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Country Sector Assessments UNDP GoAL WaSH Programme

Governance, Advocacy and Leadership for Water, Sanitation and Hygiene

Volume 1 | Sierra Leone



GoAL WaSH

Achieving the MDGs

UNDP Water Governance Programme – Adaptive Water Governance

UNDP's Water Governance Programme (UNDP-WGP) works in over 150 countries, providing policy support, capacity building and advisory services in three major strategic areas:

- Water Supply and Sanitation (\$170m, 34%)
- Integrated Water Resources Management (\$111m, 22%)
- Regional and Global Cooperation (\$216m, 44%)

The Water Governance Programme also integrates four 'cross cutting' areas into its broader thematic work:

- Climate Change and Water
- Human Rights Based Approaches (HRBA)
- Mainstreaming Gender into Water
- Knowledge Management

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The Global Water and Sanitation Crisis

Globally, almost 1bn people lack clean drinking water. 2.4bn people have no access to hygienic sanitation facilities; 1.2bn lack any sanitation facilities at all. Each day, an average of 5,000 children die due to preventable water and sanitation related diseases. In 2000, through the Millennium Development Goals (MDGs), the international community committed to halving the proportion of people without access to clean water and basic sanitation by 2015. Overall, the world is on track to meet the water supply MDG, but there are major gaps in many regions and countries, particularly in Sub-Saharan Africa. On current trends, the world will miss the sanitation target by a staggering 700m people.

Meeting the MDG water and sanitation targets is more than a health and dignity issue. The evidence is compelling that achieving the water and sanitation goals would trigger a major leap forward in human development:

- Water and sanitation are essential to achieving all of the MDGs.
- Investment in water supply yields an average economic return of \$4.4 to \$1.
- Investment in sanitation yields an average economic return of \$9.1 to \$1.
- Human development is more closely linked to access to water and sanitation than any other development driver, including spending on health or education, and access to energy services.

The crisis in water and sanitation overwhelmingly affects the poor. Availability of water is certainly a concern for some countries. But the global water and sanitation crisis is mainly rooted in poverty, power and inequality, not in physical availability. It is, first and foremost, a crisis of governance and thus governance reform must be a key pillar of any strategic approach to addressing the crisis.

UNDP's Response

UNDP promotes and facilitates equitable access to water and sanitation services as a fundamental contribution to enhancing human development.

UNDP works together with government, civil society, private sector and other development partners to bring about the necessary improvements in water governance to scale-up water and sanitation services for the poor.

UNDP Supports:

- Coordination of country assistance by UN and other development partners.
- Incorporation of water and sanitation into national development planning.
- Governance and policy reform for enhanced water supply and sanitation access.
- Capacity building of institutions and practitioners.
- Special attention to fragile states, where water and sanitation challenges are greatest.

The GoAL WaSH Programme

GoAL WaSH is an innovative new UNDP programme that aims to accelerate achievement of the water and sanitation MDGs through strategically targeted interventions that strengthen governance of the water and sanitation sectors at appropriate levels. Specifically, GoAL WaSH focuses on:

- Countries with low water and sanitation coverage projected not to achieve the water, sanitation or both MDGs.
- Identifying gaps, needs, constraints and opportunities in national water and sanitation plans, strategies and capacities.
- Governance reform, leadership and policy advocacy.
- Incorporation of water and sanitation into national MDG and related poverty reduction strategies.
- Close coordination with governments and key development partners active in water and sanitation at country level.

This volume is the first in a planned series of national assessments of governance in the water and sanitation sectors in target GoAL WaSH countries. These sector assessments are in turn informing the design and implementation of a series of UNDP capacity building and technical assistance projects to strengthen water governance and advance national progress on the water supply and sanitation MDGs.

Sincerely,

A handwritten signature in black ink that reads 'Andrew Hudson'.

Andrew Hudson
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Country Sector Assessments: Volume 1
UNDP GoAL WaSH Programme

Governance, Advocacy and Leadership for Water, Sanitation and Hygiene

Sierra Leone

National Sector Assessment

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Sector Preparedness Overview

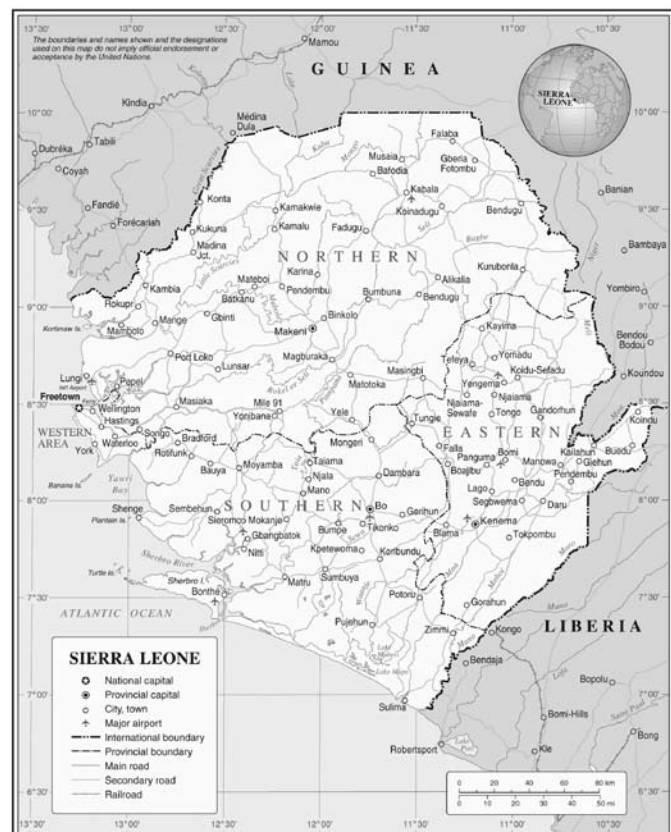
- National Strategies
- Institutional Arrangements
- Aid Coordination and Donor Support
- Legal Framework
- Sector Capacity
- Sector Financing

MDG Outlook

Is Sierra Leone on the right track to reach the MDGs for water and sanitation?

Sierra Leone is remarkable as one of the most water rich countries in West Africa, yet also one of the poorest, where water scarcity and grossly inadequate sanitation threaten to compromise the gains of a hard won peace. After a brutal ten year civil war that ended in 2001, Sierra Leone has achieved a fragile stability, and a growing economy, yet the poverty indicators are not encouraging. Sierra Leone ranks very low on most human development indicators placing it at an overall 176th position out of a total of 177 countries on the Human Development Index, 2006, surpassed only by Niger. Supply side attempts to provide services to poor people are only slowly moving out of relief mode to take on a longer term developmental perspective that focuses on sustainability dimensions.

The country is seriously off-track for reaching most MDGs, including those on halving extreme income poverty, child mortality, life expectancy, water and sanitation and health. However, recent positive developments in governance, educational enrollment, legal reform on gender, together with widespread peace and a nationally endorsed decentralisation process, suggest an enabling environment to reverse this situation and improve social indicators.



Population and Poverty Indicators

A major consequence of the civil war was a massive displacement of the population, with many people converging on the capital city, Freetown. Population estimates are accordingly subject to considerable uncertainty (last census of 2004.) A recent estimate (Mustapha, 2008) is provided in Table 1. This indicates continuing urbanization, with more than half the population in towns and cities by 2015.

Table 1: Population Growth Rate Estimates, Urban and Rural, 1990 - 2015

Source: Statistics Sierra Leone, Min. of Education, Min. of Finance (and Consultant's Estimates)

		1990	2002	2005	2006	2010	2015
Population		3,787,530	4,528,440	5,061,480	5,216,890	5,746,800	6,506,420
Annual Growth Rate		1.5	1.5	2.4	2.4	2.4	2.4
% Share of Population	Urban	32.2	39	44.2	45	48.1	52
	Rural	67.8	61	55.8	55	51.9	48
Literacy Rate (%)	Urban	38.2	36.2	39.3	41.1		
	Rural	30.0	24.0	30.9	33.3		
Per Capita GDP		\$820	484	561	602		

The November 2006 analytical report on poverty compiled on the basis of the 2004 census¹, states that 71% of Sierra Leoneans are poor (below \$1.00 a day) while 26% of the population live in extreme poverty (i.e. they are unable to afford 2700 calories of food per day). The northern region is the poorest while the western region is the richest. At the district level, Koinadagu and Moyamba in the northern and southern provinces and Kailahun in the east are the poorest.

Less than one-third of the rural population in Sierra Leone has access to a reliable supply of safe drinking water from a protected source, and many continue to rely on unprotected wells, rivers, streams and swamps (MacGrath, 2006). Even where a protected source exists, it is clear that households use a combination of sources including streams and traditional wells for cooking, washing and bathing to meet their water needs. Slum-dwellers and poor residents in Freetown rely on stand posts or unprotected wells where the water quality is questionable. In theory this water is free, but the poor regularly pay Le100/200 (\$0.03-06) or more per bucket to intermediaries who control local access.

Sierra Leone has some of the worst child survival indicators in world. Under five child mortality in 2000 was 316 for every 1000 births (Black *et al*, 2003), which was the worst in the world. MICS findings (UNICEF, 2006) show a slight improvement, with under five child mortality in 2005 being 267. This remains the highest in the world, and access to basic services, including water and sanitation, is a root cause.

Estimates on Attaining the MDGs

Different views have been taken on the validity of the existing data on WSS in the country (a recommendation in the recent National Water Policy is for a major overhaul of data collection and management throughout the sector). A Review of recent information collected from different surveys concerning levels of access to improved drinking water sources, and to adequate sanitation in Sierra Leone, shows that, while there are minor variations, a gloomy overall picture emerges.

¹ Statistics, Sierra Leone, 2004 Population and Housing Census, Analytical report on Poverty, November 2006.

Relevant results of a 'Best Estimates' analysis, undertaken for UNICEF in September 2006 (Westhof, 2006), are summarized in Table 2 below.

Table 2: Best Estimates of Access to Improved Water and Sanitation

Source: Figures summarized from Westhof (2006)

	Access to water: use of improved drinking water resources	Use of adequate sanitation	Both access to improved water and use of adequate sanitation (UNICEF 2006)
Overall (national)	52% (MDG target 76%)	34% (MDG target 66%)	
Urban	84%	64%	57.2%
Rural	32%	17%	10.3%

Table 2 summarises the overall water and sanitation coverage, but this hides significant regional variations. The UNICEF Best Estimates analysis indicates that only 11% of the poorest 20% of the population nationally have access to improved drinking water resources, compared to 91% of the richest 20% of the population. As can be seen from Table 2, Sierra Leone in 2006 was clearly not on target to meet the MDGs for either water or sanitation. Table 3 (2003-5 data) indicates the considerable regional variability of WSS coverage.

Table 4 provides an estimate from a review undertaken in mid 2007, based on data supplied by the key public sector water institutions. There are some notably bold projections here, especially for sanitation. As is argued further below, the achievement of these forecasts will require an immense turnaround in capacity and investment levels, as well as institutional reconstruction and reform.

Table 3: Regional Coverage of Water and Sanitation

* Govt Report at DEPAC Jan 2004

NO	DISTRICT	COVERAGE* (Govt 2003)		COVERAGE (MICS3 2005)		
		WATER SUPPLY	SANITA TION	REGION (Province)		
				Water	Sanitat ion	
1	Kailahun	14 %	6 %			
2	Kenema	22 %	12 %	EAST	52 %	19.2 %
3	Kono	15 %	10 %			
4	Bo	25 %	10 %			
5	Pujehun	20 %	13 %	South	46 %	31.9 %
6	Moyamba	25 %	15 %			
7	Bonthe	15 %	10 %			
8	Tonkolili	20 %	10 %			
9	Bombali	17 %	12 %			
10	Koinadugu	21 %	10 %	North	30 %	22.4 %
11	Port Loko	20 %	12 %			
12	Kambia	25 %	10 %			
13	Western Area	45 %	60 %	Western Area	87 %	70.6 %
	Rural				42.7 %	25.2%
	Urban				87.0 %	70.6%

Even accepting these estimates, Table 4 suggests that about 1.7m people would still be without access to water supply services by 2015. Furthermore, it notes that about 2.2m Sierra Leoneans would also be without proper sanitation facilities.

Based on the population that would be served in meeting the MDGs, Tables 5 and 6 provide further estimates of the physical infrastructure requirements in rural and urban areas for water supply facilities.

Tables 7 and 8 provide estimates for physical infrastructural requirements for rural and urban sanitation.

There is an inescapable conclusion from these estimates and forecasts - bearing in mind that the base for a number of the projections must be considered tenuous - that the prospect for meeting the MDGs is slender at best. The statistical picture is reinforced by the qualitative data that has emerged from a number of assessments of the social infrastructure of Sierra Leone, and the high level of linkages between poverty, water-borne diseases, and infant mortality (GoSL, DFID/UNICEF, September 2007).

Table 4: Public Sector Estimates for WSS Coverage 2005 - 2015

Source: Min. of Energy and Power, WSD, SALWACO and GVWC, derived from Mustapha (2008)

		2005	2010	2015
Total Population		5,061,480	5,746,800	6,506,420
Access	Water Supply	47 %	60.5 %	74 %
Share of Population served or to be served	Urban	1,051,472	1,672,348	2,503,670
	Rural	1,327,424	1,804,466	2,311,080
Share of Population NOT Served or that would not be served		2,682,584	2,269,986	1,691,669
Access	Sanitation	31 %	48.5 %	66 %
Share of Population served or to be served	Urban	693,524	1,340,642	2,233,003
	Rural	875,535	1,446,556	2,061,234
Share of Population NOT Served or that would Not be served		3,492,421	2,959,602	2,212,183

Source: Min. of Energy and Power, WSD, SALWACO and GVWC, derived from Mustapha (2008)

Table 5: Water supply facilities required to meet MDGs (Rural Water Supply)

Source: WSD, SALWACO, derived from Mustapha (2008)

Period	Additional population to be served	Additional population to be served considering present investments	Physical Infrastructure Requirement		
			No. of Hand Dug Wells to be constructed	No. of Boreholes to be drilled	No of standpipes to be constructed
2005-07	190,000	not known	900	350	50
2007-10	300,000		1250	600	100
2010-15	510,000		2200	1000	200
Total	1,000,000	-	4,350	1,950	350

Table 6: Water Supply Facilities Required to Meet MDGs (Urban Water Supply)

Source: WSD, SALWACO, derived from Mustapha (2008)

Period	Additional population to be served	Additional population to be served considering present investments	Physical Infrastructure Requirement		
			No of Houses to be connected	No. of Standpipes to be constructed (peri_urban)	No. of Boreholes to be drilled (peri_urban)
2005-07	250,000		22,000	15,000	125
2007-10	400,000		35,000	22,000	200
2010-15	830,000		76,200	50,000	400
Total	1,480,000		133,200	87,000	725

Table 7: Determination of Sanitation Facilities Based on MDGs (Rural Sanitation)

Source: WSD and MoHS, derived from Mustapha (2008)

Period	Additional population without access to improved sanitation	Estimated no. of Households that needs improved sanitation	No of Improved pit latrines to meet MDGs (based on one drop hole per family)	Annual installation of Improved latrines
2005-07	1,778,688	300,000	300,000	100,000
2007-10	1,536,033	250,000	250,000	85,000
2010-15	1,061,847	175,000	175,000	37,000
Total	4,376,568	725,000	725,000	

Source: WSD and MoHS, derived from Mustapha (2008)

Table 8: Determination of Sanitation Facilities Based on MDGs (Urban Sanitation)

Source: GTZ, MOHS, Freetown City Council, derived from Mustapha (2008)

Period	Add. persons without access to improved sanitation	Add. persons to be served (considering present investments)	Estimated no. of Households to be served	No. of Houses with Sewer Connection	No. of On site Facilities	Annual installation of On site Facilities
2005-07	155,000		25,000	200	25,000	8,000
2007-10	140,000		24,000	600	24,000	8000
2010-15	115,000		21,000	1200	20,000	5000
Total	410,000		70,000	2000	69,000	

Urban Water Supply and Sanitation: A Critical Issue

The urbanization rate in Sierra Leone exceeds the growth in current levels of urban water supply. In Freetown the main water supply company, Guma Valley Water Company (GVWC) provides an average daily output of 18m gallons per day, as against a daily estimated demand of 35m gallons/day. Water is rationed to many areas in the city with almost no customers getting 24-hour supply. In the peri-urban areas and the densely populated poor urban central areas, customers receive supplies once a month or none at all. Nationally, only 50% of the urban population have access to water from improved water sources. With rapid and uncoordinated expansion of urban settlements, more urban residents are likely to continue depending on vendors and tanker services, at costs far in excess of utility rates.

In addition, water supply sources are no longer able to meet current demand, as is notably the case with the Guma Dam, Freetown's major source, which irregularly runs dry. Furthermore, the water is increasingly polluted as a result of contamination by human and industrial activities.

A graphic description of the problem in Freetown is provided by DFID (2007). High densities and degraded living conditions in the slums mean that poor people have virtually no access to sanitation. Pregnant women and sick children, who are unable to walk to the community toilets at the edge of the slum, use plastic buckets to relieve themselves and then simply tip the contents into the open drain nearby. Large numbers of latrines are simple pits, emptying into streams or drains.

Freetown is the centre of governance, and the hub of political life. The cleavages and rivalries over access to resources between networks that take place here are the main determinant of political stability. This stability has been hard won, and the role of the military remains central in keeping the peace. However the 8,000 – 10,000 soldiers and their families and dependants housed in the three main military barracks in Freetown (Wilberforce, Murraytown and Goderich) are not immune from the degradation in basic services which affects the city. The nexus between poverty, an absence of basic WSS services, and the threat to regime stability is physically located in these parts of the city.

The Overall Challenge

The Second Generation Poverty Reduction Strategies (PRSP) (GoSL, May 2008) summarizes the challenges faced by the WSS sector in the following terms (see Table 9):

Table 9: Key Challenges in WSS for Sierra Leone, PRSP

Public Sector Deficiencies
▪ Absence of some sector institutions to undertake key areas of sector programming
▪ Capacity limitations amongst existing sector institutions
▪ Lack of a consistent water resources information baseline data and the lack of a systematic monitoring of the resource utilization and use
▪ Translating sector policy issues into updated water codes to guide activities in operations, financing, institutional linkages, capacity building.
▪ Limited financial support to the sector by Government and ESA
▪ Devolution to Councils with limited capacities and with no program for capacity development for the sector at the various levels.
▪ Lack of an integrated approach to Water Resources Management by various sectoral actors.

To these issues of coordination, capacity-building and institutional development and reform may be added the need for swift remedial action in the main urban centres, and notably the metropolitan capital.

The next section reviews the national policy and strategic environment for dealing with these challenges.

Sector Preparedness Overview

National Strategies

The WSS sector in Sierra Leone has until recently been characterized by the absence of a clear national policy, a single lead agency, and a clearly defined overall strategy. These deficiencies are now being addressed with the development of a number of planning and policy initiatives.

The key initiative is the National Water Policy (NWP), which was developed in 2007 with UNECA assistance, and published as a final draft in July 2008. This combines elements from the PRSPs of 2005 and 2008, Sierra Leone Vision 2025, statements on achieving the MDGs, and more general commitments to achieving a high quality livelihood for the people of Sierra Leone, attaining good governance through the rule of law, and developing a strong and competitive economy.

Vision 2025 defines the core strategic objectives that must be incorporated into all plans, policies and programmes, including the water, sewerage and sanitation sector (see Table 10). The PRSPs (Table 11) make similar commitments.

Table 10: Sierra Leone Vision 2025

Core Strategic Objectives of Sierra Leone Vision 2025

- Attain competitive private sector-led economic development with effective indigenous participation.
- Create a high quality life for all Sierra Leoneans.
- Build a well educated and enlightened society.
- Create a tolerant, stable, secure and well-managed society based on democratic values.
- Ensure exploitation and effective utilization of national resources while maintaining a healthy environment.
- Become a science and technology driven nation.

To help address these priorities the Government of Sierra Leone (GoSL) developed the first PRSP which was adopted in 2005 and was constructed around three pillars: (i) Good Governance, Peace and Security; (ii) Food security, Job Creation and Growth; and (iii) Human Development. Water is targeted under Pillar 2 (Economic Growth and Job Creation) and also Pillar 3 (Human Development – including basic education, affordable health services and water and sanitation). The Second Generation PRSP (2008-2010) maintains and strengthens this focus on water and sanitation.

Table 11: Sierra Leone PRSP 1 and 2

Core Strategic Objectives of Sierra Leone PRSPs

- Provide safe drinking water and sanitation facilities for deprived communities in rural and urban areas.
- Rehabilitate and reconstruct existing water facilities damaged by the war.
- Provide adequate liquid and solid waste disposal facilities in urban areas.
- Increase community awareness of good hygiene practices relating to collection and storage of drinking water, use and maintenance of sanitary facilities and other environmental sanitation issues.
- Reduce U5MR and MMR by 33%.
- Increase access to safe drinking water and sanitation from 46% in 2005 to 74% by 2015 at an annual rate of about 3%.
- Adopt a decentralised approach to the management of water.
- Strengthening institutional capacity and encouraging private sector participation in developing a sector policy and action plan.

National Water Policy

The National Water Policy (NWP) document (July 2008) aligns water and sanitation policy objectives with Sierra Leone's Development Vision 2025, the PRSP objectives and the commitments to attaining the MDGs. The key elements of the NWP are set out in Tables 12 to 16 on the following pages. The principal objective of the NWP is to develop a comprehensive framework for promoting optimal, sustainable and equitable development and use of water resources. The DNP reviews all water use sectors, and proposes the adoption of an Integrated Water Resource Management (IWRM) approach. New institutions, revised legislation, privatization of a number of WSS functions and other far-reaching measures are also proposed. These points of focus in the NWP reflect an awareness of the shortcomings of current practices, where planning, development and management of resources are approached from a sectoral perspective without coordination among the relevant stakeholder institutions. This has resulted in an unsustainable and inefficient use of resources.

The NWP expects that government should actively promote the development of an effective local private sector to provide high quality services in the water sector. Water entities will be established as legally, financially, managerially and operational autonomous entities, separate from operational control by central and local government. The most important of these will be a National Water Resources Board (NWRB) and a National Water Regulatory Authority that will take the main responsibility for implementation of policy away from the Water Supply Division (WSD) of the Ministry of Energy and Power (see section on institutions, page 83).

According to NWP proposals, the National Water Resources Board will be established and become the institution responsible for all water resources management, from upstream freshwater sources to freshwater-seawater interfaces. It will be responsible for implementing the IWRM strategies. The NWRB will be small, employing technical and expert personnel and initially will be funded by central government and development partners.

A new water law and regulations will be put in place to ensure that, like many other natural resources, by constitution and law, all water in the country is vested in the State of Sierra Leone and every citizen has an equal right to access and use natural water resources for their own and the nation's benefit. The new Water Law will provide for commercialisation of water entities and create an enabling framework for private sector participation in all water sector activities.

The NWP also argues that there is insufficient data and knowledge on the potential of groundwater resources in terms of quantity and quality. This could lead to under utilisation of the resource. It notes that there has not been strict adherence to procedures and guidelines governing the development of this resource, thus threatening its sustainability. The challenge is to develop and increase groundwater uses, as it is technically more feasible and relatively cheaper than water impoundments. The Ministry of Lands in collaboration with the National Water Resources Board (NWRB) will carry out groundwater resource mapping to improve its allocation and use, and to protect vulnerable sources.

Overall, the NWP breaks important new ground in providing an over-arching policy for the sector, and setting up new institutions to implement this. The question remains as to how far its aims will be achieved, and whether these can be put in place and made effective in order to maximise the chances of attaining Goal 7 of the MDGs.

Table 12: Urban WSS in Sierra Leone

NWP: Specific Policy Objectives - Urban Water Supply and Sewerage

- To improve water supply coverage for the urban population from the current average level of 47% to 74% by year 2015.
- To improve sewerage and non-sewerage sanitation coverage for the population in urban centres from 31% to 66% by 2015.
- To prevent wasteful water use, through enhanced water demand management.
- To improve water and sewage disposal services in low income areas.
- To develop waste water treatment systems which meet established environmental standards.
- To encourage private sector participation in provision of water and sanitation related services.
- To improve accountability in water supply services.
- To develop human resources for carrying out sustainable water supply and sewerage services.
- To improve capacity on research and technological development.
- To develop strong mechanisms for collaboration among urban water suppliers and stakeholders.
- To improve the financial viability of urban water service providers so that they become financially self sustainable, covering their operational costs and gradually contribute towards investments in their networks.

Table 13: Rural WSS in Sierra Leone

DNP: Specific Policy Objectives - Rural Water Supply
<ul style="list-style-type: none"> • To improve access to reliable water supply services for the rural population from the present 32% and achieve the overall national target of 74% by year 2015. • To ensure that communities participate in the planning, construction, ownership, operation and maintenance of their water supply schemes. • To encourage and promote appropriate technology for rural water supply schemes. • To gradually increase communities' obligations for paying for operations and maintenance costs of water schemes. • To establish domestic water supply minimum service levels. • To provide adequate water for other rural economic activities. • To develop other water supply technologies such as rainwater harvesting. • To encourage fair representation of women in planning, decision making and management of water schemes. • To promote participation of the private sector in the delivery of water supply related goods and services. • To develop appropriate mechanisms for monitoring rural water supply activities. • To enable legal community ownership of rural water supply schemes. • To establish coordination and collaboration among various rural water stakeholders. • To mobilize adequate financing in a sustainable manner for increasing rural water supply services. • To increase communities' participation in financing their water supply programmes.

Table 14: Hygiene and Sanitation in Sierra Leone

DNP: Specific Policy Objectives - Hygiene and Sanitation
<ul style="list-style-type: none"> • The main objective is to improve the health of communities and ensure that the majority of the population (66%) has access to sanitation services by 2015. Specific objectives include: <ul style="list-style-type: none"> • To support and provide sanitation and hygiene education to improve peoples' health and quality of life through acceptable hygienic practices. • To improve community involvement in sanitation projects for sustainable success. • To develop and improve the capacity of communities and the involvement of people in community project decision making. • To minimise pollution from sanitation systems. • To develop a sustainable approach for financing urban and rural sanitation involving increased community participation. • To install sanitation systems that are designed and constructed in a manner that provides effective protection against disease transmission and the environmental impact of waste disposal.

Table 15: WSS Institutional Framework in Sierra Leone

DNP: Specific Policy Objectives - Institutional, Legal and Regulatory Framework

Sustainable water resources management, urban and rural water supply services and improvement of sanitation and hygiene require an effective institutional setup and legal framework that addresses the growing challenges in the sector. Specific objectives are:

- To establish roles and responsibilities of the various institutions involved in implementation of the Water and Sanitation Policy.
- To establish a National Water Resources Board, responsible for water resources management ensuring coordination, equitable resource allocation and conflict prevention.
- To establish a regulatory regime for regulating water supply and sewerage services which effectively balances economic, financial and social objectives.
- To enact a new water law which creates an enabling environment for all those involved in the sector, public and private, at present and future.
- To review and update existing water related legislations that might be outdated.

Table 16: WSS Data Management in Sierra Leone

Data Collection, Research and Coordinating Procedures

- Hydro-geological surveys will be carried out to facilitate sustainable development and use of groundwater resources.
- Continuous assessment, research, and monitoring of groundwater exploration and drilling activities will be strengthened.
- Procedures and guidelines on groundwater development and project management will be established and disseminated. Such procedures shall include exploration and drilling as well as operation and maintenance.

Financial Management Strategy

The Government of Sierra Leone is implementing a wide-ranging public financial management (PFM) improvement programme, which will have an impact on all development sectors, including WSS. The World Bank, EU, DFID and AfDB have provided financial and technical support to strengthen PFM in Sierra Leone. The Ministry of Finance PFM Reform Unit is supported by the World Bank, while DFID is funding a resident advisor to support implementation of the National Action Plan and PFM aspects of budget support. Other donor interventions include institutional strengthening of the Ministry of Finance supported by EC and AfDB; support to the National Revenue Authority by DFID; support to the Office of the Auditor General by DFID and AfDB; and support to the implementation of an Integrated Financial Management Information System (IFMIS) and decentralisation by the World Bank, DFID and the EU-funded Institutional Reform and Capacity Building Project (IRCBP).

The purpose of the project is to assist GoSL to design and implement a sustainable fiscal decentralisation strategy; to help newly elected local governments acquire the management skills necessary to translate resources into service delivery improvements on the ground; and to help establish a culture of transparency and accountability in local governments. While the IRCBP project provides some degree of technical assistance to councils (for example in the preparation of District Development Plans), much of its work is at central level, developing and consolidating the new fiscal framework. It does not support detailed financial or strategic planning within specific sectors. From a WSS point of view, what is critical here is that despite the best intentions, little effective decentralisation has taken place, and delivery of rural sanitation and water to the district centre towns remains very poor.

Institutional Arrangements

Central Ministries

There is no water and sanitation ministry in Sierra Leone. Instead, overall responsibility for water services rests with the Ministry of Energy and Power (MoEP) while overall responsibility for sanitation rests with the Ministry of Health and Sanitation (MoHS). More recently, a proposal to create a Ministry of Water has emerged from national policy dialogue, but again it seems unlikely that the suggestion will be taken up, and the new government has put effort into reducing the overall number of ministries.

There are several institutions which have various responsibilities connected to the water and sanitation sector. These include:

Ministry of Energy and Power (MoEP)

The Ministry of Energy and Power plays a major role in urban and rural water supply through the Water Supply Division (WSD). The Ministry also exercises supervisory control over Sierra Leone Water Company (SALWACO) and it is responsible for water policy, planning and coordination through the National Energy, Water Policy Planning and Coordinating Unit (NEWPPCU). All piped water supply services in urban as well as rural areas in the country outside Freetown for over three decades have been under WSD. The water supply services vested under WSD in 1963 are gradually being devolved to other actors, with the establishment of SALWACO in 2001 and the enactment of the new Local Government Act in 2004.

The NWP proposals for MoEP are as follows. The ministry should be renamed to reflect the importance of water and its organisation needs. A new organisational structure for MoEP is needed, which will take into consideration the proposed reforms in the water sector. These legal and institutional reforms will enable the ministry to perform all its aforementioned responsibilities.

It is recommended that a fully-fledged Water Department be established with four departments, namely: (i) Policy, Research and Planning (ii) Urban Water Supply and Sewerage (iii) Rural Water Supply and (iv) Water Resources Management. The Water Department will be responsible for monitoring the

implementation of all water policy strategies and ensuring that the policy objectives are achieved within an established time frame. Upon the establishment of the Water Department, all water related duties and responsibilities presently vested in NEWPPCU will be transferred to the Water Department. NEWPPCU will therefore be disbanded.

Critics have long argued that the lack of an apex to the pyramid of water supply functions in MoEP, and the lack of a defined lead role for the sector, has been a significant institutional gap. The NEWPPCU was established (with World Bank support) to strengthen the capacity of MoEP to develop policies, prepare sector development plans, manage sector information and co-ordinate, monitor and evaluate sector activity. There was a proposal to merge the unit with WSD, but despite the fact that initially it was quite effective, NEWPPCU has ceased to play a strategic role (DFID/UNICEF September 2007).

Ministry of Internal Affairs, Local Government and Rural Development

Under the new Local Government Act 2004, the responsibility for provincial urban centres and rural water supply provision has been devolved to local government (effectively, the local councils). These councils are in the process of taking over responsibility for rural, urban and peri-urban water supply.

Ministry of Mineral Resources (MMR)

The Ministry is responsible for ensuring that the mining activities are environmental friendly. The Ministry also undertakes geological mapping, prospecting and exploration operations, that impact water resources exploration and planning.

Ministry of Lands and Country Planning (MLCP)

Key responsibilities of the MLCP include mapping of catchments areas, watersheds, rivers and lakes.

Ministry of Agriculture and Food Security (MAFS)

This ministry, through its Land and Water Department, conducts studies and collects data on groundwater and surface water sources, and promotes irrigation schemes for agricultural farming.

Ministry of Health and Sanitation (MoHS)

This ministry is responsible for public health and sanitation nationwide. It is mandated to conduct health studies and report incidences of water-borne communicable diseases; carry out water quality testing; and investigate sources of water pollution. Within MoHS, sanitation is widely interpreted as solid waste management, a service managed by environmental health staff in urban areas. The role of the ministry in relation to excreta disposal is less clear. There is a general understanding that hygiene promotion - including the promotion of toilets - should be a component of primary health care services, and the current PHC manual confirms this. However, this role does not generally extend to the provision of practical support to latrine construction, for example by enabling access to essential building materials and skilled labour. Within MoHS, the Director of Primary Health Care would be the focal person for sanitation and hygiene promotion services.

Ministry of Finance and Development (MoF)

This ministry is responsible for the coordination of national development policies. It is also responsible for mobilization of both internal and external sources of funds for development and co-ordinates all external aid.

Ministry of Transport and Communication (MTC)

The Ministry's responsibilities cover hydrological and meteorological activities through its maritime administration activities. It oversees control of inland waterways, issues navigation licenses and is responsible for the safety of sea and river navigation.

Environmental Commission

The Environmental Commission has the statutory national responsibility for environmental protection, control and management. It is responsible for the coordination of all environmental activities in the country and acts as a link between government institutions involved in the environment sector, notably, the Ministry of Agriculture and Food Security, Ministry of Lands and Country Planning, Ministry of Mineral Resources, and the Ministry of Marine Resources.

Ministry of Fisheries and Marine Resources (MFMR)

The Ministry has exclusive mandate for management and control over fisheries and other aquatic resources within Sierra Leone's territorial waters. It is responsible for planning, developing, managing and conserving all the country's aquatic resources.

Parastatals and Local Councils

The parastatals are key institutions for water delivery and sanitation in Sierra Leone. Their problems are a microcosm of weaknesses in the sector. Any expectation that local councils might expand their roles must overcome major capacity constraints at all levels.

Guma Valley Water Company (GVWC)

GVWC provides water supply services to Freetown, delivering water mainly from the Guma Dam, supplemented by ground water resources. It is Sierra Leone's largest provider of potable water, and a major stakeholder in the water sector. However GVWC is in a critical state. Problems facing the company include an insufficient water production, an old and inadequate distribution system, and insufficient funding. The low level of funding is attributed to problems in billing and revenue collection, loss of water through leakage and illegal connections. Other contributory factors are unrealistically low tariffs and high operating costs, especially water chemical costs. For many years water tariffs have recovered less than 15% of costs, and investment funding from the Government has been inadequate. Financial management practices also need improvement. The NWP notes that funding agencies have contributed to the development of water supply system, and more recently to financial restructuring, but there has been no comprehensive overall strategy. As a result, solutions to the water supply system have been piecemeal. Efforts to address this have commenced with the funding of the rehabilitation and improvement of distribution network by development partners. The NWP argues that to redress GVWC's problems, major investment is required in the infrastructure of the system. This should be coupled with institutional strengthening and improvement in operations and maintenance for GVWC to be able to respond to its rapidly growing water supply responsibilities. GVWC's management needs to be held more accountable by establishing a performance contract between the Government and the company. To complement these restructuring efforts, private sector involvement will be need to supplement GVWC's own capacity accelerate the achievement of key performance indicators/targets. Activities such as meter connections and repairs, water bill distribution, and stand pipe management could be subcontracted to private firms.

Sierra Leone Water Company (SALWACO)

SALWACO is responsible for water supply services in six urban areas namely Bo, Kenema, Koidu, Makeni, Kabala and the International Airport at Lungi. It has also recently become involved in rural water supply projects. Originally, under the Water (Control and Supply) Act, 1963, all water supply services in Sierra Leone outside of GVWC's area of operations (defined in the Guma Valley Water Act, 1961) was vested in a government ministry responsible for water. For more than thirty years both urban (except Freetown) and rural water supply services in the country were provided by the Water Supply Division of the Ministry of Energy and Power. In 2004, under the new Local Government Act, this responsibility was handed over to SALWACO.

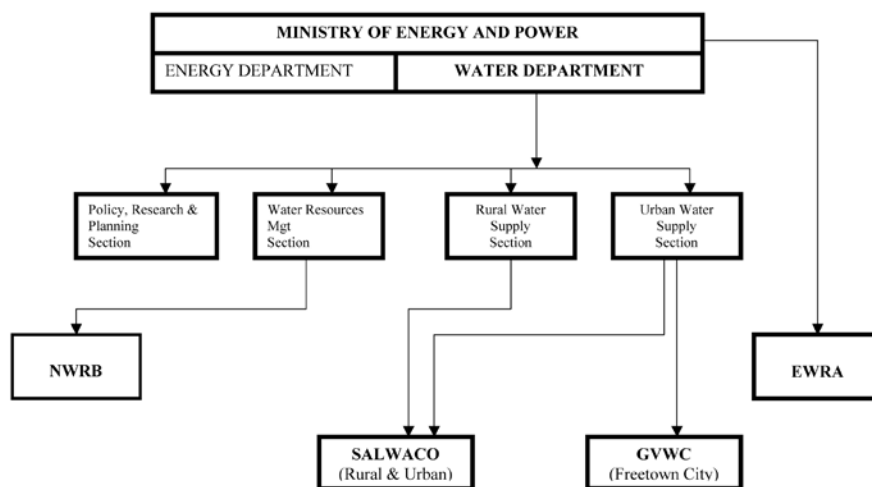
A review by DFID (May 2008) states that SALWACO's operational performance has been unsatisfactory almost since its establishment. Almost all water schemes under SALWACO are either shut down or operating on an ad hoc basis. Due to management problems, inadequate financial resources were provided for fuel and spare parts, for water treatment chemicals. As a result SALWACO and WSD waterworks have been operating erratically for many years. Once some of these waterworks closed down, the infrastructure condition deteriorated rapidly.

NWP proposes that SALWACO be strengthened with both human and financial resources and subjected to operational reforms, bringing in a performance contract to ensure managerial accountability. SALWACO's performance should be measured against its responsibilities under the Local Government Act 2004. This will entail reviewing of the Local Government (Assumption of Functions) Regulations, of the Local Government Act, 2004.

Local Councils

As part of the devolution process, all urban water supply activities (except Freetown) and peri-urban water supply schemes were to be devolved to Local Councils by 2008. However, due to capacity constraint, among other factors, the devolution process of water supply responsibilities has not yet been achieved. Efforts are being undertaken to build capacity and streamline the roles and responsibilities of the Ministry of Local Government and the district councils, so that they can efficiently discharge their obligations for water and sanitation activities. However, both the District Councils and the rural communities need adequate time for significant capacity building before they can assume responsibility for managing water supply services. The DFID review (May 2008) observes that the transfer of urban water supply responsibilities from SALWACO and WSD to the Ministry of Local Government (District Councils) needs to be reviewed, to allow sufficient time for capacity building in the districts. If they are to be successful, institutional changes (such as those intended in the Local Government Act) require appropriate operational mechanisms that provide clear mandates and responsibilities. These aspects were not adequately addressed in the transfer of urban water supply responsibilities to district councils.

Ministry of Energy and Power Water Department Organogram



Aid Coordination and Donor Support

The WSS support sector in Sierra Leone is dominated by two major agencies, DFID and UNICEF. The UK through DFID and its military force have played a critical role in restoring peace to the country after the civil war, and in helping to establish more effective governance and service delivery.

This section draws heavily on information in the WaterAid report (November 2008).

DFID and UNICEF

In its recent (DFID 2008) statement on its international water and sanitation policy, DFID has committed itself to promoting the idea that governments, donors and the UN agencies involved in water need to co-ordinate their efforts better at both the national and international levels. DFID is continuing to champion the 'Five Ones' strategy on water and sanitation to strengthen planning, target financing and monitor progress, and is promoting the Three National Ones in five target countries, of which Sierra Leone is one. (The others are Ethiopia, Tanzania, Mozambique and Bangladesh.)

The DFID aid strategy encompasses the following goals:

- **Draw up one national water and sanitation plan for each country.**
Each country plan will describe current access to safe water and basic sanitation, the investment needed to meet shortfalls and the actions that need to be taken.
- **Form one water and sanitation co-ordination group in each country.**
With representatives from national and local government, civil society and donor agencies, these groups will work to identify and address blocks to progress, and ensure coordinated action in support of the national plan.
- **Have one lead UN body in each country.**
Appointing a single lead UN body on water and sanitation services in each country will help UN agencies co-ordinate their work and ensure a coherent UN response. Currently, many different UN agencies work in each country, each with its own specific mandate.

DFID's major WSS project in Sierra Leone is the Hygiene, Sanitation and Water Supply programme for Sierra Leone (£32m over 5 years), which aims to transform the sector and improve services for poor people by:

- Sector strengthening and harmonisation, including assistance to developing *One National Water and Sanitation Strategy* with accompanying investment plan; and a particular focus on raising the profile of sanitation and hygiene. (£3.95m)
- Capacity building of and support to district councils and MDAs (Ministries, Departments and Agencies) to deliver on their responsibilities. (£10.75m)
- Securing improvements in access to, and hygienic use of, water and sanitation services for at least 1.5m people outside of Freetown, with a focus on women, girls and other disadvantaged groups. (£13.3m)
- Improving access to water and sanitation services for vulnerable communities in Freetown, (£4m)

The programme will be carried out in partnership with Government, UNICEF and selected NGOs, under the overall leadership of the Government of Sierra Leone. The urban work will be supported through an INGO Consortium (expected to be led by OXFAM and with members ACF, GOAL, Concern Worldwide, and Save the Children). After an inception phase of 3 months (mid to end 2008), and a development phase of 15 months (end 2008 to end 2009) the project will scale up over 36 months. The DFID programme promotes the CLTS approach to sanitation and scaling-up existing pilot programmes.

DFID's forthcoming new joint Country Strategy with the EC (2008-2012) aims to continue support to improving governance together with an increased focus on broad based growth, improving infrastructure and achievement of the MDGs, through the delivery of basic services in Health, Education and Water and Sanitation.

DFID is also currently funding a programme of emergency water repairs to the Freetown water supply (US\$8m), managed by the World Bank in support of the GVWC; has funded a water user study by Action Aid on the willingness to pay water tariffs; has supported the preparation of a draft 'National Water and Sanitation Policy'; and in early 2008 supported a study by Atkins, 3BMD and OXFAM in support of the GVWC to develop the 'Strategic Water Supply and Sanitation Framework for Freetown' (DFID 2007, and December 2007).

UNICEF is currently the lead UN organisation in Sierra Leone working on water and sanitation, and the donor coordinating health and education, which will be valuable in strengthening the linkages between these sectors to maximise the human development outcomes.

DFID proposes to allocate £8.5m of their total country budget to UNICEF, to cover as their principal partner in this joint DFID/UNICEF Programme. UNICEF is well placed because of its national prominence and its countrywide and permanent presence in Sierra Leone. In addition UNICEF can make use of experience from other country offices, and can call on support from UNICEF staff in Headquarters and regional offices.

World Bank, African Development Bank (AfDB)

The AfDB funded a study in 2008 in preparation for its 'Rural Water Supply and Sanitation Initiative' (RWSSI) programme in Sierra Leone on the water and sanitation situation in the country. It is expected that this will lead to the development of a national plan for the whole country to meet the MDGs. AfDB is also supporting a study for water supply and sanitation in the 3 cities - Makeni, Bo and Kenema. SALWACO is managing this process (funded under the ADF10 and 11). The AfDB hopes to become a major donor in the WASH sector but is yet to decide where to channel its funds (US\$108m for 3 years, 2008-2011).

The World Bank is funding some water and sanitation projects under the NaCSA programme. It also funds a power and water project (started in 2006, expected to finish in 2009). This includes approximately 4-500 boreholes and shallow wells and sanitation points. The Bank is managing the DFID emergency repair project in Freetown, together with the GVWC. The next programme is planned for 2009 or early 2010, and will probably provide support via the Ministry of Finance to the District Councils, supporting a basic services in general (rather than splitting its funds by education, health, water and roads sectors) – this decision can be left to the District Councils.

Bilateral Agencies and Others

JICA is funding the rehabilitation of a medium-sized town water supply in Kambia district. A Water Board based in the District Council will manage this, operating a water treatment system based on filtration and pipes to communal tap-stands, and charging usage-based tariffs. Their partner is the WSD, MoEP at national and district levels along with the District Council. They also intend to undertake a second town rehabilitation in Kambia District in 2009, as well as a study of another 10-12 medium sized towns, to see if the model developed in Kambia is replicable. If there is a positive finding JICA will consider funding some of these, and encouraging other donors to take on others.

The EU funds two NGOs in WASH under the Water Facility AIDCO, and also has a small component of their Food Security Programme in the WASH sector. It is planning to fund the preparation of a Freetown Master Plan (the pre-identification study is planned for 2009). This plan will also incorporate the water and sanitation plan (DFID supported) and the transport infrastructure plan (World Bank supported).

GTZ supports solid waste management in Freetown. Other smaller WSS programmes include Irish Aid, and the Islamic Development Bank.

UN Agencies

The UN in Sierra Leone works under a United Nations Development Assistance Framework (UNDAF). UNICEF (see also above for its cooperative relationship with DFID) is the lead UN agency in the WASH sector. It has a range of programmes and activities ranging from policy level support and capacity building to support for implementation. It supported the introduction of CLTS into Sierra Leone and is supporting national government, district government, LNGOs and INGOs to start programmes across the country. UNICEF is also supporting: School Led Total Sanitation (SLTS); the development of a national strategy on water, sanitation and hygiene aspects related to education; the development of the National Water & Sanitation Policy; the development of a National WASH database (aligned with the JMP) called STATWASH through an inter-MDA Working Group chaired by the WSD; finalisation of the School Sanitation & Hygiene Education (SSHE) handbook for primary schools; efforts to get WASH mainstreamed into a range of other areas such as the national child and reproductive rights strategy; construction of WASH for Primary Health Care Units (PHUs); exploring the possibility of a partnership with the private sector for the production of soap; and it also plans to coordinate a public awareness campaign aligned to the International Year of Sanitation.

UNDP does not specifically support WASH programmes but is deeply involved in capacity building across the country under a range of programmes. UNDP in Sierra Leone has three programmes: Peace & Development; Democratic Governance and Human Rights; and Human Development and Poverty Reduction.

Under the Peace & Development programme there are a number of sub-programmes including a Peace Building Fund; Arms for Development; and Transition Support. The transition support includes support to the District Councils to increase their revenue collection and involves the construction of markets and lorry parks, which have a WASH component. UNDP also supports the pilot Kenema District Economic Recovery Programme (KDERP) in both the Kenema District and City Councils.

International and Local NGOs

There has been considerable donor support to rural water supply and sanitation via international NGOs, but as highlighted in INGO reports much of this has been in emergency relief-mode, and there are major issues around to cost-effectiveness and sustainability. The support has been characterised by the use of relatively high-cost technology options and designs provided free or almost free. For example, domestic and institutional toilets are commonly constructed with superstructures made from bricks and metal roofs, with large concrete floors, when equally durable facilities could be constructed at considerably lower cost using alternative specifications. In the case of water supply, expensive handpumps have been used in many locations. These have proved difficult to maintain and spare parts for some are both expensive and unavailable locally.

Current NGO approaches also emphasise direct service delivery rather than capacity building, and little is being done to help councils fulfil their new roles beyond the provision of logistical support including vehicles and motorbikes. Councils have a largely passive relationship with NGOs working in water and sanitation, district level co-ordination is weak and NGO coverage is uneven; some communities close to towns receive substantial assistance while remote areas are barely touched. It would appear that in the health sector, District Medical Officers take a more proactive role in coordinating the work of NGOs.

Table 17: International Agencies/NGOs Active in WSS in Sierra Leone.

Source: WaterAid (November 2008)

NGO	Geographical areas of activity	Sectors of activity	Year when work started in Sierra Leone
ACF (Action Contre La Faim)	Currently closing offices in rural areas but remaining in Freetown	Has been rural water supply and sanitation but will refocus on cholera threats in Freetown	
ActionAid	Throughout Sierra Leone, but with activities concentrated around Bo, and in Kambia and Womba Districts.	Rural water supply, water supply to schools and health centres, Rural sanitation, Sanitation in schools and health centres, capacity development	1988
Africare	Kailahun District	Rural water supply, Rural sanitation, hygiene promotion, improving livelihoods.	
CARE	Koinadugu, Bombali, Bo, Tonkolili, Kailahun Districts	Rural water supply, Rural sanitation, hygiene promotion, improved nutrition (in Koinadugu District)	2003 (in Koinadugu District)
Concern	Mainly in Tonkolili District, support for a clinic in a Freetown slum.	Rural water supply, Rural sanitation, School sanitation, hygiene promotion, improving access to primary health care.	
GOAL	Freetown and Kenema District	Child protection and work with street children in Freetown. Rural water supply, Rural sanitation, Water supply and sanitation to clinics, hygiene promotion, improved nutrition in Kenema District.	1999
GTZ	Freetown and Kailahun District	Solid waste management in Freetown. Details not collected of work in Kailahun District.	
JICA	Kambia District	Rural water supply, and rehabilitation of water supplies to small towns, capacity development.	
Oxfam	Mainly in Kailahun District. Work in some Freetown slums is planned	Rural water supply, Rural sanitation, rehabilitation of wells and springs, hygiene promotion, capacity development	
Plan International	Kailahun District		
Save the Children	Kailahun District		
Spanish Red Cross	Kono, Koinadugu, Tonkolili and Bombali Districts	Rural water supply, Rural sanitation, capacity development	

Legal Framework

Legislation affecting the water and sanitation sector in Sierra Leone comprises the following, as summarized in the NWP (July 2008)

- The Guma Valley Water Act (1961): An Act which established Guma Valley Water Company (GVWC), a company owned by the Government and Freetown City Council that provides water supply services to the city of Freetown.
- The Water (Control and Supply) Act (1963): An Act which gave the Water Supply Division (WSD) of the Ministry of Energy and Power responsibility for all water supply services in rural and urban areas (except for Freetown). The Act also places some water resources management responsibilities on the WSD.
- The Sierra Leone Water Company Act (2001): An Act which established the Sierra Leone Water Company (SALWACO) to provide water supply services in the District towns of Bo, Kenema, Koidu, Makeni, Kabala and the International Airport at Lungi, thus passing some of the responsibilities of WSD to SALWACO.
- The Environmental Protection Act (2000): An Act which empowers the Minister of Lands, Country Planning and the Environment to make regulations and guidelines which protect the environment. The Act makes provision for the Minister to make regulations and guidelines for waste management.
- Local Government Act (2004): An Act which enables the establishment of nineteen local councils and provides for decentralisation and devolution of functions, powers and services to local councils. The Act devolve water supply and sanitation responsibilities to District and Town Councils.
- Public Health Act 1996 and the 2004 Addendum: An Act which vests the responsibility for environmental sanitation in the Ministry of Health.
- Mines and Mineral Act, 2003 and the Forestry Regulation Act 1999: Acts which also cover water related issues.

Most of the above-mentioned water and water related legislations are outdated and inadequate for meeting the growing water resources challenges facing the country today and the near future. The legislation needs to be reviewed and revised where appropriate in order to become harmonised with the NWP and the proposed new Water Act.

The Water (Control and Supply) Act (1963) and associated regulations do not adequately meet the emerging challenges of the sector. The main challenge is to modernise the legislations and associated regulations and rules so as to create an enabling legal framework for dealing with today's water and sanitation challenges. Some proposed legal reforms are set out in Table 18.

Table 18: Proposed New Legal Framework for WSS in Sierra Leone

NWP Strategies for an Effective Legal Framework

- The Water (Control and Supply) Act (1963) will be reviewed and replaced by a new Water Law.
- The new Water Law shall vest in the State all water resources in the country and provide every citizen equal right to access and use of the nation's natural water resources.
- In the new law the mandates of the Ministry, the National Water Resource Board, and the Energy and Water Regulatory Authority will be clearly defined to enable them to enforce and improve regulations and operating rules governing water sector activities.
- In the process of establishing the new Water Law, existing laws related to water supply and sewerage services and sanitation shall be reviewed and harmonized to accommodate changes that are taking place in the sector. The following Acts will be reviewed:
 - The Guma Valley Water Act (1961)
 - The Sierra Leone Water Company Act (2001)
 - Public Health Act (1996)
 - Forestry Regulation Act (1999)
 - Local Government Act (2004)

The NWP also calls for the establishment of an independent multi-sector regulatory authority, combining the energy and water sectors i.e. an Energy and Water Regulatory Authority (EWRA) overseeing water supply and sewerage services, amongst others.

Sector Capacity

Weaknesses in human resources is a major constraint on WSS in Sierra Leone at all levels. There has been a flight of professionals during the years of unrest, compounded by uncompetitive public sector salaries. These weaknesses are particularly prominent at local levels.

Sierra Leone is currently undertaking a process of decentralisation. Under the Local Government Act (2004) and in line with the Local Government (Assumption of Functions) Regulations, 2004, responsibilities for sanitation provision were decentralised, with Local Councils assuming full responsibilities for sanitation in 2005. However Local Councils are still in the process of building capacity and are yet to determine what this role might mean in practice, and how they will implement this demanding responsibility. There are therefore major concerns regarding human resources as the sector moves to more decentralised service provision. Local government bodies, with limited technical capacity and financial resources are struggling to fulfil their statutory responsibilities. Recent estimates (Mustapha, 2008) for the periods 2006-2008, and forecasts to 2015, indicate the scale of the problem.

Table 19: WSS Manpower Assessment for Sierra Leone 2006 - 2008

National Manpower Assessment in the Water Sector				
National level Attrition Rate (retirement, mortality, career change, emigration) of 5%	2005 Base year	2006	2007	2008
	Actual	5,216,890	5,343,200	5,473,530
Category of staff Requirement				
Senior Management Professionals	8	26	33	39
Professionals	20	104	119	133
Technical / Admin (senior)	30	261	278	294
Technical / Admin (Junior)	150	652	770	881
Craftsmen	80	261	328	391
Operators & others	50	1304	1289	1275

Table 20: International Agencies/NGOs Active in WSS in Sierra Leone

Source: WSD

National Capacity Requirement for a National level Attrition Rate (retirement, mortality, career change, emigration) of 5% And a staff manning ratio of 1:2,000 from 2006 to 2015												
		Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
		Population	5,216,890	5,343,200	5,473,530	5,607,930	5,746,800	5,890,080	6,037,660	6,190,280	6,348,350	6,506,420
Category of staff	In Post	Deficit										
Senior Management Professional	8	18	26	33	39	45	51	56	62	66	71	76
Professional	20	84	104	119	133	147	159	171	183	194	204	214
Technical / Admin (senior)	30	231	261	278	294	309	324	338	351	363	375	386
Technical / Admin (Junior)	150	502	652	770	881	987	1088	1183	1274	1360	1442	1520
Craftsmen	80	181	261	328	391	452	509	564	616	665	712	756
Operators & others	50	1254	1304	1289	1275	1261	1248	1235	1224	1212	1202	1192

Sector Financing

The level of interest and the rate of investment in the WSS sector in Sierra Leone have recently increased, with new players including China, India, USAID, Japan, the EU, DFID and the AfDB all committing resources to the sector. The total amount available for investment (2005 – 2007) was US\$37.05m. To attain the MDGs in water and sanitation, the requirements to 2015 total US\$507.85m, while planned investments total US\$233.01m.

The shortfall is therefore US\$274.84m. In the absence of any major new initiatives, there is thus a very probable major shortfall, even assuming a far greater level of funding from GoSL's own resources (which currently directs about 2% of its budget to WSS) and revenue generation.

Table 2I provides an overview of the financing requirements:

Table 2I: Financing Requirements for WSS and Planned Funding in Sierra Leone
Source: Ministry of Finance, SALWACO, WSD, derived from Mustapha (2008)

Requirements	2005-2007	2008-2010	2011-2015
Total.	155.8	225.2	163.9
<u>Water:</u> Rural	30.4	32.4	30.2
Urban	101.1	150.4	100.7
<u>Sanitation:</u> Rural	4.1	4.0	2.3
Urban	20.2	38.4	30.7
Financing Available			
Total:	37.05	—	—
<u>Water :</u> Rural	20.97		
Urban	12.28	—	—
<u>Sanitation :</u> Rural	1.0		
Urban	2.8		
Shortfall	118.75	225.2	163.9

The total amount available for 2005 – 2007, excluding the undisclosed amounts being spent by INGOs, is US\$37.05m, while total requirements equal US\$155.8m. Urban water supply services account for US\$101.1M, about 60% of the requirements.

The total required for 2008 – 2010 is US\$225.2m, and for 2011 – 2015, a total of US\$163.9m will be needed to meet the national targets.

Acronyms

Sierra Leone

AfDB	African Development Bank
AMCOW	African Ministers Council on Water
BADEA	Arab Bank for Economic Development in Africa
CLTS	Community Led Total Sanitation
DACO	Development Aid Co-ordination Office
DFID	Department of International Development (UK Government)
EC	European Commission
EU	European Union
EWRA	Energy and Water Regulatory Authority
GoSL	Government of Sierra Leone
GVWC	Guma Valley Water Company
HDI	Human Development Index
IDB	Islamic Development Bank
IRCBP	Institutional Reform and Capacity Building Project
NGO	Non-Governmental Organisation
IFMIS	International Financial Management Information System
IMATT	International Military Advisory Training Team
INGO	International Non-Governmental Organisation
IWRM	Integrated Water Resource Management
JICA	Japan International Co-operation Agency
JMP	Joint Monitoring Programme
Le	Leones (unit of currency in Sierra Leone)
LG	Local Government
LNGO	Local Non-Governmental Organisation
MDA	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
MICS	Multiple Integrated Cluster Survey
MoEP	Ministry of Energy and Power
MoF	Ministry of Finance
MoHS	Ministry of Health and Sanitation
NEWPPCU	National Energy and Water Policy Planning and Coordination Unit
NGO	Non-Governmental Organisation
NWP	National Water Policy
NWRB	National Water Resources Board
PFM	Public Financial Management
PHU	Peripheral Health Unit
PRSP	Poverty Reduction Strategy
SALWACO	Sierra Leone Water Company
SL	Sierra Leone
SLTS	School Led Total Sanitation
TA	Technical Assistance
UNECA	United Nations Economic Commission for Africa
UNDAF	United Nations Development Assistance Framework
UNICEF	United Nations Children Fund
WATSAN	Water and Sanitation
WASH	Water Sanitation and Hygiene
WB	World Bank
WHO	World Health Organisation
WSD	Water Supply Division
WSP	Water and Sanitation Program
WSS	Water Supply and Sanitation

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