

**Government of Lesotho**  
**Ministry of Natural Resources**

# INTERIM STRATEGY FOR THE WATER AND SANITATION SECTOR

Dated April 2010

# INTERIM STRATEGY FOR THE WATER AND SANITATION SECTOR IN LESOTHO 2010-2012

## Preface

Lesotho has water as its most important natural resource, second to her people. The ownership of all water within Lesotho is vested in the Basotho Nation. The Government of Lesotho has the duty to ensure that this resource is used in a sustainable manner and to the benefit of all users, and the responsibility to provide security of access to water sources and improved sanitation. In pursuit of this responsibility, Government has produced the water policy (2007) to provide direction in dealing with water resources

Government is committed to ensure effective and efficient management and development of water resources in order to maximize socio-economic benefits. It aims to achieve this objective in an equitable manner without compromising the sustainability of vital environmental systems. Proper planning, conservation, development, and management of water resources require a shared vision and ownership. Paramount on Lesotho's development agenda is the eradication of poverty. Properly focused programmes should allow particularly the poor to have access to potable water supply and improved sanitation facilities. In this regard a minimum standard of 30 litres per capita per day will apply.

This two-year strategy for the water sector is very important to set the stage for the implementation of the water policy. It outlines the sector framework and describes the actions to be taken within four priority areas:

- A. Urban water supply
- B. Rural water supply
- C. Sanitation services
- D. Institutional and Capacity Development

The first three of these priority areas are based on Policy Statement number 2 and the last one on Policy Statement number 7:

Policy Statement 2 – Water Supply and Sanitation Services: ***‘Ensure access to a sustainable supply of potable water and basic sanitation services for all Basotho’*** and in particular the Objectives:

1. To accelerate the delivery of water and sanitation services to all Basotho in line with national development goals;
2. To promote increased investment in infrastructure development (reservoirs, conveyance structures, etc) to meet the water demand in urban and rural areas for socio-economic development and for meeting basic consumption and hygiene needs;

Policy Statement 7 – Institutional Arrangements and Legislative Framework: ***‘Put in place appropriate institutional arrangements and a legislative framework for the sustainable development and management of the nation’s water resources and for the supply of water and sanitation services’***. Objectives:

1. To improve institutional and legal framework for implementation of the Water and Sanitation Policy;
2. To foster clarity and separation of roles and responsibilities in water resources development and management; and water and sanitation services delivery to match the needs of Basotho.

These priority areas are chosen because they directly address the Government's aim of improving water and sanitation services and reaching the Millennium Development Goals (MDGs) and the Vision 2020 targets for full coverage by year 2020. The overall management of water resources in Lesotho remains the main priority for Government however in the coming 2-year period emphasis will be on improving the services especially to the poorer households and putting in place the institutional framework for improved performance in the water sector in general.

**Urban Water Supply:** The main focus will be on increasing the production capacity and in particular the implementation of the Metolong Dam and related infrastructure to improve the supply of water in Maseru, Teyateyaneng, Roma and Morija and the neighbouring larger rural settlements. Focus will also be on increasing the connection rates and provision of public standpipes in the areas where major investments in the overall reticulation systems have recently been completed. This will improve coverage as well as affordability of water services for the households that presently are buying water from neighbours at high cost. The efforts by the Water and Sewerage Authority (WASA) of improving operating efficiencies will continue in order to improve the financial status of the utility and manage the tariff increases by an independent regulator (LEWA) that are needed for achieving the Water Policy's goal of full cost recovery.

**Rural Water Supply:** the focus will be on improving access to water services by investing in the old none functioning rural water supply systems and constructing additional new ones. The Water Act 2008 together with the establishment of Local Government Authorities in rural areas provide the opportunity for formalising the ownership and responsibility for management, operation and maintenance of rural water systems amongst the Department of Rural Water Supply (DRWS), the District Councils, the Community Councils and the Village Water and Health Committees.

**Sanitation Services:** the activities in sanitation will focus on developing effective strategies for improving sanitation services in the future with a comprehensive 'Sanitation Strategy' that will outline the roles and synergies between the different public sector actors in sanitation: the water sector institutions as well as Local Government Authorities and the Ministry of Health and Social Welfare. The major ongoing investments in sewerage systems in Maseru will be completed during this period and in rural areas the provision of subsidies for household sanitation facilities will be increased.

**Institutional and Capacity Development:** the aim is to fully operationalise the institutional reforms for water and sanitation services. The water sector regulator will be established and the institutional responsibilities for Assets Management and Bulk Water Operations will be clarified and the appropriate institutions established. WASA will be turned into a private company that will be functionally sustainable. National water services planning will be improved to ensure rational and effective coordination between the water sector actors in bulk water supply, urban water services and rural water services. The Monitoring and Evaluation (M&E) for the water sector will be improved through operationalisation of the M&E unit office of the Commissioner of Water (CoW) as well as capacitating the M&E functions in Department of Water Affairs (DWA), DRWS and WASA to arrive at an effective M&E at all levels of the sector.

The water policy's aim for affordable water services will be operationalised through development of a strategy for implementing free basic water for urban water services including connections, water tariffs and who pays (taxes or tariffs) and a strategy for implementing free basic water for rural water services including the institutional and budget responsibilities. These strategies are very important for the development of self-sustaining water services that are socially acceptable.

This Interim Strategy covers the sector activities for the period from April 2010 to March 2012 and this period will be used for setting the stage for improved sector performance in the following years. The Water and Sanitation Strategy as required in the Water Act (2008) will be developed during this period to guide the sector in the 5 year period from April 2012 to March 2017.

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**B.Leleka**

**Principal Secretary Ministry of Natural Resources**

## Acronyms

AIDS	Acquired Immuno Deficiency Syndrome
AWF	African Water Facility
BOS	Bureau of Statistics
CC	Community Councils
CEO	Chief Executive Officer
CHAL	Christian Health Association of Lesotho
CMS	Continuous Multi-Sector (surveys by BOS)
CoW	Commissioner of Water
COWMAN	Committee of Waste Management
DIS	District Information System
DMS	Drought Management Strategy
DoE	Department of Environment
DRWS	Department of Rural Water Supply
DWA	Department of Water Affairs
EDF	European Development Fund
EIA	Environmental Impact Assessment
GIS	Geographical Information System
GoL	Government of Lesotho
HIV	Human Immune Virus
HR	Human Resources
IFMIS	Integrated Financial management system
IWRM	Integrated Water Resources Management
KSI	Key Sector Indicator
LEA	Lesotho Electricity Authority
LEC	Lesotho Electricity Corporation
LEWA	Lesotho Electricity and Water Authority
LHDA	Lesotho Highlands Development Authority
LHWP	Lesotho Highlands Water Project
LLWSP	Lesotho Lowlands Water Supply Project
LLWSSU	Lowlands Water Supply Scheme Unit
LNDC	Lesotho National Development Corporation
LSPP	Department of Lands, Surveys and Physical Planning
LWSIMS	Lesotho Water Sector Information Management Systems
LWSP	Lesotho Water and Sanitation Policy
M	Maloti
M&E	Monitoring and Evaluation
MA	Metolong Authority
MCA	Millennium Challenge Account – Lesotho
MCC	Millennium Challenge Corporation
MDG	Millennium Development Goal
MIS	Management Information System
MNR	Ministry of Natural Resources

MoAFS	Ministry of Agriculture and Food Security
MoFDP	Ministry of Finance and Development Planning
MoHSW	Ministry of Health and Social Welfare
MoLGC	Ministry of Local Government and Chieftainship
MTEF	Medium Term Expenditure Framework
NAPA	National Adaption Programme (on Climate Change)
NDP	National Development Plan
NGO	Non Governmental Organisation
NMES	National Monitoring and Evaluation System
O&M	Operation and Maintenance
PIU	Project Implementation Unit
PPP	Public-Private-Partnership
PPSU	Policy, Planning and Strategy Unit
PRS	Poverty Reduction Strategy
PS	Principal Secretary
PSIRP	Public Sector Improvement and Reform Programme
RSA	Republic of South Africa
SADC	Southern African Development Community
SDC	Swiss Development Cooperation
SFPM	Strategic Financial Planning Model
SMME	Small, Micro and Medium Enterprises
SWAp	Sector Wide Approach
SWAT	Strength, Weaknesses, Opportunities and Threats
TCTA	Trans-Caledon Tunnel Authority
UfW	Unaccounted for Water
VIP	Ventilated Improved Pit (Latrine)
VWHC	Village Water and Health Committees
W&S	Water and Sanitation
WASA	Water and Sewerage Authority
WASC	Water and Sewerage Company
WB	World Bank
WDM	Water Demand Management
WHO	World Health Organisation
WSIP	Water Sector Improvement Project
WTP	Water Treatment Plant

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## INTRODUCTION

### 1.1 Socio-economic Context

Lesotho, under the leadership of its democratic Government, is struggling to find ways to sustain the livelihoods of its population of almost 1.8 million people. In a harsh mountain environment, where less than 10% of the land is arable, agricultural prospects are poor. Until the mid-1990s many men were able to find work in the mining industry of neighbouring South Africa; this is no longer an option and fewer than 50,000 have managed to maintain their jobs.

Lesotho has a potential to be a strong and prosperous nation in macro-economic performance terms. Its macro-economic policy has been largely conducive to strong economic growth. Since the 1970s, the economy has been transformed from one dominated by agriculture to one dominated recently by manufacturing. While this has improved livelihood options in the urban sector, it has significantly undermined the capacity of the rural and agricultural sector as a source of livelihood, employment and income. The shifting balance towards manufacturing has also worsened poverty in rural communities, particularly those that depend on food production. It will therefore be necessary to take measures to restore the sources of livelihoods for the rural population.

Notwithstanding higher-than-average growth over many years, the challenge at the macro-economic level is to sustain strong investment levels, driven by high domestic saving rates as well as access to international credit markets. This will call for prudent economic and financial sector policies, firstly to promote domestic resource mobilisation and secondly, to retain access to international financial markets. Employment creation and prosperity are of national importance within the macroeconomic performance in Lesotho. Challenges facing Lesotho include the need to address the depth and severity of poverty.

Education is central to national development. Presently Lesotho's adult literacy rate (82%, 2002) is higher than in most African countries. The country is committed to provision of an equitable basic education to all Basotho as a key development goal. Key challenges include: further improving access to education at all levels, and developing a curriculum that responds to the national development priorities, thus promoting entrepreneurial life, and technical and vocational skills.

Lesotho has embarked on the Public Sector Improvement and Reform Programme (PSIRP). The programme represents the Government's framework for decentralisation, civil service reform and public financial management reforms. The key challenges in development management capacity include: improving research capacity, coordinating information management systems, dealing with brain drain in different sectors, implementing the PSIRP and strengthening the public-private and civil society partnership in development.

Lesotho aspires to have a well-managed environment by 2020. The country has signed and ratified several Multilateral Environmental Agreements. The spectacular scenery of the Lesotho highlands, the country's unique ecosystem, biodiversity and heritage offer a great potential for the country's tourism opportunities.

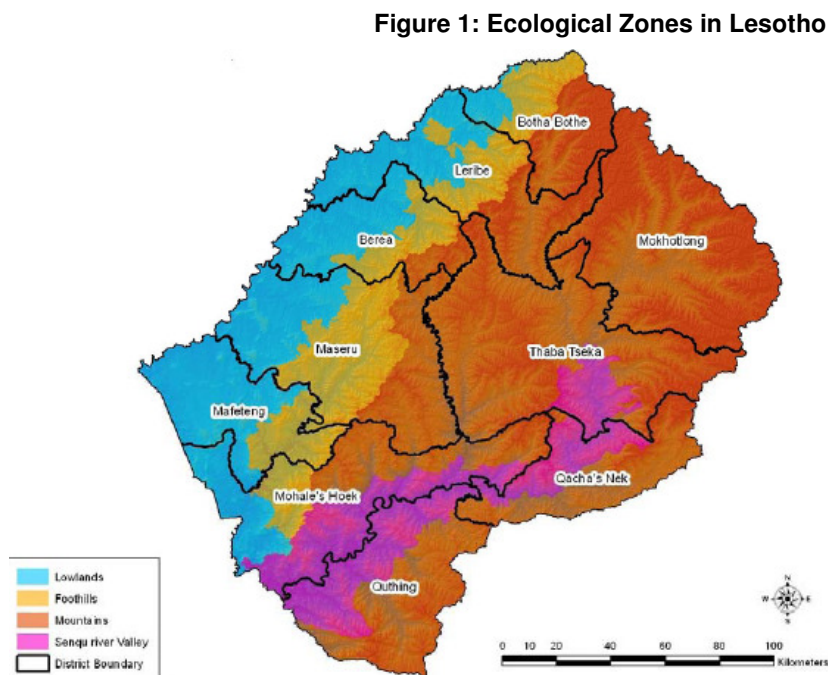
Lesotho is however faced with the challenges of implementing the ratified conventions and treaties for sustainable development, strengthening institutions responsible for natural resources management, development and effective implementation of land management systems. A further challenge is to strengthen environmental management, advocacy and awareness among Basotho.

In pursuance of its goal to make Lesotho a country with a well-established technology, the Government has, among other things, adopted a privatisation policy to liberalise the telecommunications sector. In this regard, Lesotho is faced with the challenges to move towards a technology competent country through, among others, increased budget allocation towards science and technology development, forging partnerships with other countries, strengthening science and technology education, as well as promoting science and technology research, innovation and development.

## 1.2 Geographical Context

Lesotho has a land area of 30,344 square kilometres bordered by the Drakensberg escarpment on the eastern and northern side and the Mokhotlong/ Caledon River on the western side. The elevations are between 1,400 to 3,484 metres above sea level.

The country is divided into four ecological zones as shown on Figure 1. The Lowlands form a narrow strip along the western border with South Africa at approximately 1,500 to 1,800m above sea level.



The lowlands have over 80% of the productive arable land and the highest population densities. The Foothills range in elevation from 1,800 to 2,000 metres above sea level along the western side of the Maluti mountain range. The foothills cover 8% of the country and also support high population densities. The Senqu River Valley is a major grassland area marked by shallow soils. The Mountain region ranges from 2,000 to 3,400 metres above sea level and is less densely populated.

The climate of Lesotho is characterised by warm moist summers, from November to March; and cold dry winters from May to July. The climate can thus be categorised as semi- to sub-humid and continental. The southern lowlands and SRV are warmer and drier than the northern lowlands and mountains. Higher elevations above 3,000 metres above sea level receive enough snow during winter to cover the ground for several months with sub-freezing temperatures. However, the country exhibits marked seasonality with even the lowlands experiencing winter frosts. Precipitation ranges from 450 mm in the south-western lowlands to 1,600 mm in the northern lowlands and eastern highlands. The mean annual temperature ranges from 5.7 °C at the higher elevations to more than 16°C in the southern lowlands.

### 1.3 Water Resources and Water Demand

While Lesotho is small in area, it is very significant in terms of the water resources of Southern Africa as it lies in the wetter and uppermost part of three main rivers - the Senqu, the Mhokare/Caledon and the Makhalleng. These form sub-basins of the Orange River basin, and contribute roughly half of its base flow which discharges into the Atlantic Ocean.

The total available water resources of Lesotho are abundant in relation to the demand, even when projected forward for 25 years or more. Lesotho's major natural resource is water, often referred to as 'white GoLd' by the Basotho people.

The availability of water resources vary almost 10-fold across Lesotho as illustrated with the northern highlands having run-off of above 300 mm per annum and the south-eastern lowlands having run-off of less than 50 mm per annum.

Nevertheless, there are severe water shortages in the Lowlands where about two thirds of the population live. The demand for water and its availability are divided, and while abundant clean water resources are located in valleys of the Highlands, they are separated from the main population in the Lowlands by a range of high mountains. This causes severe problems in planning and managing water resources.

The country's main exportable resource is water and this has been developed for sale to the industrial area of the Republic of South Africa (RSA) around Johannesburg through the Lesotho Highlands Water Project (LHWP). Completion of the first phase of the Lesotho Highlands Water Project in the mid 1990s generates royalties for Lesotho from the sale of water to South Africa and generates hydro-power to cover the major part of electricity needs in the country. The feasibility study for the second phase of the LHWP is completed and construction is expected to start in 2012.

In addition to the domestic and industrial demand for water resources in the Lowlands effectively outstripping supply, the expansion of the necessary production facilities and extension of the reticulation networks has also fallen behind. The total volume of water used in urban areas is approximately 12 million m<sup>3</sup>/ annum. In addition to the water supplied in urban areas there is a substantial 'suppressed' demand from areas not adequately served by the reticulation networks. It should be noted that the domestic demand in urban areas is only approximately 30% of the total demand.

Forecasting the future industrial demand is in particular difficult since the industrial development in Lesotho depends on many factors such as the international economic development and trade relations most of which are outside the direct control of the Government and the private sector in Lesotho. The growth of high water demanding industries such as the textile industries over the last 10 years might not continue and could be replaced by establishment of e.g. electronic industries with much lower water demand.

The provision of water and sanitation infrastructure remains a key essential to exploit the economic and social potential of the country. The Lowlands in particular suffers from a shortage of raw water during some months of the year and as new industrial and domestic consumption comes on line the situation is expected to worsen. With growing pressure on water demand in the lowlands for both domestic and industrial development, the country is currently facing a situation where one of its most valuable resources is becoming scarce.

Demand for water for domestic consumption in urban areas is expected to increase with 7.3% annually and the industrial consumption by 5% annually. In total the water demand in urban areas is expected to increase by 5.3% annually until 2035 to close to 45 million m<sup>3</sup>/ annum. Water resources development has in the past not kept pace with growing demand, and the increased need of industry. This imbalance is recognised by the Government of Lesotho (GoL) as a major constraint to economic development and is the background for the planned investments in water source development and bulk water infrastructure.

Despite major advances 53% of Basotho in rural areas and 46% in urban areas still lack access to a safe drinking water supply and 56% of the rural population and 11% of the urban population lack access to adequate sanitation<sup>1</sup>.

## **1.4 Water Sector Policy and Medium-term Goals**

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<sup>1</sup> While issues of coverage definitions are sorted out between the water sector and BOS, the water sector operates with two sets of data for determining coverage and access to water and sanitation: i) the water sector data bases providing information on connections, capacities etc and ii) the BOS data on access to water and sanitation from population census and other surveys. The water sector data bases do not have reliable information on on-site sanitation. The water coverage statistics provided here are according to the water sector data bases and sanitation coverage data according to analysis of the 2006 population census data from the Bureau of Statistics. The BOS data on access differ from the water sector coverage especially in urban areas since it includes the households buying water from neighbours at high cost and these are not regarded as covered by the water sector.

The Sector Policy and the medium-term goals for the water sector are expressed in the Vision 2020, Millennium Development Goal (MDG) 7 and the Poverty Reduction Strategy (PRS)/National Development Framework and Plan.

**Vision 2020:** The overall development strategies in Lesotho are guided by the Vision 2020. The Vision 2020 statement reads: *'By the year 2020 Lesotho shall be a stable democracy, a united and prosperous nation at peace with itself and its neighbours. It shall have a healthy and well-developed human resource base. Its economy will be strong; its environment well managed and its technology well established'*.

The vision of Government is to provide water and sanitation to all Basotho by 2020. It is the mandate of the water sector, through its various departments and sections, to serve the population with sustainable sources of potable water. PRS priorities are also reflected in *Vision 2020* developed through extensive consultations with the people of Lesotho.

The water and sanitation sector through its sector policy of 2007 is aligned to the vision based on the three pillars of sustainable development (environmental sustainability, social justice and economic efficiency, flanked by Stable Democracy).

The Vision document identifies and prioritises strengths, weaknesses, opportunities and threats that should inform strategic choices in Lesotho. The major strengths of the country include the Government's commitment to development, widely accepted and respected constitution, cultural homogeneity, the electoral system and high adult literacy. Major weaknesses on the other hand include food insecurity, high rate of unemployment, poor strategic and operational planning, inadequate research in science and technology, and an underdeveloped Small, Micro and Medium Enterprises (SMME) sector. In the external environment the major opportunities are foreign direct investment and good relations with the RSA, while the major threats include brain drain, donor conditionalities, decline in mine labour remittances and the increasing competition from international markets.

There is a wide gap between the present situation and the desired vision. For Lesotho to realise its vision there are three major challenges namely: improvement of the development management capacity; sustenance of the investment currently characterising Lesotho's economy; and sustenance of political commitment and support to the Vision up to the year 2020.

Local governance and popular participation contribute towards good governance. To this end the country is working towards decentralisation by implementing the Local Government Act of 1997. The challenge is to empower the imminent local government authorities, and to improve chieftainship as a strategy to complement local governance at the grassroots level. Freedom and pluralism of the Media are some of the measures of stability and democracy.

**PRS:** Lesotho's priorities and strategies for promoting economic growth and reducing poverty are outlined in the Lesotho's Poverty Reduction Strategy (PRS), which originally covered the 2004/05-2006/07 period but will be replaced by a National Development Plan (NDP) in 2012 based on the current National Development Framework. The development priorities are grouped into four main areas. These are accelerating shared and sustainable economic growth, human development, protecting and enabling disadvantaged groups, and good governance. Government has also a Growth Strategy Paper in place. This identifies potential drivers of growth.

**MDGs:** The water and sanitation targets feature under Goal – 7 (the environmental sustainability Goal) of the MDGs. The wording calls on government to *"half, by 2015, the proportion of people without access to a sustainable source of potable water and basic sanitation"*<sup>2</sup>. Water for life – the provision of safe drinking water and sanitation is the imperative for human and economic development in poor communities. Access to clean water and safe sanitation therefore correlates closely with other critical MDG targets such as child mortality, gender equity and enrolment in education, and severe poverty. Governments are being encouraged to recognize that without success in water and sanitation, the entire MDG concept will be in jeopardy.

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<sup>2</sup> The MDG targets are expressed against the 1990 baseline for access to water and sanitation

**Table 1: MDG Targets for Sanitation**

The Lesotho targets for MDGs for water and sanitation are based on the available coverage estimates from the 1990ties. The Bureau of Statistics (BOS) data are used for sanitation targets and the water sector data are used for water supply targets.

<b>BOS Data</b>	<b>BOS 94-95</b>	<b>BOS 2006</b>	<b>MDG 2015</b>
<b>Rural Water</b>	74%	43%	87%
<b>Urban Water</b>	94%	83%	97%
<b>Rural Sanitation</b>	34%	44%	67%
<b>Urban Sanitation</b>	89%	89%	95%

The BOS household budget survey in 1994 indicate that 34% of the rural population and 89% of the urban population had access to sanitation facilities and this implies MDG sanitation targets of 67% in rural areas and 95% in urban areas. Achieving the MDG targets will require a considerable effort by the water sector as the present coverage in rural areas is approximately 44% and 89% in urban areas<sup>3</sup>.

**Table 2: MDG Targets for Water Supply**

The BOS data for water coverage are affected by definition issues and interpretation of the data. The high coverage reported

<b>Water Sector Data</b>	<b>Served 1990</b>	<b>Pop 1990</b>	<b>Coverage 1990</b>	<b>Coverage 2009</b>	<b>MDG 2015</b>
<b>Rural Water</b>	700,000	1,460,733	48%	47%	74%
<b>Urban Water</b>	103,000	233,032	44%	54%	72%

by BOS in 1994 as indicated in Table 1 indicate the proportion of persons using water from an improved water source and does not include aspects such as quantity, collection distance/ time and affordability. The water supply targets are therefore determined using the data on coverage from the water sector data bases as shown on Table 2. The 1990 coverage was approximately 50% for both rural and urban areas and therefore the MDG targets for water supply are set at 75% by 2015. The targets in urban areas are considered achievable with the proposed focus on promoting new domestic connections and the new strategy with pre-paid public standpipes. Achieving the targets in rural area will require considerable effort and funding since most of the un-served population are in small remote settlements where it is costly to implement water supplies. The strategy for addressing the functionality rate of rural water systems will contribute significantly to achieving the targets.

The **2007 Lesotho Water and Sanitation Policy** (LWSP) endorsed by Cabinet is consistent with the global and regional consensus embodied in Agenda 21, the Dublin Principles, the Helsinki Rules, Johannesburg Plan of Implementation, Global Water Partnership, Southern African Development Community (SADC) Declaration, Southern African Vision for Water and Environment, SADC Regional Water Policy, and SADC Protocol on Shared Water courses.

Lesotho has also become a signatory to various international agreements that directly and indirectly affect the development of the water sector in Lesotho. It was in the light of these developments that the GoL committed itself towards ensuring efficiency in management and development of its water resources through an Integrated Water Resources Management Policy.

The LWSP is set out to be updated every five years to accommodate domestic and international changes and challenges and is also based on the recognition of a need for a holistic and integrated approach to sustainable water resources management and development, ensuring as wide a participation of water stakeholders as possible and treating the resource as an economic, environmental and social good. It aims to make a clarion call to all sectors of the society to join hands in managing, conserving, and protecting this valuable resource in order to satisfy our present needs as well as those of future generations. Of vital importance are controlling land degradation, good rangeland management practices, wetlands conservation, controlling pollution and invasive alien species. Concisely, we need to adopt an integrated approach to catchment management.

Apart from addressing specific water resource management issues and in recognition of the fact that water impacts on many other sectors, this policy document is aligned with the National Vision 2020, the Poverty Reduction Strategy 2007, the MDGs and other related policies such as those on

<sup>3</sup> The 1995 and 2006 coverage has remained constant at 89%. This does not necessarily imply that no progress has been made since new extended urban boundaries have been implemented in this period.

Decentralization, Energy, Environment, Food Security, Gender, Forestry and Land Reclamation, HIV/AIDS, Industrialisation, National Irrigation Policy, and Science and Technology. The Lesotho Water and Sanitation Policy go all-out to embrace our principle that “*Kopano ke Matla* - Unity is Strength”. United we shall stand in the quest for a better future for all of our people.

### **Policy Objectives**

The objectives of the Lesotho Water and Sanitation Policy (LWSP) are to promote:

- 1) The proper management of the country’s water resources and its sustainable utilization;
- 2) Adequate and sustainable supply of potable water and sanitation services to all of the population of Lesotho;
- 3) Co-ordination and coherence in the management and development of water and other related natural resources, in order to maximise the resultant socio-economic benefits without compromising the sustainability of vital ecosystems; and
- 4) Harmonisation of processes and procedures followed by different development partners and other stakeholders in order to optimise available internal and external resources as well as ensure timely implementation of sector programmes.

### **Principles**

The guiding principles of the Lesotho Water and Sanitation Policy are:

- A. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment. Its utilization must therefore be sustainable;
- B. Since water sustains life, in order to be effective, the management of water resources demands a holistic approach, linking social and economic development with the protection of natural ecosystems. Effective management of water resources would also link land and water uses across the whole of a catchment area as well as the groundwater aquifer in an integrated management framework;
- C. Water has an economic value and should be recognized as an economic good. Managing water as an economic good is an important way of balancing its competing uses and achieving its equitable, efficient and sustainable utilization while encouraging its conservation and protection;
- D. Water management and development should be based on a participatory approach, involving users, planners and policy-makers. A participatory approach involves raising awareness on the importance of water among policy-makers and the general public. A participatory management approach also requires that, decisions be taken at the lowest appropriate level of governance, with full public consultation and the involvement of users in the planning and implementation of water and sanitation programmes and projects;
- E. Women and girls continue to play a central role in the provision, management and safeguarding of potable water. The pivotal role of women as providers and users of water and as guardians of the living environment requires enabling policies and strategies to empower them to participate at different levels of decision-making in water resources management and development and to share in the benefits of water utilization on the basis of equity;

## STATUS OF THE WATER AND SANITATION SECTOR

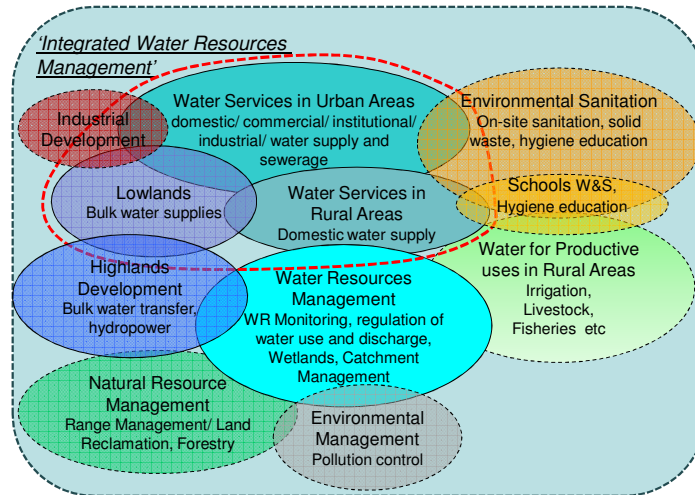
### 1.5 Definition and Characteristics of the Water and Sanitation Sector

The definition of the water and sanitation sector in Lesotho is complex as the sector covers many aspects as illustrated on Figure 2.

The full scope of Integrated Water Resources Management (IWRM) would, in addition to the water and sanitation services include all aspects of water resources management and the use of water for productive uses such as irrigation, livestock and fisheries.

Water resources management in Lesotho is closely linked to natural resources management in general and especially range management and livestock.

Figure 2: Water Sector Delineations



The water resource developments in the highlands for hydropower and bulk water supply to South Africa versus the demand for water and need for development of water infrastructure in the lowlands adds complexity to the institutional set-up in the sector as aspects of the highlands development are bilateral with the neighbouring country.

Hydrological conditions vary very widely within Lesotho: The mountain areas have large volumes of water available, whereas lowlands have to contend with acute regional or seasonal water scarcity. However, supply bottlenecks are generally not just a hydrological problem but are often caused by poor general and sector governance and inadequate resource management.

Overall, water scarcity is noticeably increasing due to the inadequate and slow pace of response by water sector actors and high population growth in urban areas and especially the industrial development with high water demanding textile industries. The water scarcity is worsened by the inadequate catchment management and water conservation resulting in soil erosion and subsequent rapid runoff and decreased recharge of groundwater. Water scarcity is often coupled with short-term water excess. Drought destroys vegetation cover and causes hardening of the soil, thereby reducing its water-holding and thus its buffer capacities. As a result, droughts are followed by floods and vice versa.

A good water sector policy which cascades into strategies that sets out a course for sustainable water resources utilisation is therefore key to mitigating or averting water crises. There is therefore a strong need for action by the sector either by implementing some of the related strategies like water demand management strategy, drought management strategy and IWRM strategy to improve the response to changes in the amount and distribution of precipitation, evaporation rates etc. resulting from climate change.

The characteristics of the water and sanitation sector in Lesotho can be summarised as:

- Lesotho and especially the north eastern mountain areas being blessed with abundant water resources that are partly utilised by the highlands water project supplying water to South Africa;

- The lowlands in the western part of the country experiencing water shortages in part due to inadequate infrastructure for storage and distribution and partly due to much lower precipitation than the north eastern part;
- All water supply and sewerage systems in urban areas operated by the Water and Sewerage Authority (WASA). Water coverage for domestic use approximately 54% based on connections. BOS reports access to water at 83%, the difference being mainly the households buying water from neighbours at high cost and not regarded as covered by the water sector;
- Sewerage coverage limited to the commercial centres of the towns. Domestic coverage is less than 2% based on the number of connections. Problems with industrial waste water as only 10% enter the sewerage system. Households in urban areas use predominantly pit latrines for disposal of human waste and only about 10% do not have access to sanitation facilities;
- Rural water supplies are typically small piped systems (100 – 1000 persons typically), where possible gravity systems based on springs above the villages, else pumping systems using solar, electrical or diesel driven pumps. Some villages in the lowlands supplied with water from boreholes with hand pumps. About 20% of the rural water systems are not operational for various reasons resulting in the although water supply facilities are in place for about 60% of the rural population, less than 45% of the population has access to water from a functioning water supply;
- Rural sanitation is exclusively on-site sanitation mainly pit latrines and in some instances e.g. institutions and few households, water borne systems with septic tanks. Rural sanitation coverage is 44% (2006 Population Census data).

The direct stakeholders in the water and sanitation sector are rural communities and the Local Government Authorities supported by the Department of Rural Water Supply (DRWS) and the urban customers supplied by WASA. The overall planning and financing in the water sector is responsibility of the Ministry of Natural Resources (MNR) and the Commissioner of Water (CoW) under the guidance of the Ministry of Finance and Development Planning (MoFDP). The Sector shares dependencies and interdependency with others, including Department of Crops, Department of Environmental Health, Department of Decentralisation (Local Gov), Ministry of Trade, Department of Environment. The Sector is responsible for working with these sectors to better identify, define, and, address these dependencies and vulnerabilities. The relationships are described in more detail below.

## **1.6 Institutional Framework and Sector Stakeholders**

### **1.6.1 Overall Sector Responsibilities**

#### Water Resource Management

The function of water resource management is currently undertaken by the Department of Water Affairs (DWA) in the MNR. The organization keeps and provides records, information, results of monitoring activities (river flow, groundwater, water quality etc), research, and analyses to the CoW's office, who acts as the custodian of raw water resources. DWA is currently not involved in raw or treated water production.

#### Water Services

Provision of potable water supply is currently undertaken by WASA in urban areas. In rural areas DRWS is supporting Local Government Authorities and communities in the provision of water supply and sanitation. Non-Governmental Organisations (NGOs) and other sector actors such as the Lesotho Highlands Development Authority (LHDA) are contributing to the rural water sector in specific areas.

#### Other abstraction/usage (fishing/ agriculture/ industry etc)

Other raw water usage is currently very low and is licensed by DWA. There are a few small irrigation schemes operating. Potential to use Maqalika dam and Rasebala dam for fish production has been



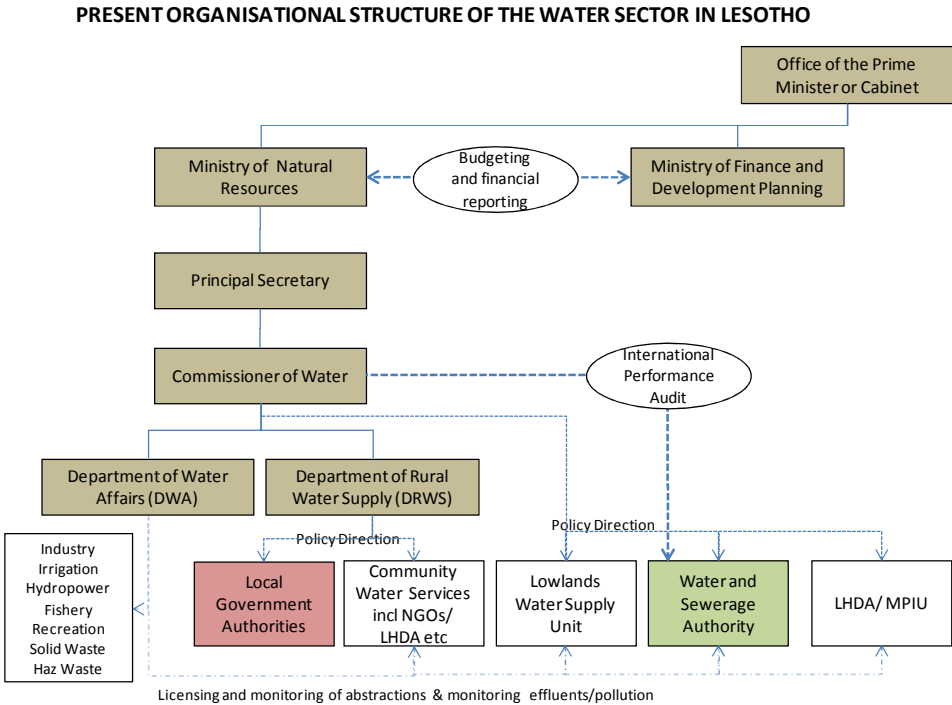
identified. Industrial users are currently supplied with treated potable water from the urban water systems and do not abstract water independently. There is potential for water demand management initiatives as presently only limited recycling of water taking place in the textile industries.

Raw Water Export to South Africa

LHDA is operating and maintaining the Highlands Water Scheme dams (Katse and Mohale), raw water transfer system and the Muela hydropower scheme within Lesotho.

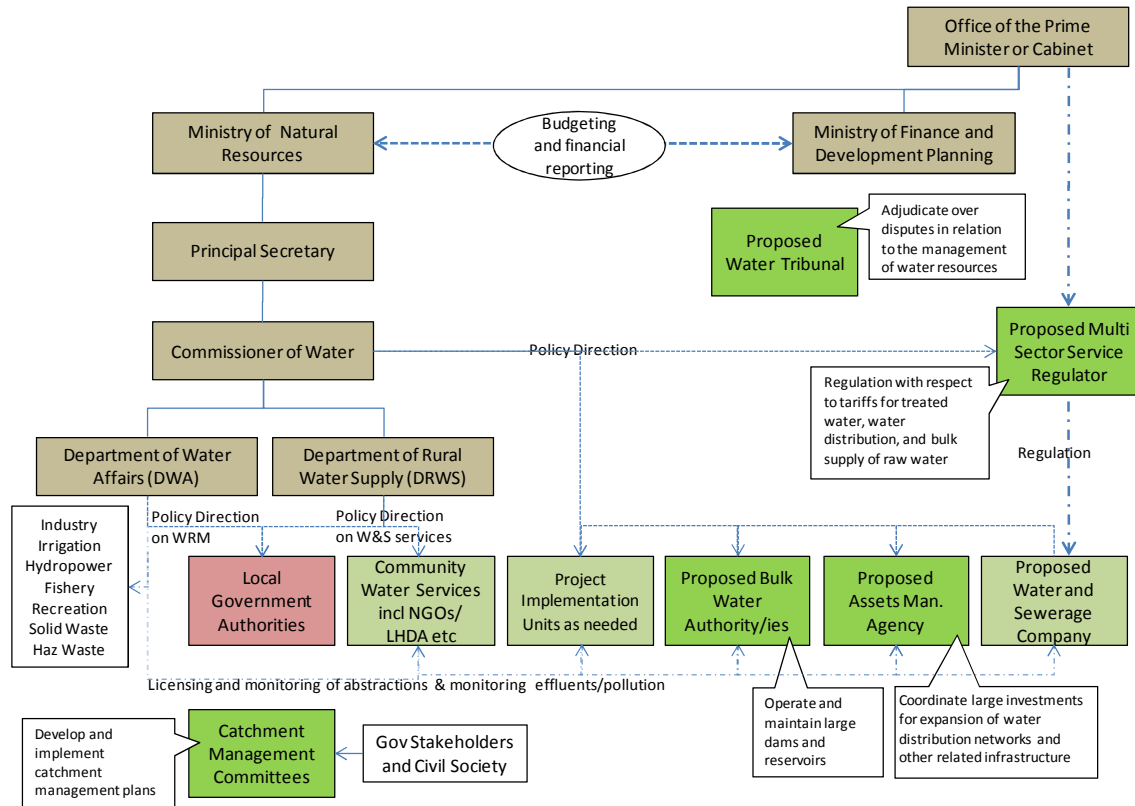
The existing organisational structure of the water sector is shown on Figure 3

**Figure 3: Existing Organisational Structure of the Water Sector**



The proposed organisation structure of the water sector as presented in the Water Policy is shown on Figure 4.

**Figure 4: Proposed Organisational Structure of the Water Sector**  
**PROPOSED ORGANISATIONAL STRUCTURE OF THE WATER SECTOR IN LESOTHO**



## 1.6.2 Government institutions and major sector players in detail

### 1.6.2.1 Commissioner of Water

The Commissioner of Water is the head of the water sector, thus, mandated by Water Act 2008 to among others provide policy direction to the departments within the MNR and water management institutions dealing with water resources, and coordinate all water management activities including activities relating to international waters.

The CoW sets GoL policy and sustains the operational environment under which the LHDA and WASA function.

The office the Commissioner is structured around four distinct units: Policy Planning and Strategy Unit (PPSU) including the Environmental Unit, the Accountancy Unit, and the newly established Monitoring and Evaluation Unit (M&E) that includes management information systems.

#### **Water Act: The functions of the Commissioner:**

- Provide policy direction to the departments within the Ministry and water management institutions dealing with water resources
- Implement the water and sanitation policy
- Develop water and sanitation strategies and plans and ensure their implementation and periodical review
- Be a custodian of the national water resources data on behalf of the Minister
- Coordinate all water management activities including activities relating to international waters
- Produce state of water resources reports once every year
- Carry out such regulatory activities in respect to water resources as are provided for under this Act and
- Advise the Minister concerning the management and utilization of water resources

The office is relatively new and needs support to strengthen its technical and financial capacities. In the future an independent regulator for the water sector will regulate tariffs and presently this function

is carried out by the Principal Secretary (PS) of MNR in cooperation with CoW and the Ministry of Finance.

The CoW has the responsibility to coordinate the overall sector planning and allocation of funding to sector institutions through the government's budgeting process, however decisions on funding to sector institutions are made at the level of the PS of MNR within the ceiling as determined by the MoFDP.

The Water Commission is also supervising the implementation of the Performance Agreement between GoL and WASA.

#### 1.6.2.2 Department of Water Affairs (DWA)

DWA has general responsibility for surface and groundwater management, the collection and processing of water sector information, for the assessment, planning, and development of the country's water resources, and for the administration of water resources legislation. The DWA maintains the country's hydrological and hydro-geological network and is structured around the following divisions: Water resources; Water pollution control; Hydrology; Hydrogeology; Wetlands Unit and, Administration.

With trans-boundary river basins and water sharing agreements with the RSA, the measurement of flows and maintaining a watch on the physical state of Lesotho's rivers is a key requirement of the DWA. Water quality has become an increasing concern of late due to increased industrial development (mainly textile) and the DWA services a network of water sampling and testing stations at key locations. They operate compatible data collection systems.

DWA is largely funded by government, however, the department generates some supplementary income from rendered services e.g. DWA provide services to the Department of Rural Water Supply in the form of drilling boreholes, carrying out pumping tests and monitoring water quality. In addition to that used for daily operations, assets are primarily equipment to perform assessment and monitoring functions.

DWA undertakes assessment and monitoring of water resources quality and quantity and issues permits for water abstraction and construction of boreholes and water structures. Efficiency in performing their tasks is somewhat hindered by lack of funding and human resources, mainly at professional level. The entity has been involved in the operation and maintenance of source installations, maintenance of flow gauging stations, many of which are in a poor condition.

#### 1.6.2.3 Department of Rural Water Supply

The Department of Rural Water Supply (DRWS) is responsible for water supply and sanitation infrastructure development and service delivery in the rural areas (comprising about 82% of Lesotho's 1.88 million population).

Currently there are water systems in place for about 60% of the rural population however some of these systems are not functioning bringing the effective coverage to less than 45%. The sanitation coverage is approximately 42% with big variation between the districts, generally lower in the mountain districts (down to 12%) and higher in the lowlands (up to 57%). The target for both water and sanitation is to achieve the MDGs and full coverage by 2020.

DRWS is responsible for overseeing water and

Figure 5: Location of RWS Offices



sanitation services in rural areas that are provided through community managed water schemes and support to on-site sanitation. Households are provided with a 90% subsidy for constructing pit latrines in the communities where water projects are implemented. The water and sanitation hardware implementation is accompanied with hygiene education and capacity building for the Village Water and Health Committees for management of the facilities.

An ongoing decentralisation process will lead to District Councils and Community Councils (CC) being responsible for supporting the communities and implementing new water and sanitation facilities. DRWS has offices in each district that carry out the planning and implementation of new water and sanitation projects and provide support to Operation and Maintenance (O&M) of the water systems. The 10 district offices, each has a staff of about 10 professionals (engineer, technicians, supervisors, social officers, accountants).

The role of the DRWS head office is to provide quality assurance, support the districts in tendering and contract implementation and monitoring and evaluation. The head office has a staff of about 15 professionals (engineers, socio-economists, planners, human resource officers, accountants etc.)

#### 1.6.2.4 Water and Sewerage Authority

The Water and Sewerage Authority (WASA) was established by Order No.29 of 1991. This Order converted WASA from a government department (then called Water and Sewerage Branch – WSB) into an autonomous body corporate with perpetual succession and it being capable of suing and being sued in its own name (Section 4(2)). In terms of the Order, the Authority is responsible for the provision of potable water and sewerage services including services for emptying of septic tanks and pit latrines in the gazetted urban areas.

Through projects e.g. Maseru Sanitation WASA is also involved in supporting the implementation of on-site sanitation facilities such as Ventilated Improved Pit (VIP) Latrines.

**Figure 6: Location of WASA Systems**

The core technical functions of WASA are to operate and maintain both potable water and sewage treatment and conveyance systems. In addition to the technical aspects of this service delivery WASA also undertake metering, billing, revenue collection, and customer care to their consumers. The WASA infrastructure includes water and waste water treatment facilities, pump stations, reservoirs, bulk and reticulation pipelines.

In terms of its mandate, WASA is currently responsible for providing potable water and sewerage services in the following 17 urban centres: Mokhotlong, Butha-Buthe, Leribe, Maputsoe, Teyateyaneng, Maseru, Semongkong, Thaba-Tseka, Mazenod, Mafeteng, Mohale's Hoek, Quthing, and Qacha's Nek. For historical reasons WASA operates systems in some minor towns in rural areas such as Peka, Mapoteng, Roma and Morija.

WASA is present in all the districts of Lesotho as shown on Figure 6. WASA currently have a total of 476 posts, 26 of which are vacant. (Maseru: 313; O&M North: 80; O&M Central: 25; O&M South: 58)



The detailed design study of the Lesotho Lowlands Water Supply Project (LLWSP) also complements the Water and Sanitation Policy and recommends that WASA assume responsibility for operation and maintenance of bulk treated water supply from Metolong dam infrastructure including treatment and distribution. The WASA shall also be transformed into a Water and Sewerage Company (WASC) that shall be regulated by the Multi-Sector Regulator. The Vesting-Bill is already in Parliament for enactment. It is currently (March 2010) awaiting the date to be read for the second time in Parliament.

#### **1.6.2.5 Metolong Project Implementation Unit**

The Metolong dam, water treatment works, conveyance system and associated works, is currently being implemented by the Metolong Project Implementation Unit.

A combination of both government and donor funding has been provided by GoL, Millennium Challenge Corporation (MCC), a group of Arab banks, the World Bank, and the Government of Republic of South Africa. The project is being undertaken to augment and improve sustainable water supply and redress chronic water shortages to the Maseru and surrounding lowlands areas through the construction of the Metolong Dam and downstream bulk conveyance system in an environmentally sound, socially responsible and financially sustainable framework. Thus, meet current WASA's supply demand, as well as to satisfy the expected medium-term (2020) water demand growth in the greater Maseru area. The Metolong Project Implementation Unit has been established to oversee the implementation the project over the next five years.

The Metolong Project Implementation Unit is a relatively small unit and, with the exclusion of the board of directors and the Chief Executive Officer (CEO), comprises a total of approximately 17 staff members. The offices and staff are based in Maseru. Its assets are only those required for the administration and management of the project, being mostly office equipment, furniture, and software systems.

The Metolong Project Implementation Unit is suggested to be formally established as the Metolong Authority (MA) through the Metolong Bill which has been read for the first time in Parliament and went through the Portfolio Committee. It is presently (March 2010) awaiting its date to be read for the second hearing in Parliament.

#### **1.6.2.6 Lesotho Highlands Development Authority**

In 1986 the Government established the Lesotho Highlands Development Authority (LHDA) as a body corporate responsible for the planning and implementation of the Lesotho Highlands Water Project (LHWP). The LHDA is also responsible for the operation and further development of bulk water transfer schemes from the highlands of Lesotho to the Republic of South Africa. The LHDA Order No. 23 of 1986 established LHDA as an autonomous statutory body under the laws of the Kingdom of Lesotho in accordance with the provisions of the Treaty, page 3 of 19. According to the Order, the primary objective of the LHDA is to implement and manage the LHWP in Lesotho. The LHDA was initially set up as a project implementation unit but is currently an operations and maintenance organization.

The role of LHDA in water services in Lesotho is limited to implementation of rural water and sanitation projects in the catchment areas for the bulk water reservoirs.

The LHWP Treaty allows for LHDA to release emergency water from the storage reservoirs in the highlands to the Mokare River in periods of drought to alleviate water shortages in the lowlands rural and urban settings.

The LHWP consists of an inter-linked system of dams and tunnels, which divert water from the Senqu Basin in Lesotho northwards to the Gauteng region of RSA. The project also generates hydropower at Muela dam and Lesotho is virtually self sufficient in terms of electricity. Following the completion of Phase 1A in 1998, which comprised the Katse and Muela Dams and a system of tunnels for the transfer of 16.8 M<sup>3</sup>/sec to RSA and the generation of 72 MW electricity, the LHWP moved into Phase 1B which comprised the Mohale Dam designed to transfer an additional 11.8 M<sup>3</sup>/sec of water to RSA. The Katse Dam was impounded in October 1995. The impoundment of Mohale Dam began on the 1<sup>st</sup>

November 2002, whilst the Matsoku Diversion Weir and Tunnel was inaugurated and commissioned on the 26<sup>th</sup> October 2001.

Since the completion of Phases 1A and 1B of the LHDP, the LHDA has moved from being a primarily implementation-based organisation to an operations and maintenance organisation. The mandate of the LHDA's Development and Operations Division is to operate and maintain the LHWP's water resources infrastructure, to generate electricity and to implement all LHDA programmes at field level. These include water and sanitation programmes such as the Katse and Matsoku programme, which entails the construction of about 15,000 VIP latrines, refuse pits, and 132 water supply systems.

Feasibility Studies have identified that the Lesotho Highlands Water Project should be developed in five (5) phases, and presently Phase 1, which is composed of Phase 1A and 1B, has been completed and it is fully operational. High level negotiations between the two governments are currently underway to assess the feasibility of the future Phases, following the recent undertaking of a Phase 2 Feasibility Study.

### **Staffing and Geographic Location**

During the implementation of Phase 1, LHDA comprised of approximately 700 staff members, however this staffing level was significantly related to the focus on engineering and construction at that time. Since 2003 a restructuring process has taken place to accommodate the change in focus to operating and maintaining infrastructure following the completion of Phase 1B. The revised organizational structure was reduced to approximately 200 staff members through this restructuring process. At one point it had accumulated a significant body of technical and institutional capacity, but unfortunately this valuable resource has been dispersed and is no longer available to the water and sanitation sector in Lesotho.

The restructuring process split the organization into two distinct divisions, namely Strategic and Corporate Services and Operations and Development. Each division has a divisional head reporting directly to the Chief Executive. The current staff complement at LHDA is 230 staff members.

LHDA are geographically spread across Lesotho with branch offices located at Katse, Muela and Muela hydropower tail race dam. Katse and Muela dam are located in the highlands of Lesotho, but the hydropower scheme is located in the upper lowlands area in the Butha Buthe region.

The core technical functions of LHDA are to operate and maintain the three dams (Katse, Muela and Muela) and approximately 100km of raw water transfer tunnels. The primary operation and maintenance functions include:

- Operation and maintenance of the infrastructure
- Dam safety inspections and reporting
- Seepage monitoring
- Water releases in accordance with the inflow stream requirements and specific dam operating procedures
- Geotechnical and seismic surveys
- Water quality monitoring and catchment management specifically related to the scheme
- Hydrological measurement and analysis
- Funding and Asset Ownership

LHDA have an operating budget of M 282 million for the financial year 2008/09. Funding of LHDA is derived from South Africa, through Trans-Caledon Tunnel Authority (TCTA), and the GoL, Ministry of Finance.

The ownership of the assets operated by LHDA is held by LHDA itself. LHDA are required to service any loans associated with the assets they operate.

LHDA have a Board of Directors made up of both public servants of each of the two Governments of South Africa and Lesotho, as well as private independent persons.

The Authority operates under the rules defined in the Highlands Treaty, and is “regulated” by the Lesotho Highlands Water Commission, which has delegates from both countries. The Lesotho side of the LHDA Board includes the Commissioner of Water, and the ultimate authorities under the mandate that LHDA operates are the two Ministers of Water Affairs and Natural Resources respectively.

LHDA have published a strategic plan covering the period 2008 to 2013.

LHWP Phase 2 – The feasibility studies were completed in 2009. The LHDA was delegated authority to implement Phase 1 and there is an opportunity for the LHDA to implement Phase 2.

#### **1.6.2.7 Lesotho Lowlands Water Supply Scheme Unit**

The Lesotho Lowlands Water Supply Scheme Unit (LLWSSU) was set up in 2002 to oversee the development of both the Metolong Feasibility Study and the implementation of the Lowlands Water Supply Scheme Projects. Bulk supply of water to the densely populated areas in the lowlands of Lesotho has been designed and the implementation of the Zone 4 and 5 is ongoing covering Metolong dam, water treatment and transmission to Maseru and nearby centres.

The detailed design of Zone4/5 Lowlands Project was funded by the European Development Fund (EDF).

The Lesotho Lowlands Water Supply Feasibility Study is the planning framework for the Lowlands Project and was completed in September 2004. Amongst its recommendations was the preliminary design of treated bulk water supplies to serve eight designated water demand zones, and the setting up a Lesotho Water Sector Information Management System (LWSIMS). The latter was seen as vital in order to provide co-ordinated access to information needed by stakeholders to manage the sector.

#### **1.6.2.8 Emerging Water Sector Institutions**

##### **Asset Management Agency:**

The Water and Sanitation Policy requires finalisation of institutional arrangement with creation of an Asset Management Agency. The Agency shall coordinate large investments for expansion of water distribution networks and other related infrastructure.

The Institutional, Financial and Economic Analysis as part of the final design of the LLWSP for the long-term ownership, operation and maintenance of assets developed under the LLWSP also recommended the creation of the Asset Management Agency to be responsible for the bulk water infrastructure.

##### **Bulk Water Authority:**

The Water and Sanitation Policy requires the creation of a Bulk Water Authority. It shall operate and maintain large dams and reservoirs while WASA will be responsible for the treatment and distribution of treated water.

##### **Regulation of Water Services:**

The regulatory reform aims at establishing and operationalising an independent economic and services regulator with respect to tariffs for treated water and water distribution. In view of the cost efficiency and effectiveness of consumer liaisons etc, the regulation of water and sanitation services will be combined with electricity to be carried out by multi Sector regulator.

The Lesotho Electricity and Water Bill has been read for the first time in Parliament and the Parliament Portfolio Committee has already scrutinized the Bill. Presently (March 2010), the processing of the bill is awaiting the date for the second reading in Parliament.

#### **1.6.2.9 Ministry of Health and Social Welfare**

Another key ministerial stakeholder in the water and sanitation sector is the Ministry of Health and Social Welfare (MoHSW) who are responsible for health services and sanitation. The division of water and sanitation (and sometimes environment) between ministries is often complicated and when the water sector is being considered sanitation is a fundamental prerequisite often overlooked.

The Environmental Health Division of the MoHSW has staff at district level that carry out environmental health regulatory duties such as inspecting sanitation facilities for approval of business permits. The MoHSW also has health education programmes that include water, sanitation and hygiene that are carried out at clinics and in the communities through health assistants and village health workers.

The rural sanitation unit in MoHSW has been responsible for the implementation of the 1983 national sanitation strategy and has carried out promotion and trained numerous local masons in the construction of latrines.

The Health Education Unit in MoHSW has been developing health education materials covering hygiene and water and sanitation aspects that have been used by the health assistants and the village health workers.

It is understood that the MoHSW maintain responsibility for the health implications related to sanitation and that WASA, the district communities and the DRWA have responsibility for sanitation services (i.e. sewers, sewage treatment works, pit latrines, septic tanks liquor removal, etc).

The detailed strategy for the division of responsibilities for hygiene education and sanitation between the water sector institutions, the MoHSW and the local government authorities will be detailed in a 'Sanitation Strategy' as one of the priority actions for the sector.

#### **1.6.2.10 Ministry of Agriculture and Food Security**

The Ministry of Agriculture and Food Security (MoAFS) has water related responsibilities in respect of irrigated agriculture.

Irrigation in Lesotho is limited due to the country's topography and soils, which restrict the irrigable area to about 17,000 Ha. Estimates of the country's potential irrigable area vary, but some suggest a maximum of 25,000 Ha are available.

Attempts to increase irrigation have not been successful to date because of technical and institutional constraints, and the consolidation of land holdings under various irrigation projects has been equally unsuccessful mainly because they provide individual landowners with few incentives to cooperate. Some of the projects that employed capital-intensive technologies have been abandoned, as they were found to be uneconomical.

#### **1.6.2.11 Department of Environment**

The Department of Environment (DoE) under the Ministry of Tourism, Culture and Environment is responsible for the development and implementation of environmental policy, manages the environmental impact assessment process, and monitors environmental matters in general.

The DoE will set the effluent standards and is responsible for issuing discharge permits and regulation of pollution of water resources in consultation with the CoW. The DWA is contributing to the Environmental Impact Assessment (EIA) process for solid and hazardous waste facilities. The Committee of Waste Management (COWMAN) consisting of government and non-governmental stakeholders advises on waste management issues.

#### **1.6.2.12 Ministry of Local Government and Chieftainship**

The Ministry of Local Government and Chieftainship (MoLGC) is an important partner in the water sector as it provides guidelines to the local authorities on the functions related to water and sanitation. Capacity development programmes for the local councils will be implemented jointly by the DRWS and the MoLGC.

The Department of Lands, Surveys and Physical Planning (LSPP) is responsible for land use planning, land tenure, topographic surveys and mapping, physical planning and housing. The Lands Division's responsibilities include the monitoring of the occupation of land and reporting on compliance by lessees, the processing of planning applications for selected development, and the allocation of land for public purposes. The MoLGC/ LSPP are responsible for gazetting the urban boundaries that define the service areas for WASA.



### 1.6.2.13 Local Government Authorities

The Local Government Act of 1997 and Local Government (Amendment) Act, 2004 establishes local councils at district and community level and define their functions. The councils are responsible for operation and maintenance of water systems.

The plan for decentralization from central Government to Local Authorities for the period 2004 – 2009 (GoL 2004) provides a further break down of the decentralised functions, however there is not yet clarity on the functions of local authorities and the water sector institutions regarding rural and urban water and sanitation.

**Water Act (2008): A local authority has the following functions:**

- a) Elaboration of catchment management plans for the protection and use of water resources in the catchment area, which shall be in line with the water and sanitation strategies and plans developed by the Commissioner
- b) Promotion of community participation in its catchment area through education and other appropriate activities
- c) Promotion of community self-reliance, including the recovery of costs for operation and maintenance of waterworks
- d) Collection, management and sharing of data that is necessary for proper management of its catchment, and
- e) Resolving conflicts relating to water resources within its catchment area

The Water Act (2008) assigns responsibilities for catchment management to the Local Government Authorities as shown in the textbox.

### 1.6.2.14 NGO's in the Water Sector

There is an active community of NGOs engaged in the water and sanitation sub sector. They work throughout the country and are particularly active in the LHDA managed areas affected by the LHWP but are often constrained by lack of funds. The NGOs play an important role in the policy dialogue.

Prominent NGOs active in the sector include the Christian Health Association of Lesotho (CHAL), World Vision, and the Transformation Resource Centre. The latter have been engaged in promoting the cause of displaced communities affected by the LHWP.

The NGOs are carrying out water and sanitation projects with funding from their own sources. An exception to this was projects by CHAL in remote areas (Mantsunyane and Tebellong) where the funding for the projects was channelled through DRWS. The off-budget NGO funding to the sector is estimated in the rural water planning framework to be approximately M 1 million annually.

### 1.6.2.15 Lesotho National Development Corporation

The Lesotho National Development Corporation (LNDC) falls under the Ministry of Industry, Trade, and Marketing and channels capital into the development of industrial sites, including the provision of infrastructure.

Since many recent developments have involved “wet industries”, the LNDC plays a significant role in the water and sanitation sector. For instance, it has funded water supply upgrades serving the new industrial areas of Ha Thetsane and Ha Tikoe and the refurbishment and extension of the Maseru Potable Water Treatment Plant.

### 1.6.2.16 Private Sector

The private sector involvement in the water sector is presently focussed on providing services for design and construction of water and sanitation facilities and consultancy services for various studies to support the sector institutions.

The challenges arising in the water sector can only be solved through cooperation on the basis of partnership. Local partners for water sector generally include government institutions and administrative bodies, public corporation, non-governmental organisations, Community Councils, and user groups.

The development of the private sector in Lesotho has many advocates not least the World Bank (WB) who is actively promoting the concept through their private sector development initiative. In parts of the Lesotho economy the private sector is performing strongly but there is a clear lack of drive in the move to greater public ownership of key services.

To some degree Lesotho has embraced the Public-Private-Partnership (PPP) concept and the leasing of the GoL's transportation requirements to a private company indicates that at least in principle the importance of the private sector is acknowledged. But there are many constraints to be overcome for any private company setting up business in Lesotho. Presently there are no suitable private sector dam operators in Lesotho but there is relevant expertise in the public sector and elsewhere in the region. In order to justify the use of a private service provider, it must be cost-effective and a viable technical and financial business model must be provided.

It should also be realized that the private sector operates on a profit basis, which would ultimately be reflected through tariffs or transparent allocation of government subsidies. The current situation of low critical mass and low affordability factors combined with relatively low tariffs, would severely curtail private sector interest in being involved in the Lesotho water sector. The ongoing establishment of an independent regulator for the sector is an important step in providing the framework that can allow for increased private participation in service provision.

## **1.7 Sector capacity development**

The Lesotho Water and Sanitation Policy 2007 is predicated upon guiding principles and objectives that have a direct bearing on the water and sanitation sector's human resource capacity. The principles, objectives and strategies as outlined by the Policy require the sector institutions to have a work force with appropriate skills in order to effectively undertake their mandate. The advent of HIV and AIDS and migration of skilled professionals continue to substantively erode the HR capacity of the water and sanitation sector. The water and sanitation sector faces these challenges at a time when Lesotho faces increased economic and natural hardships and increasingly constrained public finances. The Ministry of Natural Resources recognises the need to articulate the current HR capacity in the sector and mechanisms to strengthen the sector's HR capacity.

One of the primary requirements for an effective sector program is the ability of institutions to implement envisaged programmes and plans effectively. In order to be able to assess the institutional capacity of Lesotho's Water Sector; one needs to carry out a comprehensive institutional capacity assessment and then come up with a related institutional development programme. During the development of this sector strategy, such an assessment had not been carried out but preparations for such an assessment have advanced to the point that Terms of Reference for the capacity assessment and a corresponding roadmap have been agreed between the Human Resources Dept of the Ministry of Natural Resources and Development Partners, in particular Irish Aid. It is therefore intended to build such a program into the current sector program activities.

The Water and Sanitation Sector in Lesotho is broadly defined and includes organisations that are within and outside of the public and private sector. The water sector related departments of MoNR have been selected for the HR Needs Assessment because they are the key entities in the delivery of services or outputs as outlined in the Interim Strategy priority areas. However, the Ministry of Natural Resources envisages that an HR Needs Assessment of other entities will be undertaken in the foreseeable future. Organisations that will be targeted in the second phase of assessment include but are not limited to local councils, private contractors, Government departments such as Department of Conservation and NGOs working in the sector.

In undertaking this HR Needs Assessment, the Ministry of Natural Resources will work in collaboration with the Ministry of Public Service and Administration and the Ministry of Finance and Development Planning. The Ministry of Natural Resources has identified these Ministries as key stakeholders in this assessment due to their strategic role as lead Ministries in the reforms currently being undertaken by GoL. The Ministry of Public Service is key in this regard as it is leading the

Public Sector Reform and the Ministry with sole responsibility of leading Government Ministries in HR issues; and the Ministry of Finance and Development Planning as it is leading the Public Financial Management Reform and it allocates funding to all Ministries for institutional development. The Ministry of Natural Resources requires the involvement and support of these Ministries to ensure that the HR Assessment and subsequent plans or strategies that will be put in place are in harmony with the on – going reform processes.

The Ministry of Natural Resources and donors expect that the findings of the HR Needs Assessment will constitute the basis upon which a comprehensive Human Resource Plan, addressing the capacity and skills requirement of the Water and Sanitation Sector will be developed. It is expected that this Human Resource Plan will inform strategic staffing issues for medium to long term. In addition the HR Needs Assessment will enable Ministry Management and Staff to have a shared understanding of the human resources capacity constraints and human resources capacity development opportunities.

The following indicate the purpose of this Human Resources Needs Assessment:

- To inform policy dialogue between the Ministry of Natural Resources and key strategic Water and Sanitation Sector partners, thereby achieving a better policy foundation.
- To enable the Ministry of Natural Resources to prepare a Human Resources Plan for the Water and Sanitation Sector which will indicate how human resources capacity issues will be addressed and financial resources required.
- To enable the Ministry of Natural Resources to approach other important stakeholders (e.g. Ministry of Finance, Ministry of Public Service) to propose solutions of institutional constraints which cannot be solved at sector level.

After the completion of the Needs Assessment a comprehensive Human Resources Development Plan shall be developed during the second year of implementation of the Interim Strategy.

The Ministry of Natural Resources acknowledges that focusing only on human resources at this stage does not entirely address the capacity constraints of the water and sanitation sector. MNR intends to undertake a comprehensive sector capacity assessment that will focus on issues such as financial resources, systems, policies and legislation in the initial stages of implementation of the 5 Year Sector Strategy. The Ministry will solicit the support of development partners to carry out this assessment.

## **1.8 Cross-Cutting Issues**

The cross cutting issues integrated in the Interim Sector Strategy are HIV and AIDS, gender mainstreaming, and embracing the principles of IWRM.

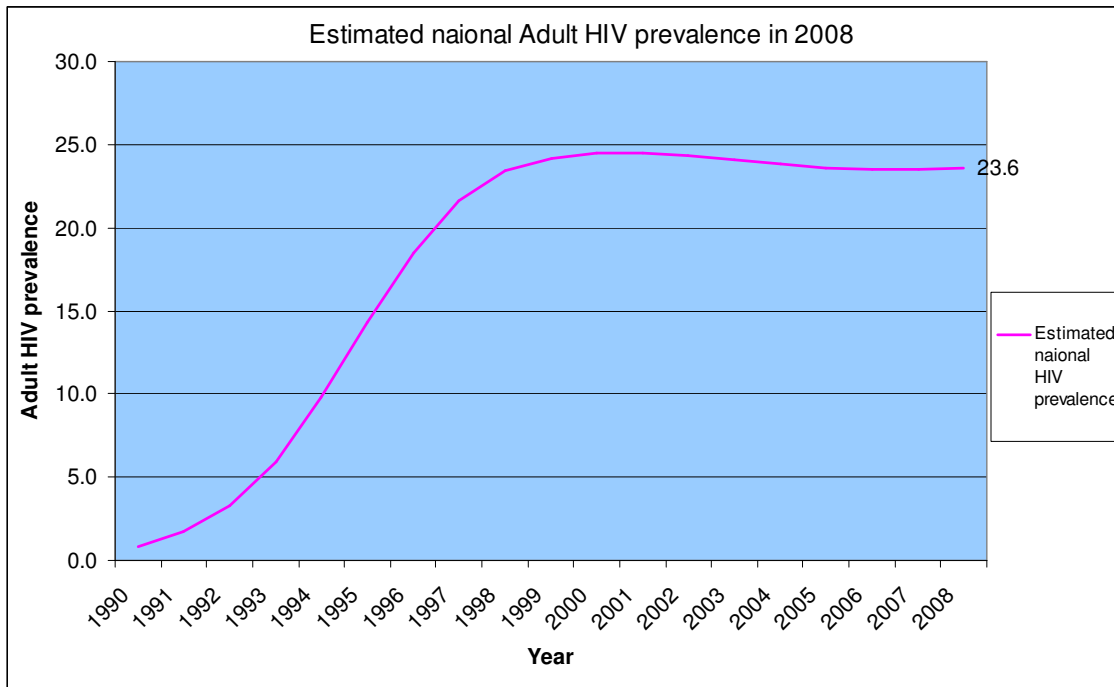
### **1.8.1 HIV and AIDS in Lesotho**

The estimated adult HIV prevalence rate for 2008 was 23.6 % (range=21.3 %, 25.8 %). This was an increase of 0.4% from 2007, as shown in Figure 1 below.<sup>4</sup> It may indicate that national prevalence in Lesotho is increasing; however, more data points are required for subsequent years before this trend can be confirmed.

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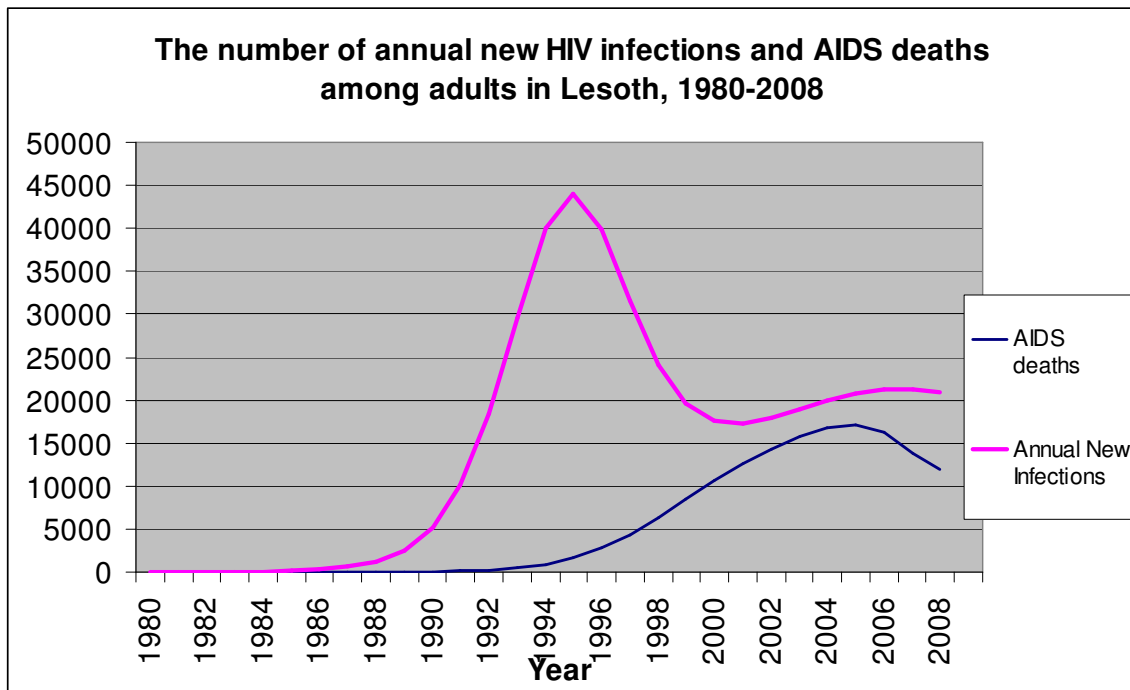
<sup>4</sup> GOL/UNAIDS. 2009. Lesotho Sentinel Survey Results 2008. Maseru, LS: MOHSW. All data in this section comes from this report unless otherwise indicated.

**Figure 7: Estimated Adult HIV Prevalence in 2008**



The increase in prevalence is usually explained by the relationship between the number of deaths annually and the number of new infections as shown in Figure 2 below.

**Figure 8: Number of annual new HIV infections and AIDS-related deaths, 1980-2008**



The total number of HIV+ individuals in any one period declines when the number of AIDS deaths exceeds the number of new infections. In 2008, there were approximately 21,000 new adult HIV infections in Lesotho. There were approximately 12,000 AIDS-related deaths. The annual number of AIDS-related deaths had been declining since 2005. The increasing number of people receiving anti-retroviral therapy (ART) has significantly reduced the annual number of AIDS deaths. The growing number of HIV+ individuals still alive as a result of ART has an influence on the prevalence trend in that it will continue to push up the prevalence rate despite the decline in AIDS deaths. The stable or slightly elevated HIV prevalence rate in Lesotho is strongly affected by this trend.

Against this backdrop, the Government of Lesotho recognises that HIV and AIDS is not only a health problem but a multi-sectoral development issue that has social, economic and cultural implications. Combating further spread of HIV and AIDS therefore continues to be one of the biggest challenges that face the country. Lesotho has had a national, multi-sectoral strategy to respond to HIV&AIDS since 2000. The current National HIV&AIDS Strategic Plan 2006-2011 (NSP) underwent a mid-term review in 2008. The strategy was revised to become a results-based plan with specific, quantifiable targets under each component. Furthermore, responding to the epidemic has been mainstreamed within all of Lesotho's development frameworks, including the Millennium Goals, the Vision 2020, the Poverty Reduction and Growth Strategy, the African Peer Review Mechanism and the UN Country Assistance Framework. While discussion of a sector-wide approach incorporating donor contributions to the national HIV&AIDS response continues, no major developments have occurred to-date. However, a development partners' forum meets regularly and helps to foster collaborative approaches to improve the efficiency and effectiveness of donor support. The UN family in Lesotho began implementing its first Joint UN Programme of Support on AIDS in 2009. Multi-sectoral coordination is one domain of the national HIV response where improvement is still necessary. Although there is full commitment across all sectors to work together, some duplication and fragmentation still occurs.

Within this context of the HIV & AIDS epidemic, it is important for the water and sanitation sector to focus more on the actual and future impacts of HIV & AIDS on its operations. In addition the sector needs to adequately explore the link between water and sanitation services and HIV & AIDS. The water and sanitation sector will therefore need to determine what its contribution is to the epidemic, how the epidemic has affected its goals and objectives and how best to respond to the impact of HIV & AIDS when conducting its core business. In this regard the Water and Sanitation Sector will focus on developing a Strategy and Framework for mainstreaming HIV & AIDS in all of the sector's programmes and operations.

### **1.8.2 Gender Mainstreaming in the Water and Sanitation Sector**

The Water and Sanitation Policy 2007 recognises the importance of including a gender perspective in the day to day business of the water and sanitation sector. One of the guiding principles of the Water and Sanitation Policy 2007 states that:

'Women and girls continue to play a central role in the provision, management and safeguarding of potable water. The pivotal role of women as providers and users of water and as guardians of the living environment requires enabling policies and strategies to empower them to participate at different levels of decision-making in water resources management and development and to share in the benefits of water utilization on the basis of equity.'

The Policy further outlines specific objectives and strategies that are directed at promoting gender equality in the sector such as promoting equity in access to water supply and sanitation services taking into account vulnerable and marginalized groups including women, girls and all those affected by HIV/AIDS. In pursuing the principles of the Water and Sanitation Policy, at the operational level, the

sector has attempted to consider gender perspectives by adopting standards and technologies that ease the burden on women as users of water and sanitation services. These standards and technologies include the maximum distance / time traveled to an improved source of water for households; the eradication of hand pumps and the subsidization of sanitation facilities for households. In addition to the services provided, women are now taking a more active role in the decision – making processes of water and sanitation services. This is particularly evident in the rural water supply and sanitation sub sector where women are members of the Village Water and Sanitation Committees and make decisions in the planning, implementation of water supply projects and the daily management of the water supply systems.

Despite some of the achievements stated above, the water and sanitation sector recognizes the need to strengthen its response to promoting gender equality by mainstreaming gender in all of the sectors' programmes. This is a challenge that the sector currently faces and acknowledges that this is largely due to a lack of capacity to deal with gender mainstreaming. During the period of implementation of this Interim Strategy the water and sanitation sector will therefore focus on two core issues namely:

- Building the capacity of the sector in gender mainstreaming.
- Developing a sector – wide gender mainstreaming strategy / guidelines as a follow – up on one of the guiding principles of the Water and Sanitation Policy 2007.

The sector will also consider and explore other initiatives such as the introduction of the use of gender disaggregated data in the planning, implementation and M&E of sector programmes.

## **1.9 Sector Policy, Strategic and Legal Framework**

### **1.9.1 Drought management strategy**

The Drought Management Strategy (DMS) highlights core priority measures that aim to make use of limited resources to reduce vulnerability of the population as well as enhance resilience of the water resources to hydrological droughts. The strategic measures that deal with all steps of Drought management include: Preparation, Adaptation, Response and Recovery strategic measures.

The DMS was developed to deal with hydrological droughts, not agricultural droughts that are outside the direct mandate of the water sector since agriculture in Lesotho is almost entirely rain-fed. However closer co-operation between the water- and agricultural sector is recommended, especially a linkage between the DMS and the MoAFS Food Security Strategy as the latter promotes an increase in irrigated agriculture in Lesotho which might in fact reduce water security.

A series of measures are identified that deal with Lesotho's regular seasonal water scarcity and also reduce impacts of rare and extreme hydrological droughts. Different measures are suitable to different local conditions; the approach required for rural areas is different from that suitable for (peri-) urban areas, water resources available during dry periods in the Highlands are different from the Lowlands. A core-set of priority measures was identified that aims to use the limited resources available primarily to reduce vulnerability of the population, i.e. to enhance resilience of the water resources system.

The strategy is endorsed by the MNR and is ready for implementation. The CoW is responsible for implementing the strategy in cooperation with the water sector stakeholders and the Department of Meteorology in particular. Definition of the institutional roles in drought management and clear protocols are needed to enhance co-operation and communication.

### **1.9.2 Industrial Waste Water Policy and Action Framework**

The GoL is actively promoting industrial development as a means of creating employment and enhancing economic growth. Significant growth has taken place in the manufacturing sector, and

specifically in the textile sector that is considered as a “wet industry” due to its large water requirements and associated wastewater discharges.

Currently, industrial wastewaters are largely discharged untreated to Lesotho’s watercourses, impacting negatively on the receiving water environment, as well as on the countries downstream of Lesotho. Although the legislative framework makes provision for actions against polluters, the level of enforcement is limited. Current water and wastewater tariffs for the wet industries, implemented by Government as an incentive to industrial development, are disincentives for efficient water and wastewater management. Within the wet industries, little or no attention is given to efficient use, re-use or recycling of the scarce water resource.

There are a number of ministries and agencies that regulate and deal with industrial water and wastewater management. The institutional arrangements have led to a degree of duplication and fragmentation in the management of industrial water and wastewater, with inadequate communication and co-ordination between the line function ministries and responsible agencies. To address this situation, Government established an inter-departmental committee to jointly develop this Policy.

Government’s vision is to create a policy environment that will ensure efficient and effective industrial wastewater management in Lesotho. In order to achieve this vision, five priority areas have been identified. The following are the Policy goals for these priority areas:

- Legislation and Enforcement: Implement and enforce existing legislation.
- Institutional Arrangements: Develop and implement an integrated and co-ordinated institutional approach to industrial wastewater management.
- Tariff System: Implement the “polluter-pays-principle” through the development and use of an equitable industrial wastewater tariff system.
- Training: Strengthen and update the technical and managerial skills of personnel responsible for the management of industrial wastewater.
- Awareness Raising: Raise awareness of government, industry and civil society stakeholders about sustainable industrial wastewater management.

A number of associated strategies have been agreed for achieving the Policy goals. A phased approach to implementation is proposed. Government intends to develop and implement an action plan which will inter alia detail the activities for effecting the strategies, associated stakeholder responsibilities, as well as indicators to monitor and evaluate the implementation of the plan.

The time horizon for the Industrial Wastewater Management Policy is five years and it is intended to review the Policy at approximately five-year intervals, based on practical experience with its implementation.

### **1.9.3 Water Demand Management Strategy**

The Water Demand Management (WDM) strategy deals with four types of measures:

- Economic measures
- Structural and operational measures
- Legal and institutional measures
- Awareness raising and public education measures

The strategy proposes specific measures under each of these four types that are relevant for the water sector in Lesotho. The strategy has been endorsed by the MNR and is read for implementation. The CoW has the overall responsibility for implementation of the strategy, however many of the measures need to be implemented by the various water sector actors.

#### **1.9.4 Irrigation Strategy**

The Agricultural Sector Strategy (2003) emphasise the need for irrigation in ensuring food security in Lesotho. Of the 270,000 Ha of arable land 13% or 36,000 Ha are considered suitable for formal irrigation. In addition there is scope for gravity fed small scale irrigation and rainwater harvesting. The available data indicate that irrigation projects covering 2,637 Ha have been implemented however by 1999 only 66 Ha were still operational.

The Sector Strategy emphasise the need to promote water management in all its forms and has reoriented the policies to promote water management techniques that are appropriate to the local conditions. In summary the focus will be on:

- Targeting smaller farmers, down to units of 2 Ha of diversified production
- Concentration on sensitisation of farmers and implementation on the basis of demand by farmers rather than the transfer of pre-designed irrigation packages
- Complementary activities in other sub-sectors to ensure a coordinated approach
- Encouragement of the private sector to participate more fully in the development of irrigation practices

The MoAFS is responsible for implementation of the irrigation strategy in cooperation with the water sector.

#### **1.9.5 Climate change adaption Plan**

The strategies in Lesotho for adaption to climate change are described in the ‘National Report on Climate Change’ (April 2000) and the recent ‘Lesotho’s National Adaptation Programme on Climate Change Action’ (NAPA).

The NAPA document represents an official submission by Government of Lesotho in satisfying the said provisions of the Convention in conformity with Decision 28/CP.7. It entails the country’s “urgent and immediate” priority adaptation needs aimed at providing an enabling mechanism for the country to minimize the impacts of climate change while at the same time enhancing adaptive capacity of vulnerable communities that are most prone to the adverse effects of climate change.

Climate change activities are coordinated by the MNR through the Department of Meteorology (Lesotho Meteorological Services) including implementation of climate change adaptation plan. The plan facilitates in the vulnerability assessments of different socio economic sectors to climate change and also identifies corresponding adaptation measures in the different sectors.

Lesotho is one of the most vulnerable countries to climate change due to its highly variable climate and the extremely fragile mountainous ecosystem. The country is already paying high premiums as a result of the impacts of global warming. This is evidenced by the increasing devastating signs of progressive desertification, increasing frequency of natural disasters, droughts, wind storms and many other factors. Adaptation is therefore of utmost importance to Lesotho.

Analysis of Lesotho’s future climate predicts warmer climate conditions, lower precipitation, particularly in the spring and summer seasons, shift in precipitation patterns in such a way that good seasonal rains that characterize summer season could set in late. Climate change will thus have severe impacts on water resources of Lesotho, as diminishing rainfall will lead to the shrinkage of surface and ground water resources. Due to recurring droughts, fresh water availability is set to diminish. It has been projected that Lesotho would enter a water stress period of less than 1,700m<sup>3</sup> per capita per year by 2019 and a water scarcity period of less than 1,000m<sup>3</sup> per capita per year by 2062.

Therefore, the issue of management and preservation of water resources has thus become one of the very critical developmental challenges for the country. Closer collaboration on climate and water management should be encouraged to further explore the links between climate, water and economic development. The climate adaptation plan aims at reducing the vulnerability of socio economic sectors to climate related impacts and enhancing their readiness or preparedness to deal with climate change impacts.



The strategy has been endorsed by the MNR and is being implemented. The Department of Meteorology is responsible for implementation of the strategy in cooperation with the water sector institutions and other stakeholders. Info on status of implementation responsibility and status of endorsement of the strategy

### 1.9.6 Tariff Policy

To date the PS of the MNR exercises authority over tariff approvals in consultation with the sector stakeholders in particular the CoW.

In 2006 the tariff structure was banded according to the amount of water consumed plus a monthly standing charge. This means that the households using only the basic amount of water are cross-subsidised by the households with a larger consumption

**Table 3: WASA Tariffs**

Non-Domestic customers pay a flat rate of 6.52 M/m<sup>3</sup>.

The tariff policy allows WASA tariff increases according to inflation annually and foresee review of tariffs every 3 years to enable amending the tariffs to bring them into line with actual costs and recovery rates.

The connection fees range from M1,500 to M4,500 depending on the distance up to 150 metres for domestic water connections and M3,000 to M5,000 for sewerage connections. WASA is working on various models for making connections more affordable such as gradual payment over a year or waiving the connection fee for households that cannot afford. The connection fee is believed to be one of the main obstacles for poor households to access water services.

The tariff policy is being implemented and WASA is provided with annual increases according to inflations.

WASA Tariff Structure for Domestic Water Supply		
Standing Charge	All connections	M 24.65/ month
Band A	0 – 5 m <sup>3</sup> /month	M 2.41/ m <sup>3</sup>
Band B	6 – 10 m <sup>3</sup> /month	M 4.08/ m <sup>3</sup>
Band C	10 – 15 m <sup>3</sup> /month	M 7.17/ m <sup>3</sup>
Band D	> 15 m <sup>3</sup> /month	M 9.89/ m <sup>3</sup>

### 1.9.7 Integrated Water Resources Management (IWRM) Strategy

The objective of the IWRM strategy is to develop a coordinated approach in management, utilization and development of water resources. The IWRM strategy is a road map to achieve Policy goals or desired futures for the water sector as outlined in the Water and Sanitation Policy 2007.

The IWRM strategy proposes the following strategic goals: social Equity, maximum reliability of supply, minimum Government Investment, minimum Environmental Impact.

IWRM is a key aspect of the water policy and an IWRM Strategy was developed in 2007 by the office of the CoW. The Strategy emphasise 5 guiding standard strategies against which the detailed strategies are prioritised as shown in

Table 4.

**Table 4: IWRM Standard Strategies**

Strategy	Goal	Success Criterion	Examples of possible implications on sector financing
1. Social Equity Strategy	Equal distribution of water resources goods and services	Degree of equal access to safe water and sanitation services	More funding to CCs with low existing coverage – reduced funding to CCs with coverage above target

2. Maximum Reliability of Supply Strategy	Reliability of service delivery to the majority of the population	Degree of water delivery efficiency	Emphasis on capacity building to improve management of rural water systems and investments in replacement of old equipment and pipes in urban systems
3. Minimum Government Investment Strategy	Minimize necessary investment in measures by GoL	Amount of Government monetary investment	Willingness to increase tariffs to work towards the (urban) sector being self-sustaining
4. Minimum Environmental Impact Strategy	Implement the measures that impact least on the environment	Amount of impact on the state and health of ecosystems	Aim at using water sources that supply water by gravity and avoiding systems with high energy and chemical use. Investment in proper environmental management plans. Investment in wastewater treatment for industries in Maseru
5. Rapid Result Strategy	Implement the rapid and short term measures that give results fast	Implementation time times anticipate success	Focus on connecting more households to existing reticulation systems e.g. by making it easier for poor households to afford the connection fees

IWRM formulates principles for water sector policy as a whole and for water resources management in particular. However, the concept should not be regarded as a rigid blueprint. On the contrary, it must be implemented on a context-specific basis. IWRM is an ongoing process to optimise the water sector in line with the specific needs of the local population and the environment. Specific IWRM principles can be helpful, and should be supported in the water sector policy

Wherever possible, development cooperation should be integrated into sector IWRM processes, with development measures linking in with existing water management plans. However, development cooperation must be particularly engaged in dialogue and assist in undertaking reforms, where it can have a significant impact, and strengthen appropriate institutional, legal and political frameworks to ensure that development measures have a sustainable effect.

The strategy has been endorsed by the MNR and is ready for implementation. The strategy provides general guidance to the development of the water sector and has guided the development of the policy and the Water Act however it is not yet fully adhered to in terms of stakeholder involvement etc.

### 1.9.8 After Care Strategy

The detailed rural water and sanitation strategy document that describes the implementation policies and roles and responsibilities of stakeholders is the 'After Care Strategy' that was approved by Government in 2007. The 'After Care Strategy' is critical for the sustainability of rural water and sanitation investments. The policy principles are outlined in the box below:

<p><b>The After Care Policy Principles</b></p> <p>The management of rural water systems shall be guided by the following policy principles:</p> <ul style="list-style-type: none"> <li>- Community Councils (CCs) as the lowest level of Local Government are the owners of the water systems and responsible for planning and implementation of new water systems and monitoring and supervising the management of existing rural water systems.</li> <li>- Village Water and Health Committees (VWHCs), legally established under the CCs are responsible for management, operation and maintenance of their water systems.</li> <li>- The private sector will be contracted by the VWHC where necessary to provide maintenance and operational services.</li> <li>- Water users will pay for water services according to tariffs for individual water systems based on operation and maintenance plans and sound business principles for the management of the water systems.</li> </ul>
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- Central Government will play a facilitating role and will not be directly involved in operation and maintenance of the water systems.
- DRWS will provide support and capacity building to the new local governments to operate effectively in the sector and support VWHCs.
- VWHCs can apply for subsidy for major repairs, rehabilitation and extension of systems. The subsidy will be for a maximum of 90% of the cost and the remaining will be contributed by the VWHCs either in kind as participation in the works or as cash contribution to project costs.
- To achieve maximum impact on poverty alleviation, health benefits and achievement of the Millennium Development Goals, the support to community management of water supplies shall be coordinated with the promotion of sanitation and hygiene education, and shall include capacity building of the users and community organizations in management, operation and maintenance of the water and sanitation facilities as well as covering environmental issues.
- Gender equity and social issues including HIV/AIDS prevention shall be considered and fully taken into account in the capacity building activities as well as the development and management of facilities.

The After Care Strategy has been endorsed by the Cabinet in 2006 and is being implemented. The Strategy is guiding the work in the rural water sector however the roles of the Local Government Authorities still need to be fully operationalised to improve the sustainability of rural water and sanitation activities.

### **1.9.9 National Sanitation Strategy**

The strategy for implementation of rural sanitation was developed in 1983 and is based on full payment by owners for sanitation facilities and government provision of capacity building and health and hygiene promotion. To reach the poorer segments of the communities, DRWS in cooperation with the rural sanitation program under Ministry of Health has over the last 5 years been promoting household sanitation with a subsidy as an integrated part of water supply projects.

The strategy of providing the current level of subsidy at 90% for latrines in rural areas has been estimated to approximately M 60 mill annually until 2020 to reach the target of full coverage.

The 1983 national sanitation strategy focussed on hygiene education and promotion of sanitation facilities and included an extensive programme for training local mason in the construction of latrines. Households would contract directly with the local masons for construction of sanitation facilities and there was no subsidy for the construction cost. The strategy has been very successful in raising the level of sanitation coverage in rural areas from less than 20% in 1985 to approximately 35% in 1995 and 50% in 2006. However it has been realised that the main barrier to increasing the coverage further is poverty and the income levels in rural areas makes it difficult for rural households to afford the sanitation facilities and use their scarce funds for other necessities such as food – hence the change in strategy to include subsidy for latrine construction.

The strategy is still useful however it is being complemented with subsidies for household latrines in villages where water projects are implemented to ensure that the poor households can afford the sanitation facilities. The strategy needs to be updated to incorporate these new approaches.

### **1.9.10 Strategic Policy Issues**

#### **1.9.10.1 Environmental Sustainability**

Water will continue to be vital for future generations. Water resources management therefore aims to achieve a balanced water budget, which means that water withdrawals should not exceed the amount of available water resources in order to avoid a drop in groundwater levels or the drying out of surface watercourses. Catchment management and combating erosion is important in the water sector in Lesotho to ensure sustainability of the water resources. The present lack of catchment management and high levels of erosion results in reduced recharge of groundwater that again affects the water available in boreholes and in the many springs that are the present sources for the majority of the rural water systems.

If there is a need to draw on water reserves because there is insufficient freshwater available for water supply, new methods of providing water should be developed – as long as it is economically and ecologically viable, such as artificial groundwater recharge, or the use of treated wastewater especially for industrial use, as is done by some industries, in order to avoid long-term supply bottlenecks and ecosystem disruptions. In other words implement strategy under;

**Policy Statement 1 – Strategy g: Develop and put in place measures and guidelines for retaining surface water runoff for utilization and for artificial recharge of groundwater;**

Alongside water quantity, quality is also playing an increasingly important role in environmental sustainability. In order to avoid further pollution of surface water and groundwater, commercial, industrial and agricultural production processes should be restructured, closed linked strategies incorporated to a greater extent into all sectors, and wastewater treatment and recycling/reuse substantially expanded. In this context, the avoidance, collection, treatment, reuse or proper disposal of all types of pollutants and waste play an important and complementary role. Implementation of relevant policies is key in managing the environment.

**Policy Statement 3: Water and Environment; Protect and conserve water resources and minimize the adverse impacts of socio-economic development activities on water;**

#### **1.9.10.2 Social Justice**

Equitable access to water and sanitation services for all population groups in Lesotho is a core element of social justice. Poor availability of water services for specific social groups is an indicator of social injustice and also heightens social disparities. Access to drinking water and basic sanitation is also recognised as a human right as expressed in the Water Policy:

**Policy Statement 2: Ensure access to a sustainable supply of potable water and basic sanitation for all Basotho and Objective 4: To promote equity in access to water supply and sanitation services taking into account vulnerable and marginalized groups including women, girls and all those affected by HIV/AIDS**

There is often a wide gap between entitlements and reality. A key priority in Lesotho water sector policy has been to improve the situation of poor population groups, which still have no access to drinking water and sanitation or buy water from neighbours with even a higher price.

It is not always possible to align the water interests of different social groups, and so appropriate mechanisms for participatory conflict resolution should be established in accordance with the Lesotho Water and Sanitation Policy principles and objectives. The aim is to achieve a consensus among all stakeholders when disputes arise. Often, however, consensus-based decision-making is impossible in practice. Participation does not automatically lead to consensus, as decisions are never taken in contexts that are entirely power – or interest-free. For that reason too, participation requires the establishment of appropriate institutions and processes. In many cases, besides the adoption of consultations and active participation, support must also be provided to build or improve the political dialogue capacities of poor and disadvantaged groups (empowerment).

#### **1.9.10.3 Economic Efficiency**

Many of the mistakes made in water resources management arise from the fact that water prices, as a key benchmark of scarcity and preferences, and therefore a steering instrument for efficient, needs-related water allocation, do not exist, or are distorted, or do not have the impact they should have. This is apparent from the fact that the value put on water as a resource is often too low (e.g. omitting

environmental services) or non-existent, does not take full account of the costs of treating and supplying the water, and does not aim to cover the costs of water services. Tariff and charging

**Policy Statement 2 – Objective 5: To ensure that the tariffs charged by water and sanitation service providers cover the actual cost, including the capital costs as well as the cost of overheads, of providing water and sanitation services**

systems play a key role in this context, but other demand management strategy and regulatory instruments – such as rationing, and strategy i, j and l) under **Policy Statement 2:** – all play a part in determining whether water, as a scarce resource, is managed efficiently and sustainably and can thus be supplied to everyone on an equitable basis.

In line with the IWRM concept, not only the costs of providing water (operating expenditures and capital charge for water withdrawal, treatment, distribution, purification etc.), For efficient water resources management, an operational perspective is also of key importance alongside macroeconomic considerations. In line with this approach, the full economic cost (operating expenditures and capital charge, at the level of the public or private utility company must be covered from revenue. Full cost recovery is a key prerequisite to ensure the sustainable operation of systems and must include appropriate funding for investment in renewal and expansion.

Compliance with the principle of full cost recovery does not rule out the option of providing poorer social groups with a basic drinking water supply to meet their essential daily needs as well as basic sanitation at lower prices, i.e. prices which generally do not cover the costs, or even at no charge in

**Policy Statement 2 – Strategy J: Introduce a cross- subsidy tariff mechanism to reflect water for basic needs only (30 litres per capita per day) in the case where customers are unable to afford the cost of lowest service**

extreme cases. The methods and detailed procedures for introducing the social safeguards stated in Policy Statement 2 – Strategy J (as shown in the text box above) are important for the cost recovery aspects of the water sector since the tariff increases that are needed to make the urban sector self-financing will be un-acceptable for the poorer part of the population unless some safeguards are put in place.

Presently WASA customers pay for O&M costs for urban water services and provide a small operating profit for investments. In the rural areas the water users cover an estimated 70% of the O&M costs as the government's support for major maintenance of water systems are approximately of 30% of the total estimated O&M costs for rural water systems.

#### **1.9.10.4 Conflicts between the Various Objectives**

When adopting individual measures in the water sector, it is not always possible to achieve all the above-mentioned objectives to an equal extent. For example, in situations of severe seasonal or regional water scarcity, conflicting priorities can rapidly arise between the need to expand water services, on the one hand, and environmental sustainability, on the other. In water catchment areas with a strained or negative water balance, the drinking water supply can only be safeguarded – if no water is to be diverted away from agriculture – through the temporary or permanent over exploitation of groundwater or from rivers. In such situations, the need to ensure a basic supply of water services to poor population groups must be brought into line with the need for environmental sustainability. In the long term, social justice can only be achieved on the basis of ecologically sustainable resource management.

The provision of water for basic human consumption will always be given priority over other water uses such as agriculture, industry or the environment. A conflict between objectives may arise between economic viability and the need for social justice. In many cases, for example, connecting poor and other marginalised households to the water supply and sanitation system is not commercially

viable, whereas it is of course an imperative from a social and economic perspective. Here, regulatory provisions are required – including adequate control and incentives to safeguard a supply to disadvantaged social groups. The study for how to ensure free basic water for vulnerable households is therefore a priority and included in this interim strategy.

In terms of water quality, environmentally motivated restrictions on the management of land and water resources often cause conflicts with the economic performance objective and with social objectives. For example, the establishment of water protection areas may curtail the income generation opportunities available to the local population. Here too, the conflicting objectives must be carefully weighed up and a viable solution achieved between stakeholders on the basis of broad participation.

### **1.9.11 Legal Framework**

The present legal framework of importance for provision of water and sanitation services includes the following:

- [The Water Act \(2008\)](#) with the overall purpose to manage water resources in an integrated and sustainable manner. It makes provisions for conservation and protection of the water resources from all forms of pollution. It provides for the ownership of all water resources to be vested in the Basotho nation and held in trust by the King. It makes provision for different types of permits, such as abstraction permits and construction permits and the manner of acquiring them. It establishes the office of the CoW to be responsible for the formulation of the Water and Sanitation Strategy, determination of a reserve and classification of water resources for the management and utilisation of water resources in the country.
- [The WASA Order of 1991](#) providing the directions and regulations for WASA. It describes the mandate of the authority, the functions of the Board of Directors and the officers, its financial provisions (including tariff settings), general functions and powers, works and areas of jurisdiction of the Authority. The institutional status of WASA is under revision and a 'Lesotho Electricity and Water Authority Bill' has been approved by the Cabinet during 2008 however the Parliament Portfolio Committee has required some revisions to allow for WASA to become a company. MNR has therefore also prepared the 'WASA Vesting Bill' and the two have now been presented to the Portfolio Committee.
- [The Lesotho Environment Act, 2001 \(Act 15 of 2001\) and amended in 2008](#) is the framework for implementing the National Environment Policy. The principles include: i) ensuring that every person living in Lesotho has a fundamental right to a clean and healthy environment; ii) establishing adequate environmental standards; iii) polluter pays principle; and iv) promotion of national, regional and international cooperation for the protection of the environment. The Environment Act is being implemented but not yet enforced since development of guidelines and regulations is still ongoing. When it is enforced it will have implications for the water sector and especially for management of wastewater from the industries.
- [The Local Government Act of 1997 and Local Government \(Amendment\) Act, 2004](#) establishes local councils at district and community level and define their functions. The plan for decentralization from central Government to Local Authorities for the period 2004 – 2009 (GoL 2004) provides a further break down of the decentralised functions. Of relevance for water and sanitation services are:
  - The establishment, operation, management and regulation of a potable water supply system (Municipal councils)
  - Water supply through ground water (Community Councils): i) Identification of springs; ii) Erecting protective structures around wells and springs; iii) Laying down pipeline network; iv) Maintenance of the water supply system; v) Issuing of permits and licences for construction of small earth dams and vi) Promoting better management of water resources – monitoring of water quality
  - Local Environmental Health Programmes for i) Water and Sanitation and ii) Pollution control and management

A Lesotho national standard for potable water has not yet been established, however a draft 'Proposed Water Quality Guidelines for Lesotho – Domestic (Drinking) Water Guidelines dated April 1998 is available from the National Environmental Secretariat. The World Health Organisation (WHO) water quality guidelines are used by the water sector institutions until specific guidelines are available for Lesotho.

The institutional reforms in the water sector imply that changes are made to the legal framework. The process of enacting the Vesting Bill establishing WASA as a company is ongoing. The legal framework for water sector regulation, the Lesotho Water and Electricity Bill is also in the process of being enacted. The process of establishing the Metolong Authority is also ongoing with the enactment of the Metolong Authority Bill.

## **1.10 Sector Budget/MTEF and Financial Planning in the Sector**

Lesotho has recognized the potential of achieving sustainable economic development through the public sector management reform process. The Lesotho public Sector report process finds its basis from the New Public Management concept that is based on the following doctrines:

- Direct public sector costs should be cut and labour discipline raised to improve use of resources;
- Private sector style management practices should be applied to increase flexibility in decision making;
- Controls should be shifted from inputs to outputs, to stress results rather than procedures;
- Decentralization should be implemented to make units more manageable and to increase competition among them; and
- Express standards and performance measures should be established to achieve accountability and efficiency.

The public sector reform process in Lesotho is going to be implemented in phases. Phase 1 comprises three components namely Public financial management and accountability program; improving service delivery through decentralization; and improvement of public service management.

The first component focuses on the implementation of an integrated planning and budgeting process through Medium Term Expenditure framework (MTEF), an integrated accounting system called the Integrated Financial management system (IFMIS) and an improved and transparent procurement system. It is against this backdrop that a Sector Budget Support programme for Lesotho water sector is going to operate.

The second component is concerned with decentralization processes where communities can partake in planning and management of planning processes in their areas. It will clarify the roles of local authorities, sensitize the public about the decentralization process, determine municipal and district council areas as well as implement a capacity building program for local governance.

The third component seeks to formulate, coordinate and operationalise the Human Resources policies and manuals. It also seeks to develop civil service capacity –building through the provision of quality training programs. Therefore an opportunity exists for the water Sector to foster synergy of efforts in this regard.

The government and donor funding to the water sector is shown in the table below. The water sector funding is unusually high presently due to the implementation of the Metolong Project and the MCC grant funding for the sector. The water sector benefits from about 40% of the GoL capital budget and the sector funding corresponds to about 4.2% of the GDP.

**Table 5: Water Sector Funding**

Cost Centre/Project	2007/08	2008/09	2009/10	2010/11
Water Sector Recurrent Estimates (mLSL)	23.98	25.86	27.69	29.61
Water Sector Capital Estimates (mLSL)	260.72	316.32	392.07	679.95
Total 'Water Sector' Budget (mLSL)	284.70	342.18	419.75	709.56
GOL Recurrent Budget Total	4,404.40	5,375.22	5,740.39	6,153.32
GOL Capital Budget Total	1,924.21	2,157.13	1,978.72	1,635.14
'Water Sector' as % of total GOL Recurrent	0.5%	0.5%	0.5%	0.5%
'Water Sector' as % of total GOL Capital	13.5%	14.7%	19.8%	41.6%
'Water Sector' as % of total GOL	4.5%	4.5%	5.4%	9.1%
GDP	11,777.80	13,979.00	15,022.00	17,005.00
Water Sector Budget as prop of GDP	2.4%	2.4%	2.8%	4.2%

Funding of Lesotho Highlands Development Project is reflected by the MTEF for Lesotho Highlands Development Authority. Lesotho Highlands Development Project is managed as part of a government to government agreement between Lesotho and South Africa. Capital and recurrent expenditure budgeting for this project is presented in parallel with other ministry budgets.

The historical data seems to indicate that the GoL is directly contributing approximately 50% to the capital budget. The estimate above of the available funding includes an estimated contribution of 1.0 M 1million per year by the Local Authorities to rural water and sanitation services in addition to the approximately M 200 million from government and donors. The Local Authorities are using some of their development funding for rural water systems, both new investments and support to communities for maintenance and major breakdowns.

In addition to the funding listed above, WASA generates operating profit of approximately M 10 million annually that is utilised for investments in infrastructure such as network extensions and replacement of equipment.

In addition to the 'on-budget' funding there is also some 'off-budget' funding especially to the rural water sector from NGOs. In the DRWS District Information System (DIS) estimated to approximately M 1.0 million per year.

The investments by private individuals in 'self supply' should also be taken into account to get a more complete picture of the investment flows for water services. According to the surveys in peri-urban areas 7% have supply from own borehole and from the WASA connection survey indicates that 8% use own borehole water to supplement the WASA supply. A larger proportion of approximately 30% of households supplement the utility water supply with rainwater harvesting. This represents a considerable investment in 'self supply'. It is however complex to take self supply into account when analysing the investment requirements in terms of coverage targets since these investments overlap with the public investments in that it supplements the public water supplies mainly in order to provide higher service level or security of supply.

Private investments in water supplies to serve communities or sections of towns does not seem to be prevalent in Lesotho except on a small scale where one household invests in a borehole supply and sells water to neighbours. As revealed by the peri-urban survey this is case for 7% of the households serving 11% of households in peri-urban areas. In this case the investment is not done in the community water services as such but more as a by-product of investing in water supply for self supply.

### **Budget Framework Paper**

The planning cycle as outlined in the Budget Framework Paper requests the relevant ministry i.e. MNR to prepare a three year budget in accordance with a programme budget approach.

In accordance with programme budgeting each ministry specifies its policy objectives, cost and sub-cost centres as well as programme and sub-programmes. Activities supporting the same policy



objective will then be grouped for the budget exercise. Whereas output indicators are used to measure sub-programme performance, specific outcome indicators should be formulated to measure the performance of programmes.

Ideally the performance indicators used for programme budgeting would therefore also be those used to monitor sub-sector performance (please WASA and LHDA are budgeted under general administration within the Ministry's Head Quarters as they receive a subvention fund of some sort. This one aspect that further complicates Sector Program Budgeting. Account has also not been taken to include other players outside the Ministry of Natural Resources who are potential beneficiaries to the Sector Budget. i.e. Local Authorities, Ministry of Forestry and Land Reclamation, Ministry of Agriculture and Food security, NGOs etc.) refer Chapter 4 Monitoring and Evaluation)

Two major areas of funding is transferred through other channels other than through the MTEF of the Ministry of Natural Resources:

WASA funding takes place mainly as self-financing but also through state loans/guarantees which will be reflected in the MTEF for the Ministry of Finance and Development Planning. WASA is a state owned enterprise, and operates in accordance with a performance agreement with GoL represented by the MoFDP. The WASA budget is presented to its board (for which the Principal Secretary of Natural Resources is the chairman) for approval. WASA is supposed to cover its own recurrent expenditures through its revenue collection-however state loans are reflected under The MoFDP. Thus WASA's consolidated budget is not directly included in the GoL budget, however the Government and donor funding including loans to WASA are reflected in the budget.

### Strategic Financial Planning

The Strategic Financial Planning Model (SFPM) is a tool for estimating the financing needs versus available funding in the water and sanitation services sub-sector in Lesotho for different development and policy scenarios.

The SFPM is designed to specifically describe the water sector in Lesotho and will be used at national level by the COW's office in cooperation with the sector stakeholders (WASA, DRWS and LLWSU) to guide the development of sector strategies and the preparation of MTEF budgets. The SFPM focuses on determining the future demand and estimating the consequences in terms of investment costs and operating profits. The SFPM provides estimates of the present coverage and the back-log in terms of coverage and could possibly be further developed to be an integrated part of the LWSIMS to provide easily accessible information on these aspects.

The SFPM results can, via the LWSIMS (when fully operational)' be used as a tool to provide the information on water sector targets and plans to all stakeholders via the internet.

DRWS prepares MTEF budgets and plans using the DIS a detailed information and planning systems based on individual modules for each district that contains the information and plans for each rural community. The SFPM shall not attempt to duplicate or replace the DIS, but utilise the data from the DIS and combine with information from other sources such as the lowlands design.

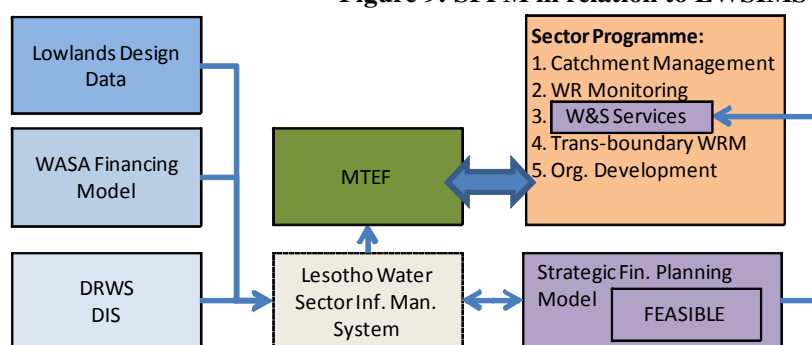


Figure 9: SFPM in relation to LWSIMS

WASA uses the Financial Model to analyse the income, operating costs and financing needs for the respective systems. The WASA Financial Model focuses on the financial aspects of WASA's business, where the SFPM focuses on determining the future demand and estimating the consequences in terms of investment costs and operating profits. The SFPM links to the Financial Model data and combine with the information from the LLWSP on the supply of bulk water, supplementing or replacing the existing water sources and treatment facilities.

The Sector Programme will be guided by the outputs from the SFPM for the W&S aspects. The relationship between the existing planning and information systems, the SFPM and the Sector Programme is illustrated in Figure .

The SFPM will be based on data directly from the DIS, the WASA Financial Model and the LLWSP Design and will provide input to the cost estimates for the water and sanitation services part of the Sector Programme. The COW has designed the 'Lesotho Water Sector Information Management System' (LWSIMS) as a common information system for the water sector. The LWSIMS is a comprehensive system that combines the information from all the sub-sectors in one internet based platform. In the future the SFPM can be linked directly to the LWSIMS however as the LWSIMS is not yet fully populated with data, initially the SFPM will get the data directly from the existing sub-sector systems.

The SFPM provides estimates of the present coverage and the back-lock in terms of coverage and could possibly be further developed to be an integrated part of the LWSIMS to provide easily accessible information on these aspects.

## 1.11 Decentralisation in the Water Sector

The Government of Lesotho embarked on the process of decentralisation and strengthening of Local Government rather recently and a key milestone was the democratic Local Government Elections held in 2005. The elections culminated in the establishment of 128 Community Councils, 10 District Councils and 1 Municipal Council. Government of Lesotho's main purpose for decentralisation is to improve service delivery in the country. Though a complex process, decentralisation through Local Government is gradually devolving functions and staff to Councils and within their realm of decision making. The Ministry of Local Government and Chieftainship is coordinating and leading the process of decentralisation in the country.

In Lesotho's context, the current decentralisation process is a mix of devolution, deconcentration and delegation through Local Governments and sectoral Ministries. Apart from the land administration and management function which has been devolved, other service impact areas remain with the respective Line Ministries. All the recurrent expenditure requirements of the Councils are provided for through the National Budget while the capital funds for Councils remain restricted.

To effectively deliver water and sanitation services to all Basotho the sector recognises the contribution and importance of local authorities. Through the decentralization process, DRWS staff in the districts is working together with the Ministry of Local Government and Chieftainship to assist Community Councils in the planning and supervision of water and sanitation projects. The following entities are key role players in the provision of water and sanitation services in the rural areas:

- **Village Water and Health Committees:** established by DRWS prior to local government dispensation and are responsible for the operation and maintenance of water supply systems, including collection of revenues for this purpose. Have now been incorporated into Community Council Sub – Committee Structure.
- **District and Community Councils:** owners of water systems and are responsible for planning and implementation of new water systems and for overseeing the management of water supplies. The Councils report to the District Rural Water Sector on the status of water and sanitation in the villages under the Community Council.

- The Ministry of Natural Resources acknowledges that at this stage in the decentralisation process, the water and sanitation sector has so far only deconcentrated to the district level and has not devolved functions to the Local Governments. The Water and Sanitation Policy Statement 2 – Objective 3 clearly calls for the devolution of functions to the Local Authorities and the Ministry of Natural Resources intends to achieve this objective by undertaking a process that entails:
- Clarifying specific functions to be devolved to specific types of Councils (District, Community, Urban and Municipal Councils).
- Disaggregating the recurrent and capital budgets that are attached to the devolved functions and determining procedures for the associated funds and assets to move to the Councils with sufficient accountability and transparency.
- Identifying appropriate staff to move with the functions and redefine their job descriptions, reporting lines and administrative and management systems.
- Redeploying the functions, staff, finances and assets to the Councils concerned.
- Harmonising sector legislation and policies with the decentralisation process.

In accordance with the Local Government Act, the Ministry of Natural Resources will focus on building the capacity of these Councils to effectively deliver water and sanitation services in their respective areas of jurisdiction; particularly in ensuring adherence to set standards on water and sanitation and maintenance of existing infrastructure. This will complement the Ministry of Local Government's efforts of developing the core institutional and administrative capacities of the Councils

## **1.12 Sector Wide Approach and Coordination Mechanisms in the Sector**

### **1.12.1 Overall Sector Coordination**

The Office of the Commissioner of Water is mandated to promote improved coordination of programmes and activities within the sector. Effective sector wide coordination remains a challenge for proper management and development of the water resources in the country.

The sector reform process required sector institutions to re-define their roles and functions. At the same time there was an urgent need for improved coordination and accelerated execution of investments in the sector. How this was going to be achieved remained a challenge as there was no centralized planning process for investment in the sector. The policy review process of 2007 identified Sector Wide Approach (SWAp) as a funding mechanism that would help to overcome the fragmentation of the sector investments and provide a more suitable implementation modality. To this effect the GOL has approved in the current Water and Sanitation policy; the adaptation of SWAp as a mechanism for the management and development of the water and sanitation sector in Lesotho. At the moment what remains is the establishment of systems and processes for a functioning SWAp. All the key sector donors have been consulted and have indicated strong support for the SWAp process.

Planning and coordination in the water sector takes place through quarterly coordination meetings chaired by the PS of MNR with the sector stakeholders and donors. A process for gradually arriving at a sector wide approach to planning is ongoing. An effort in formalising and strengthening the function of the coordination meeting was made with the endorsement of the Terms of Reference of the Sector Coordination Meeting. The goal of the Sector Coordination Meeting is

- To facilitate the exchange of information between stakeholders and improve the coordination of planning and activities in the water and sanitation sector in order to increase the efficiency of funds invested in the sector and of water resource management;
- To better align development partners behind the Water and Sanitation Sector Policy and Strategy based on the principle of mutual accountability.

Its specific objectives are:

- Progress towards a reliable system for monitoring and evaluation of development of the water sector;
- Facilitate understanding between Government and Development Partners (DPs), amongst DPs themselves and between Government/DPs and other stakeholders;
- Establish a Sector Wide Approach.

To achieve its objectives the Coordination meeting is mandated by the MNR:

- To submit recommendations to the Minister of Natural Resources, Minister of Finance and Development Planning and where appropriate the Cabinet as far as the above mentioned critical areas of Coordination are concerned;
- To discuss and endorse the "Annual Status of Water Resources Report";
- To participate in the development of the Capacity Development Plan and the Sector Medium-Term Expenditure Framework;
- To discuss and comment on legislative initiatives in the sector;
- To conduct the Joint Annual Sector Review;
- Follow-up and monitor a medium-term schedule/road-map of the sector.

### **1.12.2 Coordination in Rural Water Supply Sub-Sector**

In 2001 the DRWS embarked on a SWAp concept as a means of securing financial support for the rural sub-sector. To overcome a funding deficiency, the MoFDP in cooperation with the MNR signed a bilateral agreement with Irish Aid (IA) and the Swiss Development Cooperation (SDC) to adopt a “mini-SWAp” in the rural water supply and sanitation sub-sector. This was founded on a five-year strategic plan and was an extension of early work funded by Irish Aid, which commenced in 1987 and SDC which commenced in 1979.

A pooling arrangement for financial management of donor funding through a single bank account with the Lesotho Central Bank was successfully used to disperse funds. The support from SDC ended in 2005 and the financial managements set-up for the SWAp continues to operate for only the IA funding, while the recent MCC funding for rural water supply is implemented using a project approach.

### **1.12.3 Coordination between Central Government and Local Government Authorities**

The MoLGC is responsible for coordination between the Local Government Authorities and the central government ministries. The water sector, in particular the DRWS, is therefore interacting with the MoLGC for coordination of responsibilities and development of strategies e.g. for capacity building of the local councils.

At district level the government departments plan together with the District and Community Councils in the annual planning process. The government departments together with the Community Councils form the Planning Forum that proposes development plans to the different sectors. In the water sector, this is in particular important for the planning in the DRWS since the national plans are based on the plans for the respective districts that are agreed in the Planning Forum. The district plans include all villages in the district and the plans for development or rehabilitation of water systems regardless of the funding source i.e. the projects funded and implemented by NGOs as well as projects funded by the Local Government Authorities are included together with the projects funded through the DRWS by GoL and Donors.

The DRWS District Engineers take part in the regular meetings at district level between the District Administration and the government departments represented in the district.

## 1.13 Sector SWOT Analysis

In a sector workshop a SWOT-analysis (Strength, Weaknesses, Opportunities and Threats) was carried out by the participating stakeholders to assess the capacity of the sector and the impact of the institutional reforms. The results of the analysis are shown below.

### SWOT Analysis

STRENGTHS	WEAKNESSES
<ol style="list-style-type: none"> <li>1. Water Act: legislative framework established</li> <li>2. Water Policy (2007): An all inclusive policy document which provides sector guidance and the policy framework</li> <li>3. Monitoring and Evaluation Unit (Coordination Mechanism): policy framework in place. A first step towards measuring sector performance focusing on outcome indicators ongoing</li> <li>4. Support and involvement from development partners and stakeholders: regular coordination via established stakeholder forum</li> <li>5. Private sector involvement: Growing competencies in the private sector in Lesotho for design and construction of water and sanitation facilities.</li> <li>6. Lesotho water sector information management system (LWSIMS): established MIS for the sector. An important support function for the M&amp;E Unit</li> <li>7. Financing strategy: improved planning framework and establishment of sectoral priorities</li> <li>8. Office of Commission of Water: clear definition of the institutional/ regulatory responsibilities in the water sector</li> <li>9. Industrial and waste water policy established</li> </ol> <p><i>Strategic Response: Build on the strengths of the ongoing implementation of the legislative, policy and institutional framework for the sector</i></p>	<ol style="list-style-type: none"> <li>1. Sector cuts across several ministries: increases the need for cross Ministry dialogue</li> <li>2. Potential conflicts in terms of high level policy objectives and the sequencing of objectives in the hierarchy. For example, investments in the highlands for increasing revenue as compared to investments in the lowlands for water services</li> <li>3. Human resource capacity: both in terms of skills base and numbers</li> <li>4. Multiple sectoral stakeholders and the potential lack of clarification of roles and responsibilities</li> <li>5. Financial planning and resources: the weaknesses in terms of establishing sectoral priorities and budget</li> <li>6. In-adequate performance of sector institutions in managing human and financial resources efficiently resulting in low performance and operating efficiencies</li> <li>7. Lack of clarity on roles in rural water and sanitation between DRWS, MoH and Local Councils</li> <li>8. Uncoordinated multiple donors: some donor assistance to the water sector still use a project approach rather than contributing to the sector programme</li> <li>9. Lack of performance based monitoring e.g. service levels and investment</li> <li>10. Enforcement of legislation: legislative framework establishes obligations on enforcement that requires sufficient capacity in the sector</li> </ol> <p><i>Strategic Response: Coordination across the sector to be improved by the movement towards implementing a SWAP</i></p>

OPPORTUNITIES	THREATS
<ol style="list-style-type: none"> <li>1. Confidence of development partners in investing in the water sector</li> <li>2. Development of the regulatory function to provide guidance to the water sector in doing their business lawfully</li> <li>3. The Monitoring and Evaluation Unit will provide assessments of the impacts of water sector interventions</li> <li>4. Improved information management will provide evidence based policy making to the authorities and inform policy and strategic response of GoL</li> <li>5. Improved support and involvement of development partners via the sector stakeholder forum</li> <li>6. Private sector involvement: policy framework allows for broadening the concept of private sector involvement in the sector</li> <li>7. Improved access to reliable data and readily available information will improve M&amp;E at all levels resulting in improved sector performance</li> </ol> <p><i>Strategic Response: Implementation of the strategic plan maximises the opportunities</i></p>	<ol style="list-style-type: none"> <li>1. Global financial crisis reduce available donor finance for the sector. Falling SACU revenues reduce the GOL budget available to the sector</li> <li>2. Increased staff turnover: HRM Issues across Government results in weaknesses in capacity in terms of skills and numbers of staff</li> <li>3. Environmental degradation threaten wetlands and water resources: weak enforcement of legislative provisions result in increased environmental degradation</li> <li>4. Climate change e.g. erratic rainfall patterns can affect the gravity spring sources for rural water systems and availability of water for abstraction in the lowland rivers</li> <li>5. HIV/AIDS: influence on skilled human resources for the water sector and poverty/affordability of water services</li> <li>6. Government changes in priorities: present focus and level of funding to the water sector could change</li> <li>7. Failure of MTEF process: delays in operationalising objective based budgeting in the MTEF affect the response to sectoral priorities</li> <li>8. Inflation: largely not within the control of the sector; but influences investment and operational costs</li> <li>9. Lack of integrated spatial planning: unplanned settlements and inadequate coordination of establishing urban-rural boundaries</li> </ol> <p><i>Strategic Response: Implementation of the strategic plan to manage the threats influencing the sector</i></p>

The SWOT analysis indicates that the institutional and legal reforms in the water sector provide good opportunities for sector improvements. The sector weaknesses will be addressed by the improvements in sector planning, coordination and the implementation of human resource development plans as part of the institutional reforms.

The threats to the water sector will be mitigated by development and implementation of effective strategies and improved coordination with sector stakeholders and government decision makers.

## STRATEGIC APPROACH

### 1.14 Purpose and scope of the Interim Strategy

The development of the Interim Sector Strategy is a process which set out sector development programmes for the period of two years, while the preparations for the formulation of the full water sector strategy are in progress and will be based on this Interim Strategy.

The Interim Sector Strategy serves as the basis and provides a set of criteria for sector dialogue with partners and other donors, for setting out priority areas, for planning and implementation of Lesotho development projects, and as a benchmark for the assessment of development cooperation in the water sector.

The Interim Sector Strategy also provides guidance for stakeholders on approaches and developments in the water sector and offers interested parties information about the steps towards implementation of the water supply and sanitation policy.

The Interim Strategy is related to the entire water sector however as a priority specifically dealing with domestic and industrial water supply and sanitation services as well as institutional development for the period of 2010 to 2012. This Interim Sector Strategy describes how GoL will implement, the Policy statements number 2 (water and sanitation services) and 7 (institutional development) as stated in 0, over a period of two years from April 2010 to March 2012.

**Policy statement number 2.** Particularly focusing on the following policy objectives:

- To accelerate the delivery of water and sanitation service to all Basotho in line with National Development goals
- To promote investment in infrastructure development to meet water demand in Urban and Rural areas for Socio-Economic development and meeting basic consumption and hygienic needs

and **Policy statement number 7** Particularly focusing on the following policy objectives:

- To improve institutional and legal framework for implementation of the water and sanitation Policy
- To foster clarity and separation of roles and responsibilities in water resources development and management; and water and sanitation services delivery to match the needs of Basotho

The Interim Strategy identifies how development cooperation in the water sector can make the best possible contribution to development policy objectives also offers conceptual guidelines for the process.

Other areas of the sector such as, Water for Food (agriculture, livestock farming and forestry); Water for Ecosystems (terrestrial ecosystems such as wetlands and forests, freshwater ecosystems); and Water for Other Purposes (tourism, energy, industry etc.) will be addressed by the five year strategy which should be finalised by at least 2011.

The Interim Sector Strategy describes how GoL will implement the policy objectives on domestic water supply and sanitation during the coming two years through the various types of use, areas of development, action to the extent that they pertain to the water sector. It identifies how development cooperation in the water sector can make the best possible contribution to development policy objectives and offers conceptual guidelines for the process. Development cooperation in other sectors is encouraged to also comply with the present Sector Strategy on activities that are related to or has a bearing on water issues.

A holistic approach means integrating land use and water issues. Here, the water quantity and quality requirements of various types of land use must be taken into account in water resources management,

and by the same token, the impacts of land use on the quantity and quality of these resources must be considered.

### **Participation and Transparency**

A core element of the IWRM concept is the participation of all relevant actors in decisions which affect them. IWRM requires the knowledge, perspectives and interests of these actors to flow into the decision-making process, with equal participation of women in decision-making. This applies to all water subsectors, especially when conflicts arise between or among individual user sector.

In the context of development cooperation, this means that appropriate opportunities for public participation in the development of management and action plans, in project planning and implementation, and in the operation of systems must be provided, utilised and expanded if necessary. In this context, gender equality and participation by civil society organisations must be ensured. In rural development projects, this participation is already taking place via awareness-raising and active participation of village water committees and leadership structures.

In this case water sector still needs to be strengthened, to promote that development agencies are also working to ensure that adequate information is provided for, and consultations held with, stakeholders and users, starting with the planning process onwards. Furthermore, appropriate structures are being demanded and supported so that users and stakeholders are represented in planning, implementing through civil society organisations.

## **1.15 Strategic Priority Areas for 2010-2012**

Drinking water supply, basic sanitation, and wastewater management are key prerequisites for a life in dignity. They prevent many of the diseases which impair quality of life, impose financial burdens on households and limit their income-generation opportunities.

The initiative of Government of Lesotho to address this situation in partnership with development cooperation is ongoing and this strategy is a basis to agree on priority objectives.

In rural areas, drinking water withdrawal often does not inflict stress on the resource situation. In today's expanding urban centres, however, it has a major impact on the quality and quantity of surface water and groundwater. In particular, contamination of watercourse due to poor wastewater and waste management can cause irreversible damage if the environment's pollution absorption capacities are exceeded (e.g. Maqalika Dam and pollution from industries).

Adequate wastewater management therefore not only has positive impacts on settlement hygiene; it also plays a key role in resource conservation. Furthermore, in situations of water scarcity, appropriately adapted wastewater management can create the conditions for the reuse of treated wastewater in agriculture and industry, thereby freeing up precious freshwater for the drinking water supply and easing the burden on the water balance.

### **Policy Statement 2: Water Supply and Sanitation Services;**

**Objective 1: To accelerate delivery of water and sanitation services to all Basotho in line with national development**

**Objective 2: To promote increased investment in infrastructure development (reservoirs, conveyance structures, etc) to meet the water demand in urban and rural areas for socio-economic development and for meeting basic consumption and hygiene needs**

The key priority strategies based on the Water Policy 2007 under Policy Statements number 2 are the following:

- Reconstitute water committees as a mechanism for sustainable service delivery at local level;
- Empower district and community councils in the effective implementation of water supply and sanitation programmes, including the development of all relevant by-laws;



- Develop and implement management systems for existing and planned bulk water storage structures (reservoirs, dams, etc);
- Develop and implement programmes aimed at creating public awareness on linkages between water supply, sanitation, health and hygiene;
- Introduce a cross-subsidy tariff mechanism to reflect water for basic human needs only ( 30 litres per capita per day) in the case where customers are unable to afford the cost of lowest service;
- Implement the Aftercare Strategy for rural water supply systems in order to improve sustainability of access to potable water; and
- Introduce systems for monitoring and evaluating the performance of water supply and sanitation systems at community level.

**Policy Statement 7: Institutional Arrangements and Legislative Framework: Put in place appropriate institutional arrangements and a legislative framework for the sustainable development and management of the nation's water resources and for the supply of water and sanitation services.**

**Objective 1: To improve institutional and legal framework for implementation of the Water and Sanitation Policy;**

**Objective 2: To foster clarity and separation of roles and responsibilities in water resources development and management; and water and sanitation services delivery to match the needs of Basotho.**

The key priority strategies based on the Water Policy 2007 under the Policy statement number 7 are the following:

- Introduce and effect institutional reforms. In this regard, the priorities of Government in the medium to long term include the following:
  - Strengthen policy development and monitoring;
  - Establish and operationalise a bulk water authority for raw water. The authority will operate and maintain large dams and reservoirs;
  - Establish and operationalise an independent economic and services regulator with respect to tariffs for treated water, water distribution, and bulk supply of raw water;
  - Provide for urban water utility, WASA to have responsibility for treatment and distribution of treated water;
  - Establish and operationalise asset management agency. The agency will coordinate large investments for expansion water distribution networks and other related infrastructure

## **1.16 Non-prioritized Areas of the Sector**

### **1.16.1 Water for Food**

The term “water for food” denotes water that is used in agriculture in order to feed the world’s growing population. In the broadest sense, it comprises all types of land use which consume water for food production and income generation, including rain-fed and irrigated agriculture, livestock farming, forestry and aquaculture.

Agriculture alone accounts for a large percentage of water consumption. As water demand intensifies and climate change increases, the need for action in this area is likely to become more acute.

The water for food issues are not dealt with in detail in this Interim Strategy however the sector will continue to work with the agricultural sector to improve the coordination and prepare the foundation for implementing a wider scope of IWRM. These issues will be considered in more detail in the 5-year strategy to be developed during the coming 2-year period.

## 1.16.2 Water for Ecosystems

### **Policy Statement 3: Water and Environment**

**Protect and conserve water resources and minimize the adverse impacts of socio-economic development activities on water;**

Ecosystems are reliant on adequate water quantity and quality. They play a key role in the hydrological cycle and form important natural reservoirs such as wetlands, tropical forests and lakes. Ecosystems transform water into life and absorb parts of the hydrological cycle, which are then no longer available for human use.

It is becoming clear that the environment carries weight in the negotiating processes of inter-sectoral resource allocation. In many cases, it is the poor who suffer most from environmental pollution and who are most directly reliant on environmental services, if, in calculating the hydrological balance in research and politics, the water requirements of natural ecosystems are ignored.

Ecosystems currently lack adequate protection, partly because their benefits for water supply, flood protections etc. are often underestimated. Often, irreversible or costly environmental damage occurs because preserving these ecosystems has not been adequately integrated into management planning in the water sector yet they are well articulated in the water and sanitation policy. Yet in many cases, the targeted promotion of ecosystems in a manner appropriate to the natural geographic region offers viable solutions, e.g. for water retention and filtration, within the framework of a holistic water sector policy.

The project on wetland rehabilitation is ongoing on the designated areas through the assistance of MCC funding under the Department of Water Affairs (DWA). This is the first initiative which needs to be supported and continued in order to promote a sustainable protection of ecosystem in Lesotho.

The right to water also creates an obligation to conserve scarce water resources for future generations. Its implementation requires close interaction with the local population, along with information, awareness-raising and participation on the basis of ownership.

The aspects of Water for Ecosystems will be addressed in more detail in the 5-year Strategy to be developed over the next two years.

## 1.16.3 Water for Other Purposes, Including Energy

Besides food security, the availability of water is an important basis for all other productive activities. Water is essential for commerce and industry, where it is used as a medium (e.g. as a solvent), coolant or mode of transport in most production processes.

Water is also an important resource for energy production, especially via hydropower plants. Thermal power stations require water for cooling during operation or as a conveyor of heat energy. Hydropower is likely to become increasingly important in the context of the global climate change debate, as it is often a cheap renewable energy resource, which generally causes far fewer negative environmental impacts than other energy sources, this is the opportunity which Lesotho should capture given its natural geographical altitude and beautiful valleys and potential for hydropower.

These aspects will be covered in more detail in the 5-year Strategy, especially the integrated planning of water resources for hydropower for Lesotho and bulk water supply for South Africa in relation to the water needs in the lowlands of Lesotho.

## 1.16.4 The Importance of Flood Management

**Policy Statement 1: Water Resources Management; Promote development and implementation of drought relief strategies and flood measures for risk reduction and effective mitigation of impacts**

Extreme flood events pose a danger not only to people and infrastructure but also to cultural property and environmental resources. Flooding can claim thousands of lives, cause epidemics, destroy investment in infrastructure, and thus impact severely on economic development. But on the other hand for economic and social development which is partially dependent on agriculture as is the case

in Lesotho this may bring along fertile floodplains for food production and poverty reduction. The frequency and variability of extreme flood events are changing; this is due, among other things, to climate change etc. Population growth and settlement of new areas as well as urbanisation are increasing the numbers of people at risk from flooding thus contributing to greater vulnerability and potential damage. Drought strategy has been developed but not yet been implemented, while flood measures need to be developed in order to avert associated risk caused by floods.

## WATER SUPPLY AND SANITATION DEVELOPMENT PROGRAMME

### 1.17 Priority Programmes implementing Policy Statements no. 2 and 7

Implementing comprehensive multi-sectoral water programmes based on IWRM is often very complex. It is often more effective to implement clearly focussed sectoral projects that aim to facilitate local capacity-building and reforms and achieves social, environmental and economic objectives. In these case, it is nonetheless essential to integrate the projects consistently into the overall water sector context and thus to make a progressive contribution to the establishment of a wider process which conforms with IWRM principles.

The practical approach to prioritisation and the selection of development projects must be implemented in a holistic approach in the water sector. However, a clear distinction has been made between the following priorities: drinking water supply and sanitation services; and environmental and resource protection.

The key target for the water sector is the un-served, the underserved, and the poor population, which currently has little or no access to safe and/or adequate drinking water, and sanitation services. The peri-urban and rural regions are especially important in this context.

It is always the poor groups who suffer most from contamination of watercourses as they are often reliant on these sources of water for drinking, irrigation (garden) and washing. They are also particularly hard hit by decrease in groundwater resources as they rarely have access to the technologies required to draw water from ever-greater depths.

The above mentioned strategic objectives will be implemented through the following priority areas:

Priority Area I: Urban water supply

Priority Area II: Rural water supply

Priority Area III: Sanitation

Priority Area IV: Institutional and Capacity Development

#### 1.17.1 Indicators for Sector Programme

The following indicators below in Table 6 will be used for overall monitoring of the progress in implementing the water-sector programme for the 2-year period described in this Interim Strategy. The baseline and annual values for the indicators will be based on the Continuous Multi-Sector (CMS) Surveys by the BOS.

The sector M&E system and the cooperation with the BOS, in terms of clearly defining the performance measures for the indicators, will be improving over the 2-year period described in this Interim Strategy and it is therefore expected that there could be some inconsistencies in the values for the indicators during this period. The M&E system and the indicator definitions are expected to be fully developed and operational for the future 5-year strategy.

**Table 6: Performance indicators for the priority areas of the Interim Strategy**

Performance Area	Indicator & definition	Baseline*	Target 2011	Target 2012
Access to rural water supply	Proportion of rural households using piped water and public borehole as their main source of drinking water	63.6%	66.5%	70.5%
Access to urban water supply	Proportion of urban households using piped water as their main source of drinking water	56.8%	61%	66.3%
Access to rural sanitation	Proportion of rural households using in their place of residence a sewage system, septic tank, own VIP or own pit latrine	53.1%	55.4%	58.8

Performance Area	Indicator & definition	Baseline*	Target 2011	Target 2012
Access to urban sanitation	Proportion of urban households using in their place of residence) sewage system, septic tank, own VIP or own pit latrine	77.8%	79.9%	82%

Details on data sources, definitions and availability are described in Chapter 5.

The overall budget for the four priority areas and the other ongoing activities in the water sector is presented in Table 7. The budget for Priority Area I include the investments in Bulk Water Supply.

**Table 7: Overall Water Sector Budget divided per priority area**

Budget for April 2010 - March 2012 per Priority Area		Required Budget	GOL Recurrent	Capital (GOL + Grants + Loans)	Funding Gap
	<b>Total Budget Estimate</b>	<b>2,563.20</b>	<b>61.29</b>	<b>2,345.57</b>	<b>156.35</b>
<b>1</b>	<b>Urban Water Supply</b>	<b>1,818.53</b>	<b>0.00</b>	<b>1,769.13</b>	<b>49.40</b>
<b>2</b>	<b>Rural Water Supply</b>	<b>321.40</b>	<b>46.90</b>	<b>221.50</b>	<b>53.00</b>
<b>3</b>	<b>Sanitation Services</b>	<b>357.71</b>	<b>0.00</b>	<b>305.71</b>	<b>52.00</b>
<b>4</b>	<b>Institutinal and Capacity Development</b>	<b>31.88</b>	<b>0.00</b>	<b>29.93</b>	<b>1.95</b>
	<b>Other areas</b>	<b>33.68</b>	<b>14.39</b>	<b>19.29</b>	<b>0.00</b>

The current situation and challenges, strategic aims of the priority areas and the activities are described below.

## 1.18 Priority Area I: Urban water supply

### 1.18.1 Policy Objectives

A key field of action in the water sector is expanding and safeguarding access to drinking water and basic sanitation and introduction or improving wastewater management.

**Objective 1:** To accelerate delivery of water and sanitation services to all Basotho in line with national development;

The Nation relies on a sustained amount of safe drinking water, basic sanitation and on treatment of wastewater to maintain public health and environmental protection. To help better improve and secure public and environmental health, the Water Sector will work to ensure the continuity of provision and expansion of both drinking-water, basic sanitation and wastewater services.

**Objective 2:** To promote increased investment in infrastructure development (reservoirs, conveyance structures, etc) to meet the water demand in urban and rural areas for socio-economic development and for meeting basic consumption and hygiene needs;

High investment costs associated with provision of drinking water and sanitation services, especially in urban wastewater management, can only be met through external financing. In urban areas, such investments include the development, expansion and upgrading of water supply, sanitation and wastewater management systems.

The Strategies in the Water Policy specifically relevant for urban domestic water services for the 2-year planning period in terms of improving access to services are:

- i. Establish and put into effect tariff structures and cost recovery mechanisms for water supply and sanitation services which ensure that water service providers recover the actual cost, including capital costs, of providing water services;
- j. Introduce a cross-subsidy tariff mechanism to reflect water for basic human needs only (30 litres per capita per day) in the case where customers are unable to afford the cost of lowest service;

- k. Tariffs for non-domestic water supply shall be flat rate and shall not be less than the marginal cost of the water supplied while tariffs for domestic consumers shall be banded, but nevertheless its weighted average shall not be less than the marginal cost of the water supplied;
- l. As a way of promoting equity, the Government shall endeavour to ensure that the maximum expenditure on water shall not exceed 5% of disposable income, and that the water service providers apply a uniform tariff in all areas as opposed to regional tariffs;

### 1.18.2 Current situation and challenges

#### Connections and coverage

The WASA delivers potable drinking water for domestic consumption to 38,500 domestic connections and 200 public standpipes. In addition, the majority of the water produced by WASA is delivered through 170 industrial, 1,800 commercial, 530 governmental and 420 other (schools, churches etc.) connections.

A total of 11.5 million m<sup>3</sup>/year of potable water was delivered to consumers in 2009 of which an average of 8.7 million m<sup>3</sup>/year was in Maseru. The coverage for domestic water supply in urban areas is currently 54% of urban residents when incorporating the actual number of persons that are served by WASA connections (and the rural water systems within the urban boundaries). The data from the Bureau of Statistics 2006 population census on access to water services indicate that 83% of the urban population have access to improved water sources.

The difference between the WASA data on the number of persons served by the connections and public standpipes is the large number of poor households that do not have a connection but buys water from neighbours at a higher cost. The cost varies and can be as high as 1 – 2 M per 20l bucket or a fixed monthly fee of e.g. 30 M per month. The cost of water for the households collecting from neighbours is therefore up to 20 times the cost of water for households with connections and the water sector do therefore not regard these households as served. The population statistics for urban areas are shown on Figure 7. The difference between the ‘pop covered’ and ‘pop served’ is the community managed water systems in urban areas that are not functioning.

The preliminary results of the 2009 BOS CMS Survey indicate that 14.3% of households in urban areas do not have access to water service 18 hours per day indicating problems with interrupted supply in some areas.

**Figure 7: Population statistics for urban areas**

	Urban Areas						BOS 2006 Census data	BOS 2006 Domestic Connections only
	Pop urban areas	Pop covered Community Schemes	Pop Served Community Schemes	Pop Served WASA Schemes	Coverage (WS exists)	Served (WS working)		
	2009	2009	2009	2009	2009	2009	2006	
<b>Lesotho total</b>	<b>484,630</b>	<b>29,804</b>	<b>27,035</b>	<b>236,020</b>	<b>55%</b>	<b>54%</b>	<b>83%</b>	<b>57%</b>
Botha Bothe	26,483	8,082	7,198	8,680	63%	60%	72%	41%
Leribe	57,074	2,018	1,943	23,198	44%	44%	78%	52%
Berea	19,022	267	267	10,310	56%	56%	84%	59%
Maseru	281,624	5,848	4,634	160,183	59%	59%	86%	60%
Mafeteng	33,483	1,096	940	13,968	45%	45%	83%	62%
Mohale's Hoek	25,947	3,694	3,544	6,161	38%	37%	76%	52%
Quthing	12,724	2,958	2,668	4,390	58%	55%	81%	53%
Qacha's Nek	11,306	3,802	3,802	3,046	61%	61%	83%	44%
Mokhotlong	9,851	881	881	4,388	53%	53%	86%	58%
Thaba Tseka	7,117	1,158	1,158	1,697	40%	40%	77%	47%

#### Institutional Reform

In 2004 WASA signed a “Performance Agreement” with the GoL with the aim of improving service delivery to customers and transforming them into a financially self-sustaining water and sanitation utility and in recent years the financial situation of the organisation has improved. Financial performance will be helped by a demand for higher levels of service, including household connections

rather than public standpipes. To meet this challenge, the WASA will need to maintain a clear focus on managing and operating its reticulation systems efficiently, and must increase the service base.

The sector reforms envisage WASA transformed to a private company and the legislation for this are at an advanced stage. The Water Policy calls for the appointment of a Regulator to oversee service supply organisations and approve the tariffs. Plans are well advanced to include regulation of the water sector under the existing regulator for the electricity sector, the Lesotho Electricity Authority (LEA). The Water Policy also calls for a level of tariffs that will enable the water utilities full cost recovery. The current tariffs enable WASA to cover O&M cost and over the last few years there has been a small operating profit that has been invested in extensions of the network.

Private sector participation in WASA activities is limited to consultancies for design and supervision works, contractors for construction and some maintenance operations but not the provision of services. There is considerable scope for entering into PPPs and there are plans for cooperating with the private sector in providing services for emptying septic tanks and pit latrines.

### **WASA's Financial Situation**

Since 2003, WASA has generally operated at an operating profit margin, but in real terms, if full assets valuation and corresponding depreciation was taken into account, and subsidization removed, it is probable that WASA (with its current bulk treated water supply capacity constraints) would operate at a net loss per year. This indicates that also when WASA becomes a company, subsidies for investments will be required in an initial period.

The WASA performance agreement dated June 2008 specifies the targets for financial performance in year 1, 2 and 3 as: Operating Margin, 12%; 15%; 18% and the total operating revenue as M90 Million; M95 Million and M100 Million.

In addition to the employment of revenue funding from the tariffs charged for the provision of water and sanitation services, WASA enjoys other capital funding from GoL grants, and also makes use of loans and grants from international sources to develop more infrastructure.

Some of WASA international loans which have been of long tenor but low interest have been forgiven (some Maloti 180 million) with WASA only having to pay annual interest on these. WASA has also requested that it be forgiven payment of interest on GoL loans inherited from its predecessor, which will help its financial viability situation.

The WASA financial planning model indicates total assets worth in the region of Maloti 600 million which is predominantly plant, equipment, structures and reticulation. However, much of WASA's infrastructure was inherited from its predecessors and is relatively old, which will require considerable additional ongoing investment to maintain and replace as necessary. WASA have yet to complete a fully comprehensive inventory and valuation of its assets, but this is one of the objectives of the Water Sector Improvement Project (WSIP), as is the introduction of an asset management system.

**Table 8: WASA Operating Costs**

The WASA operating costs are shown in Table 8. The manpower costs are almost half of the total operational costs. This is high as compared to international benchmarks of 25%. The number of staff per 1000 connections is 11 persons. This is also high compared to international benchmarks of 5 – 7 persons/1000 connection<sup>5</sup> in developing countries.

<b>WASA O&amp;M Costs 2008/09 Financial Year</b>	<b>Cost (M)</b>	<b>%</b>
Manpower Costs	47,796,140	49%
Electricity	9,387,676	10%
Reticulation & Plant Maintenance	7,304,924	7%
Chemicals	4,048,401	4%
Transport	3,638,017	4%
New Connections	9,379,952	10%
Telephone, Stationery, Postage	2,515,708	3%
Rents, Security & Insurance, Office	3,280,486	3%
Other Costs	11,150,998	11%

<sup>5</sup> WSP Water Utilities Performance Assessment, 2009.

The maintenance costs are only 7% of the total costs. Most maintenance activities are implemented 'in-house' and this affects the high manpower cost and low maintenance costs proportions. The operational problems of many of the water systems and the low proportion of maintenance costs could indicate that improvements are possible in preventive maintenance activities.

Another way that WASA can improve its financial position is to improve its operating efficiencies including reducing the Unaccounted for Water (UfW), which currently stands at some 31% for all WASAs areas, excluding Maseru, which is 31%. The WASA Corporate Strategy calls for this to be brought down to at least 25%. The UfW come from losses due to technical losses such as leaks as well as administrative losses such as illegal connections, metering deficiencies e.g. old water meter under-registering consumption and other consumption that is not billed.

It has been known for some time that WASA has a much larger potential customer base than it has treated water and reticulation capacity to sell water to these customers. The WASA Financial planning model indicates a growth in metered customers from some 45,000 today, to  $\pm$  130,000 in the year 2020. There is therefore a large pent-up demand which will provide WASA with significant increased income once these supply chain constraints are removed. This should significantly improve WASA financial viability.

### Demand in urban areas

Figure 10 shows the development in the amount of water supplied by WASA over the last 7 years. In addition to the water supplied there is a substantial 'suppressed' demand from areas not adequately served by the networks.

The demand forecasts for reaching the MDGs and the 2020 targets for full coverage are shown on Figure . The demand forecast depend on many variables such as population dynamics, economic development and industrial growth etc. The demand forecast presented here is the 'Business as Usual' Scenario from the Strategic Financial Planning Model. This scenario implies that the population development in Lesotho continues as at present with urbanisation especially in Maseru and GDP growth of 3% per annum. The growth in industrial water consumption is 5% annually assuming that the industrial growth will be in less water consuming industries than the textile industries.

With these assumptions, demand for water for domestic consumption in urban areas is expected to increase with 7.3% annually. In total the water demand in urban areas is expected to increase by 5.3% annually until 2035 as illustrated on Figure .

The demand forecast indicate large increases in the WASA supply capacity compared to the development over the last 7 years as illustrated on with almost stagnant water demand for the last 5 years following the expansion of industrial growth in 2002-2004. The investments in urban water capacity has over the last few years concentrated on production capacity and the overall distribution network and the limitation in production capacity is likely to be the reason for lack of historical growth in demand.

Figure 10: WASA Billing Statistics

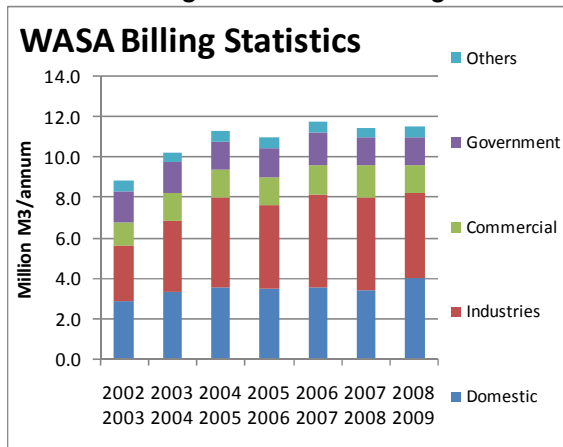
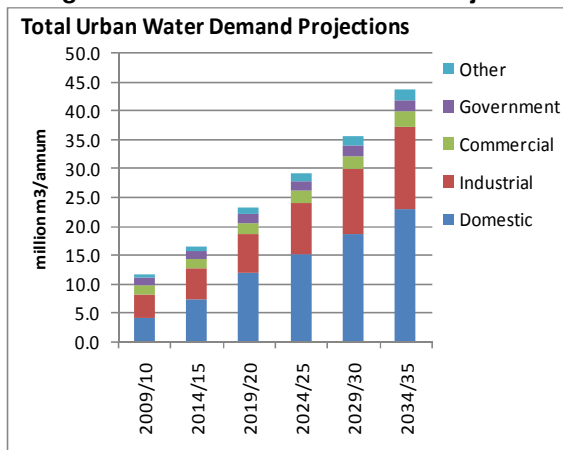


Figure 11: Urban Water Demand Projections





With the ongoing and recently completed projects (3-towns, Maseru Peri-urban etc.) and the Metolong project, the overall infrastructure in urban areas will be in place to accommodate the increase in demand. The focus for the next years will therefore be on increasing the connections and managing the network.

### Operating Inefficiencies

Many of the urban water systems have operational problems as indicated by the low capacity utilisation combined with interrupted water service in many of the systems. The reasons for the operational problems are diverse e.g.:

- Natural physical conditions such as large variations in the water flows in many of the rivers and streams that are used as sources for the water systems as well as the very high sediment load in the lowlands rivers that are the sources of the major WASA systems.
- Inadequate replacement of equipment that has outlived its lifespan.
- Many of the existing intake structures with infiltration galleries and well points (e.g. Hlotse, Maputsoe and Teyateyaneng) and borehole sources (e.g. Botha Bothe, Teyateyaneng, Roma, Morija) are no longer fully utilised, possibly due to design issues or inadequate preventative maintenance/ operating procedures.

Levels of Un-accounted for Water (UfW) in the WASA systems are moderate to high as shown in Table 9. The recent work by the 3-towns project in Maputsoe, Teyateyaneng and Roma indicates that under registration of consumption due to old water meters is one of the major contributors.

**Table 9: UfW in WASA Systems**

<b>WASA Supply Areas</b>	<b>Un-accounted for Water</b>
B. Buthe	30%
Leribe	24%
Maputsoe	44%
Peka	25%
TY	44%
Mapoteng	31%
Maseru	30%
Roma	15%
Morija	22%
Mafeteng	33%
M. Hoek	53%
Quthing	51%
Q. Nek	43%
Mokhotlong	21%
T. Tseka	27%
Average	31%

### 1.18.3 Strategic aims for 2010 to 2012

The Interim Strategy will focus on three issues:

- i) improved access by improving the connection rate;
- ii) improved operating efficiencies; and
- iii) expanded production capacity through continued investment programmes

The strategic aims for the planning period from April 2010 to March 2012 are:

#### **Strategic Aim 1: Access to water supply**

The overall aim is to improve the rate of increase in access to water services in the planning period. This will be achieved by establishing clear rules for tariffs and connection fees, test these and seek approval by the regulator by 2012. The rules shall include the aspects of free basic water to vulnerable households in line with the strategies as described in the Water Policy and operational guidelines provided by the CoW.

The current strategy of implementing public standpipes will be continued focussing on the areas where the rates for domestic connections are low.

The rules for connection fees and possible subsidies for domestic connections should result in an increase in the number of domestic connections. During the two year period a clear target for new connection is set.

The expansion of the networks in Maputsoe, Teyateyaneng and Rome as part of the 3-towns project as well as the Maseru Peri-urban project will be completed during the planning period establishing the foundation for expanding the number of connections. The expansion of the networks in other towns funded by the MCC project will be ongoing during the planning period.

### **Strategic Aim 2: Operating Efficiencies**

The aim is to increase operating efficiency

This will be achieved by:

- Developing planning tools and a better understanding of the WASA customers and the network
- Developing a clear strategy for reducing UfW including calibration and replacement of meters
- Reduction of energy costs.

The strategy will look into the cost and logistic issues of improved metering. The strategy will be based on WASA's experiences with pre-paid meters and the conventional post-paid metering system and will assess the possibility of introducing new metering technologies such as smart meters with remote monitoring possibilities and without moving parts that are subject to wear and tear.

The aim in terms of UfW is to complete the ongoing assessment and classification of non-revenue water to get a clear understanding of the sources of UfW. The rehabilitation of the networks to reduce the leaks and replace meters will be completed in Maputsoe, Teyateyaneng and Roma through the 3-Towns Project and will be extended to other towns covered by the MCC project activities. The implementation of the metering strategy is expected to further reduce the UfW and reduce the financial losses due to under registering the consumption that is caused by wear and tear on the existing type of meters.

Specific targets for UfW reduction will be set for Maseru and for the other towns.

Energy cost reduction will be achieved by implementing the Energy Management Plan including replacement of electrical and mechanical equipment and reassessment of the tariff agreements with Lesotho Electricity Corporation (LEC) for charges related to capacity and use. Specific targets will be set for reduction in expenditure on electricity consumption

### **Strategic Aim 3: Production Capacity**

The general aim is to increase production capacity by 10,800 m<sup>3</sup>/day in order to fulfil demand of population and industry until March 2012 in the towns supplied by WASA. In addition, projects will be ongoing at the end of the planning period for an additional 80,000 m<sup>3</sup>/day and rehabilitation of treatment plants with a combined capacity of 6,600 m<sup>3</sup>/day.

## **1.18.4 Summary of Activities and Indicators**

### **1.18.4.1 Activities**

#### **Access to water Supply**

The WASA data on connections indicate that only 56% of the urban population has access to water services from the WASA system directly (domestic connections and public standpipes). The BOS figures on access to water indicate that 83% of the population in urban areas has access to piped water service. The wide gap between these 'coverage figures' is an indication of the many households that live in areas covered by the reticulation network but for various reasons are not connected and buy water from neighbours at higher cost than the WASA tariffs – in cases up to 20 times the tariff for domestic connections. After a period with reducing the number of public standpipes due to operational problems for payment of water, WASA is now, with the new pre-paid metering technology, increasing the number of public standpipes and this will greatly improve the access to water for the households that cannot afford a connection.

WASA has over the last two year implemented substantial extension of the reticulation networks in Maseru (Peri-urban Phase II) and Maputsoe/ Teyateyaneng and Roma (3-Towns Project) that are covering new peri-urban areas with pipelines and the overall infrastructure is now in place for the households to connect.

Affordability for households to connect is one of the bottlenecks for increasing the access. The Interim Strategy will therefore focus on developing strategies for assuring a minimum of 30 l/capita/day to the poorer households as enshrined in the Water Policy. WASA is already testing different methods for making connections more affordable and this will be intensified. The strategy will focus on increased access to public standpipes using the pre-paid technology and ways of making domestic connections affordable (subsidies, staged payments etc).

In addition to the ongoing projects, two other investments are proposed during the 2-year planning period: i) rehabilitation and extension of the water system in Morija. The system will be supplied from the Metolong dam and the additional investments will be in the secondary distribution network, connections and public standpipes; ii) extension of the network in Maseru to cover the villages of Likotsi, Ha Lesia, Ha Shelile and Pena Pena that are the remaining under-served areas in the Maseru urban area.

### **Operating efficiencies**

In the planning period, the ongoing replacement of old pipelines in Maputsoe, Teyateyaneng and Roma by the 3-towns project and the pipeline rehabilitation under the MCC project in Maseru, Roma, Mohale's Hoek, Qacha's Nek, Botha Bothe, Leribe and Teyateyaneng will be completed and this will considerably reduce the UfW related to leaks.

WASA is working on identifying and addressing all the different sources of non-revenue water and this work will be continued.

The focus during the two year period for the Interim Strategy is therefore to continue the planned network rehabilitation and extension as well as developing and implementing a meter calibration and replacement strategy. The metering strategy shall also look into the possibility of using new meter types (e.g. smart meters for remote monitoring) in general and assess the experiences with the use of pre-paid meters.

WASA has comparatively small expenditures on maintenance as described in 1.6.2.4 in Table 8 on page 47. Increased focus on preventive maintenance could improve the reliability of supply and the operational efficiencies.

WASA is working on developing an energy management plan for assessing and replacing the pumping equipment where necessary and this plan will be implemented during the planning period.

### **Production Capacity**

Major projects are ongoing for expansion of the production capacity in the various centres. The most significant is the Metolong Project that will provide an additional 80,000 m<sup>3</sup>/day for Maseru and the neighbouring towns of Teyateyaneng, Roma and Morija and the major rural settlements in the supply area. The 3-Towns project is also rehabilitated or established considerable production capacity in Maputsoe (5,800 m<sup>3</sup>/day), Teyateyaneng (2,400 m<sup>3</sup>/day) and Roma (2,600 m<sup>3</sup>/day) and these projects will be completed during the 2-year planning period.

The MCC grant funding for WASA is utilised for parts of the Metolong Project and for the network rehabilitation and extension in many of the towns as well as funding the new water and sewerage systems for Semonkong and rehabilitation of the treatment plants in Mafeteng (rehabilitation of Scootvlei Water Treatment Plant (WTP) to 500 m<sup>3</sup>/day and Mafeteng WTP to 2000 m<sup>3</sup>/day), restore the production capacity of the boreholes for Botha Bothe to the original (2,600 m<sup>3</sup>/day) and rehabilitate the Quthing WTP to 1,500 m<sup>3</sup>/day. The MCC projects will be ongoing during the 2-year planning period.

### **1.18.4.2 Indicators**

The indicators for measuring progress during the planning period from April 2010 to March 2012 within the three strategic areas and the targets are listed below. These indicators are specific for the activities that will be implemented during the 2-year planning period and are therefore more detailed and not necessarily corresponding to the outcome indicators described in Chapter 5.

#### **Area 1: Access to water supply**

1. Clear rules for tariffs and connection fees allowing for free basic water to vulnerable households developed, tested and approved by the regulator
2. 150 number of new public standpipes serving 15,000 persons established for providing access to water in areas with low connection rates
3. 6000 number of domestic connections implemented serving 30,000 persons

#### **Area 2: Operating Efficiencies**

1. Clear strategy for calibration and replacement of meters developed and being implemented
2. UfW reduced to an average of 27% nationally
3. Expenditure on electricity consumption reduced by 10% from 9.3 million M/annum in 2009/10 financial year to 7.44 million M/annum in the 2011/12 financial year

#### **Area 3: Production Capacity**

1. The production capacity of WASA systems increased by 10,000 m<sup>3</sup>/day from April 2010 to March 2012

### **1.18.5 Costing of activities**

#### **Access to water:**

The cost of the activities that are in addition to the normal ongoing activities of WASA related to new connections and public standpipes are:

2 person months of WASA professional input and 2 person months of consultancy input + approximately 100,000 for research assistants etc for field studies to determine the strategy for improving the connection rates.

Capital cost of 6,000 new connections and 150 pre-paid public standpipes, approximately M 20,000,000 less the contribution from the customers as determined by the strategy.

Total budget approximately M 20,500,000.- + water sector staff input.

The cost of rehabilitation and extension of the water system in Morija is estimated to M 18 million based on the cost estimates from the design of the 6-Towns project allowing for cost increases. The cost of extension of the network in Maseru to cover the villages of Likotsi, Ha Lesia, Ha Shelile and Pena Pena is estimated to M 7.3 million based on the design estimates from the Maseru Peri-urban projects.

#### **Operating Efficiencies**

1 person month of WASA professional input and 2 person months of consultancy input for analysing and developing the customer data base and GIS + approximately M 1,000,000 for survey assistants, GPS equipment etc for implementing the surveys and collection of data on connections.

Assignment of WASA workshop staff and field staff for calibration of 5000 water meters per year (equivalent to 25 meters per day). Approximately M 1,000,000 for workshop and field tools, transport etc. M 1,200,000 per year for replacement of meters – assuming 50% needs replacement

Total budget approximately M 3,600,000 + water sector staff input.

Cost of the other activities related to operating efficiencies are covered by the ongoing programmes in WASA.

## Production Capacity

The funding for expansion of production capacity is covered in the ongoing projects

The total cost of the new activities are shown in Table 10.

**Table 10: Priority Area I budget for new activities**

Budget for April 2010 - March 2012 per Priority Area		Additional activities	Budget Add act
1	Urban Domestic Water Supply		
1.1	Access to Water Supply	Connection sub	45.80
1.2	Operating Efficiencies	Network mapping	3.60
1.3	Production Capacity		

### 1.18.6 Financing and Investment planning for 2010 to 2012

The total funding requirements for priority area I is shown in Table 11. The funding will come from the GOL capital budget as well as from donor grants and loans.

**Table 11: Priority Area I Financing Plan**

Budget for April 2010 - March 2012 per Priority Area		Required Budget	GOL Recurrent	Capital (GOL + Grants + Loans)	Funding Gap
1	Urban Domestic Water Supply	1,818.53	0.00	1,769.13	49.40
1.1	Access to Water Supply	291.80	0.00	246.00	45.80
1.2	Operating Efficiencies	33.53	0.00	29.93	3.60
1.3	Production Capacity	1,493.20	0.00	1,493.20	0.00

## 1.19 Priority Area II: Rural water supply

### 1.19.1 Policy Objectives

The key field of action in the water sector is expanding and safeguarding access to drinking water and basic sanitation in rural areas.

**Objective 1:** To accelerate delivery of water and sanitation services to all Basotho in line with national development;

The delivery of water services will be accelerated by increasing the rate of implementation of new and rehabilitation of water systems in line with the ongoing programmes complemented with improvements in the coordination and cooperation at district and community council level for the implementation of the 'After Care Strategy'.

The Strategies in the Water Policy specifically relevant for rural water services for the 2-year planning period in terms of improving access to services are:

- a) Reconstitute water committees as a mechanism for sustainable service delivery at local level;
- b) Empower district and community councils in the effective implementation of water supply and sanitation programmes, including the development of all relevant by-laws;
- g) Develop and implement programmes aimed at creating public awareness on linkages between water supply, sanitation, health and hygiene;
- l) As a way of promoting equity, the Government shall endeavour to ensure that the maximum expenditure on water shall not exceed 5% of disposable income, and that the water service providers apply a uniform tariff in all areas as opposed to regional tariffs;
- n) Implement the Aftercare Strategy for rural water supply systems in order to improve sustainability of access to potable water; and
- o) Introduce systems for monitoring and evaluating the performance of water supply and sanitation systems at community level.

In rural areas, a particular priority will be given to support Community Councils to play active role in maintenance and repair of systems, as one of their task.

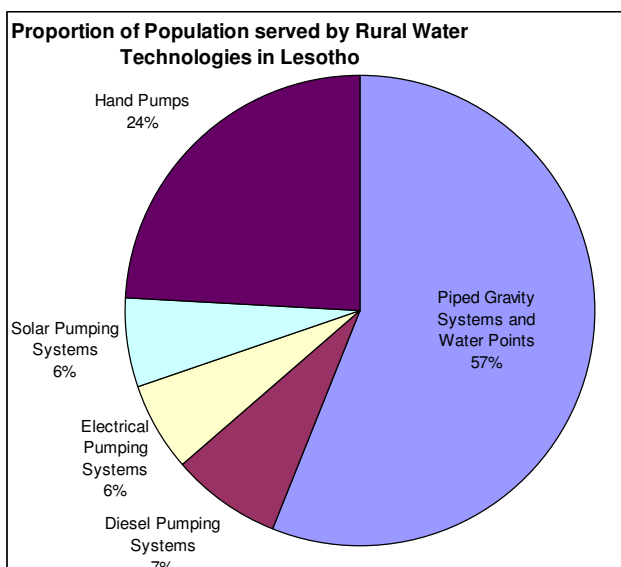
### 1.19.2 Current situation and challenges

Rural water supplies in Lesotho are typically simple piped water systems serving individual villages. If possible **gravity systems** are built, using water sources above the village, or if that is not possible **pumping systems** are installed from either boreholes or springs using diesel, electrical or solar pumps.

These small systems typically serve between 200 and 2000 people. In addition to the piped systems, approximately 25% of the rural population with access to potable water is served by **hand pumps**. These are mostly located in the lowlands communities.

In 2005, the DRWS adopted an "After Care Strategy", which identified

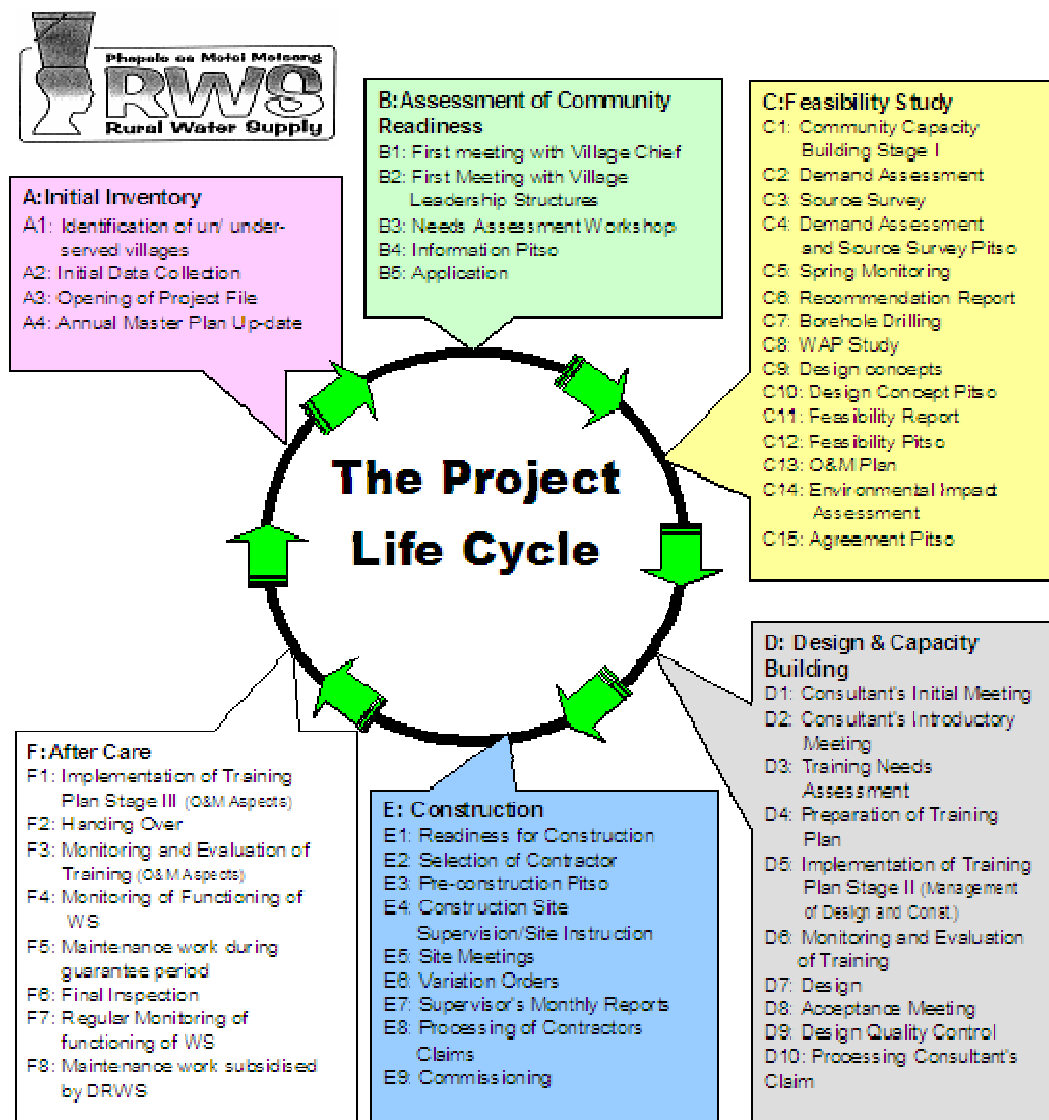
Figure 12: Rural Water Technologies



community maintenance responsibilities in line with the Local Government Act, 1997 (the principles of the 'After Care Strategy' are explained in 0 above). A partial transfer of the DRWS's resources and responsibilities in their ten district offices to the district authorities has been made, and is expected to be complete in the forthcoming years. The rural water systems are managed by Village Water and Health Committees (VWHCs) supported by the Community Councils and DRWS. The new Water Act 2008 and the establishment of the Local Government Authorities provides an opportunity for legalising the functions of the VWHCs and providing well structured capacity building programmes for improved management of the rural water systems, however there is a need to arrive at a common understanding of the roles of the Local Government Authorities versus DRWS in supporting the O&M of rural water systems. The capacity of the Community Councils to carry out their functions as described in the After Care Strategy is still developing and therefore the strategy and not yet been effective in reducing the proportion of water systems that are not functioning.

The community level activities are in principle demand driven by the communities and carried out according to the 'Project Life Cycle' as illustrated on Figure 8. In practice some of the procedures prescribed in the 'Project Life Cycle' are not followed for various reasons such as pressure to complete systems according to annual targets and political decisions on implementation of systems in specific villages. The sector faces a challenge after the establishment of the local government authorities to develop rational planning and prioritisation procedures with the local authorities that respects the 'DRWS Project Life Cycle' aims of increasing sustainability since there is often pressure to implement facilities without going through the lengthy process of monitoring water sources and reaching agreement on the facilities with the communities.

**Figure 8: DRWS Project Life Cycle**



### **Functionality of rural water systems**

Water systems are in place for 60% of the rural population however some of these are not functioning. Presently only approximately 45%<sup>6</sup> of the rural population has access to a functioning water system that provides the minimum of 30 l/capita/day.

Sustainability is therefore a major challenge and a substantial proportion of the existing water systems are out of commission. The emphasis is on community ownership but communities often lack the necessary management and financial capacity (fiscal decentralisation not yet completed) and maintenance skills and many system failures go unreported. Presently capital and recurrent budget of the (central) GOL is funding approximately 30% of the estimated O&M costs of rural water systems by carrying out major repairs and servicing of pumping systems. The main practical tool for planning and coordination of the activities in the rural water sector is the District Information System (DIS) that has detailed information on the community level plans for feasibility studies, design and implementation for a 5-year period. Ideally the plan shall include all activities by DRWS, NGOs, and local authorities, however there are some difficulties in making this work in practice especially in relation to the selection and prioritisation of projects in cooperation with the local authorities

There are multiple reasons why some of the existing water systems in the densely populated lowlands are not functioning and are in need of rehabilitation – some of these are:

- Many of the systems were built in the 1980s and are now beyond their design life of 25 years and have critical components that must be replaced.
- The population growth in the lowland villages since implementation has resulted in inadequate capacity of the systems both in terms of the quantity of water provided per capita and the extent of the pipe network.
- A significant proportion of lowland villages were served by hand pumps in the 1980s, but these no longer provide an adequate level of service for the growing population. Increased population pressure has resulted in the reliable hand pumps being overused and suffering damage. As they are expensive and difficult to maintain at community level the ratio of population served to operating hand pumps has risen rapidly.
- The majority of villages in Lesotho are served by gravity water systems based on spring sources. In many parts of the lowlands the yields of the springs have been affected negatively by reduced recharge of ground water resources due to degradation of the catchment areas. The decline in spring yields coupled with population growth means these systems no longer meet the required standard of 30 litres per capita per day (l/c/d) and will require augmentation from additional springs or from new pumped boreholes.
- Inadequate maintenance, in particular preventive maintenance, has resulted in some systems requiring major rehabilitation. The establishment of the new local government structures and the recently approved rural water supply 'After Care Strategy' is expected to alleviate many of the problem areas that have previously led to lack of clarity in the responsibilities for management of the existing systems.

In some cases, where the locally available sources are no longer adequate to provide a reliable service, regional water schemes will be proposed to augment the existing schemes by using a larger more reliable source, e.g. a stream located at a higher elevation than the supply area. These regional schemes will typically serve 20 to 30 villages

Another challenge in the rural water sector is to reach the un-served villages that are typically in the more remote mountainous areas of Lesotho. The implementation unit costs in these remote villages are considerably higher than in the lowland villages, due to i) the size of the schemes (low population) and ii) the transport costs. All the 10 districts except of Mafeteng have mountain areas and typically 10% to 0% of the villages are in-accessible meaning that there is no road access and materials need to be carried on foot or by donkeys or horses.

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<sup>6</sup> BOS 2006 Census data: 43% using water from an improved source within a 15 minutes collection time. DRWS DIS 2009 access to functioning water systems delivering 30 l/capita/day: 47%



Larger communities in easily accessible areas have been given priority in the past, leaving the smaller more remote communities without adequate water and sanitation facilities. Provision of better infrastructure including water and sanitation in these communities will potentially contribute to reducing migration to the urban areas and the resulting high levels of unemployment.

The main challenge in the rural water sector is the management of the water systems and the improvements that are needed in the capacity of community councils and the Water Committees to fulfil their roles in accordance with the After Care Strategy.

The main challenge concerning coverage is that the uncovered villages are mainly in the remote areas where the unit costs for implementation are higher.

**Table 12: Number of DRWS Water Projects per year**

The number of water projects and the population served over the last 5 years are shown on Table 12. In average approximately 65 projects are completed per year serving 30,000 people.

The recurrent budget for DRWS has been approximately M 20 million per year and the capital budgets have increased over the last 5 years from approximately M 30 million to M 78 million in the 2009/10 financial year.

Year	Water Projects	Population
2005/06	63	27,568
2006/07	67	38,539
2007/08	71	34,969
2008/09	69	21,859
2009/10	49	30,271

### **1.19.3 Strategic aims for 2010 to 2012**

The Interim Strategy will focus on three issues:

- i) improving the functionality rate of existing water systems by working actively with the Local Government Authorities,
- ii) improved data and planning systems for rural water; and
- iii) improved access to water supplies by continuing and scaling up the investment programmes for new water systems and rehabilitation/ replacement of existing water systems that have outlived their lifespan.

The strategic aims for the planning period from April 2010 to March 2012 are:

#### **Strategic Aim 1: Improved functionality rate**

The final aim is to improve the management, operation and maintenance of rural water systems. This will be achieved through implementation of the 'After Care Strategy' and capacity building of the Local Government Authorities, especially the Community Councils as the owners of the water systems and the Village Water and Health Committees as the day to day managers of the systems.

The capacity building will be based on a clear understanding and consensus on the roles and responsibilities of the Local Government Authorities vis-a-vis DRWS guided by the 'After Care Strategy'.

The capacity building activities will take into account the Water Policy's aim of providing free basic water services to the vulnerable households according to the directions given by the CoW. This will increase the transparency in the sector by making it clear how to target the present subsidies that are provided for the major maintenance of the rural water systems.

#### **Strategic Aim 2: Improved data and planning**

The aim is, within the two year planning period, to have an up-to-date data management system and improved planning system. The data management will be based on a Geographical Information System (GIS) for the rural water systems coherent with the BOS GIS to ensure easy correlation of the population and other socio-economic data available from the BOS with the rural water system data. The planning and data system and the GIS will be based in the 10 districts with consolidation tools at national level.

The improved data and planning system will enable the DRWS to accurately assess and report on progress in functionality rate and coverage in a consistent manner. This will improve the reliability of the M&E system and potentially lead to improved overall performance in the rural water sector.

The improved planning and GIS systems will also enable the Department, in cooperation with the Local Government Authorities to plan and target the investments where they are mostly needed e.g. target the impact on poverty since the GIS will combine the water system data with the BOS statistics on income levels etc.

### **Strategic Aim 3: Improved access to water supply**

The aim is to improve the access to water supply through increased implementation of new water systems and rehabilitation/ replacement of old systems that are no longer adequate for the service areas. The increased implementation rates will necessitate performance improvements in the DRWS and improved cooperation in planning with the Local Government Authorities to ensure that the projects are planned and implemented according to the 'Project Life Cycle' to enhance the sustainability of the systems.

## **1.19.4 Summary of activities and indicators**

### **1.19.4.1 Activities**

#### **Strategic Aim 1: Improved functionality rate**

The activities to improve the management, operation and maintenance of rural water systems will include capacity building of the Community Councils as the owners of the water systems and the Village Water and Health Committees as the day to day managers of the systems.

Consultations will take place between the Ministry of Local Government, the Local Councils and DRWS on the establishing a clear understanding and consensus on the roles and responsibilities of the Local Government Authorities vis-a-vis DRWS. The 'After Care Strategy' calls for a transparent process of allocating the subsidies for major repairs through applications from the CCs/ VWHCs and approval by the District Council of the allocation. These procedures will be operationalised taking into account the implementation of the Water Policy aims for free basic water.

The improved data available from the completion of the data collection on all the existing water systems (focus area 2) will enable the Department to target the funding of major repairs and support to the water committees to address the courses of non-functioning systems.

#### **Strategic Aim 2: Improved data and planning**

The activities for improving the data management and planning systems will include the completion of the African Water Facility supported project for establishing the GIS for the rural water systems and improving the planning systems. The project includes capacity building and establishment of GIS planning tools in all the district offices. The GIS tools will also be used for the survey and design of new water systems, and thereby ensuring that the data bases are updated whenever new water systems are implemented.

The GIS will be established in close coordination with the BOS to ensure that available socio-economic data will be included for improving the planning of water systems.

The improved data systems in DRWS will be coordinated with the development and operationalisation of the water sector information system under the CoW's office and the activities for improving the M&E in the water sector in general.

#### **Strategic Aim 3: Improved access to water supply**

The improved access to water supply will be achieved through the implementation of the ongoing MCC project and through increased implementation activities supported by funding from the GOL and the Irish Aid.

The assessment of investment requirements from the Strategic Financial Planning done by the CoW's office indicate that the rural water sector needs to increase its activities in order to reach the MDGs and eventually the Vision 2020 targets of full coverage.

The increased implementation will required performance improvements in the DRWS. These will be achieved through enhanced management follow-up and targeted capacity building and refresher training of the DRWS staff when needed.

The in-house capacity for design and supervision will, when required according to the work plan, be supplemented with using private sector consultants for specific larger projects or area interventions.

It is anticipated that in the future DRWS will utilise streams and simple treatment plants to satisfy the water demand in more densely populated areas. The first of such schemes is under implementation in the Pitseng area in Leribe District serving approximately 20,000 people.

The bulk water systems planned for the lowland areas of Lesotho will cover some of the rural settlements with populations over 2,500.

The combined effort of providing clean water, sanitation facilities and hygiene education is important for the health of the rural population.

#### **1.19.4.2 Indicators**

The indicators for measuring progress during the planning period from April 2010 to March 2012 within the three priority areas and the targets are:

##### **Strategic Aim 1: Improved functionality rate**

1. Baseline for functionality per water system/ CC/ district established by end March 2011
2. Functionality rate improved by a national average of 5% by March 2012 compared to the 2011 baseline

##### **Strategic Aim 2: Improved data and planning**

1. GIS and improved data system operational in all districts by March 2011
2. Consistent quarterly reporting on project implementation and functionality during the 2011/12 Financial Year

##### **Strategic Aim 3: Improved access to water supply**

1. 77 new or rehabilitated water supplies implemented by March 2011 serving 38,000 persons
2. 100 new or rehabilitated water supplies implemented by March 2012 serving 53,000 persons

#### **1.19.5 Costing of activities**

##### **Functionality Rate**

The DRWS will implement capacity building activities for the community councils and the water committees in order to improve the functionality rate. A preliminary budget of M 2 million has been allocated for this for the two year period.

##### **Data and Planning**

DRWS is implementing the improved planning framework project with funding from the African Water Facility that includes establishing a GIS covering all the rural water systems. The project is ongoing and it is anticipated that there will be some funding shortfall in relation to the GIS software and the GPS equipment needed to complete the study. The GIS is vital for improving the monitoring and evaluation system for rural water and sanitation and a provisional sum of M 1 million is allocated to ensure that the project can be completed.

## Improved access

The ongoing programmes for improving access to water supply are funded through the GOL capital budgets as well as funding from Irish Aid and MCC. DRWS has been piloting area based approaches to larger water schemes where the local water sources are not sustainable. An additional M 50 million are allocated to the implementation of a similar approach in the Tsikoane areas in Leribe district in conjunction with the lowlands water supply scheme for Zone 2&3.

**Table 13: Priority Area II Budget for new activities**

<b>Budget for April 2010 - March 2012 per Priority Area</b>		<b>Additional activities</b>	<b>Budget Add act</b>
<b>2</b>	<b>Rural Water Supply</b>		
2.1	Improved Functionality Rate	CC Cap Building	2.00
2.2	Improved Data and Planning	Equip + Software	1.00
2.3	Improved Access to Water Supply	Area Projects	50.00

### 1.19.6 Financing and Investment planning for 2010 to 2012

The total funding requirements for priority area II is shown in Table 14. The funding will come from the GOL capital budget as well as from Irish Aid and MCC.

**Table 14: Priority Areas II Financing Plan**

<b>Budget for April 2010 - March 2012 per Priority Area</b>		<b>Required Budget</b>	<b>GOL Recurrent</b>	<b>Capital (GOL + Grants + Loans)</b>	<b>Funding Gap</b>
<b>2</b>	<b>Rural Water Supply</b>	<b>321.40</b>	<b>46.90</b>	<b>221.50</b>	<b>53.00</b>
2.1	Improved Functionality Rate	29.29	14.07	13.23	2.00
2.2	Improved Data and Planning	8.69	4.69	3.00	1.00
2.3	Improved Access to Water Supply	283.41	28.14	205.28	50.00

## **1.20 Priority Area III: Sanitation Services**

### **1.20.1 Policy Objectives**

The key field of action in the water sector is expanding and safeguarding access to domestic sanitation services in rural and urban areas including sewerage in urban areas.

**Objective 1:** To accelerate delivery of water and sanitation services to all Basotho in line with national development;

The delivery of sanitation services will be accelerated by increasing the rate of support to on-site sanitation in rural areas and implementation of the ongoing programmes for urban sewerage that includes piloting approaches for improving the affordability of connections to the sewerage systems. The development of a comprehensive sanitation strategy for rural and urban areas will be initiated in the planning period.

The sanitation activities also address some aspects of Policy statement 3: Water and Environment: ‘Protect and conserve water resources and minimize the adverse impacts of socio-economic development activities in water’, however the focus during the planning period will be on sanitation services.

The Nation relies on a sustained access to basic sanitation and on treatment of wastewater to maintain public health and environmental protection. To help better improve and secure public and environmental health, the Water Sector will work to ensure the continuity of provision and expansion of both drinking-water, basic sanitation and wastewater services. High investment costs associated with provision of sewerage and subsidising on-site sanitation services for the poor households, especially in urban wastewater management, can only be met through external financing. In urban areas, such investments include the development, expansion and upgrading of sanitation and wastewater management systems.

The Strategies in the Water Policy – Policy Statement 2 Water and Sanitation, specifically relevant for sanitation and sewerage services for the 2-year planning period in terms of improving access to services are:

- a) Reconstitute water committees as a mechanism for sustainable service
- b) Empower district and community councils in the effective implementation of water supply and sanitation programmes, including the development of all relevant by-laws;
- e) Develop and implement principles and guidelines for various forms of Public-Private Partnerships to facilitate sustainable provision of adequate water supply and sanitation services to rural, peri-urban and urban areas;
- g) Develop and implement programmes aimed at creating public awareness on linkages between water supply, sanitation, health and hygiene;
- o) Introduce systems for monitoring and evaluating the performance of water supply and sanitation systems at community level.

The aspects of domestic sanitation services that are addressed in this Interim Strategy are focussing on the disposal of human excreta and exclude other environmental sanitation aspects such as solid waste management, hazardous waste management, drainage as well as hygiene aspects such as workplace and public area hygiene that are addressed by the environmental sanitation activities under the Ministry of Health.

## 1.20.2 Current situation and challenges

Figure 14: Sanitation in Urban Areas

### 1.20.2.1 Sanitation in Urban Areas

About 1,500 of WASA's domestic customers and 1,000 of the industrial, commercial, government and other customers are connected to a sewerage system. The households that are not connected to the sewerage systems have on-site facilities predominantly pit latrines (81%) as illustrated on Figure 7. The proportion shown under 'water borne' includes households connected to WASA's sewerage systems as well as households with septic tanks.

The on-site sanitation facilities are characterised as:

- i) Pit Latrines (simple pit latrine without vent pipe and not necessarily a concrete slab covering the pit
- ii) Ventilated Improved Pit (VIP) Latrines that are pit latrines with a ventilation pipe and concrete cover over the pit ensuring hygienic conditions and restricting the access for flies
- iii) Septic tanks are consisting of water closets draining to a septic tank for biological degradation of the faecal matter. In some cases the effluent from the septic tank is drained into an underground stone filled soak away, in other cases the effluent is collected by sewerage trucks.

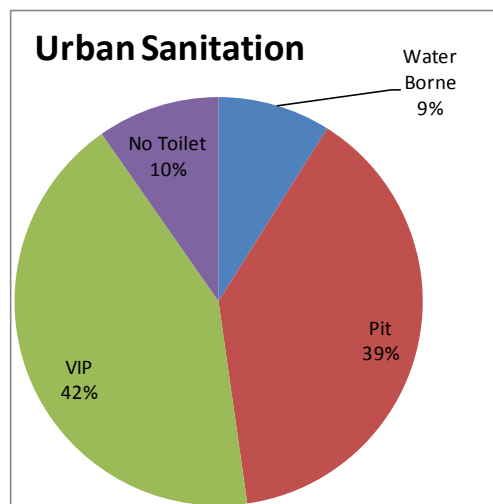
WASA serves those consumers who are not connected to a sewerage system by collecting the deposits in septic tanks, conservancy tanks and pit latrines, and dispose and treat the bio-solids for approximately 5,000 registered customers in the urban centres.

WASA operates sewage collection systems and treatment plants in most of the urban centres. Only Peka, Semonkong and Qacha's Nek does not have sewerage systems. The sewerage systems typically serve the commercial centres of the towns and have little domestic coverage. Only 10% of the sewerage discharge billed by WASA is from domestic sources. The use of coverage (the proportion of the population served for domestic purposes) as a measure for sewerage services is therefore not always appropriate.

The effluent from industries in Maseru does not all enter the WASA sewerage system. The water supplied to industries is approximately 11,000 m<sup>3</sup>/day while the sewerage volume billed from the industries is only 1,200 m<sup>3</sup>/day or 10% of the water consumption. Portions of the industrial discharge that does not enter WASA's system is treated on site by the industries but a large proportion flows untreated into the water courses.

The very low coverage for domestic sewerage and the small proportion of industrial discharge in Maseru that presently enters the sewerage system indicate that large investments will be needed in sewerage coverage in Maseru and the other industrial towns to reduce the environmental pollution and safeguard the water resources.

The sewerage system in Maseru includes the collection network and 10 pumping stations delivering the sewage to the Ratjomose wastewater treatment plant. The treatment includes some mechanical treatment and oxidation ponds. The design capacity of the plant is 10,000 m<sup>3</sup>/day.



<sup>7</sup> Based on the 2006 BOS population census data. The sewage system coverage of 6% of the population differ from the WASA data on number of domestic connections. This difference is likely to arise from possible errors by enumerators in classifying sewage system and septic tank technology options and from the possibility that a number of the commercial and 'other' sewerage connections in the WASA data might serve a mixture of commercial and domestic purposes.

**Figure 9: Sewerage Connections and Volumes**

WASA Supply Areas	No of Domestic Sew.Con	No of non-Domestic Sew.Con	Sewage volumes (m3/day)
B. Buthe	39	67	301
Leribe	3	4	215
Maputsoe	0	146	561
Peka	0	0	0
TY	23	3	60
Mapoteng	0	1	91
Maseru	1,268	650	9,677
Roma	3	8	660
Morija	14	9	128
Semonkong	0	0	0
Mafeteng	39	48	411
M. Hoek	4	16	68
Quthing	15	11	131
Q. Nek	0	0	0
Mokhotlong	38	16	155
T. Tseka	81	40	103
<b>Total</b>	<b>1,527</b>	<b>1,019</b>	<b>12,561</b>

The pumping stations and the mechanical and electrical equipment at Ratjomose were renovated in 2008.

In the centres outside Maseru, the sewage systems are based on oxidation ponds in consisting of anaerobic ponds and/or imhoff tanks, one facultative pond and two maturation ponds. Data on the sewerage networks, sewage flows and pond system capacities are not available, however, approximate capacities can be deduced from the sewage billing data that gives a picture of the amount of sewage entering the systems. WASA is in the process of collecting the data on the existing sewerage systems and treatment plants.

The sanitation coverage in urban areas<sup>8</sup> are shown on Table 15. The statistics are

according to analysis of the data from the 2006 population census, for sanitation coverage and according to the WASA data on connections for the sewerage coverage statistics.

**Table 15: Access to Sanitation BOS - 2006**

Urban Sanitation Coverage	Total Pop BoS	Coverage	Pop covered	Pop not covered	Pop Covered Sewerage	Sewerage Coverage
<b>Total Urban</b>	<b>471,303</b>	<b>88%</b>	<b>414,219</b>	<b>57,084</b>	<b>6,156</b>	<b>1.3%</b>
B. Buthe	26,354	86%	22,537	3,817	156	0.6%
Leribe	15,053	87%	13,074	1,979	12	0.1%
Maputsoe	40,284	90%	36,143	4,141	48	0.1%
Peka	4,698	73%	3,411	1,287	0	0.0%
TY	7,829	86%	6,710	1,119	92	1.2%
Mapoteng	18,598	73%	13,502	5,096	0	0.0%
Maseru	245,410	94%	230,026	15,384	5,072	2.1%
Roma	10,597	73%	7,693	2,904	12	0.1%
Morija	2,884	73%	2,094	790	56	1.9%
Semonkong	5,853	55%	3,216	2,637	0	0.0%
Mafeteng	30,577	92%	28,109	2,468	156	0.5%
M. Hoek	24,756	80%	19,855	4,901	16	0.1%
Quthing	12,807	80%	10,184	2,623	60	0.5%
Q. Nek	10,528	70%	7,357	3,171	0	0.0%
Mokhotlong	8,515	66%	5,656	2,859	152	1.8%
T. Tseka	6,560	71%	4,653	1,907	324	4.9%

### 1.20.2.2 Sanitation in Rural Areas

Sanitation in rural areas in terms of disposal of human waste is dominated by pit latrines as illustrated on Figure 10<sup>9</sup>. The small proportion of water borne sanitation represents the few households with septic tank systems mostly in connection with institutions in rural areas such as schools, police staff houses etc.

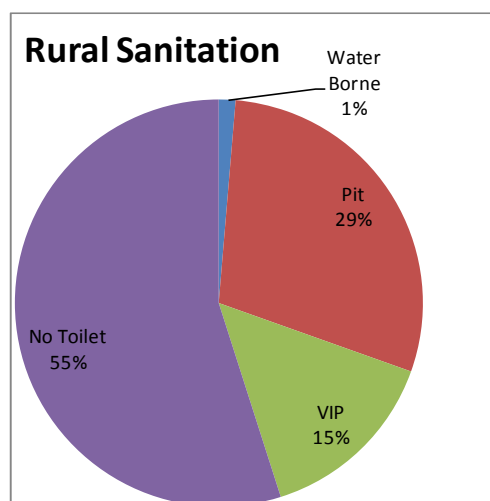
**Figure 10: Technology Use in Rural Sanitation**

<sup>8</sup> Including the rural areas served by WASA – shaded on the table. Accurate sanitation coverage estimates for these areas will be available when the village by village analysis of the census data has been completed in April 2010

<sup>9</sup> Data from BOS 2006 Pop Census

Over the last 30 years, rural sanitation activities were guided by the 1983 Sanitation Strategy that focussed on promotion and hygiene education as well as training of local masons to construct latrines for households without a subsidy.

The strategy was successful to the extent that the households that could afford latrines are now having good sanitation facilities but in order to reach the poorer portion of the population, the DRWS started in 2003 to pilot a sanitation strategy based on providing a 90% subsidy for construction of VIP Latrines. This is now implemented in all the villages where water projects are being constructed.

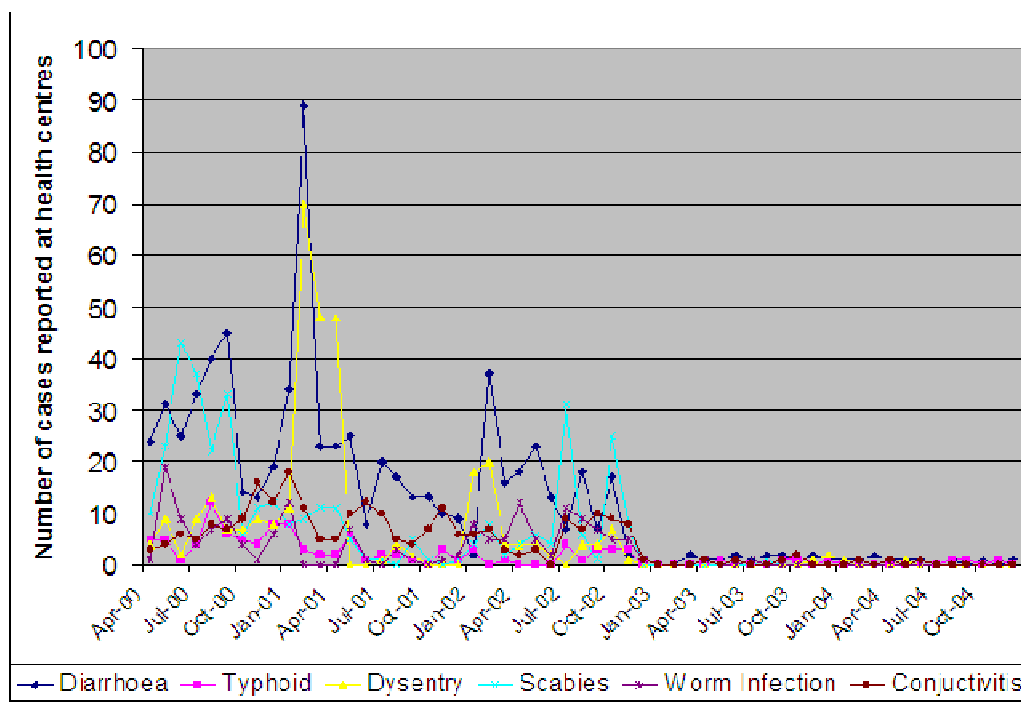


**Table 16: Number of DRWS Water Projects per year**

The number of sanitation facilities and the population served over the last 5 years are shown on Table 16. In average approximately 2500 VIP latrines were subsidised serving 12,500 people.

Year	VIP's	Population
2005/06	628	3,140
2006/07	2,362	11,810
2007/08	3,105	15,525
2008/09	3,727	18,635
2009/10	2,659	13,295

**Figure 11: Frequency of water related diseases and implementation of water supplies**



The importance of water, sanitation and hygiene education activities are illustrated on Figure 11 that shows the effect on water related diseases after the implementation of a rural water and sanitation



projects in the health area for Mantsunyane Hospital in Thaba Tseka district<sup>10</sup>. Combined with the individual benefitting from improved health, there is an economic benefit for the society at large in terms of reduced health service cost and improved productive capacity of the population.

### **1.20.3 Strategic aims for 2010 to 2012**

The Interim Strategy will focus on three issues:

- i) continuing the implementation of the ongoing sewerage expansion programmes,
- ii) continuing the support to households in rural areas for on-site sanitation; and
- iii) initiating the process of developing a comprehensive strategy for address sanitation in rural and urban areas.

The strategic aims for the planning period from April 2010 to March 2012 are:

#### **Strategic Aim 1: Sewerage expansion Programmes**

The final aim is to improve the capacity for collecting and treating and safely disposing of the sewage from domestic, industrial, commercial, institutional and other sources in Maseru and other towns with ongoing Maseru Waste Water programme and 3-Towns project.

Preparation for implementation of the third phase of Maseru Waste Water project will be ongoing during the planning period based on the Sanitation Master Plan (Strategic Aim 3). The Sanitation Master Plan will also guide other investments in sewerage in the urban areas.

#### **Strategic Aim 2: Rural Sanitation**

The final aim is to improve access to sanitation facilities in the rural areas. This will be achieved through continued support to implementation of household sanitation facilities in villages where water supply projects are ongoing. The aim is to achieve 100% coverage in these villages for both water and sanitation.

The implementation will be based on providing a subsidy for the materials and labour costs for constructing VIP latrines. The households will provide labour for digging the pits and local materials such as stone and sand and the DRWS will provide the cost of skilled labour and the materials needed for building the latrines in accordance with the practice over the last 5 years.

#### **Strategic Aim 3: Sanitation Strategy**

The aim is to develop an effective strategy for providing all Basotho with hygienic cost-efficient sanitation and to assess options for WASA to deal with the commercial and industrial sewage. The strategy will cover all aspects of sanitation and hygiene and assess different strategies such as social marketing, hygiene education methodologies as well as subsidies to reach full coverage. The cooperation between the different stakeholders: Local Government Authorities at District, Municipal and Community Council level and the Environmental Health and Health Education Divisions in the MoHSW, DoE and LNDC are key aspects of ensuring that the activities are carried out in a cost effective and efficient manner.

### **1.20.4 Summary of activities and indicators**

#### **1.20.4.1 Activities**

##### **Strategic Aim 1: Sewerage expansion Programmes**

WASA is presently with the assistance from the EU implementing improvements to the sewage system in Maseru through the refurbishment and upgrading of the Ratjomose treatment plant, and construction of a new treatment plant at the Agric college as well as rehabilitation, infilling and

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<sup>10</sup> Projects implemented in the Lesobeng, a remote mountain area. Based on data from the health statistics from clinics under the Mantsunyane hospital covering the same area as the water supply projects. Source: *Mantsunyane Water and Sanitation Supply Project*

extension of sewerage systems in the Ratjomose catchment area and installation of new sewerage systems in the Agric College catchment area.

The project also includes support to households in the construction of on-site disposal systems (VIPs) and testing approaches to improving the affordability of connecting to the sewerage systems by converting existing VIP latrines to water borne sanitation.

The 3-Towns projects provides for a new waste water treatment plant and sewer connections in Roma and for rehabilitation and expansion of the sewerage networks and treatment facilities in TY and Maputsoe.

### **Strategic Aim 2: Rural Sanitation**

The activities will focus on the continued implementation of household sanitation facilities in villages where water supply projects are ongoing. In line with the present strategy, the implementation will be based on providing a subsidy for the materials and labour costs for constructing VIP latrines. The households will provide labour for digging the pits and local materials such as stone and sand and the DRWS will provide the cost of skilled labour and the materials needed for building the latrines.

The programme is implemented by the DRWS District Teams in cooperation with the Local Government Councils and the Village Water and Health Committees. Hygiene education is provided through some cooperation with the Ministry of Health – health workers and through the Village Liaison Officers from DRWS as part of the capacity building for community management of water and sanitation activities.

### **Strategic Aim 3: Sanitation Strategy**

The activities will on completing a comprehensive sanitation strategy study/ National Sanitation Master Plan. This will be carried out by the CoW's office in cooperation with the DRWS and WASA and in close consultation with the local government councils at municipality, district and local levels.

The terms of reference which are already under preparation will cover all aspects of support to sanitation from promotion and hygiene education to subsidies for implementation and the private sector involvement.

The sanitation strategy will cover the different sanitation technologies such as sewerage and on-site facilities (septic tanks, latrines, EcoSan etc). The aspects in the sanitation strategy dealing with industrial wastewater will be based on the existing Industrial Waste Water Policy.

An important aspect will be a function analysis of the role of the different stakeholders from the Ministry of Health and the local governments vis-a-vis the water sector activities in sanitation.

#### **1.20.4.2 Indicators**

The indicators for measuring progress during the planning period from April 2010 to March 2012 within the three priority areas and the targets are:

##### **Area 1: Sewerage Expansion Programmes**

1. Wastewater treatment capacity increased by 7,000 m<sup>3</sup>/day
2. 4000 households connected to the sewerage systems in Maseru and the 3-towns
3. 7,200 households in urban areas supported in implementation of on-site facilities

##### **Area 2: Rural Sanitation**

1. 15,000 households in rural areas supported in implementation of on-site facilities and covered by hygiene education activities

##### **Area 3: Sanitation Strategy**

1. Terms of Reference agreed by all stakeholders by June 2010, Sanitation Strategy/ Master Plan Study completed by March 2012

### 1.20.5 Costing of activities

#### Urban Sewerage

The funding requirements for the urban sewerage activities are provided through the ongoing projects such as the Maseru Waste Water and the 3-Towns projects. No additional activities are suggested.

#### Rural On-site sanitation

The funding for rural sanitation is often marginalised compared to the water supply activities and in order to ensure that there is funding to achieve 100% coverage in the villages where water systems are implemented, an additional M 50 million is allocated over the 2 year planning period. This corresponds to an additional 10,000 latrines.

#### Sanitation strategy

A budget of M 2 million is allocated for carrying out the sanitation strategy/ master plan study.

**Table 17: Priority Area III Budget for new activities**

Budget for April 2010 - March 2012 per Priority Area		Additional activities	Budget Add act
3	Sanitation Services		
3.1	Urban Sewerage		
3.1	Rural On-Site Sanitation	Sanitation Focus	50.00
3.1	Sanitation Strategy	Strategy	2.00

### 1.20.6 Financing and Investment planning for 2010 to 2012

The total funding requirements for priority area II is shown in Table 18. The funding for urban sewerage will come from the EU and GOL capital budgets while the finding for rural on site sanitation will come from GOL capital budget and Irish Aid and MCC.

**Table 18: Priority Area III Financing plan**

Budget for April 2010 - March 2012 per Priority Area		Required Budget	GOL Recurrent	Capital (GOL + Grants + Loans)	Funding Gap
3	Sanitation Services	357.71	0.00	305.71	52.00
3.1	Urban Sewerage	230.96	0.00	230.96	0.00
3.1	Rural On-Site Sanitation	124.75	0.00	74.75	50.00
3.1	Sanitation Strategy	2.00	0.00	0.00	2.00

## 1.21 Priority Area IV: Institutional and Capacity Development

### 1.21.1 Policy Objectives

**Policy Statement 7:** Put in place appropriate institutional arrangements and a legislative framework for the sustainable development and management of the nation's water resources and for the supply of water and sanitation services;

**Objective 1:** To improve institutional and legal framework for implementation of the Water and Sanitation Policy;

The development of an appropriate legal institutional and administrative framework for better water resources management is relevant to all the fields of action discussed. These are supposed to strengthen implementation of environmentally sustainable, water policies and water strategies, water master plans, sectoral investment plan and reporting system, the development of water legislation and relevant by-law and implementing provisions and production and adaptation of standard and norms.

**Objective 2:** To foster clarity and separation of roles and responsibility in water resources development and management; and water and sanitation services delivery to match the needs of Basotho;

The Strategies relevant for the implementation of Policy Statement 7 in the initial 2-year period are:

- i. Strengthen policy development and monitoring;
- ii. Establish and operationalise a bulk water authority for raw water. The authority will operate and maintain large dams and reservoirs;
- iii. Establish and operationalise an independent economic and services regulator with respect to tariffs for treated water, water distribution, and bulk supply of raw water;
- iv. Provide for urban water utility, WASA to have responsibility for treatment and distribution of treated water;
- vi. Establish and operationalise asset management agency. The agency will coordinate large investments for expansion water distribution networks and other related infrastructure
- b) Where need arises, establish project implementation units (PIUs) to catalyse implementation of complex projects that require specialized expertise. In the event where PIU is needed, an oversight board, with necessary expertise for quality control, will be formed to provide policy guidance to the former;
- e) Promote involvement of other stakeholders, including local communities and the private sector (in the management of water resources and) in the provision of water supply and sanitation services;

### 1.21.2 Current situation and challenges

Lesotho Water Sanitation Policy (2007) fosters clarity and separation of roles and responsibilities in water service development and management, as well as water and service delivery to match the needs of the country. A study on institutional options has been done and recommended

- The Water and Sewerage Authority will be transformed into a public corporation – Water and Sewerage Company (WASC), which will be able to be commercially viable and self-sustaining and to operate bulk water supply schemes like the Metolong project and Lowlands Bulk Water Supply Scheme
- The regulatory reform which combines regulation of water and sanitation services, with electricity to be carried out by multi-Sector regulator.
- Asset Management Agency that will coordinate large investments for expansion of water distribution networks and other related infrastructure. The Agency will be responsible for

overall national level planning of bulk water infrastructure and will take over the roles of the Lowlands Water Supply Unit.

- Establish and operationalise a bulk water authority for raw water. The authority will operate and maintain large dams and reservoirs. The LHDA is currently the bulk water authority for the water resources in the highlands and could be contracted to also manage the catchments and reservoirs in the lowlands. Other options that could be considered would be to establish different bulk water authorities for the major dams. The less costly option might be for the DWA to develop capacity to carry out the functions of the Bulk Water Authority.

The agreed path is to separate the functions of policy setting, supervision, service delivery/operation and maintenance into different institutions or entities and create opportunities for the private sector to involve into service delivery as well as to give WASA the chance to operate as an efficient public company.

The Water and Sewerage Order of 1978 has been repealed in order to turn WASA into public private company which will enable it operate in a more commercial manner. Pursuant to this, WASA is now being transformed into a public utility company (WASC), commercially oriented and financially self-sustaining. As a public utility company, WASC should operate in accordance with business principles, in a similar manner to non-governmental companies. No major changes are expected to WASA's organizational structure, except for necessary changes in governance and adjustment of the organization to the establishment of the Water Sector Regulator.

The regulatory legislation that is to expand the existing Lesotho Electricity Authority (LEA) to the Lesotho Electricity and Water Authority (LEWA), is at an advanced stage, i.e. it has been tabled before parliament for consideration. Similar to its current task in setting standards and tariffs for the Lesotho Electricity Company it shall then perform these tasks for WASC. The tariffs charged by WASC are expected to maintain the company's financial sustainability; in other words, they should reflect cost recovery (operation and maintenance as well as company overhead) together with an allocation for future expansion.

The water policy calls for social safe guards for access to water and sanitation services. The tariff increases that are needed for the bulk water and WASA services to become self-financing are substantial, according to the findings from the Strategic Financial Planning project, in the areas of 5% annual increases above inflation over a number of years. Already now the WASA tariffs and connection fees are unaffordable for about 20% of the urban population and depending on the development in income levels this proportion of households that cannot afford the basic service level is likely to increase. In line with the water policy the threshold for affordability is 5% of household income for water and sanitation services.

The COW's office will over the two year planning period carry out a study together with WASA and DRWS to determine ways of implementing the water policy statements on social safe guards. The study will assess the different options e.g. cross-subsidisation from other water users to those who cannot afford or subsidies to the water users (or the water utility) from Government via taxes.

The impact of the institutional reforms as well as the other strategic priorities will have to be monitored. An M&E Unit was recently established within the Office of the CoW which will take on this task.

The table below presents the actions needed by the respective water sector institutions for finalisation of the strategic institutional framework and provide related activities to be performed in the next two year period (2010 to 2012). It also separate roles and responsibilities of key institutions under the MNR to clarify Policy and Implementation functions.

**Table 19: Institutional Actions**

	<b>Agency:</b>	<b>Description:</b>	<b>Action:</b>
1.	Water Commission	<ul style="list-style-type: none"> <li>• A monitoring and evaluation unit shall be capacitated to facilitate sector M&amp;E.</li> <li>• Long-term (5-year) Sector Strategy shall be developed.</li> <li>• The format and the first version of the annual State of Water Resources (SWR) Report shall be developed.</li> <li>• Recommendations to government concerning the establishment of the Bulk Water Authority and the Assets Management Agency shall be prepared.</li> </ul>	<ul style="list-style-type: none"> <li>• Assess functions and capacity needs for M&amp;E unit and related functions in DWA, WASA and DRWS. Appoint professional staff (3 people) by December 2010. Carry out capacity building programme.</li> <li>• Develop the draft Strategy by end March, 2011. Final approved strategy by March 2012.</li> <li>• Produce first SWR report in July 2010. And second report in July 2011.</li> <li>• Carry out analysis of functions of the existing institutions and the proposed Bulk Water Authority and Assets Management Agency and submit recommendation to government by December 2010</li> </ul>
2.	Department of Water Affairs	<ul style="list-style-type: none"> <li>• Hydrology will be strengthened to enable DWA to publish a hydrological yearbook annually and within four months of hydrological year (October to September)</li> </ul>	<ul style="list-style-type: none"> <li>• Assess functions and capacity needs. Appoint staff (2 people) by end September 2010. Carry out capacity building programme.</li> <li>• Produce the report by December 2010. Second report by December 2011.</li> </ul>
3.	Department of Rural Water Supply	<ul style="list-style-type: none"> <li>• Improve the DRWS management functions in particular in strategic planning and M&amp;E as well as cooperation with local government authorities.</li> </ul>	<ul style="list-style-type: none"> <li>• Appoint staff for planning and M&amp;E by March 2011.</li> <li>• Capacitate the DRWS in strategic planning and M&amp;E</li> </ul>
4.	Lowlands Water Supply Unit	<ul style="list-style-type: none"> <li>• Improve the overall infrastructure planning for water services and coordinate large investments for expansion of water distribution networks and other related infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop capacity (Human Resources) and tools for planning by March 2011</li> </ul>
5.	Lesotho Highlands Development Authority	<ul style="list-style-type: none"> <li>• Implement Phase II of LHWP.</li> </ul>	<ul style="list-style-type: none"> <li>• Create a Project Management Unit for the Phase II by end March 2012.</li> </ul>
6.	Multi-Sector Regulator for water and electricity	<ul style="list-style-type: none"> <li>• Amendment to the Lesotho Electricity Act for Creation of Multi-Sector Regulator. The Cabinet has already approved the change.</li> </ul>	<ul style="list-style-type: none"> <li>• Parliament amends the Lesotho Electricity Act to the Lesotho Electricity and Water Act by end July 2010. The Bill is already in Parliament for enactment.</li> </ul>
7.	Metolong Project Implementation Unit	<ul style="list-style-type: none"> <li>• Metolong Project Implementation Unit established as a legal entity.</li> </ul>	<ul style="list-style-type: none"> <li>• Parliament enacts 'Metolong Authority Bill' by end July 2010 to formally create the Authority.</li> </ul>
8.	WASA/ Water and Sewerage Company	<ul style="list-style-type: none"> <li>• WASA shall be transformed into a Water and Sewerage Company (WASC) and Cabinet has already approved the change. Multi-Sector Regulator shall regulate it.</li> </ul>	<ul style="list-style-type: none"> <li>• Pass Vesting Bill that is already in Parliament for enactment into Act to create a WASC by end July 2010.</li> </ul>
9.	Asset Management Agency	<ul style="list-style-type: none"> <li>• Create an Asset Management Agency by Cabinet Memorandum.</li> </ul>	<ul style="list-style-type: none"> <li>• The Lesotho Government Cabinet approves creation by end March 2011.</li> </ul>
10.	Bulk Water Authority	<ul style="list-style-type: none"> <li>• Create a Bulk Water Authority by Cabinet Memorandum.</li> </ul>	<ul style="list-style-type: none"> <li>• Lesotho Government Cabinet approves creation by end March 2011.</li> </ul>

### 1.21.3 Strategic aims for 2010 to 2012

The Interim Strategy will focus on five issues:

- i) operationalising the institutional reforms for water services;
- ii) improving the M&E in the water sector;
- iii) developing an implementation plan for providing free basic water for vulnerable households in line with the policy; and
- iv) improving national planning for water services.
- v) developing a 5-year strategy for the water sector

The strategic aims for the planning period from April 2010 to March 2012 are:

#### **Strategic Aim 1: Institutional Reforms**

The final aim is to fully operationalise the institutional reforms for water and sanitation services. The water sector regulator will be combined with the electricity regulator in a new authority the Lesotho Electricity and Water Authority. The institutional responsibilities for Assets Management and Bulk Water Operations will be clarified and the appropriate institutions established by Cabinet Memorandum.

WASA will be established as a company that will be expected to operate on a self sustaining basis.

#### **Strategic Aim 2: Improving M&E**

The final aim is to improve the M&E for the water sector. This will include the full operationalisation of the M&E unit in CoW's office as well as capacitating the M&E functions in DWA, DRWS and WASA to arrive at effective M&E at all levels of the sector.

The detailed M&E functions will be analysed further to arrive at an effective M&E system with clearly identified roles and responsibilities of the different water sector actors. The Terms of Reference for the function analysis has been prepared.

#### **Strategic Aim 3: Free Basic Water**

The final aim is to operationalise the water policy on free basic water. The outcomes will include i) Definition and data on vulnerable households (BOS); ii) Strategy for implementing free basic water for urban water services including connections, water tariffs and who pays (taxes or tariffs) and iii) Strategy for implementing free basic water for rural water services including the institutional and budget responsibilities.

#### **Strategic Aim 4: National Water Service Planning**

The final aim is to improve national water services planning to ensure rational and effective coordination between the water sector actors in bulk water supply, urban water services and rural water services.

The Lowlands Unit will initially develop the coordination mechanisms and tools for improved planning e.g. continued development of the sector modelling tools for investment planning developed as part of the Strategic Financial Planning Projects and GIS for the water sector. The capacity development in national level planning will be done in parallel with the studies for determining the future responsibilities for overall national water services planning, i.e. the detailed institutional study for determining the functions of the proposed Bulk Water Authority and the Assets Management Agency versus the responsibilities of the CoW's office in overall national planning and the future functions of the Lowlands Water Supply Unit.

#### **Strategic Aim 5: 5-Year WS Strategy Formulation**

The aim is to document a clear strategy to guide the water and sanitation sector in the 5 year period from April 2012 to March 2017.

## **1.21.4 Summary of activities and indicators**

### **1.21.4.1 Activities**

#### **Strategic Aim 1: Institutional Reforms**

The activities will focus on the completing the legal and regulatory framework for the water and sanitation services institutions. A detailed study will be carried out of functions of the existing water sector institutions versus the proposed institutions such as the LEWA, the Bulk Water Authority and the Assets Management Agency. The study will analyse in detail the functions of the CoW's office, the PPSU and the Lowlands Water Supply Unit.

Based on the results of the study and consultations with stakeholders, recommendations will be provided to GoL for the Cabinet to take decisions on completion of the institutional reforms.

The function analysis study will include the development of a capacity building plan that will form input into the 5-year strategy for the water and sanitation sector.

#### **Strategic Aim 2: Improving M&E**

The activities will focus on the capacity building of the M&E unit in CoW's office and the M&E functions in DWA, DRWS and WASA.

A Terms of Reference has been prepared for analysis of the M&E functions and defining the capacity building activities for fully operationalising the M&E functions. The study will be carried out during the first year for the budgets for capacity building and the M&E functions to be included in subsequent annual budgets.

#### **Strategic Aim 3: Free Basic Water**

The activities will focus on developing a sustainable approach in urban and rural areas for operationalising the water policy on free basic water.

The activities will include definition and data on vulnerable households; development of a strategy for implementing free basic water for urban water services including connections, water tariffs and who pays (taxes or tariffs); and development of a strategy for implementing free basic water for rural water services including the institutional and budget responsibilities.

The activities will also include the preparation of implementation guidelines for operationalising the free basic water in rural and urban areas including monitoring and evaluation plan.

The M&E system will in the longer-term focus on providing accurate and consistent data on the key sector indicators as described in Chapter 5. During the Interim Strategy Period until better data are available for assessing sector performance the M&E system will provide data on:

1. The overall indicators from BOS specified in Table 6 used for overall monitoring of the sector progress during the Interim Strategy Period
2. The detailed indicators specified in the respective chapter above and below for assessing the detailed progress on the strategic aims in implementation of this Interim Strategy. These indicators will be used internally in the sector for performance management.

#### **Strategic Aim 4: National Water Service Planning**

The activities will focus on the institutional arrangements that are needed for improving the national water services planning and capacity building.

Initially the focus will be on the Lowlands Water Supply Unit under the CoW since the overall planning activities have until now been carried out in this unit. Depending on the results of the function analysis for the new institutions in the water sector, the capacity building activities will focus on the appropriate institutions with the long-term responsibility for overall national level planning of water and sanitation services.



The activities will concentrate on developing the coordination mechanisms and tools for improved planning such as continued development of the sector modelling tools for investment planning and GIS for the water sector. The DRWS and WASA are developing GIS for the sub-sectors and based on these planning tools, combined national planning tools for water and sanitation services will be developed.

The capacity development in national level planning will be done in parallel with the studies for determining the future responsibilities for overall national water services planning, i.e. the detailed institutional study for determining the functions of the proposed Bulk Water Authority and the Assets Management Agency versus the responsibilities of the COW's office in overall national planning and the future functions of the Lowlands Water Supply Unit.

#### **Strategic Aim 5: Develop 5-Year Water and Sanitation Strategy**

The 5-year strategy will be developed by the CoW's Office in close cooperation with sector stakeholders. A process consultant will be engaged to advice on the process.

The activities will start immediately by developing the Terms of Reference for the process consultant. The Terms of Reference will include the road map for the development of the strategy and clearly define the time frame, plans for consultations and presentations and the deadline for the strategy.

The draft strategy shall be ready by March 2011 so that the strategy can contribute to the process of defining the sector budget requirements and the inputs need from the Development Partners after the completion of the interim strategy period in March 2012

#### **1.21.4.2 Indicators**

The indicators for measuring progress during the planning period from April 2010 to March 2012 within the four priority areas and the targets are:

#### **Strategic Aim 1: Institutional Reforms**

1. Lesotho Electricity and Water Authority legally established by July 2010.
2. The institutional study completed by December 2010.
3. The proposed institutions (Bulk Water Authority and Assets Management Agency) established by Cabinet memorandum by March 2011.

#### **Strategic Aim 2: Improving M&E**

1. Baseline data on key sector indicators available in April 2011 providing the baseline for future sector performance monitoring
2. Data on key sector indicators available in April 2012 proving the progress compared to the 2011 baseline

#### **Strategic Aim 3: Free Basic Water**

1. Operational guidelines for implementing social safeguards in water and sanitation available by March 2011

#### **Strategic Aim 4: National Water Service Planning**

1. Consensus on the institutional responsibilities for national water services planning by March 2011

#### **Strategic Aim 5: Develop 5-year Water and Sanitation Strategy**

1. Draft 5-year strategy developed by March 2011
2. Final 5-year strategy approved by MNR by April 2012

### 1.21.5 Costing of activities

#### Institutional Reform

The funding for the institutional assessments needed to implement the institutional reforms will come from the ongoing programmes in the sector funded by GOL and the Water Sector Improvements Project.

#### Improving M&E

The funding for the assessments needed to implement the M&E activities will come from the ongoing programmes in the sector funded by GOL and the Water Sector Improvements Project.

#### Free Basic Water

The financial and human resources needed to carry out the activities envisaged for preparing the operational guidelines for implementation of the policy of free basic water are:

1 person months of COW's Office professional input and 1 person months of consultancy input for providing definitions and data on vulnerable households + cost for Bureau of Statistics of providing data if the requirements are in addition to the Bureau's normal surveys

2 person month of COW's Office and WASA professional input and 4 person months of consultancy input for analysing and documenting the options for urban water services, presenting, estimating the cost and preparing operational guidelines. Expenses for transport and workshops approximately M 50,000.

2 person month of COW's Office and DRWS professional input and 4 person months of consultancy input for analysing and documenting the options, presenting, estimating the cost and preparing operational guidelines for rural water services. Expenses for transport and workshops approximately M 50,000.

In total a budget of M 1 million is allocated for preparing the operational guidelines for free basic water.

#### National Water Services planning

A budget of M 250,000 is allocated for the development of GIS tools and capacity building in overall planning for water services

#### 5-year strategy

A budget of M 700,000 is allocated for the workshops and process consultant for preparing the 5-year strategy.

**Table 20: Priority Area V Budget for new activities**

Budget for April 2010 - March 2012 per Priority Area		Additional activities	Budget Add act
<b>4</b>	<b>Institutinal and Capacity Development</b>		
4.1	Institutional Reform	Inst Study	
4.2	Improving M&E	M&E Cap dev	
4.3	Free Basic Water	Free basic water study	1.00
4.4	National Water Service Planning	Cap Dev and tools	0.25
4.5	Develop 5-year WS Strategy	Strategy Dev	0.70

### 1.21.6 Financing and Investment planning for 2010 to 2012

The total funding requirements for priority area IV is shown in Table 21. The funding will come from the ongoing programmes by GOL and the Water Sector Improvement Project. Additional funding is needed for the free basic water study, the capacity building in planning and development of the 5-year strategy.

**Table 21: Priority Area V Financing Plan**

<b>Budget for April 2010 - March 2012 per Priority Area</b>		<b>Required Budget</b>	<b>GOL Recurrent</b>	<b>Capital (GOL + Grants + Loans)</b>	<b>Funding Gap</b>
<b>4</b>	<b>Institutinal and Capacity Development</b>	<b>31.88</b>	<b>0.00</b>	<b>29.93</b>	<b>1.95</b>
4.1	Institutional Reform	11.97	0.00	11.97	0.00
4.2	Improving M&E	8.98	0.00	8.98	0.00
4.3	Free Basic Water	1.00	0.00	0.00	1.00
4.4	National Water Service Planning	9.23	0.00	8.98	0.25
4.5	Develop 5-year WS Strategy	0.70	0.00	0.00	0.70

## MONITORING, EVALUATION AND REPORTING

### 1.22 Performance Assessment Framework

#### 1.22.1 Introduction to Performance Assessment Framework

Lack of information impedes the sector planning and management process. Admittedly, water master plans have been developed occasionally, often with donor financing, but they are not integrated into systematic data collection and evaluation. The monitoring of water quantity and quality often only takes place within individual projects and the same applies to the collection of information about access to water in the settlement areas of the poor. As a result, measures are often being developed and adapted on the basis of inadequate data.

For that reason, greater priority has been given over the last year to developing the Performance Assessment Framework (PAF) to provide the systematic reporting, collection and development of data that will populate the newly established management system – Lesotho Water Sector Management Information System (LWSMIS).

The PAF consists of the definition of a few Key Sector Indicators (KSIs) that will be used for describing the sector performance. The KSIs must have clearly defined performance measures for the water sector institutions and the BOS to be able to provide consistent data from year to year.

Chapter 5.1.2 describes some of the present challenges in providing accurate data on access to water and sanitation services and the subsequent chapters provide the description of the KSIs that have been agreed in a consultative process during 2009.

#### 1.22.2 Population and coverage issues

**Table 22: Population Growth 1996 - 2006**

The preliminary results of the 2006 population census showed that there were considerable variations between the population data in the rural water DIS and the official population statistics. The WASA Financial Model does not include projections of population in the WASA service areas.

The analysis of the census population data is in particular important since the 2006 census data shows that the population in Lesotho remained at approximately 1.8 million people as compared to earlier population projections based on the previous census indicating approximately 2.3 million people. In total the annual population growth has been only 0.21% between 1996 and 2006. Rural-urban migration is still prevalent and the urban population has been increasing with 3.67% while in general, the population in rural villages especially in the lowlands has decreased. There have been slight increases in the rural population in the mountains<sup>11</sup>

Average Annual Population Growth 1996-2006	
Lesotho total	+0.21%
Urban areas total	+3.67%
Rural areas total	-0.65%
Lowlands	-0.75%
Foothills	-0.27%
Mountains	+0.46%
Senqu River Valley	-0.34%

**Rural water and sanitation:** The DRWS information system, the DIS has fairly accurate data on all the existing water systems (design population, capacity m<sup>3</sup>/day, no of public standpipes etc.), however the population data in the DIS are grossly overestimated compared to the 2006 census data. Data are not available on un-served communities where planning and feasibility studies have not been carried out. Data on sanitation is only available on the latrines that have been implemented with subsidy from DRWS.

The African Water Facility (AWF) Project on the improving the planning framework for rural water will carry out the data collection that is needed to verify and complement the rural water and

<sup>11</sup> The difference in population development in the highlands and lowlands is consistent with the data on HIV prevalence: 21% in the highlands and 25% in the lowlands and likely more rural-urban migration in the lowland rural areas close to the urban centers with industrial development

sanitation data. The process of starting the project has been prolonged and the contract with the consultant supporting the project was only signed in November 2009.

**Urban water and sanitation:** WASA has good data on the existing water and sewerage connections, consumption and production. Data on the existing networks and production facilities are not easily available. More information is needed on the WASA customers e.g. the number of persons served by domestic and other types of connections.

Data on assets that are important for estimating replacement investments are not available. The valuation of WASA assets in 2006 did not include the most important assets, the pipe networks. The assets values used in the financing model and the annual accounts are based on adding new investments to the previous year's data and do thus not reflect the present replacement costs. The WASA accounts and inventory therefore need to be improved in order to evaluate performance against the Water Policy's aim of full cost recovery.

### 1.22.3 Key Sector Indicators

The sector has<sup>12</sup> developed and agreed on four selected indicators representing priority performance areas for the purpose of the Interim Strategy and the Sector Budget Support. Other performance indicators (see Section 5.2) will be addressed and developed as part of the five year sector strategy.

The four indicators are:

1. Access to rural water supply
2. Access to urban water supply
3. Access to rural sanitation
4. Access to urban sanitation

Each of the Lesotho's 10 districts are divided into rural and urban areas which according to BOS are defined by Land Survey and Physical Planning. BOS uses these same definitions in planning and undertaking its surveys.

Ideally the baselines as summarised below from the Continuous Multipurpose Survey (CMS) should be used by the sector for annual monitoring. The CMS is sample survey in rural and urban areas carried out on quarterly basis and focus on different modules each quarter. The water and sanitation module is applied once per year and includes detailed indicators as a result of the ongoing five year BOS/Millennium Challenge Account (MCA) arrangement to monitor in detail the water and sanitation situation.

A draft report was made available in March 2010 as a result of the survey carried out in the second quarter of 2009/10. The methodology used by BOS is a representative sample survey representing 6,840 urban and rural households covering all the different agro-ecological zones. The survey results reflect household use of main source for drinking water as well as household use of type of toilet. The results represent household statements related to their use of water sources and types of toilets – thus survey results present an impact on households of all sector and private investments in water and sanitation infrastructure.

An agreement between CoW and BOS for annual update of baselines is under consideration; however this will be fully coordinated with the above mentioned BOS/MCA arrangement where the final report<sup>13</sup> for second quarter of 2009 will be presented by end of March 2010.

The four performance areas with indicators and their definitions as well as their baseline values 2009 are shown in Table 23. For the performance areas of access to rural and urban water supply, the indicator used is the overall proportion of households which use piped water and boreholes with hand-

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<sup>12</sup> Through two Performance Assessment Framework workshops (PAF) in 2009 and 2010

<sup>13</sup> The final report will in addition to proportions include household numbers. Furthermore the final report includes the definitions of sewage, VIP and pit latrines. There is no specific water quality standard related to rural piped water.

pumps as their main source of drinking water. In rural areas therefore, households supplied and from protected spring catchments are not included.

In the final CMS report this baseline will be combined with information on those households using as a minimum of 25 litres<sup>14</sup> of water/ per person/ per day and the time for water collection. Furthermore the survey result includes baselines combining water by different sources with number of service hours, restrictions on water amount and with treatment practices.

**Table 23 – Key Performance Indicators**

<b>Performance Area</b>	<b>Indicator &amp; definition</b>	<b>Baseline*</b>	<b>Target 2011</b>	<b>Target 2012</b>
Access to rural water supply	Proportion of rural households using piped water and public borehole as their main source of drinking water	<b>63.6%</b>	<b>66.5%</b>	<b>70.5%</b>
Access to urban water supply	Proportion of urban households using piped water as their main source of drinking water	<b>56.8%</b>	<b>61%</b>	<b>66.3%</b>
Access to rural sanitation	Proportion of rural households using in their place of residence a sewage system, septic tank, own VIP or own pit latrine	<b>53.1%</b>	<b>55.4%</b>	<b>58.8</b>
Access to urban sanitation	Proportion of urban households using in their place of residence) sewage system, septic tank, own VIP or own pit latrine	<b>77.8%</b>	<b>79.9%</b>	<b>82%</b>

Currently BOS is collecting data for the fourth quarter of 2009/10 for which data collection takes place during March-May 2010 and data processing and reporting June-August 2010. Thus a 2010 update of the above baseline can be expected by September 2010.

For pit latrines enumerators have included all households with a pit latrine disregarded the design standard. Thus a suggested improvement would be to train enumerators in identifying only those pit latrines which are designed in accordance with the hygienic standards.

These indicators as available from the BOS will be used in parallel with the indicators for monitoring the progress in the specific sector performance as specified in Table 6. The specific indicators described for the respective priority areas in Chapter 4 represent the efforts of the water sector and this will be compared to the BOS data on progress in coverage figures for water and sanitation.

#### **1.22.4 Other sector indicators**

In addition to the PAF sector indicators, the main stakeholders of the sector including WASA, DRWS and DWA should, assisted by the M&E Unit under CoW's office monitor performance of their main policy objectives through the selection of outcome or output indicators.

The kind of indicators which are already being considered but needs to be fully developed as part of the preparation of the five year sector strategy are shown below:

<sup>14</sup> The 25 l per person per day will be changed to 30 l to be consistent with the standards set in the water policy

**Table 24: Sector Indicators**

Performance area	Definition of indicator	Status	Main responsible
1. Technical coverage for water supply	Proportion of rural and urban households which are covered: Improved water source <sup>15</sup> available within 150m (assumed to be equivalent to 15 minutes collection time) providing a minimum of 30 l/ person/ day safe water at an affordable <sup>16</sup> cost.	<b>Rural:</b> Present coverage with water systems is 60% based on the data in the DIS. This figure will be updated with more accurate data at the completion of the AWF supported project on establishing a GIS for the rural water systems. <b>Urban:</b> coverage is 56% based on the WASA data on connections <sup>17</sup> .	WASA for urban water supply- DRWS for rural water supply
2. Technical coverage of urban sewerage	Proportion of urban households connected to a functioning sewerage system	Presently 1.4% of urban households connected to WASA sewerage systems	WASA
3. Functionality	3.1 Proportion of safe water sources that are functional at the time of a given spot-check	No systematic way of measuring functionality yet – thus no reliable baseline. A 2010 baseline is expected to be available as a result of the development of the planning framework to be completed by June 2010	DRWS
4. Water quality	4.1 % of biological complying with national standards. 4.2. % of chlorine samples complying with national standards 4.3 % of effluent samples complying with national standards	Water quality data available from WASA. No water quality monitoring by DRWS	DRWS and WASA
5. Sustainability	5.1 % of un-accounted for urban water supply	Presently approximately 30%. WASA performance reports provides baseline	WASA
	5.2 Cost recovery for urban supply – Total revenue collected divided by the sum of capital, operation and maintenance costs in urban WS	WASA performance reports provide baseline	WASA
6. Sustainability of water resources	6.1 Water flow and quality measure	To be defined	DWA

In particular, the performance areas of technical coverage for water supply (1) and technical coverage of urban sewerage (2) are important to supplement the information provided through the performance areas of access to water and sanitation through the PAF.

<sup>15</sup> Improved water sources include piped systems, boreholes with hand pumps or other pumps and protected spring catchments. Rainwater harvesting provides a valuable supplementary water source however since the rainwater harvesting systems seldom provides year round supply these are not included as coverage.

<sup>16</sup> Affordability defined in accordance with the Water Policy as water and sanitation services costing a maximum of 5% of the household income.

<sup>17</sup> The main difference to the BOS coverage figure is that the technical coverage does not include households collecting water from neighbours at high cost.

## 1.23 Sector Monitoring

### 1.23.1 Monitoring and Evaluation Unit

TOR for the Monitoring and Evaluation Unit was developed in 2009 and the Unit became operational by January 2010 manned by a Chief Water Engineer and an Economist.

The objectives of the M&E Unit are through COW to provide GoL, other stakeholders and the public with updated information on:

- sector, programme and project performance and effectiveness
- progress made in the implementation of the Lesotho Water and Sanitation Policy;

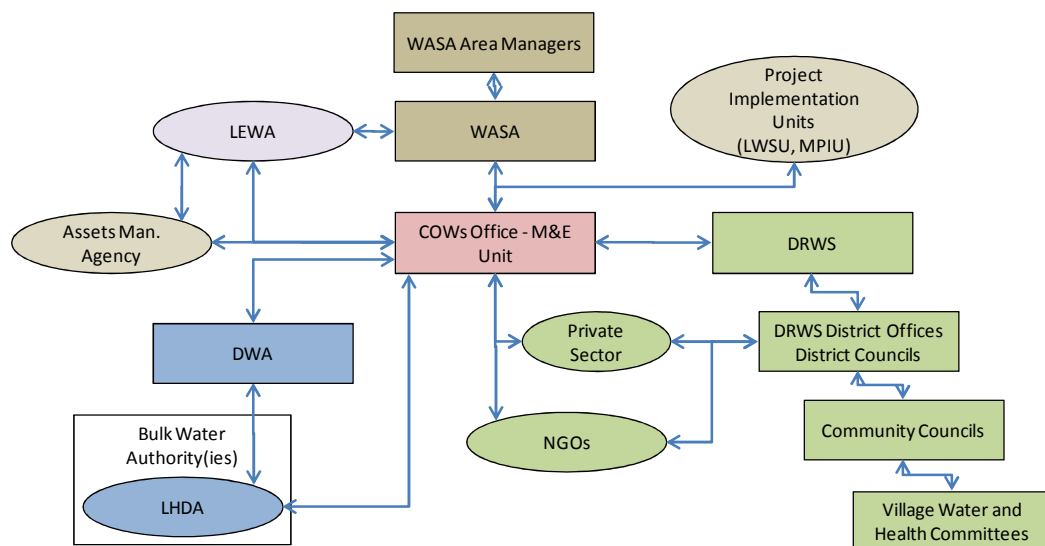
To serve as a key source of identification of:

- weakness in implementation strategies which should be adjusted to ensure effective policy implementation
- appropriate sector or sub-sector policy review

The main lines of flow of data and reporting are illustrated in Figure 12.

**Figure 12: M&E Data and Reporting lines**

**M&E - Data flow and Interfacing**



The roles and responsibilities of M&E and the main stakeholders are listed in the below table:

**Table 25: M&E Roles and Responsibilities**

Entity	Roles & responsibilities
M&E Unit in the Office of COW	<ol style="list-style-type: none"> <li>1. Support the preparation and implementation of annual M&amp;E plans for WASA, DRWS, DWA</li> <li>2. Preparation of impact analysis of specific programmes and projects, with the view to improve effectiveness and future planning of programmes and projects;</li> <li>3. Contribute to the preparation and presentation of an annual state of the water sector report, focusing on the achievement of the performance indicators, identifying possible weaknesses in policy implementation and recommending actions for more effective policy implementation;</li> <li>4. Preparation of a HR capacity and organisational assessment of primary stakeholders in M&amp;E and implementation of a subsequent training programme for key staff</li> </ol>
LWSIMS	<ol style="list-style-type: none"> <li>1. Receive data from primary stakeholders in accordance with Monitoring Guideline and submit to the M&amp;E for review and analysis</li> </ol>



Entity	Roles & responsibilities
	2. Produce data reports for the M&E based on specific requests 3. Provide information to stakeholders via the web-site
BOS	1. Carry out annual continuous multipurpose surveys with focus on the water and sanitation module, process data and submit report the M&E Unit of COW in accordance with agreement to be formalised between COW and BOS. 2. Carry out other surveys providing data on W&S coverage such as population census, agricultural census, household budget surveys etc.
DRWS	1. Prepare and implement an annual M&E plan with support from the M&E Unit of COW 2. Provide national level data on rural water and sanitation based on data from Local Government Authorities and communities
WASA	1. Prepare and implement an annual M&E plan with support from the M&E Unit of COW 2. Provide on the functioning of urban water and sewerage systems. (The data flow will be analysed in relation to the establishment of the LEWA)
DWA	1. Prepare and implement an annual M&E plan with support from the M&E Unit of COW 2. Provide data on water resources including data from the LHDA on water resources in the highlands
NMES	1. Give feed-back to M&E Unit through MNR on annual state of the sector report; 2. Submit specific requests to M&E Unit related to the monitoring of the national development plan

The outputs of the M&E Unit are as follows:

- An annual M&E plan prepared and implemented jointly with all stakeholders and in particular primary stakeholders including DRWS, WASA, DWA and BOS based on agreed indicators which reflect key policy objectives;
- Prepare impact analysis and evaluation of the performance and effectiveness of individual programmes and projects;
- A capacity building programme updated annually in M&E, targeting main stakeholders;
- Essential contribution to the annual report prepared by CoW on the state of the water and sanitation sector

Its main activities in relation to an annual M&E plan include:

- Support all primary stakeholders including DWRS, WASA and DWA in preparation and implementation of their individual M&E plans in accordance with the monitoring guidelines; harmonise to the extent possible the data formats and data collection methodology for stakeholders such as WASA, DRWS and DWA;
- Advise and support individual stakeholders in the collection and submission of data;
- Prepare a quality assurance check of all data received from stakeholders, ensure revision of required data by primary stakeholders;
- Analyse and process all data received from primary stakeholders and produce data monitoring results in close co-ordination with LWSIMS

Its main activities in relation to programmes and projects include:

- Based on progress reports from programme and projects in the sector, impact analysis will focus on issues of financial cost recovery, cost effectiveness of interventions, sustainability in terms of putting in place a system for maintenance and repair of established infrastructures as well as on institutional sustainability through community involvement;
- Provide COW with clear advice on results on impact analysis with the view to make decisions for improved strategy implementation of programmes and projects.
- Specify M&E requirements, definition of indicators etc to programmes in the water sector e.g. MCC project and Metolong Authority

Its main activities in relation to capacity building for stakeholders of the M&E system include:

- In supporting the sector stakeholders in preparing and implementing an M&E plan, the M&E Unit should identify and assess the HR capacity and organisational constraints faced by the primary stakeholders; for stakeholders such as WASA, DRWS and DWA the most appropriate institutional set-up of their respective M&E units should be assessed and in particular the synergies with their planning departments should be fully utilised;
- Based on above capacity constraints, identify and organize required M&E training, primarily in SA such as for example through DWAF and its ongoing water sector programme; this activity should be carried in close coordination with NMES as well as with the HR department of MNR

Its main activities in relation to the annual report on the state of water and sanitation sector include:

- Based on analysed and processed data from primary stakeholders, contribute to the preparation of an annual report for the water and sanitation sector focussing on the achievement of performance indicators reflecting key policy objectives;
- In addition to a quantitative section, the annual report should analyse the performance of the sector and identify the possible weaknesses in policy implementation and come up with the recommendations for how to ensure a more effective policy implementation;
- The annual report should be presented by CoW to the sector in a conference and subsequently be made available to the public through the website of the Lesotho National Water Sector Information Management System.

### **1.23.2 Monitoring Guidelines**

A water sector Monitoring Guidelines is about to be finalised (March 2010) in accordance with the overall structure and concepts as outlined in National Monitoring and Evaluation Guidelines (Ministry of Finance and Development Planning, December 2009). The Monitoring Guidelines set out the elements of the M&E plan requested by all main stakeholders of the sector. They should subsequently be endorsed by the stakeholders in question in order to agree on the reporting obligations. These elements include:

- Stakeholder analysis with regards to their capacity and planned resources for M&E
- M&E conditions and capacities
- Monitoring indicators for the stakeholders which are those monitoring indicators that stakeholders should prepare to measure their performance in accordance with their main policy objectives
- M&E matrix presenting the selected indicators, baseline, targets, data sources, monitoring frequency and overall responsibility for preparation of indicators
- M&E calendar (work plan)
- M&E budget
- Data collection, validation and collation
- Data analysis, reporting and information dissemination

The Monitoring Guidelines will guide the M&E Unit and other main stakeholders in carrying out their M&E plan.

### **1.23.3 NMES**

GOL is committed through Vision 2020 to monitor the implementation of national development initiatives and to meet international reporting obligations (MDG). In 2008 The National Monitoring

and Evaluation System (NMES) was therefore established in the MoFDP and provides a framework for design, development and implementation of M&E to promote evidence based decision making and resource allocation. GoL is committed through Vision 2020 to monitor the implementation of national development

NMES plans to publish a selected number of 21 core national indicators of which indicator 14 and 15 represent social infrastructure. The indicators, the institution in charge of data collecting and processing as well as the frequency of publishing the indicator is shown below.

**Table 26: W&S Core National Indicators**

Cluster	Indicator	Responsibility	Frequency
Social infrastructure	14. Proportion of households within 1 km distance of safe water	BOS	Annually
	15. Percentage of households with improved sanitation	BOS	Annually

There is still a lack of co-ordination between NMES and BOS in terms of co-ordination of indicators and reporting of baseline values.

Clearly the NMES is highly dependent on the development of M&E skills and capacity in ministries. In December 2009 an assessment study on M&E and statistics capacity was undertaken by NMES covering both central and district levels. The main findings of the study include

- M&E is still widely not understood in the country and ministries, departments, agencies and local authorities use different systems to monitor their own performance;
- Lack of skills in data collection, processing and management-when data exists it is outdated and unreliable;
- Low level of utilization of M&E information and statistics for policy and decision making, planning, budgeting, monitoring and evaluation;

The first phase of a recommended strategy for building M&E skills will focus on eight ministries (including Ministry of Natural Resources). These ministries do have M&E Units and staff whose core function is to carry out M&E activities. During 2010-2012 the selected ministries will be strengthened and supported to monitor and report on the implementation and performance of their policies, programmes and projects.

## 1.24 Interim Strategy Evaluation

An evaluation of the Interim Strategy should be carried out at the end of the period for which it is valid i.e. by end of the financial year 2011/12. The aim of the evaluation is to assess to which extent the Interim Strategy has been implemented, and in particular whether priority areas have been properly focused and to assess whether sector targets set have been achieved.

The annual state of the sector reports 2010/11 and 2011/12 should, when properly prepared, provide an important input to the evaluation of the Interim Strategy. The annual reports address among other issues the following:

- Programme and project status including priority areas
- Status on disbursement from different funding sources and utilisation of funds for strategic priority areas
- Update of strategic sector indicators and target

Thus the conclusions and recommendations from the evaluation of the Interim Strategy are important in the continued development and implementation of the subsequent five year sector strategy.

Identified weaknesses in the implementation of the Interim Strategy should influence the subsequent five year strategy.

The evaluation of the Interim Strategy should be carried out by the M&E Unit under COW's Office.