>512</b>	<b>40</b>	<b>24</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>9</b>	<b>23</b>

Sources: JMP 2010 Report; National Water Policy; CSO2 costing.

**Table 2**  
Annual OPEX requirements

Subsector	OPEX US\$ million/year
Rural water supply	9
Urban water supply	52
<b>Water supply total</b>	<b>61</b>
Rural sanitation	1
Urban sanitation	7
<b>Sanitation total</b>	<b>8</b>

Source: CSO2 costing.

utilities that do not achieve operational cost recovery, it reduces the amount available for capital investment. Indeed, in many areas water is not paid for as a result of an unwillingness to charge and, in some cases, communities' refusal to pay for water use and poor quality service.

The current sector leadership is placing emphasis on piped water supply and household connections. Per capita costs for this technology are high. In respect of sanitation, no specific technology choices are being promoted within the general framework of CLTS, but the quality and cost of latrines will depend on the ability of poor households to raise needed finance.

To meet the investment requirements Sierra Leone faces challenges at both the national and household levels. The country is one of the poorest in the world, ranked 179th of 182 in per capita gross domestic product (GDP), which stands at US\$326 (current prices).<sup>8</sup> A decade of civil war destroyed both economic and social infrastructure, creating competing demands on scarce national resources. Ability to pay the true cost of services is constrained given high poverty levels. However, development partners are increasingly supportive and improved governance could see increased external finance allocated and utilized. O&M and rehabilitation will continue to be a challenge in the short and medium term as user contributions are unlikely to be realized.

These considerations are only part of the picture. Bottlenecks can, in fact occur, throughout the service delivery pathway—all the institutions, processes, and actors that translate sector funding into sustainable services. Where the pathway is well developed sector funding should turn into services at the estimated unit costs. Where it is not, the above investment requirements may be gross underestimates. The rest of this report evaluates the service delivery pathway in its entirety, locating the bottlenecks and presenting the agreed priority actions to help address them.

### 3. Reform Context: Introducing the CSO2 Scorecard

The main driver for sector reform as captured in various commitments—Sierra Leone Vision 2025, the Poverty Reduction Strategy Paper (PRSP), and the MDGs—is the need to create a high quality life for all Sierra Leoneans based on the fundamental human right of access to safe and adequate water to meet basic human needs. Faced with the challenges of a postconflict environment, sector reform has recognized the following priorities, among others: (a) provision of safe drinking water and sanitation facilities for deprived communities in rural and urban areas through rehabilitation and reconstruction of water facilities damaged by the war; and (b) provision of adequate liquid and solid waste disposal facilities in urban areas. In its second PRSP, the GoSL has indicated that its “overarching aim in the long term is to make available bulk potable safe water to as many people as possible, targeting high population density areas, such as urban, peri-urban and large villages. Pipe-borne water supply will be the preference”.<sup>9</sup> To achieve this, the government expects to prioritize increasing access to safe water both in the western area (where access has largely fallen behind), and selected large provincial settlements including district headquarter towns, especially in the short to medium term.

The sector’s recent history puts the service delivery pathway in context, which can then be explored in detail using the CSO2 scorecard, an assessment tool providing a snapshot of reform progress throughout the pathway.<sup>10</sup> The CSO2 scorecard assesses the building blocks of service delivery in turn: three building blocks which relate to enabling services, three which relate to developing new services, and three which relate to sustaining services. Each building block is assessed against specific indicators and scored from 1 to 3 accordingly.

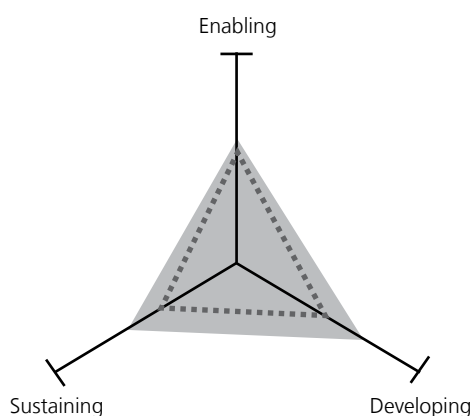
Reforms have included the establishment of the Guma Valley Water Company (GVWC) to supply water to Freetown and its environs, and the Sierra Leone Water Company (SALWACO) to supply water to a number of key cities and towns. The MoEWR’s Water Supply Division has relinquished responsibility for rural water delivery to local governments. Due to limited capacity at that level,

SALWACO holds the fort in the interim and will relinquish service delivery to councils as soon as their capacity to undertake water supply services improves.<sup>11</sup>

A national policy on water supply was seen as the first requirement to energize the reform process. To support the intentions set out in the policy, a new Water Law is under development, which will review and incorporate all existing water-related laws and regulations, create a Water Department to act as the principal advisory wing of the ministry, and define new regulatory agencies that will supervise the sector. The Policy and the Law aim to bring all water-using sectors in line with the measures intended to improve water resources management.

The emphasis of reform in terms of developing new water supply and sanitation services is to shift from centralized supply-driven approaches, to demand-driven/led and decentralized approaches. In the case of sanitation this entails a move from subsidy-driven household latrine promotion to CLTS. Other goals outlined in the policy relate

**Figure 3**  
Average scorecard results for enabling, sustaining, and developing service delivery, and peer-group comparison



■ Sierra Leone average scores  
 :::: Averages, LICs, GNI p.p. <=\$500

Source: CSO2 scorecard.



to financing rural water on a cost-share basis, building local capacity for service delivery and backstopping, and harmonizing and aligning activities among various agencies and actors. Many of these, however, remain policy intentions, awaiting the development of the required strategies and implementation of the identified measures.

An overview of results from the CSO2 scorecard (Figure 3) suggests Sierra Leone has made some progress in evolving the enabling environment within the service delivery pathway, due in part to the 2008 policy. The country falls slightly short of the average score for its economic peer group, comprising low-income countries with per capita gross national income (GNI) below US\$500 (World Bank Atlas Method). Building blocks of

the service delivery pathway concerned with developing services score reasonably, though there is still much that can be improved, through the above-mentioned implementation of policy goals. Across subsectors, building blocks for sustaining services, such as funding and support for water supply maintenance, and markets for sanitation, are weakest.

Sections 4 to 6 highlight progress and challenges across three thematic areas—the institutional framework, finance and monitoring and evaluation (M&E)—benchmarking Sierra Leone against its peer countries based on a grouping by GNI. Related indicators are extracted from the scorecard and presented in charts at the beginning of each section. The scorecards for each subsector are presented in their entirety in Sections 7 to 10.

**Table 3**  
**Key dates in the reform of the sector in Sierra Leone**

Year	Event
1961	The Guma Valley Water Act (1961) established the GVWC to supply water to Freetown
1963	The Water (Control and Supply) Act (1963) established the Water Supply Division to oversee provincial water supply services
1996	Public Health Act (1996) created the Environmental Health Division to oversee sanitation services
1999	Forestry Regulation Act (2001) created Forest Reserves to protect water sources and catchment areas
2001	The Sierra Leone Water Company Act (2001) established an agency to supply water to Bo, Kenema, Makeni, Kono, and Lungi
2004	The Local Government Act (2004) devolved water supply functions to local councils
2008	Adoption of a National Water and Sanitation Policy. Recommended major reforms including the creation of the National Water Resources Board, Energy and Water Regulatory Authority and a Water Department to act as the key advisory unit in the Ministry. The Water Supply Division is to be scrapped.
2009	Efforts are ongoing to establish a new Water Law which will review and incorporate all existing laws related to the sector including relevant customary laws and practices

## 4. Institutional Framework

### Priority actions for institutional framework

- Implement institutional arrangements as envisaged in the policy.
- Resolve and strengthen the institutional home and champion for sanitation.
- Undertake extensive capacity building (manpower and logistics) for sector institutions.

Sierra Leone is taking various measures to address the institutional framework to improve sector performance. The decision to limit the role of the sector ministry to policy formulation, creation of regulatory agencies, and efforts to improve funding, coordination, and monitoring appear consistent with good practice. In addition, the decision to rename the ministry to include water resources will give it greater visibility and clearly demonstrate a commitment to drive socioeconomic development through the country's water resources infrastructure. Figure 4 shows that Sierra Leone's performance against related scorecard indicators—which assess the presence of subsector policies, nationally recognized targets, and clarity of roles and leadership—is reasonable compared to its peers. Figure 5 sets out the essential institutional

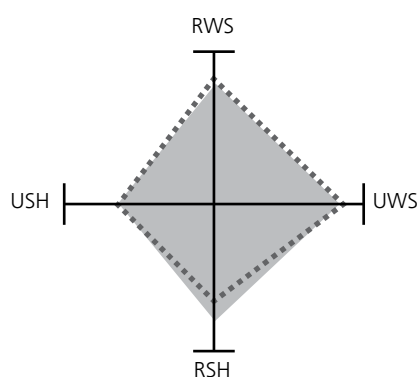
architecture of the sector. The paragraphs that follow outline key challenges relating to the sector's institutional framework.

**New Water Law:** The decision to enact a new Water Law will provide legal backing for the measures outlined in the policy document. The enactment of the Water Law will require amendments to some of the existing legislation to make it consistent with the new policy and institutional framework, and drive sector performance.

**Sector leadership:** Discussions with various stakeholders clearly pointed to the need for a strong sector leadership in practice. Current legislation and the new water policy give the ministry oversight responsibility for water resources management. This requires that sector agencies (principally SALWACO and GVWC), development partners, and nongovernmental organizations (NGOs) align with the ministry's policies and report their operations in accordance with requirements set out by the ministry.

**Capacity building:** New institutions are to be created to ensure a more effective sector management framework. Whilst it is desirable to strengthen the functions for facilitation and regulation in the sector, lean, yet highly professional institutions will be key in this regard. Weak capacity for these and other functions is a major hindrance in the sector, and in Sierra Leone as a whole. Beyond establishing water supply and sanitation (WSS) institutions, a greater challenge will be building their capacity—both in relation to professional manpower and in logistics—to deliver on the mandates assigned to them.

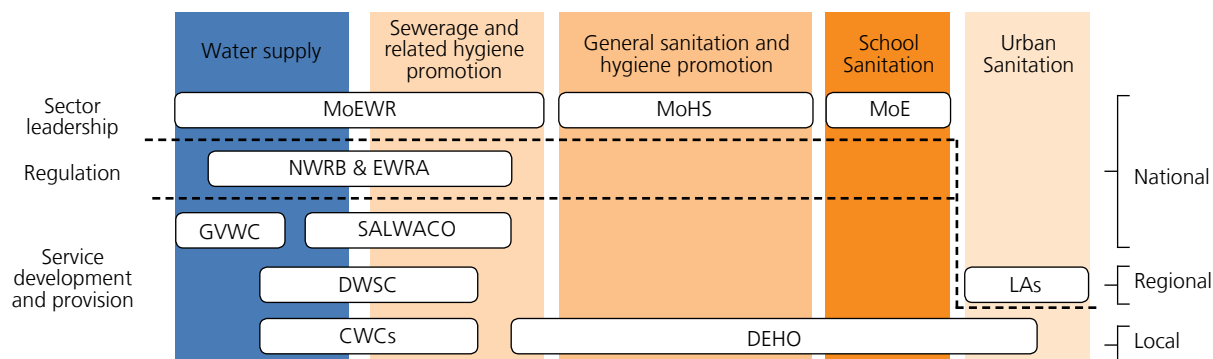
**Figure 4**  
Scorecard indicator scores relating to institutional framework compared to peer group (see endnotes)<sup>12</sup>



■ Sierra Leone average scores  
 :: Averages, LICs, GNI p.p. <=\$500

Source: CSO2 scorecard.

**Figure 5**  
**Institutional roles and relationships in the water supply and sanitation sector**



**MoEWR:** Ministry of Energy and Water Resources, lead for water resources and the custodian of the Water Law. Exercises oversight over sector agencies through Water Department.

**MoHS:** Ministry of Health and Sanitation, lead for overall coordination of sanitation and hygiene activities, through the Environmental Health Department (EHD) taking the lead in the promotion of sanitation and hygiene programs.

**MoE:** Ministry of Education, lead for sanitation and hygiene education in schools

**LAs:** Local Councils, focal entities at the district level for implementation of water and sanitation delivery. Work through District Water and Sanitation Committees (DWSC).

**NWRB:** National Water Resources Board, regulation and

oversight for water resources management.

**EWRA:** Energy and Water Regulatory Authority (EWRA), economic regulation of water and related sanitation delivery.

**GVWC:** Guma Valley Water Company, provision of water to Freetown and its environs.

**SALWACO:** Sierra Leone Water Company, water and sanitation in all urban areas outside of Freetown and some rural areas.

**DEHO:** District Environmental Health Officers, responsible for health, sanitation, and hygiene promotion at the district level.

**CWS:** Community Water Committees: management of water and sanitation delivery at the community level.

Additional actors include the private sector and a significant number of international and local nongovernmental organizations.

Source: Author, developed from National Water Policy.

**Regulation (including tariff regime):** There is currently no effective regulation of the urban water sector, besides the requirements of the Governing Board of sector agencies and the sector ministry. More effective regulation is now being contemplated, through the National Water Resources Board (NWRB) and the Energy and Water Regulatory Authority—for water use and economic regulation (standards, tariff-setting, customer care), respectively. The current lack of economic regulation means that tariff decisions are determined more through political than economic considerations.

**Institutional home for sanitation:** Whilst many recognize the Ministry of Health and Sanitation as responsible for sanitation, in practice the Environmental Health Department has been neglected, with an annual

budget in 2009 not exceeding US\$20,000.<sup>13</sup> The MoEWR has assumed responsibility for water-related sanitation policy and as the National Water and Sanitation Policy concedes, “the confusion surrounding whether full sanitation responsibility should fall under Ministry of Health, Environment Commission, Local Government or the Ministry responsible for water has not been fully addressed”.<sup>14</sup>

**Private sector participation:** The private sector’s role is currently very limited throughout the service delivery pathway. This includes drilling contractors, water supply operators, and small-scale entrepreneurs providing sanitation hardware and back-up services. In large part this is a reflection of the lack of capacity across the whole of Sierra Leone.

## 5. Financing and its Implementation

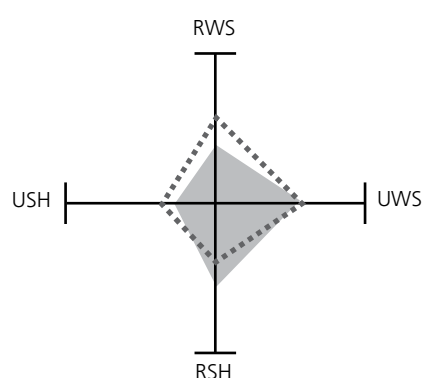
### Priority actions for financing and its implementation

- Prepare medium to long term Investment Plans to achieve national targets.
- Prepare an MDG Action Plan and market to secure interest from the donor community, NGOs, the private sector, and consumers.
- Continue to increase sector funding.
- Improve fund utilization rates.

WSS allocations as a percent of the total national budget, excluding salary and interest payments, have more than doubled between 2008 and 2010, reaching close to 3 percent. Whilst this is still low by regional standards, the trend is a healthy development, and as the economy improves it is expected that allocations to the sector will continue to increase. WSS capital spending as a percentage of GDP has increased from 0.17 percent in 2008 to 0.47 percent in 2010, and is projected to rise to 0.51 percent in 2012. The absolute increases are shown in Figure 7. Figure 6 shows the performance of the four subsectors against scorecard indicators relating to financing and its implementation, which look beyond the adequacy

of allocations, to the clarity and comprehensiveness of subsector budget lines, and levels of utilization. The stronger performance of RSH relative to the peer group average is partly attributable to the adoption of the CLTS approach by all sector actors, coordinated by the MoH and UNICEF. For now, however, CLTS is a common approach adopted by all for RSH, but pooling of resources to drive the agenda is not immediately in sight and it is not clear that sufficient allocations are being made to support this program (see Section 9). The following paragraphs highlight the key challenges the sector faces in financing and its implementation.

**Figure 6**  
Scorecard indicator scores relating to financing and its implementation, compared to peer group<sup>15</sup>



■ Sierra Leone average scores  
 ∴ Averages, LICs, GNI p.p. <=\$500

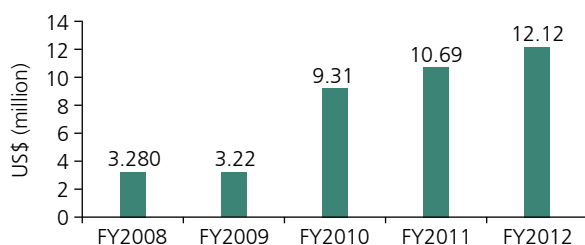
Source: CSO2 scorecard.

### Planning: Linking inputs, outputs, and need:

While the sector agencies have investment programs, these are not properly aligned to the achievement of sector targets. Both GVWC and SALWACO's investment horizons lie only two years ahead, as captured in the Corporate Plan (GVWC) or annual budget statements. Comprehensive subsector investment plans to meet the targets, as well as a consolidated sector investment plan, are currently missing. Programmatic approaches are not in place in Sierra Leone, with the possible exception of CLTS in the rural sanitation subsector, nor is a framework for developing them. Donor-driven projects remain the main route for implementation.

Given its recent history, the GoSL is pursuing basic water and sanitation services in phases—with emergency to short-term, and medium- to long-term strategies. In the short term the focus is on increasing access to safe drinking water in Freetown and its environs, the district

**Figure 7**  
**Increase in total (recurrent and development) budgetary allocations to water supply, FY2008–12**



Source: GoSL, 2010 Budget Profile.

headquarter towns, and large provincial settlements. In the medium to long term, the government will focus on increasing the volume of water supplied nationwide. Some information for planning these phased interventions is available: population, coverage, and technology. However, more detailed information from inventories, including functionality of systems (to establish a truer picture of coverage), and clear unambiguous policy direction on issues such as subsidies, cost recovery, and technology options remain unclear or are not pursued to the letter.

**Budgeting: Directing finance effectively.** Over the three-year period 2010–12, the GoSL expects to increase its spending in the water sector from Le34 billion (US\$9.3 million) in 2010 to Le46 billion (US\$12.1 million) by 2012. These figures compare to spending of Le10 billion (US\$3.3 million) in 2008 and Le11 billion (US\$3.2 billion) in 2009.<sup>16</sup> However, as indicated by the CSO2 costing model, current anticipated sector budget allocations do not match policy intentions and targets.

Sector agencies indicate that historically the actual disbursement of budget allocations has been around 60 percent, but both the sums allocated and the disbursements have been increasing in recent years. Though a number of instances of delays to projects were noted<sup>17</sup> (attributed to capacity limitations), the utilization of budgetary allocations is improving, thanks to the introduction of the Integrated Financial Information Management System (IFIMS).<sup>18</sup> The Ministry of Finance and Economic Development (MoFED) recognizes the challenge of matching allocations and disbursements and is taking measures to address this, with the 2010 Budget Speech of the Minister of Finance

noting that “Government is strengthening the integration of procurement planning in the budget process in order to better synchronize sectoral plans with annual budget allocations”. Both donors and recipients agree on the need to build the capacity of the sector institutions to prepare project documents, drive the procurement process, and monitor the implementation of projects.

#### **Aid delivery, harmonization, and coordination:**

Emerging from a civil war, Sierra Leone has benefited from an influx of donor aid flows—both bilateral and multilateral—as well as from NGO activity. This naturally presents challenges for coordination. Major donors for the sector include: AfDB, BADEA (US\$4m), DfID (£35m), EU (€7m), Islamic Development Bank, JICA, UNICEF (US\$2.9m) and the World Bank (US\$52m). The central focus of aid has been on rehabilitation of water infrastructure and building the government’s capacity to own and drive sector activity. For example, US\$45 million (£30 million) in DfID support to the sector includes activities in sector harmonization, capacity building, water resources management, and implementation of the National Water Policy.

UNICEF currently leads donor coordination. Aid is provided as both budgetary support through MoFED and as project support through other Ministries, Departments and Agencies (MDAs), and there has been a gradual shift from emergency to recovery and development projects, now that the sector is recognized as safe and investment-friendly. The long-term plan is to fund WSS services in all district headquarters towns from domestically generated revenue. This is set out in the current Medium-Term Expenditure Framework Budget. It is expected that when mining operations (especially of iron ore and bauxite) pick up in 2010, coupled with oil production in 2011, the government’s revenue base will improve strongly to reduce overdependence on donor assistance.

NGOs continue to play a crucial role in service delivery and capacity building. Their interventions are geared towards strengthening MDAs and local councils/communities through training and technical support and the provision of vital services in the water, sanitation, education, agriculture, and housing sectors.

Best estimates of the distribution of domestic finance, external (donor and NGO) finance, and expected



household contributions within and between subsectors are shown in Figure 8.

**Local council grants for rural water supply (RWS):**

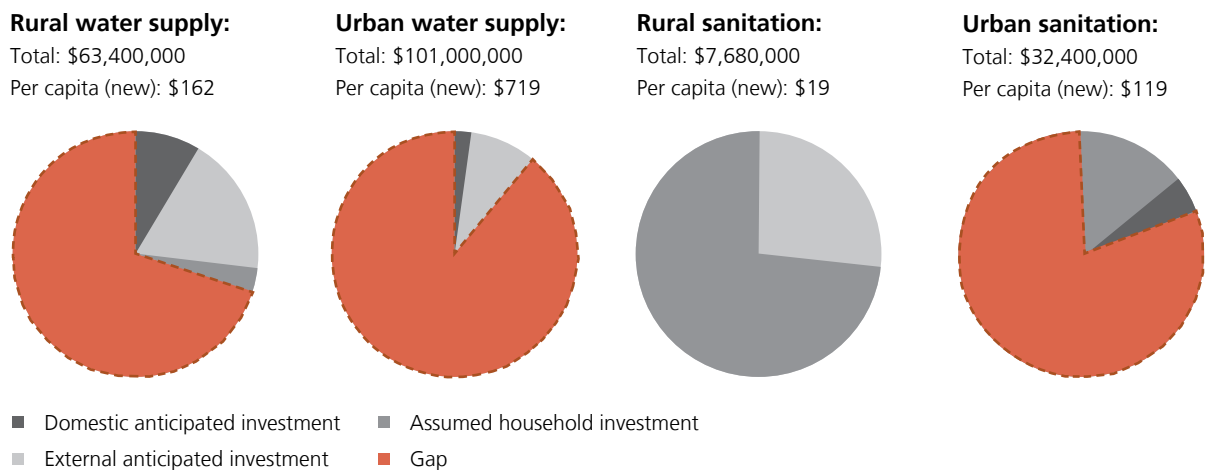
While there are no pooled funds specific to WSS, rural water and sanitation services receive dedicated intergovernmental transfers via the local council grants for RWS, guided by the Local Governments Equitable Grants Distribution Formulae and Allocations. Under this system, central government grants are allocated to councils to cover activities such as construction, rehabilitation, and drilling of boreholes, spring wells, and other systems. In the case of RWS, the criteria used relate to the ratio of the individual council’s rural population to the total national rural population, and the ratio of the proportion without access to safe water to that of all local councils. A weighting of 60 percent and 40 percent is attached to each factor, respectively. This stands to enhance equity when a greater

proportion of sector resources are channeled through local councils. For now the resources available to the fund are limited, totaling US\$242,000 for FY2009.

**Gaps in financing policies and strategies:**

The relative shares of central government, local government, and communities in financing the capital costs of WSS facilities need to be made clearer. Likewise, there should be an unambiguous definition of cost recovery for both rural and urban WSS services, indicating how current revenue gaps for O&M and capital maintenance—due to low tariffs—will be closed over time. The current practice of making free water available at standpipes is sending the wrong signals on the responsibilities of consumers and is inconsistent with sustainable delivery of the service. There is also a policy gap regarding ultimate responsibility for rehabilitating rural WSS facilities after they have been built.

**Figure 8**  
**Annual overall and per capita investment requirements and contribution of anticipated financing by source**



Source: CSO2 costing.

## 6. Sector Monitoring and Evaluation

### Priority actions for sector monitoring and evaluation

- Agree to definitions for sector indicators and targets to aid planning, budgeting and measurement of impact.
- Undertake national consolidated reporting on water and sanitation.
- Improve water quality monitoring to understand relevance of survey coverage data (which is often challenged as being too high).

A water, sanitation and hygiene (WASH) database is currently being developed by UNICEF in collaboration with Statistics Sierra Leone and MoEWR to monitor eight WASH indicators, namely (a) the percentage of people with access to improved drinking water; (b) the percentage of water handled safely at household level; (c) the percentage coverage of sanitation facilities; (d) coverage of improved solid waste disposal; (e) improved waste water management; (f) percentage of people practicing hand washing with soap/ash at critical times; (g) percentage of people with access to hygiene promotion activities;

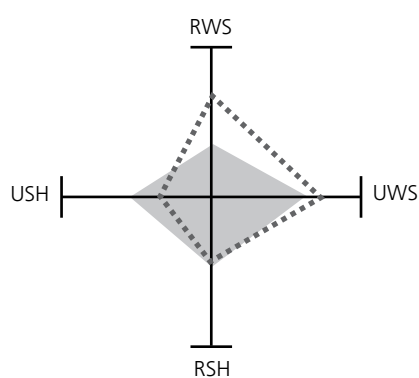
and (h) percentage of people with basic knowledge of hygiene practices. The project is being implemented by Statistics Sierra Leone and the Water Supply Division of the MoEWR in partnership with the 19 local councils. The measurement of some of these indicators will be challenging and will require substantial resources to be undertaken on a regular basis. It is also important that the definitions of these indicators are agreed within a national consultative process.

Figure 9 indicates that Sierra Leone's water subsectors score below the peer-group average for indicators relating to sector M&E, while the sanitation subsectors score above average. However, substantial improvements can be made in all subsectors, particularly RWS, with regards to the reporting of allocations, fund utilization, and output.

M&E needs considerable strengthening as sector data is currently hard to come by. The following paragraphs outline key challenges for sector M&E in Sierra Leone.

**Consolidating sector reporting:** Mechanisms for M&E of the sector exist largely at the project level and there is currently no nationally consolidated reporting of sector information. Discussions for the CSO2 identified no specific reasons for this but the lack of adequate personnel to collect and collate subsector reports may be a factor. A clear need for consolidated reporting was acknowledged, however, and the MoEWR intends to undertake this within its ongoing sector performance improvement arrangements. It is hoped that the WASH database will contribute the necessary data. Given the

**Figure 9**  
Scorecard indicator scores relating to sector M&E, compared to peer group<sup>19</sup>



■ Sierra Leone average scores  
 :: Averages, LICs, GNI p.p. <=\$500

Source: CSO2 scorecard.

myriad NGOs making significant contributions to the sector, a key challenge is getting information from them for national reporting, let alone in a sector-agreed format. An exception is the CLTS activities supported by UNICEF, for which reporting is regular and up-to-date. At the subsector level reports are prepared by SALWACO and GVMA but these have been tailored more to guide management and the Governing Boards' decision making than to feed into a sector reporting mechanism.

**Improving participation for M&E and ownership:**

A sector review process has been in place for the last five years, led by the MoEWR working in partnership with UNICEF. This is mainly attended by government agencies, service providers, donors, and NGOs, and could benefit from wider participation.<sup>20</sup> Beyond this, stakeholders' participation in sector dialogue on policy formulation, programming, project implementation, and

management has been limited and could be enhanced. Community participation in M&E, including through civil society and community-based organizations, could also be institutionalized in WASH activities to enhance sustainability of services.<sup>21</sup>

**Enhancing coverage data:** There is consistency between the definitions used in household surveys by Statistics Sierra Leone and the JMP for assessing coverage, with the 2008 Demographic and Health Survey fully applying the definitions used by the JMP. The cooperation between Statistics Sierra Leone and the MoEWR in capturing sector data is appropriate. As part of that effort, which is supported by UNICEF, a water-point mapping exercise including all 19 councils is to be undertaken. This will help establish the functionality of systems and establish more realistic figures on coverage.

## 7. Subsector: Rural Water Supply

### Priority actions for rural water supply

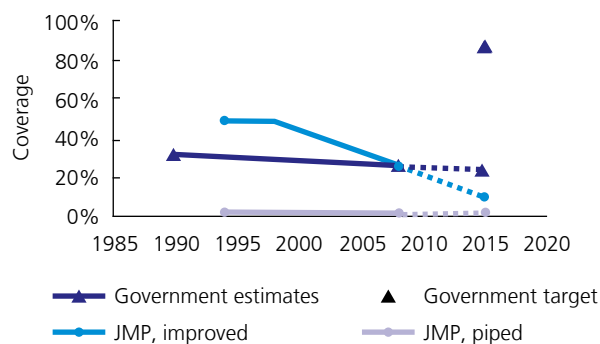
- Increase subsector funding, through public (including donor) finance and user contributions, whilst rapidly improving absorptive capacities.
- Rapidly implement the practice of community ownership and management.
- Develop appropriate strategies and guidelines to support the implementation of interventions.
- Actively build the capacity of the private sector to enable it to provide goods and services whilst public agencies gradually transition to a facilitation and regulation role.

The JMP figures show a reduction in rural water coverage from 49 percent in 1994 to 26 percent in 2008. Due to lack of household surveys, the trendline is not extrapolated back to 1990, and flatlines from 1994–1998. The national coverage estimate for 1990, of 32 percent, would entail a slower decline. In either case, however, projecting the trendlines to 2015 shows that the national subsector target of 74 percent is unlikely to be reached. According to JMP estimates, access to piped water in rural Sierra Leone is minimal.

An estimated US\$63 million per year would be required in capital investments for the subsector to meet the target of 74 percent coverage. While allocations have increased

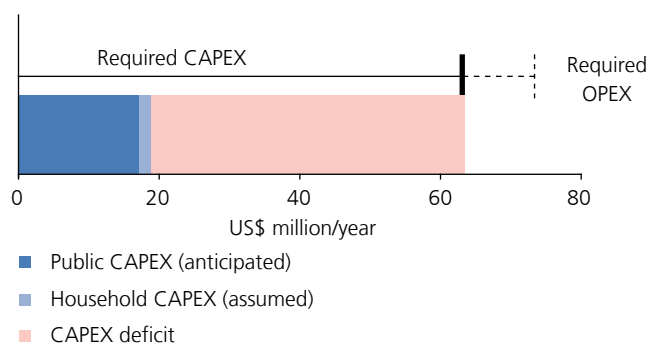
(see Section 5), anticipated public funding of around US\$17 million per year still leaves a considerable deficit, given the large backlog in coverage indicated in Figure 11. While it was estimated for the CSO2 costing model that users could be expected to meet 10 percent of the costs of installations, current anticipated public allocations mean only US\$2 million per year in user finance would be leveraged in this way. The relative poverty in rural areas means the possibility for increasing household contributions to capital expenditure (CAPEX) is slim. At a minimum, rural communities should meet the cost associated with O&M if systems are to be sustainable. However, for the moment even this is rare for rural and small town schemes, without commitment to community management, meaning O&M

**Figure 10**  
Rural water supply coverage



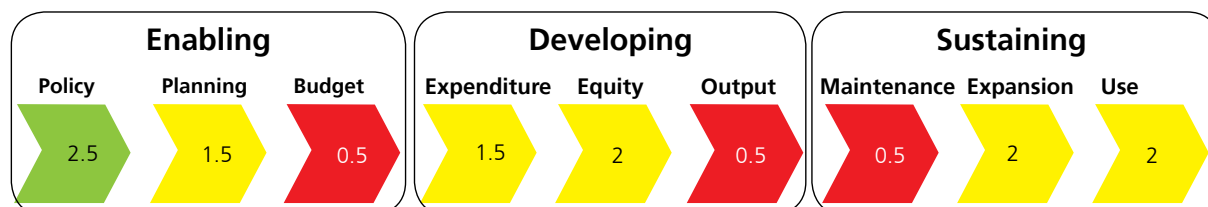
Sources: JMP 2010 report; Water Supply Division, GoSL.

**Figure 11**  
Rural water investment requirements



Source: CSO2 costing.

**Figure 12**  
Rural water supply scorecard



Source: CSO2 scorecard.

costs of around US\$10 million per year are likely to be unmet or fall on the public purse.

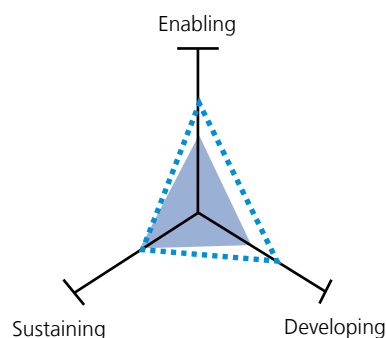
Figure 12 shows the scorecard results for the RWS service delivery pathway. The scorecard uses a simple color code to indicate: building blocks that are largely in place, acting as a driver on service delivery (score >2, green); building blocks that are a drag on service delivery and require attention (score 1–2, yellow); and building blocks that are inadequate, constituting a barrier to service delivery and a priority for reform (score <1, red).

The subsector scorecard indicates several concerns along the service delivery pathway. The poorest scores were registered for **planning, budgeting, delivering outputs,** and ensuring adequate **maintenance** of services.

For **planning**, while Sierra Leone has developed a policy covering rural water supply, it has yet to develop a sector investment plan through which to operationalize policy goals. While in recent years **budgets** for the subsector have gone up considerably, they remain inadequate relative to requirements and do not comprehensively capture all spending in the sector. Levels of **expenditure** (budget utilization) are improving but are still inadequate due to capacity limitations, particularly for procurement.

In respect of **equity** the formula for distributing allocations to local councils for rural water and sanitation based on needs (see Section 5) is positive but the sums involved are too small to make any meaningful impact at this stage. The scorecard's low score for **output** is explained by a host of factors, including insufficient funding, procurement

**Figure 13**  
Average RWS scorecard scores for enabling, sustaining, and developing service delivery, and peer-group comparison



■ Sierra Leone average scores  
⋯ Averages, LICs, GNI p.p. <=\$500

Source: CSO2 scorecard.

challenges, and limited private sector involvement in providing goods and services. The low score for **maintenance** is attributable to the fact that SALWACO (which is currently in charge of many rural systems) is unable to generate sufficient tariff revenue to meet basic O&M requirements, whilst operational cost recovery also remains low or nonexistent in systems provided by NGOs. The supply chain for water supply spare parts in rural areas is also considered to be inadequate.

Figure 13 indicates that Sierra Leone's performance is below the peer-group average for building blocks relating to enabling and developing services.



## 8. Subsector: Urban Water Supply

### Priority actions for urban water supply

- Undertake preparation of an Urban Water Sub-Sector Investment Plan, with details on financing requirements, mix of funds, and achieving financial equilibrium.
- Speed up reform of the sector to improve efficiency of cost recovery.
- Set realistic tariffs to recover a substantial portion of production cost.

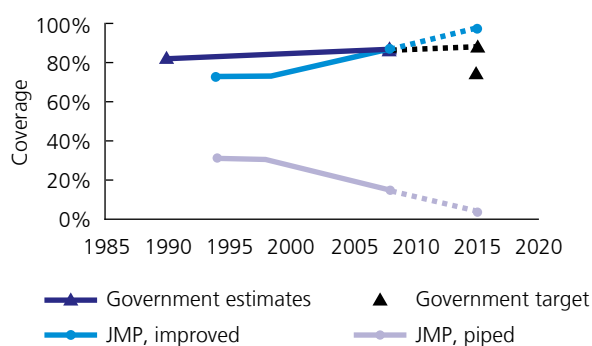
The JMP reports 86 percent urban water coverage for 2008. Many local stakeholders argue that this figure is overly optimistic on the grounds that many water sources in urban areas which are being considered improved by the JMP—for example, protected wells and tube wells (on which 36 percent of urban households depend)—may in fact be supplying water of doubtful quality. However, no reliable alternative administrative data on coverage exist (the government trendline depicted in Figure 14 uses national estimates for 1990 in the absence of JMP figures, but otherwise uses the same disputed 2008 figure).

The National Water and Sanitation Policy (NWSP) indicates a target of 74 percent for urban water supply by 2015. If the current survey data are to be believed, this has already been achieved. The JMP data imply that piped water coverage has decreased in the past decade and a half.

Anticipated financial flows to the urban water subsector are inadequate relative to capital investment requirements of around US\$100 million per year for meeting the sector target, even though both the SALWACO and GWWC have reported an increased financial commitment to the sector from the GoSL for the 2010 financial year. Even assuming the subsector coverage target is already met (Figure 14), costs will be incurred for both new infrastructure (due to population growth) and rehabilitation.<sup>22</sup>

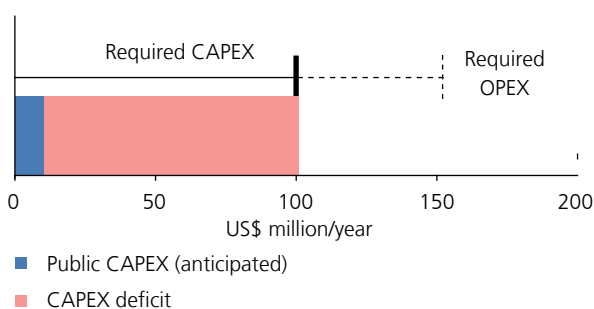
With no up-front user contribution to capital costs, the projected financing gap for water supply infrastructure is US\$90 million per year. Additional to this, major costs will be incurred developing new water resources, particularly for Freetown.

**Figure 14**  
Urban water supply coverage



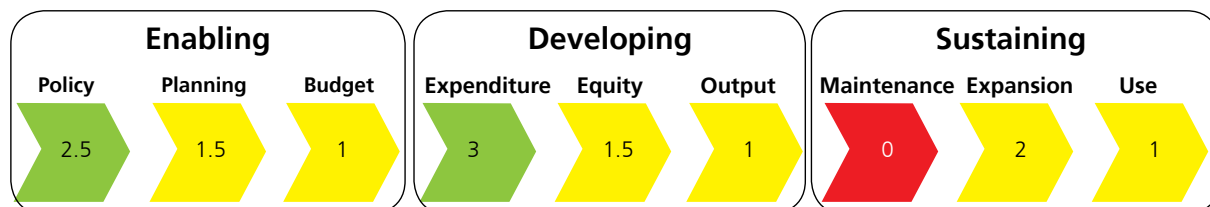
Sources: JMP 2010 report; Water Supply Division, GoSL.

**Figure 15**  
Urban water investment requirements



Source: CSO2 costing.

**Figure 16**  
Urban water supply scorecard



Source: CSO2 scorecard.

In the future a substantial proportion of costs could be recovered through tariff revenues as the subsector moves closer to cost recovery. Currently, however, there appears to be an unwillingness to charge for services (particularly to those considered poor) even when considerable improvements have been made. For example, public standpipes dispense water free when consumers previously paid substantial amounts to obtain water through private providers.

The urban water subsector scorecard suggests satisfactory progress in putting in place a number of building blocks, with **policy** and **expenditure** being particular highlights. The NWSP clearly spells out the vision and the targets that the subsector must pursue and follows regional best practice, although some policy measures have yet to be translated into practice. The GVWC’s annual financial

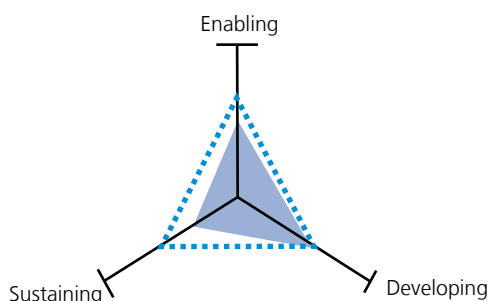
statements are an important indication that expenditure monitoring is being taken seriously. Whilst **budgets** have been small, utilization rates for domestic allocations are assessed to be good.

In terms of **equity**, no mechanisms/criteria exist for allocating resources between unserved regions and among different categories of consumers. Some consideration of equity issues may, however, be seen in an emphasis on provision of standpipes for the poor in all new projects.

For the moment there is insufficient **output** to meet the service delivery gaps that have arisen from years of civil war that saw infrastructure seriously deteriorate. The quality of output remains an unknown as water quality is not systematically monitored.

**Maintenance** represents the greatest challenge for sustainability for urban water supply systems, given the SALWACO’s low internal revenue-generating capacity (only 12 percent of revenues are generated from tariffs) and the inability of the GVWC to achieve cost recovery (compounded by an unwillingness to charge for standpipes).

**Figure 17**  
Average UWS scorecard scores for enabling, sustaining, and developing service delivery, and peer-group comparison



■ Sierra Leone average scores  
 ⋯ Averages, LICs, GNI p.p. <=\$500

Source: CSO2 scorecard.

## 9. Subsector: Rural Sanitation and Hygiene

### Priority actions for rural sanitation and hygiene

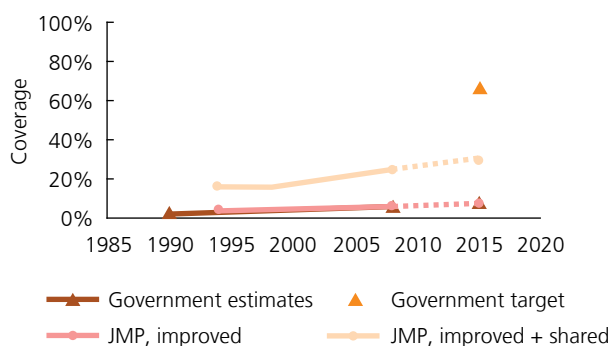
- Increase the budget for sanitation, in particular for strengthening institutions and undertaking community sensitization programs.
- Complement CLTS with microfinancing to assure uptake.
- Undertake continuous monitoring of uptake of CLTS.

The JMP figures show only a marginal increase in rural sanitation coverage from 4 percent in 1994 to 6 percent in 2008. Extrapolating the trend reveals that the subsector target of 66 percent would be missed by a considerable margin without a huge acceleration. Household surveys remain the only source of data available for establishing coverage in the subsector. In terms of definition, Sierra Leone NWSP refers to ‘adequate sanitation’ rather than ‘improved’, which is used by the JMP and national surveys.<sup>23</sup> It is clear from this definition by the GoSL and the target figures indicated in the NWSP that shared facilities are counted among those considered adequate (unlike the JMP’s ‘Improved’ definition). The JMP estimates that a further 18 percent of the rural population use shared

facilities. Perhaps the greatest challenge in the subsector is the high incidence of open defecation (estimated at 36 percent by the 2010 JMP report).

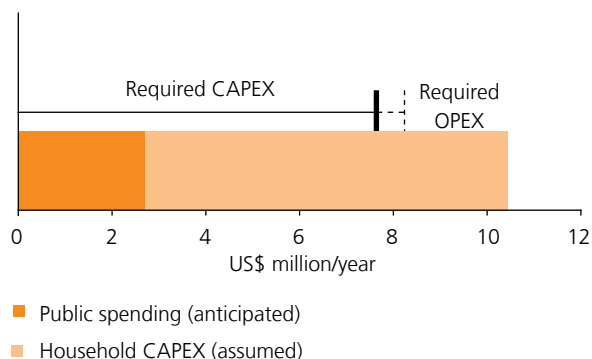
The CLTS approach requires that users meet the full cost of capital investments (CAPEX, or ‘hardware’), which are in the region of US\$10 million annually: the costing model (and results shown in Figure 19) depicts the expectation of the policy, with household contributions matching CAPEX requirements. However, these contributions will not be leveraged without complementary efforts from the government, in the form of a microfinance arrangement that supports poor rural households to build their choice of facilities, alongside effective, large-scale software efforts.

**Figure 18**  
Rural sanitation coverage



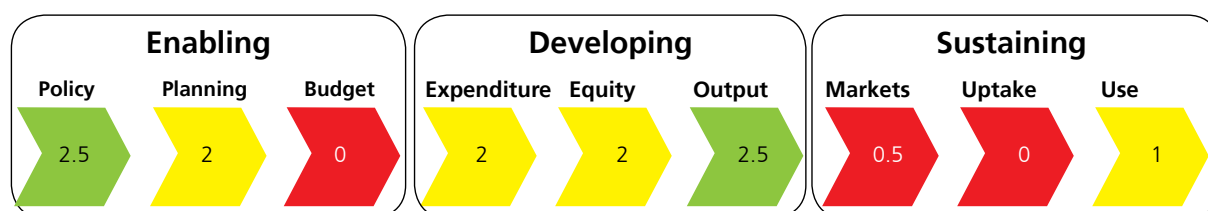
Sources: JMP 2010 report; Water Supply Division, GoSL.

**Figure 19**  
Rural sanitation investment requirements



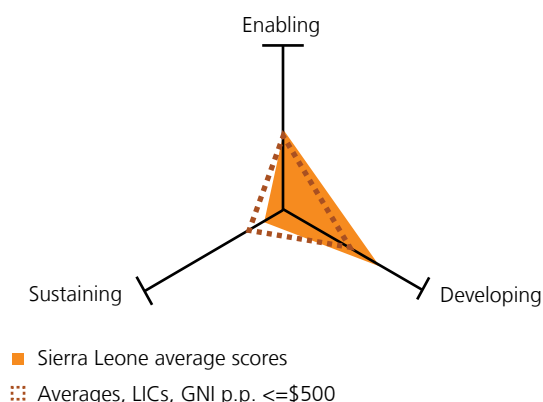
Source: CSO2 costing.

**Figure 20**  
Rural sanitation and hygiene scorecard



Source: CSO2 scorecard.

**Figure 21**  
Average RSH scorecard scores for enabling, sustaining, and developing service delivery, and peer-group comparison



Source: CSO2 scorecard.

The apparent availability of user finance will thus in practice depend on how effectively anticipated public finance (of around US\$3 million per year) is utilized: for underwriting any losses associated with recoveries on microfinance schemes; information, education, and communication (IEC); and marketing.

The O&M requirement (OPEX) for upkeep of rural sanitation is estimated at an additional US\$1 million per year.

The subsector scorecard, as depicted in Figure 20, indicates a number of low scoring building blocks which present barriers along the service delivery pathway. This includes very low **budgets** to support the Environmental Health Department, insofar as they can be discerned at all (the obscurity of subsector spending further reduces the score for this building block).

The low scores with regard to sustaining services stem from the lack of private sector capacity to facilitate household access to sanitation goods and services (the main concern of the **markets** building block), as well as the insufficiency of **uptake**—in terms of the quantity and quality of latrines, and sound hygiene behavior.

Whilst the emphasis on CLTS is an important initiative, at this early stage it is difficult to tell how far it will result in increased coverage: implementation will be far more challenging than declaring CLTS as a policy principle. Figure 21 shows Sierra Leone’s strong score, relative to its peers, for building blocks associated with developing services. This indicates that the tools for developing household sanitation equitably and at scale, through the CLTS approach, are at least partly in place. However, the low budgetary allocations, insufficient private sector involvement, and the absence of effective microfinance arrangements may make this sound framework for implementation redundant, allowing communities and households to slip back into open defecation.

## 10. Subsector: Urban Sanitation and Hygiene

### Priority actions for urban sanitation and hygiene

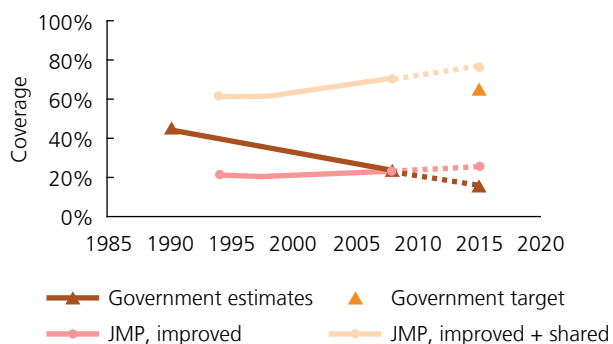
- Prepare an urban sanitation plan and strategy for achieving targets.
- Increase budgetary support for both operations and maintenance of existing facilities and for capital investments in sewerage.
- Clearly define strategy for addressing sanitation and hygiene in poor and peri-urban communities.

The JMP figures show a marginal increase in urban sanitation coverage from 21 percent in 1994 to 24 percent in 2008; the trend suggests that the national target of 66 percent will likely be missed in terms of the JMP’s definition of improved sanitation. Using the government’s own estimate of coverage in 1990 yields a steeply declining trendline. A small portion of the population is connected by sewers (0.3 percent), 8 percent use an on-site pour-flush system, whilst 16.5 percent use VIP latrines or latrines covered with slabs.<sup>24</sup> Open defecation is estimated at around 5 percent. On the other hand, the latest JMP estimate portrays 47 percent of the urban population sharing sanitation facilities; if this is factored into the category of adequate sanitation, as defined by the GoSL, then the target of 66 percent could be met.

An annual capital investment requirement of US\$32 million is estimated for the rehabilitation and expansion of urban sanitation facilities. A user contribution of 25 percent of total hardware costs has been incorporated in the model, in the face of a very unclear strategy on urban household sanitation delivery. It is assumed that sewer connections will be largely subsidy driven, though these are expected to serve a small proportion (c. 6 percent) of those gaining improved access.

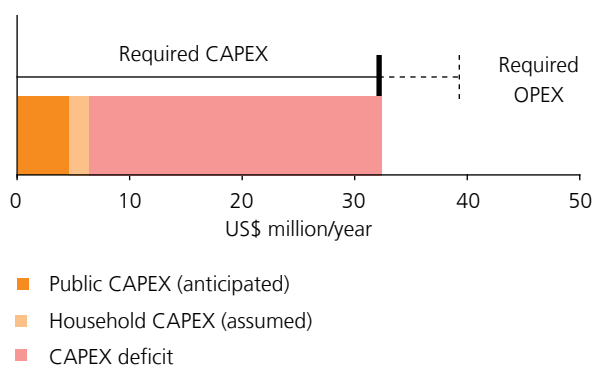
The sector lacks a strategy to accelerate urban sanitation. CLTS is not an option for urban sanitation in Sierra Leone. Indeed, according to UNICEF, an attempt to introduce CLTS to the semi-urban Western Area of Freetown, had extremely limited success. It was found that the

**Figure 22**  
Urban sanitation coverage



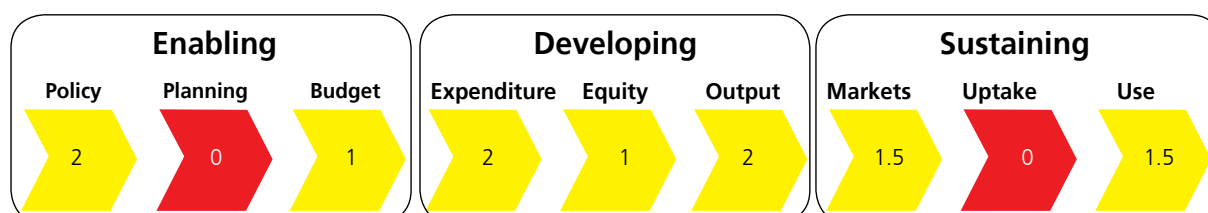
Sources: JMP 2010 report; Water Supply Division, GoSL.

**Figure 23**  
Urban sanitation investment requirements



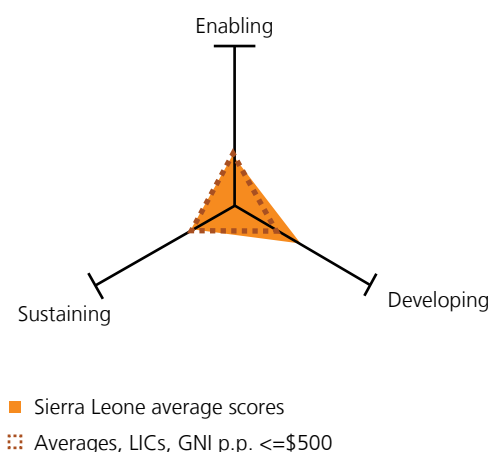
Source: CSO2 costing.

**Figure 24**  
Urban sanitation and hygiene scorecard



Source: CSO2 scorecard.

**Figure 25**  
Average USH scorecard scores for enabling, sustaining, and developing service delivery, and peer-group comparison



Source: CSO2 scorecard.

high population density, lack of space, and community cohesion all hindered the success of the program.<sup>25</sup> This implies that other means of speeding up sanitation uptake should be used to encourage low-income and peri-urban populations to construct their own facilities. In these communities communal facilities, even though considered unimproved, may be an interim solution to the sanitation deficit.

The service delivery pathway for the urban sanitation and hygiene subsector is faced with barriers in relation to poor **planning** and unclear mechanisms for ensuring **uptake** (Figure 24). While **budget** allocations to the subsector are slightly easier to discern, and capture more domestic and donor spending, than for rural sanitation, they are still insufficient.

The main bottleneck to achieving the targets for improved sanitation in urban areas is the absence of a strategy to increase access. The MICS 2005 established a strong correlation between improved sanitation facilities and location (urban versus rural), increasing wealth status, and increasing educational level of the head of household.

The current default assumption appears to be that sanitation uptake will move in tandem with improved wealth status. However, increasing urbanization, and the challenges in obtaining basic livelihoods in peri-urban and low-income urban communities, demand a new strategic direction if the targets are to be met. To underpin a strategy and effectively enable service delivery, there needs to be greater clarity in the institutional arrangements, and the building of adequate capacity to handle urban sanitation.

The role of sewerage networks in the future technology mix will need to be carefully considered, as it is expensive, tends to benefit only the wealthiest, and poses a challenge in terms of recovering costs.

## Notes and References

- <sup>1</sup> 2010 average, Global Economic Monitor, The World Bank.
- <sup>2</sup> The first round of CSOs was carried out in 2006 covering 16 countries and is summarized in the report, 'Getting Africa On-Track to Meet the MDGs on Water and Sanitation'.
- <sup>3</sup> JMP estimates are based on a linear regression of nationally representative household surveys.
- <sup>4</sup> Statistics Sierra Leone. 2008. Sierra Leone Demographic and Health Survey, 2008.
- <sup>5</sup> The CSO2 costing model also omits the cost of hygiene promotion and other software activities, relative to the targets, due to the difficulty of estimating such costs on a per capita basis.
- <sup>6</sup> As for any model reliant on assumptions, the 'workings' are as important a tool for policy makers as the outputs. Consequently the model itself is provided to partners and the Government of Sierra Leone. When more reliable data become available they can be used to get a better appreciation of the financing requirements.
- <sup>7</sup> Due to rounding, component figures may not sum to totals.
- <sup>8</sup> International Monetary Fund, World Economic Outlook Database October 2010, accessed November 10, 2010
- <sup>9</sup> Government of Sierra Leone. 2008. An Agenda for Change. Second Poverty Reduction Strategy Paper (PRSP II), 2008-2012. p.88.
- <sup>10</sup> The CSO2 scorecard methodology and conceptual framework are discussed in detail in the synthesis report.
- <sup>11</sup> WATSAN Policy—Final Doc, August 2008 page 30. It notes the following: "It is observed that the transfer of urban water supply responsibilities from SALWACO and WSD to the Ministry of Local Government (District Councils) needs re-examination with a view to allow sufficient time for capacity building in the districts, that will make it possible for the districts to take over the responsibilities".
- <sup>12</sup> Indicators relating to the institutional framework section are: All subsectors: targets in national development plans/ PRSP; subsector policy agreed and approved (gazetted as part of national policy or as standalone policy); RWS/UWS: institutional roles defined; RSH/USH: institutional lead appointed.
- <sup>13</sup> Indicated during discussions with the Head of the department.
- <sup>14</sup> MoEWR. 2008. National Water and Sanitation Policy, page 47.
- <sup>15</sup> Indicators relating to the section on financing and its implementation are: All subsectors: programmatic Sector-Wide Approach; investment program based on MDG needs assessment; sufficient finance to meet MDG (subsidy policy for sanitation); percent of official donor commitments utilized; percent of domestic commitments utilized.
- <sup>16</sup> The depreciation of the SL Leone against the more stable US dollar accounts for the relatively higher expenditure in 2009 in Leone terms, but lower in dollar terms compared to 2008. The average exchange rates for US\$1 were Le 2,953 (2008), Le 3,562 (2009) and Le 3,650 (2010), according to GoSL (MoFED Budget Profile 2010).
- <sup>17</sup> MoFED, Budget Profile for Y2010, Annex 7, and Budget Statement for 2010.
- <sup>18</sup> The Integrated Financial Information Management System (IFIMS)
- <sup>19</sup> Indicators relating to the sector M&E section are: All subsectors: annual review setting new undertakings; subsector spend identifiable in budget (UWS: inc. recurrent subsidies); budget comprehensively covers domestic/donor finance; RWS, RSH, and USH: domestic/donor expenditure reported; UWS: audited accounts and balance sheets from utilities; RWS, RSH, and USH: periodic analysis of equity criteria by CSOs and government; UWS: pro-poor plans developed and implemented by utilities; RWS/UWS: nationally consolidated reporting of output; RSH/USH: monitoring of quantity and quality of uptake relative to promotion and subsidy efforts; All subsectors: questions and choice options in household surveys consistent with MDG definitions.
- <sup>20</sup> The sector review should involve all sector-related actors—including ministries of health, internal affairs, finance and education), local councils, service providers, donors, NGOs and civil society, the private sector, academia and training institutions, consumers, and traditional authorities, among others. It should also involve water-using sectors such as energy and agriculture so as to give a broader perspective of water security and its nexus with socioeconomic growth. The CSO2 consultation workshop had representation from all the listed actors.
- <sup>21</sup> Discussions with OXFAM.
- <sup>22</sup> Investment requirements for urban water supply are amplified by a high-cost technology mix, with exceptionally high per capita costs for standpipes (US\$750) as well as household connections (US\$1,000).
- <sup>23</sup> The NWSP defines this as "the provision and maintenance of systems or facilities of disposing of human excreta, waste water and household refuse, which is acceptable and affordable to the SL communities.... Facilities must meet construction set standards, should be hygienic and easily accessible, with no adverse elements on the environment". MoEWR. 2008. National Water and Sanitation Policy, p. 48.
- <sup>24</sup> Sierra Leone 2008 Demographic and Health Survey, page 26.
- <sup>25</sup> UNICEF. 2009. CLTS in Sierra Leone: The Progress So Far, January–December 2009, p.7.









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