



**MINISTRY OF NATURAL RESOURCES  
Water Commission**

**ROADMAP TO COMPLETING INTEGRATED WATER RESOURCES  
MANAGEMENT AND WATER EFFICIENCY PLANNING IN LESOTHO**



*“From Strategy to Action”*

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**UCC-Water**



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## List of Acronyms

CoW	Commissioner of Water
DRWS	Department of Rural Water Supply
DWA	Department of Water Affairs
GWP – SA	Global Water Partnership – Southern Africa
IWRM – WE	Integrated Water Resources Management and Water Efficiency
JPOI	Johannesburg Plan on Implementation
LEYWAT	Lesotho Youth Water Action Team
LWP	Lesotho Water Partnership
LWSIP	Lesotho Water Sector Improvement Project
LWSPU	Lowlands Water Supply Project Unit
MNR	Ministry of Natural Resources
PPSU	Policy, Planning and Strategies Unit
PRS	Poverty Reduction Strategy
SADC	Southern African Development Community
UCC Water	UNEP Collaborating Center on Water and Environment
WSSD	World Summit on Sustainable Development

## SUMMARY

The World Summit on Sustainable Development (WSSD) held in Johannesburg in 2002, called for countries to craft Integrated Water Resources Management (IWRM) and water efficiency plans by 2005, and called for support to be given to developing countries to meet this target. Lesotho is one of the countries that subscribed to this call by the WSSD, which was also devised as a way to meet the Millennium Development Goals (MDG's).

In the informal survey carried out by the Global Water Partnership (GWP) published in 2006, Lesotho was one of the countries that was identified as not having fully developed the IWRM /WE Plan to meet the 2005 target. It is at this stage that the UNEP Collaborating Centre for Water and Environment (UCC-Water), extended support to countries in the SADC region including Lesotho to develop a "roadmap" to the elaboration of the IWRM /WE plans in order to meet the WSSD target. This agreement was brokered by the SADC Water Division and facilitated through the Global Water Partnership- Southern Africa (GWP-SA). The Office of the Commissioner of Water (CoW) has been instrumental in supporting the development of the roadmap.

In December 2006 a fact finding mission that included a workshop on establishing the present state in adoption of IWRM. From this workshop it was established that there are some major activities going on within the Lesotho water sector aimed at adopting the IWRM/WE principles, especially within the Government of Lesotho and the World Bank supported Water Sector Improvement Project (WSIP). The information gathering showed that since the publication of the GWP survey there had been some progress that had taken place in the country towards the realisation of the IWRM /WE Plan. A follow up workshop that included presentations on the activities related to IWRM planning within the WSIP and the relation to the roadmap was undertaken in February 2007. The reports of the two (2) workshops have been issued.

Currently there has been an adoption of a Water and Sanitation Policy (February 2007), which is based on the Dublin and IWRM principles. To implement the Policy, an IWRM strategy is being developed as well as the Water Demand Management Strategy to guide Water Efficiency as well as the Drought Management Strategy.

The "roadmap" development is therefore aligned with the ongoing developments in the water sector. What remains in order to move forward is to translate the IWRM Strategy to action through an Implementation Plan. There is a need to support the ongoing activities through strengthening of institutions managing water and that are entrusted with the implementation of the IWRM

strategy. Targeted capacity building is necessary in order for the new dispensation to take effect. It is also necessary that awareness on the Policy, IWRM and ongoing reforms be raised among all sectors and on the community.

A robust monitoring and evaluation also needs to be developed to gauge the success of the implementation of the Policy and the IWRM Strategy and Action Plan.

# 1 INTRODUCTION AND BACKGROUND

In an effort to encourage a move towards more sustainable approaches to water development and management, the World Summit on Sustainable Development (WSSD) in 2002 called for all countries to craft integrated water resources management (IWRM) and water efficiency plans by 2005. Such plans are to assist countries in their efforts to meet development goals, such as reducing poverty, increasing food security, fostering economic growth, protecting ecosystems, and tackle specific water challenges, such as controlling floods, mitigating the effects of drought, expanding access to water and sanitation, and addressing increasing competition for water and water scarcity<sup>1</sup>. These plans would contribute directly to achieving most of the Millennium Development Goals (MDG's).

Lesotho is one of the countries that subscribes to the WSSD targets and by 2005 was behind in the development of the IWRM and water efficiency Plan. The informal Global Water Partnership (GWP) survey published in 2006 indicated that the process of developing the IWRM Plan in the country had started the process of IWRM planning but could be assisted to improve the process.

When the target for developing the IWRM Plans was set at the WSSD in 2002, there was also a call for support to be given to developing countries in order to meet this target. In the SADC region various cooperating partners have been involved in assisting countries to develop IWRM/WE plans. Lesotho is receiving support from the UNEP Collaborating Centre for Water and Environment (UCC-Water) through the SADC Water Division to devise a "Roadmap" to what is needed to develop and implement an IWRM Plan/WE for the country.

At the time when the support from UCC-Water came through for Lesotho, various activities are ongoing in the water sector in Lesotho aimed at improving water resources management and providing clean water and sanitation for the people. It is within the framework of the ongoing and planned activities that this roadmap is developed.

The process of developing the roadmap was initiated in Lesotho in December 2006 with a workshop that had a wide representation of stakeholders in the water sector, from government, parastatals, non-governmental organisations and the private sector. The aim of this workshop was to establish the status of the progress towards IWRM Planning in the country and map the possible direction that the Roadmap development should take. Based on the discussions and

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<sup>1</sup> GWP TEC (2004) Catalyzing Change: A handbook for developing IWRM and water efficiency strategies

recommendation of this first workshop, a follow up workshop was held in February 2007 that was held jointly with the office of the Commissioner of Water (CoW) who is developing an IWRM Strategy and related Drought Management Strategy and the Water Demand Management Strategy.

It is after these workshops that it was decided by the participants that the roadmap in Lesotho should ideally analyse the present position and map the way forward, recognising that within the stages of IWRM planning, the country has had some progress and is on the way to achieving some of the vital elements in the process.

## **2 SITUATIONAL ANALYSIS**

### ***2.1 Country Background***

Lesotho is an inland country in Southern Africa which occupies an area of about 30,350 square kilometres of the Drakensberg escarpment on the eastern rim of the Southern African Plateau at elevations ranging from about 1500 to 3480 metres above mean sea level (amsl). Geographically the country is located between 28 and 31-degree south latitudes, and 27 and 30 degree east longitudes. The country is divided into four (4) distinct physiographic regions: highlands, lowlands, foothills mountains and the Senqu Valley. The lowlands and foothills regions are the most densely populated.

Lesotho's climate is continental with four (4) distinct seasons of summer, autumn, winter and spring. 85% of the annual rainfall is received from October to April and averages 700 mm a year. The highlands regions receive the highest precipitation; with an annual average of 1200 mm a year while the Senqu River Valley receives the least precipitation with an annual average of 500 mm.

The country has three (3) major river basins: the Mohokare, Makhaleng and the Senqu Rivers. The Mean Annual Runoff (MAR) of these three catchments has been quantified as around 160 m<sup>3</sup>/s with the total groundwater flow being about 10 m<sup>3</sup>/s (TAMS, 1996). The water resources of Lesotho have been described as having an exceptionally good quality, especially in the highland areas.

Lesotho's population is estimated at 2.4 million, with the population density being 69 persons per square kilometre in the highlands and 754 persons per square kilometre in the lowlands. Although urban areas are growing at a higher rate, about 84% of the population still lives in rural areas. Lesotho is categorized as a *least developed country*, ranked by the UNDP Human Development Report

of 2005 at number 149 of 177 member countries according to the Human Development Index (HDI).

The TAMS report (1996) also estimated the overall demand from all sectors (domestic, commercial industrial and agricultural) to be 2.18 m<sup>3</sup>/s in 1995 and projected to 5.8 m<sup>3</sup>/s in 2025. This projection had not taken into account the effects of the HIV/AIDS pandemic on the population. The recent study on the Lowlands Water Supply has reviewed estimates on the demand in the lowlands regions integrating the effects of the HIV/AIDS and the increased demand from industrial sector.

The water sector faces various challenges, including ensuring access of safe water and sanitation by all Basotho by investing in water resources development, protecting the water resources base from pollution and destruction of ecosystems (including wetlands), rationalisation of the institutional set up of the sector, development and implementation of a legislative and regulatory framework. In an effort to alleviate poverty, the Government has also developed and adopted a Food Security Policy, which includes strategies for improving irrigation development, which will have a major impact on water resources management, as agriculture uses large quantities of water.

## ***2.2 Ongoing Activities in the IWRM***

There are various activities that are ongoing in the water sector aimed at improving management and protection of water resources and ensuring provision of water and sanitation and thereby working towards attainment of the MDG's.

A study was commissioned by the Government of Lesotho that was concluded in 1996 that gave recommendations on "Water Resources Management: Policy and Strategies". This study led to the development and adoption of the National Water Resources Management Policy (NWRMP) in 1999. Since then a number of activities have been carried out in the country to achieve the goals of the 1999 NWRMP. These included the restructuring of the water sector and the establishment of the Commissioner of Water (CoW) to coordinate the sector and the Policy, Planning and Strategy (PPSU) to support the CoW. Activities aimed at improving access to water have also been promoted and undertaken, with the Department of Rural Water Supply (DRWS) continuing to promote efforts to provide water and sanitation to the rural areas of the country, at present, coverage of the rural areas in providing water stands at around 62%. The Water and Sewerage Authority (WASA) is also continuing to improve efforts to extend water supply and sanitation to the designated urban areas. Since the NWRMP



was adopted, the Lowlands Water Supply Project Feasibility study was commissioned to problems of inadequate water supply in the lowlands areas of Lesotho and this programme is well underway and includes the fast-tracked component of the scheme, the Metolong Dam which is meant to address water shortages facing the Maseru City and its surrounding areas.

The water sector has also recently initiated the Lesotho Water Sector Improvement Project (LWSIP) supported by the Lesotho Government and the World Bank aimed at improving initiatives of securing adequate, sustainable, clean, and reliable water supply and sanitation services in the lowlands areas. This project started in 2005 and the first Phase should complete in 2007 and has funding of USD 15.6 million. The WSIP includes a component on capacity building and policy implementation that is undertaken by the CoW. Through this component, a review of the 1999 NWRMP has been undertaken, and a new Water and Sanitation Policy has been adopted as at February 2007. This policy is premised on the Dublin Principles and IWRM. It includes the following goals:

- Water Resources Management  
Sets guidelines for strategic action within sustainable management of the water resources embracing IWRM principles
- Water supply and sanitation services  
Sets strategic guidelines within the functions of service delivery of water and sanitation
- Water and environment  
Sets strategic guidelines for action regarding protection and conservation of water resources and associated eco-systems
- Trans-boundary water resources  
Sets strategic guidelines for action coordinating the management and usage of water resources with the downstream countries in shared watercourses.
- Sector wide approach  
Sets strategic guidelines for coordinating all sectors for IWRM and service delivery
- Stakeholder involvement  
Sets guidelines for involving all stakeholders in IWRM and service delivery
- Institutional arrangements and legislative framework

Sets strategic action guidelines for appropriate institutional and regulatory framework of the water sector for implementation of IWRM and effective service delivery.

Strategies for setting priorities for implementing the Water and Sanitation Policy are being developed with the elaboration of the IWRM Strategy and the related Water Demand Management Strategy to guide water efficiency programmes, and also the Drought Management Strategy to guide the responses of the sector to the increasing frequency of drought events. These Strategies are due to be completed before the end of the current year (2007), and are being developed under the auspices of the CoW.

During the preparation of the Roadmap to further activities aimed at articulating an IWRM/WE Plan for Lesotho, the activities undertaken in developing the Strategies were evaluated to guide with the intention of finding out what still needs to be done. The key issues that have been identified for inclusion into the IWRM Strategy include the Water and Sanitation Policy goals, and the stakeholders at the workshops that have been undertaken recently under this exercise have identified the following as key areas of concern:

- Environmental degradation
  - Erosion
  - Wetlands degradation
  - Pollution
- Access to water and sanitation
- Institutional arrangements
- Drought management
- Transboundary water resources management
- Floods
- Irrigation

These issues that were identified are very much a confirmation of the principles of the new Water and Sanitation Policy.

The next Phase of the LWSIP is aimed at the implementation of the Strategies supporting IWRM and will develop legislation to support implementation of the Water and Sanitation Policy and therefore the IWRM principles. Capacity building and institutional strengthening are also key issues related to the implementation of the recommendations of the IWRM Strategy.

The SADC region which Lesotho is part of also has developed frameworks for promoting IWRM in the member states. At present, the SADC Regional Water Policy has been developed and adopted and therefore has presented a framework for the development of the current Water and Sanitation Policy in

Lesotho. The region has developed and adopted the SADC Protocol on Shared Watercourses and this guides the management of transboundary waters. As the result of this protocol, Lesotho has formed a River Basin Organisation (RBO) with the other riparian states to the Orange/Senqu River, which originates in Lesotho and passes through South Africa, Botswana and Namibia. The RBO is the Orange /Senqu River Commission (ORASECOM). The ORASECOM is currently developing and IWRM Plan for the Orange Senqu Basin.

### 3 The Roadmap to Achieving IWRM

#### 3.1 Present Status in the IWRM Planning Cycle

The Water Sector in Lesotho has been over the last years been involved in a number of activities related to instigating IWRM, as it has been indicated in the previous sections. The IWRM Planning cycle presented below has been developed by the GWP and CapNet and is taken as a basis for countries to develop their national IWRM Plans.

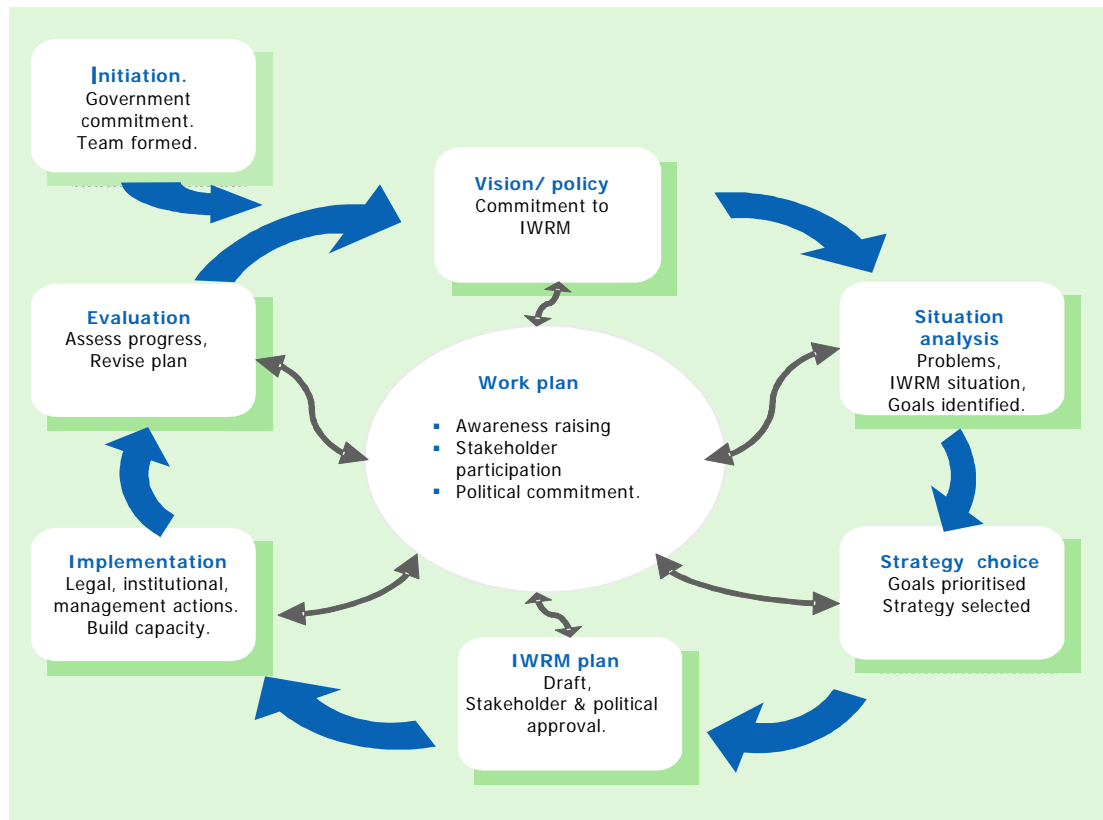


Figure 1: The IWRM Planning Cycle<sup>2</sup>

<sup>2</sup> CapNet and GWP (March 2005) Integrated Water Resources Management Plans: Training Manual and Operational Guide

The Consultant Team from the IWRM Strategy development exercise together with the National Consultant for development of the Roadmap have developed a conceptual cycle on the processes that have been undertaken in Lesotho and linked to the next steps in the adoption of the IWRM principles. This was derived from the analysis of the activities presented in Section 2.2 above.

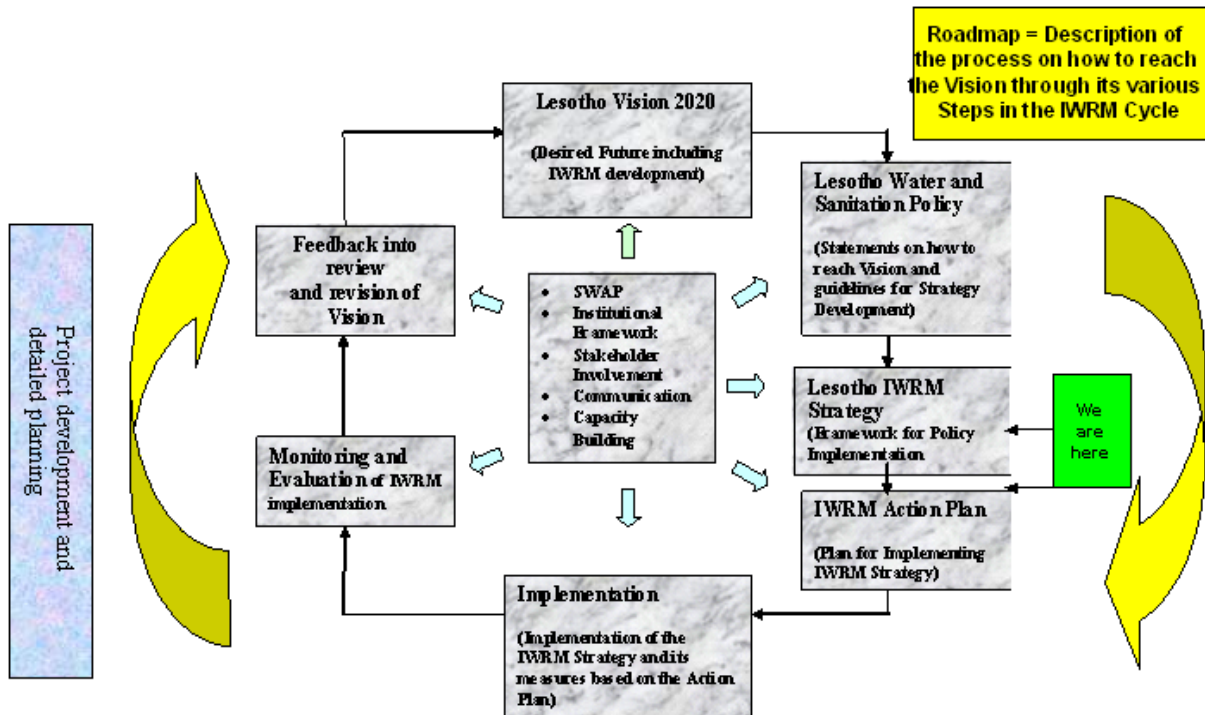


Figure 2: The actual stage in the IWRM cycle

### 3.2 Steps to Moving Towards Realisation of the IWRM Principles

Due cognisance has to be taken of the progress that has already been made in the IWRM planning in Lesotho. At present, there is a need to carry on with the momentum in making sure that there is implementation of IWRM Strategy and the related Strategies on Water Demand Management and the Drought Management. Essentially this roadmap defines the process that will ensure and support the implementation of the strategic actions that are recommended in the

IWRM and related Strategy documents, as well as the monitoring and evaluation of the process.

### **3.2.1 Elements of the Roadmap**

There is an ongoing process of adopting IWRM in Lesotho. With the implementation of the LWSIP, a lot of activities related to policy, regulatory and legislative framework are being implemented or are planned. Support towards technological capacity development is also build into the Project. The sustainability of these activities depends on maintaining and growing the political commitment that exists supporting the processes, also in awareness of these IWRM principles by other related sectors outside the mainstream water sector and also the general public. Capacity within and outside the water sector also needs to be strengthened considerably to deal with the challenges and changes brought about by this incoming dispensation. Moreover, such that progress on the implementation of this process may be tracked, there is a need for a robust monitoring and evaluation plan for the objectives that are going to be set under the IWRM Strategy and the Plan of Implementation.

This essentially means that the support that may be sought to enhance efforts in the elements below:

#### **3.2.1.1 Developing an Implementation Action Plan for the implementation of the IWRM Strategy**

*Objective*

To specify an implementation plan to meet the strategic goals set in the IWRM Strategy.

*Activities:*

- Development of a portfolio of projects with time schedules and costs.

#### **3.2.1.2 Institutional strengthening support and capacity building for the water sector**

*Objective*

To enhance the capacity of institutions in meeting the challenges of their mandate in meeting the IWRM/WE efficiency strategic goals.

*Activities:*

- Undertake capacity audits of the agencies who have a stake in the execution of the IWRM strategy and plan
- Undertake capacity development strategies to enhance the ability of the institutions to improve performance

### **3.2.1.3 Communication, education and public awareness on the IWRM principles**

*Objective:*

To ensure stakeholder participation in IWRM through awareness raising on the principles and benefits of an integrated approach in water resources management.

*Activities:*

- Development of tools and strategies for stakeholder participation and awareness raising
- Implementing awareness strategies with the involvement of local authorities and civil society organisations

### **3.2.1.4 Monitoring and evaluation of the implementation**

*Objective:*

To ensure that the IWRM Plan implementation responds to the challenges that have been identified at assessment stage and that the Strategy aims to address.

*Activities:*

- Development of a monitoring and evaluation plan for the components of the IWRM /WE Plan
- Regular monitoring audits of the key issues that the IWRM strategy and Plan have indicated and to provide feedback into the revision of the Vision

## APPENDIX: Activities for translating the IWRM Strategy to Action

Activities	Key Requirement	Resource	Responsible Agency(s)	Possible Source of Support	Indicative timeframe for Implementation**
<b><i>1.0 Developing an Implementation Action Plan for the implementation of the IWRM Strategy</i></b>					
<ul style="list-style-type: none"> <li>• Identification of gaps in the next stages of the LWSIP</li> <li>• Development of a portfolio of projects to implement the IWRM Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Technical assistance</li> <li>• Budgetary support</li> </ul>		CoW, in collaboration with water sector agencies	Government of Lesotho (GoL) and the World Bank through the LWSIP	Immediate
<b><i>2.0 Institutional support and capacity building for the water sector</i></b>					
<ul style="list-style-type: none"> <li>• Undertake a capacity audit of the institutions mandated to implement IWRM</li> <li>• Embark on a comprehensive capacity development activities</li> </ul>	<ul style="list-style-type: none"> <li>• Technical assistance</li> <li>• Technological support</li> <li>• Budgetary support</li> </ul>		CoW, water sector agencies	GoL, WB, other Development Partners	Short to medium term
<b><i>3.0 Communication, education and public awareness on the IWRM principles</i></b>					
<ul style="list-style-type: none"> <li>• Develop a comprehensive plan and tools for building and increasing awareness of IWRM</li> <li>• Engage local authorities and civil society organisations in advancing IWRM to communities</li> </ul>	<ul style="list-style-type: none"> <li>• Technical assistance</li> <li>• Budgetary support</li> </ul>		Lesotho Water Partnership, CoW, water sector agencies	GoL, Development Partners	Short to medium term
<b><i>4.0 Monitoring and Evaluation of the implementation of IWRM Action Plan</i></b>					
<ul style="list-style-type: none"> <li>• Development of a robust monitoring and evaluation plan to</li> </ul>	<ul style="list-style-type: none"> <li>• Technical assistance</li> </ul>		CoW, Lesotho Water	GoL, Development	Short to long term

Activities	Key Resource Requirement	Responsible Agency(s)	Possible Source of Support	Indicative timeframe for Implementation**
track outputs	<ul style="list-style-type: none"> <li>• Budgetary support</li> </ul>	Partnership	Partners	