

FINAL REPORT

PARTNERSHIP FOR AFRICA'S WATER DEVELOPMENT PROGRAMME II

THE IWRM PLANNING PROCESS

~~~~ MOZAMBIQUE ~~~~

Achievements, Lessons & Challenges

by

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Abbreviations and Acronyms

	Portuguese	English
ARA's	Administrações Regionais de Água	Regional Water Administrations
СВО		Community Based Organization
CIDA		Canadian International Development Agency
CAN	Conselho Nacional de Águas	National Water Council
CRA	Conselho Regulador de Águas	Council for the Regulation of Water Supply
DAF	Departamento de Finanças	Department of Administration and Finance
DAR	Departamento de Água rural	Department of Rural Water Supply
DAU	Departamento de Água Urbana	Department of Urban Water Supply
DES	Departamento de Saneamento	Department of Sanitation
DGRH	Departamento de Gestão de Recursos Hídricos	Department of Water Resources Management
DNA	Direcção Nacional de Águas	National Directorate of Water
FIPAG	Fundo de Investimento e Património para o Abastecimento de Água	Water Supply Investment and Assets Fund
GDP	Produto Interno Bruto	Gross Domestic Product
GOH	Gabinete de Obras Hidráulicas	Office of Hydraulic Works
GoM	Governo de Moçambique	Government of Mozambique
GPC	Gabinete de Planificação e Controlo	Office of Planning and Control
GRI	Gabinete dos Rios Internacionais	Office of International Waters
GTA	Grupo de Trabalho Alargado	Task Force Platform
GWP	Parceria Global de Águas	Global Water Partnership
GWPO	Organizações da Parceria Global de Águas	Global Water Partnership Organizations
GWP-SA	Parceria Global de Águas-África Austral	Global Water Partnership Southern Africa
HCB	Hidroeléctrica de Cahora Bassa	Cahora Bassa Hydropower
INAM	Instituto Nacional de Meteorologia	National Meteorology Institute
INGC	Instituto Nacional de Gestão de Calamidades	National Disaster Management Institute

IUCN		International Union for Conservation of Nature
IWRM	Gestão Integrada de Recursos Hídricos	Integrated Water Resources Management
MCWP	Parceria Nacional de Águas de Moçambique	Mozambique Country Water Partnership
MGDs	Metas de Desenvolvimento do Milénio	Millennium Development Goals
MICOA	Ministério Para Coordenação da Acção Ambiental	Ministry for Coordination of Environmental affairs
МОРН	Ministério das Obras Públicas e Habitação	Ministry of Public Works and Housing
MoU	Memorando de Entendimento	Memorandum of Understanding
NGO	Organizações Não Governamentais	Non-Government Organization
NWP	Política Nacional de Águas	National Water Policy
NWRMS	Estratégia Nacional de Gestão dos Recursos Hídricos	National Water Resources Management Strategy
PARPA	Plano de Acção para Redução da Pobreza Absoluta	
PAWD		Partnership for Africa's Water Development
PRSP		Poverty Reduction Strategic Plans
SADC		Southern Africa Development Community
ToRs	Termos de Referência	Terms of Reference
UGB	Unidade de Gestão de Bacia	River Basin Management Unit
UNICEF		The United Nation Children's Fund
USAID		United States Agency for International Development
WE		Water Efficiency
WL		Water Law
WSSD		World Summit on Sustainable Development

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Executive Summary

The Heads of State at World Summit for Sustainable Development (WSSD) held in Johannesburg in 2002 recommended that developing countries develop IWRM and Water Efficiency (WE) plans by 2005, in order to meet the Millennium Development Goals (MDGs) agreed by the international community in the year 2000. In 2007 at the WSSD +5 the Heads of State further recommended that IWRM Plans should be linked to National Development Planning Processes.

In this regard, developed countries were requested to support the initiative. The Dutch Government within the framework of the Partnership for Africa's Water Development (PAWD programme) supported the IWRM Planning Process in six countries namelyBenin, Cameroon, Cape Verde, Eritrea, Mozambique and Swaziland with the objective of contributing to sustainable development and poverty reduction The support for the six countries was channelled through the Global Water Partnership who were the facilitators of the process.

In Mozambique, agriculture contributes about 23.5% to the Gross Domestic Product (GDP) and consumes 73% of the country's water, industry contributes 30.9% to the GDP and consumes 2% of the water resources with services contributing approximately 45.6%. Water is therefore a key ingredient in the growth the development of Mozambique.

Currently, only 48.5% and 40% of the urban and rural populations respectively have access to potable drinking water (at home or from public fountains) and 31% do not have basic sanitation infrastructure. Hydropower generation is one of the most important non-consumptive water users in the country with a huge potential for expansion.

However, water with its central role in Mozambique the sector faces the following major challenges:

- I. meeting basic water supply needs;
- II. increasing the resilience of the sector to climate change and extreme events;
- III. institutional arrangements (including financial and human resources) to support the implementation of NWP and NWRMS;

- IV. enhancing the involvement of civil society;
- V. water infrastructure development; and
- VI. capacity building.

Currently, the legal framework for water resources management in Mozambique is going through a reform process, as part of the public sector reform. To operationalize the National Water Policy (NWP), a National Water Resources Management Strategy (NWRMS) were developed in Mozambique in 2004 and later approved in 2007. The NWRMS covers all relevant aspects of IWRM including the need for gender mainstreaming in water resources management. The National Directorate of Water (DNA) under the Ministry of Public Works and Housing (MPOH), and the Regional Water Administrations (ARAs) are responsible for the progressive implementation of the water resources plans. However, the current institutional setup of the Water Sector needs to be elevated to an appropriate position in the Government system in order to fulfil its expected role as outlined in the WL, NWP and NWRMS.

Despite the unstructured implementation of the NWP and NWRMS due to the ongoing sectoral reform, the country has endeavoured to use some of the management instruments for an effective IWRM, namely (i) *water resources assessment*, (ii) *regulatory and conflict resolution instruments, (iii) information management and exchange*, and (*iv*) *demand management*.

During the formulation and revision of the NWRMS and the NWP respectively in 2004, a participatory process involving other sectors was followed due to the cross-cutting nature of water this was also done to seek input and gain consensus through a much wider group of stakeholders. The multi stakeholder platform (GTA), mainly constituted by governmental institutions representatives, was set up by Government in 2004 to be a Task Force this was as an interim arrangement during the formulation of the policy and the strategy. Towards the end of the process of formulating and revising the NWRMS and NWP the Global Water Partnership Southern Africa undertook efforts to support the GoM in the development of a IWRM/WE Plan, and several sensitising meetings were held in Maputo with the National Directorate of Water (DNA). Taking advantage of the existing multi-stakeholder platform (GTA), and following the recommendations by DNA the Mozambique Country Water (MCWP) was launched in June 2006, with 32 member

partners among them academics, NGOs, Civil Society, Government, CBOs, etc. However, the process to get the partnership working effectively took time and full functionality started in July 2008 after signing of the MoU with the Government (DNA). This kick started the IWRM Planning Process in Mozambique.

This report aims to capture experiences from the IWRM planning process in Mozambique and draw some reflections and insights from these. The following are some of the key observations from the planning process in carried out in Mozambique:

- The IWRM implementation plan for the NWRMS in Mozambique has been delayed. According to DNA, the delay of this activity is due to inadequate funding to carry out the activity from the MCWP and government. Delays in the procurement of consultants for developing the plan hampered efforts to implement the joint work plan between DNA and MCWP. Therefore, the IWRM Plan could not be completed in the timeframe of the PAWD project. Leading to the postponement of the IWRM Plan development by the GoM. DNA is currently under negotiations with its "traditional" partners to fund this activity during the coming GoM five years plan.
- During the interviews it was recognized by DNA that the current MCWP role could be improved to act as a neutral platform by bringing together all stakeholders (from grassroots to national level), to discuss and influence the GoM decisions on water related issues, including the IWRM planning process. However, setting a common agenda between the potential stakeholders (researchers, academics, NGOs, environmental agencies, CBOs, consultants, civil society, etc.) will present a major challenge. Additionally, the human resources capacity, public awareness, and most important, the funding will require special attention.
- For effective implementation of IWRM in Mozambique it is important for MCWP to continuously identify champions who are able to dynamize the process at all levels (village, district, province), taking advantage of already existing members in the network. It is also important to ensure that the MCWP engages water using and water impacting sectors into water resources management and development

issues. Thus, sustainable funding mechanisms should also be identified to effectively promote IWRM within and outside water sector.

- Under the water sector reform, the basin management plans are seen by DNA as key documents and guidance for the successful implementation of IWRM and development of water sector in Mozambique. The MCWP could act as a platform to facilitate the entire process, from formulation to implementation, since this process requires stakeholders' participation.
- The definition of the working plan (MCWP vs. DNA) and prioritization of its activities should be done at earlier stage on a common and participatory basis. However, the success is also dependent on donor's agenda flexibility to meet the country's need, plans and priorities.
- Besides the institutional arrangements, an effective integration of different stakeholders in the process (e.g. Agriculture, Fisheries, Environment and others) is crucial to streamline the process, especially in terms of increasing and creating awareness regarding the IWRM process and concept.
- MCWP needs additional financial resources to ensure that there are an effective stakeholder platform that involves a broader group of stakeholders.
- The internal capacity (within DNA) to promote, advocate and create awareness regarding water related issues including the implementation of IWRM in the country is weak. Thus, there is a need to strengthen the Water Sector capacity nationwide (human and financial resources) in order to better meet the challenges posed by the ongoing public sector reform.
- The MCWP facilitated the development of several studies which formed the basis of intensive stakeholder consultations and input. These contributions were compiled into a document *"Stakeholder Contributions to the Mozambique IWRM Planning Process"* which will form the basis for future implementation of IWRM in Mozambique. This document which was developed with the involvement of DNA aims to support the IWRM planning process and will also form the foundation of the IWRM Plan.

The following studies were developed and taken to stakeholders for intensive consultations:

• Capacity Building Plan for the Water Sector in Mozambique

- Stakeholders' analysis for the establishment of Licungo River Basin Committee
- Financing Water Resources Management in Mozambique
- Mainstreaming Gender into the Mozambique IWRM Plan
- Setting up River Basin Committees: Learning from Pungwe, Licungo, Rovuma and Zambeze River Basin Committees in Mozambique
- Guidelines for Stakeholder Identification and Analysis for setting up River Basin Committees in Mozambique
- o Impact of Climate Change on Water Resources
- o Integrating IWRM into National Development Planning in Mozambique

1. Introduction

1.1 Background

The Dublin Conference in 1992 adopted the four principles of IWRM which went on to be adopted at the in the Rio de Janeiro Conference on the Environment and Development. The World Summit for Sustainable Development (WSSD) held in Johannesburg in 2002 highlighted the relevance of good water management practices on life and the environment and came up with a recommendations for all developing countries to develop IWRM and Water Efficiency (WE) plans by 2005, in order to meet the Millennium Development Goals (MDGs) agreed by the international community in the year 2000. Developed countries were encouraged in the recommendation to support developing countries to develop these plans for better water resources management.

In this regard, the Dutch Government within the framework of the Partnership for Africa's Water Development (PAWD II) channelled funds through the Global Water Partnership Organization (GWPO). The Dutch support under the PAWD programme targeted six countries, viz. Benin, Cameroon, Cape Verde, Eritrea, Mozambique and Swaziland with the objective of contributing to the sustainable development and poverty reduction efforts (in these countries) through the development of IWRM Plans.

The main purpose of this report is to summarize and analyse some of the key achievements, challenges and constraints faced in the IWRM planning process in Mozambique (from 2006-to 2009).

The findings presented in this report result from a desk study review of the relevant documentation (i.e. Water Sector reforms reports, PAWD inception report, MCWP reports and minutes, the MoU, etc.) as well as interviews with key stakeholders in the Water Sector who were involved in the process (Appendix 2).

1.2 Development Context

Nine of Mozambique's main river basins are shared with ten other SADC Members

States (DNA, 1999). Thus the country's water resources are to a large extent conditioned by the fact that they form part of international river basins, where the neighbouring countries, all upstream, have been increasing the amounts of water abstraction. therefore worsening the

Box 1: Illustration of the relevance of water in the country's economy

- The recurrent natural disasters (i.e., floods & droughts) make the country vulnerable and have a direct impact on the poverty situation of the population, thus require flood control measures and preparedness programmes.
- Food security depends to a large extent on irrigated agriculture (i.e., crop failure in the southern region of the country exceeds 50%).
- Floods and droughts have in the past decade cost Mozambique 5.6% of GDP on average
- Mozambique is downstream riparian state on all the nine major rivers which requires joint agreements on the management of water resources.
- Drinking water supply coverage still low with 42% in 2006

national water vulnerability in quantity and quality (Vaz, 2005; van Woersem *et al.*, 2007). The surface water resources availability is about 5 550 m³ year⁻¹ per capita (runoff generated within the country) or 12 000 m³ year⁻¹ (including cross-border flows) (Vaz, 1997; World Bank, 2005). Most of the sectors which contribute to and make up the Mozambican economy are either directly dependent upon secure and sustainable water availability or are indirectly affected by water stocks (Box 1). Agriculture (i.e. irrigated, livestock and forestry) contributes about 23.5% to the Gross Domestic Product (GDP) and accounts for 73% of the country's water consumption), industry contributes 30.9% and uses 2% of the water consumed services provided the bulk contribution to the GDP in Mozambique(INE, 2009). This indicates that about 75% of the total water use in the country has a direct impact on economic production. Urban and rural water supply consume the remaining 25% of the total water, this has a direct impact on the industries and public health services (World Bank, 2005).

Currently, only 48.5% and 40% of the urban and rural populations respectively have access to potable drinking water (at home or from public fountains) and 31% do not have basic sanitation infrastructures (USAID, 2008; DNA, 2008). The mining and mineral industry accounted for only 2% of the GDP in 2008 (INE, 2009), however, to date there is no information available regarding water demand and use from this sector. Hydropower generation is one of the most important non-consumptive water users in

Mozambique and its potential¹ is greater than 65 000 GWh year⁻¹ (NWDPI, 2004). However, the country has one of the lowest electrification covering rates² (5%) in Southern Africa (INE, 2002).

Despite the role played by water to the national economy, as aforementioned, the

Box 2: Challenges and Opportunities for Key Water Related Development (Personal communication, DNA-2009)	
"	<i>Meeting basic water supply needs:</i> Provision of safe and reliable domestic water supply and sanitation to the urban and rural population.
"	<i>Risk Management:</i> Improve drought mitigation strategies and provide potential impact of climate change on water resources.
"	<i>Institutional Arrangement:</i> Strengthen decentralization of water sector institutions to the local levels with regard to the water resources management and development (i.e., development of river basin plans taking into consideration IWRM).
"	<i>Enhancing the role of the civil society:</i> Encourage stakeholders' participation and consultation through the MCWP in the formulation and enforcement of water related policy and legislation.
"	<i>Water infrastructures development:</i> build water infrastructure to cope with climate variability and guarantee water supply needs (i.e., small reservoirs, rainwater harvesting techniques, etc.).
"	<i>Regional co-operation: A</i> lthough Mozambique is strongly committed with joint management of water resources in international river basins, still a challenge to balance the sustainable development of country and region.
"	<i>Capacity Building:</i> In water related issues, including building awareness on value of water and IWRM.
"	Reinforcement, Review and Development of Water Sector Legislation

challenges in the Water Sector remain enormous as illustrated in Box 2.

The enabling environment created through the existence of a Water Policy and Strategy – and an IWRM Plan developed from effective participation of relevant stakeholders are key to improving the management, development and monitoring of water resources in Mozambique.

1.3 Water Sector Policy and Legislation and Sector Reform for IWRM

The Southern Africa Development Community (SADC) which comprises of 14 countries, formulated the Regional Water Policy and Strategy (Resolution Nr. 46/2007) to which all the SADC Member States including Mozambique are formally committed to

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^{70%} of this potential concentrated in the Zambezi watershed.

The domestic electricity consumption per capita is 78 kWh compared to South Africa which is 3745 kWh.

implement. The Revised SADC Water Protocol on shared watercourses was also developed and signed in 2003 in order to ensure that countries can co-manage shared rivers in order to promote regional integration, poverty reduction and economic development for the region. The water sector in Mozambique has undergone some reforms as part of public sector reforms taking place in the country. These reforms involved development of a Water Policy and a National Water Resources Management Strategy. This has also involved decentralisation of water institutions responsible for the management of water resources in Mozambique. The basis of the reforms in the sector is the Water Law (WL) of 1991 and the National Water Policy (NWP) of 1995. The WL defines amongst various aspects:

- water as a public domain;
- the basic principles of water resources management including the overall organization of the Sector;
- and the rights and obligations of users.
- It also outlines the creation of various regulations (i.e. statutes and decrees) to facilitate specific Water Sector management and leadership.

And the main principles covered in the National Water Policy are:

- (i) provision of water supply and sanitation services completely decentralized, autonomous and financially self-sustaining;
- (ii) greater role for the private sector;
- (iii) IWRM taking into consideration the environmental impacts;
- (iv) water recognized as an economic and social good;
- (v) more users' participation (government, non-government, private and other civil society); and
- (vi) capacity building (training and enhancing the existing institutional capacity).

In summary, the NWP aims remove the the operational role of the central government in managing water resources to to a role of policy-making, coordination, guidance and monitoring of the Water Sector.

A summary of the Water Sector legal framework is presented in Box 3.

Box 3: Policy & Strategy Framework of the Water Sector in Mozambique	
• Water Law	1991
• Institutional Framework for Delegation of Water Supply Management	t 1995
• Implementation Manual for Rural Water Supply	1997
Water Tariff Policy	1998
National Irrigation Policy	1998
Rural Water Transition Plan	2001
• Strategic Plan for Urban Water Supply & Sanitation	2006
• Strategic Plan for Rural Water Supply & Sanitation	2007*
• Mid Term Expenditure Framework 2008-2010	2007*
National Water Policy	2007*
National Water Resources Management Strategy	2007
* Draft	

To operationalize the NWP, a National Water Resources Management Strategy (NWRMS) was developed in Mozambique in 2004. The NWRMS was adopted in August 2007 and its main objective is to effectively guarantee the implementation of the NWP.

It covers in general the whole range of water resources (i.e., surface and groundwater); water quality and protection of ecosystems; use of water by the various national economic sectors; legal and institutional framework; institutional capacity building as well as issues related to national development and regional integration.

The NWRMS covers key issues in IWRM including mainstreaming gender into water resources management. It also looks into coordinating water using and water impacting sectors such as Agriculture, Industry, Energy, Environment, Health, Planning and Urban Development, Tourism, etc., in order to manage water resources better.

Therefore, the following sectoral Policy and Legislation is also considered important in the Water Sector:

- (i) Land Law of 1997 and the respective regulations;
- (ii) Environmental Law of 1997 and its Policy of 1995;
- (iii) Mining Law (Nr. 14/2002);
- (iv) Fisheries Law (Nr. 03/90);
- (v) Rural Development Strategy (09/2007); and
- (vi) Green Revolution Strategy (2007).

Consideration of these in conjunction with the Water Sector Policies and Legislation provides the country with a coordinated approach to managing and developing water resources.

Development and issues with regards to poverty reduction are with regards to water are also addressed in the Poverty Reduction Strategy Plan (PARPA) of the Government of Mozambique (GoM) (Box 4). The PARPA provides the entry point

Box 4: Water Sector in PARPA II: 2006-2009 (GoM, 2006)		
Water Supply & Sanitation		
•	Increase urban water supply to 60% in 2009, and 70% by 2015	
•	Increase rural water supply to 55% in 2009, and 70% by 2015	
•	Increase urban sanitation services to 55% in 2009, and 80% by 2015	
•	Increase rural sanitation services to 40% in 2009, and 50% by 2015	
Water Resources Management		
•	Reduce the country's vulnerability by mitigating & managing droughts	
•	Reduce the country's vulnerability to floods by strengthening water resources management	
•	Increase water resources storage capacity	

for donors to align themselves with a Government's priorities, policies and systems.

1.4 Institutional Arrangements and Roles

The WL of 1991, NWP of 1995 and the NWRMS of August 2007 are directed at the establishment of decentralised water resources management including provision of water supply and sanitation services. Thus, the National Directorate of Water (DNA) and the Regional Water Administrations (ARAs) are responsible for the progressive implementation of the water resources plans and proposed activities. The majority of

water resource management activities are performed at the River Basin Management Unit (UGB) level. To date, all the five ARAs have been established, and these are: ARA-Sul, ARA-Centro, ARA-Zambeze, ARA-Centro-Norte, and ARA-Norte. The institutions and their respective role on water resources management in Mozambique are provided in Table 1.

 Table 1: Roles of the major institutions of the country's Water Sector (Source: NWDPI,

Ins	stitution	Role
1.	Ministry of Public Works and Housing (MOHP)	 Governmental institution responsible for all water related issues, specifically: To promote better use of national water resources; To propose policies for the development of water resources and their respective implementation; To propose the establishment of an inventory for water resources, demand and balance at national level and river basins. To regulate the usage of water resources
2.	National Council of Water (CNA)	• Advisory body for the Council of Ministers
		responsible for inter-sectoral co-ordination and strategic decision-making
3.	 National Directorate of Water (DNA) Department of Rural Water Supply (DAR) Department of Urban Water Supply (DAU) Department of Sanitation (DES) Department of Water Resources Management (DGRH) Office of International Waters (GRI) Office of Hydraulic Works (GOH) Office of Planning and Control (GPC) Department of Administration & Finance (DAF) Department of Human Resources 	 The main institution under the MOPH responsible for the management of the Water Sector in the country through the nine created departments. The DNA aims is responsible for: Define policies; Stock taking of water resources and requirements at all levels; Prepare and implement general schemes; Execute investments in studies and projects; Prepare legislation and inspect enforcement.
4.	Regional water administrations (ARAs)	Responsible for carrying out operational management of water resources at regional scale, including the collection of hydro- meteorological, data storage, dissemination, development of Flood Advisory System, registration of water users, billing and collection of water use charges, implementation of basin plans including the promotion of stakeholders participation.
5.	Council for the Regulation of Water	• Ensure balance in the quality of service

2004; GoM, 2007a; GoM, 2007b).

Institution	Role	
Supply (CRA)	provided to safeguard the interests of users and the economic sustainability of water supply systems.	
6. Water Supply Investment and Assets Fund (FIPAG)	 Promoting management of funding in autonomous, efficient and lucrative way through various types of contracts with private operators. 	

As mentioned earlier the DNA is a department in the Ministry of Housing and Public Works. The MOPH does not identify in its title the responsibility of the country's water sector – bearing in mind the role that water plays as a vital commodity for economic expansion, poverty reduction and development of Mozambique.

The current institutional setup of the Water Sector needs to be elevated to an appropriate position in the Government system in order to fulfil its expected role as outlined in the respective WL, NWP and NWRMS. Additional strategic management and planning needs to be incorporated at the DNA level to allow for a cross sectoral approach to the management of water resources. Although the National Water Council (CNA) was created in 1991 as an advisory body to the Council of Ministers, it has not been effective in coordinating the different agencies involved in water resources management.

1.5 Water Resources Management Instruments

With regards to management of water resources the countries seeks to ensure that current demands and those of the future generations are met. Attention is also being given to ensuring that environmental needs are met and water is used in a sustainable manner in order to ensure economic growth.

Despite the slow implementation of the Water Policy in the country a number of IWRM instruments have been implemented namely (i) *water resources assessment*, (ii) *regulatory and conflict resolution instruments, (iii) information management and exchange*, and *(iv) demand management*.

- Water resources assessment: The ARAs have established hydrological stations for flood forecasting and also in monitoring water flows. Water quality monitoring is also done annually on a quarterly basis.
- *Regulatory and conflict resolution instruments:* Water allocation, water demand management and resolution of conflicts are being regulated under (Decree Nr. 43/2007). This decree addresses the implementation of the Water Law (Law Nr. 16/91), it guarantees water for domestic use, and allocates water according to development priorities. The decree also regulates conflict resolution mechanisms. At international level, instruments such as the SADC Protocol on Shared Water Resources, Joint and Bilateral Cooperation are used to manage transboundary waters.
- (*iii*) Information management and exchange: Information sharing is done between institutions of the Water Sector, however, a special and relatively effective arrangement amongst those involved in disaster management has been well established (i.e. INGC, DNA, IMAN, etc.). Due to the absence of defined procedures for data exchange and acquisition costs, the sharing of data between institutions is still limited. With respect to international information sharing this is done with various riparian states through websites, personal contact, email, telephone, and hydrometric initiatives at SADC level such as SADC-HYCOS.
- (iv) Demand management: In Mozambique, the primary objective of water demand management instruments is to improve water use efficiency and to unaccounted water. Thus, the country's instruments for water demand management can be grouped into two broad categories, namely, economic and legislative and institutional instruments (Box 5). The economic instruments include aspects of cost-recovering, financial sustainability of water bodies such as ARA's for operation and maintenance of water infrastructures, promotion of well regulated water market. On the other hand the country's legislative and institutional instruments in place are meant to regulate the use and demand of water, including water rights, prioritization of water use, role and mandates of each regulator, water pricing, protection of water, licensing and conflict resolution procedures.

Box 5: Water Demand Instruments (www.portaldogoverno.gov.mz)

Economic instruments

• Water Tariff Policy (Resolution Nr. 60/98)

Legislative and institutional instruments

Fisheries Law (Nr. 03/90); Establishment of Regional Water Administrations (ARA's) (Decree Ministerial 70/91); National Environmental Policy (Resolution Nr. 05/95); Environmental Law (Nr. 20/97); Institutional Framework for Delegation of Water Supply Management (Decree Nr. 72/98); Water Supply Investments and Assets Fund (FIPAG) (Decree Nr. 73/98); Water Regulation Council- CRA (Decree Nr. 77/98); Regulation on Arbitration, conciliation and mediation as alternative means for conflict resolution (Law Nr. 11/99); Manual for the Demand Responsive Approach which was completed in 2002 and approved in 2004; Regulation on standards for environmental quality and effluent emissions (Decree Nr. 18/2004); Regulation on Environmental Impact Assessment - EIA (Decree Nr. 45/2004); Regulation on water quality for human consumption (Diploma Ministerial Nr. 180/2004); General conditions for establishment of water supply contract; Regulation of licenses and concessions for water (Decree Nr. 43/2007);

Although recognized as strategic objective in the NWRMS, awareness rising and capacity building are instruments that are not yet effectively in place. However, the National Directorate of Water uses the World Water Day while the Ministry for Coordination of Environmental Affairs uses the World Environment Day as key occasions for raising awareness on water demand management and other water related issues.

2. The IWRM Planning Process

2.1 Enabling Environment

The Government of Mozambique (GoM) has over the past 15 years being carrying out public sector reforms to ensure that it achieves the MDGs and also work towards rebuilding the country after years of civil war. The water sector is also one such sector that has also carried out a number of sector reforms which led to the development of the National Water Resources Management Strategy (NWRMS) and revision of the National Water Policy (NWP) in 2004. This was done through a participatory process involving other sectors due to the cross-cutting nature of water. The multi stakeholder platform (GTA³) was set up in 2004 as a Task Force, on an ad-hoc basis to facilitate stakeholder engagement during the formulation of the policy and the strategy. After the

³ GTA is inter-sectoral and multidisciplinary. It is made up of senior representatives from ministries, government institutions, academics, NGOs, water user associations, social communication networks, etc.

formulation of the NWRMS, DNA indicated the need to develop an Implementation Plan for the strategy.

2.2 Setting the scene in Mozambique

Towards the end of the process of formulating and revising the NWRMS and NWP in 2004 the regional secretariat of GWP-SA with support from the Dutch government undertook to facilitate through a multi-stakeholder platform the development of an IWRM Plan. At this stage the Mozambique Country Water Partnership (MCWP) had not been established and GWP SA had been finding it difficult to engage partners in Mozambique to form a Country Water Partnership. Thus one of the first steps in initiating the IWRM Planning Process in Mozambique was to mobilise stakeholders who were interested in water resources management.

During the inception phase of the IWRM planning process several meetings were held in Maputo with the National Directorate of Water (DNA) to ensure alignment of the proposed IWRM Plan development and government processes and also to develop a roadmap on the development of the plan. The DNA, the GTA and GWP SA met and developed a roadmap for the IWRM Planning process and the following issues were prioritised:

- Development of National IWRM Plans
- Consolidation of the existing Multi-stakeholders Platform to improve public participation in the planning process
- Development of water partnerships
- Strengthening of River Basin Committees
- Supporting the process of negotiations on international water agreements

At the inception phase when the work plan was being developed the DNA indicated that the project should focus on strengthening the existing stakeholder platform and also assist in establishing the Licungo River Basin Committee – in the proposed work plan this took a significant component of the financial resources. However, the resources that were available, that the Mozambique Government had expressed interested, were targeted at four main components

- Development of an IWRM Plan
- Strengthening of the multi-stakeholder platform
- Integration IWRM in national development

• Understanding and improving financing of water resources management

This issue of the establishment of the Licungo River Basin Committee vis-a-vis the envisaged use of the funds to develop the IWRM Plan is an issue throughout the implementation of the project.

However, at this planning stage it was agreed to first establish the stakeholder platform by strengthening and broadening participation within the already existing GTA. The stakeholder platform would become the Country Water Partnership and then spearhead the development of the IWRM Plan by ensuring that stakeholders are involved in process.

2.4 Establishment of a stakeholder platform and project structures

A task team comprising of GTA members was setup to spearhead the establishment of the Country Water Partnership. The DNA; Academia-UEM/FAEF; NGO-Justiça Ambiental and a Community Based Organization (CBO)-União Geral de Camponeses de Tete) were tasked with the following:

- *I. identify the partners;*
- II. identify the potential host institution and chairperson;
- III. draft the rules of procedures.

As a result of the work of the Task force, the MCWP was launched with 32 members on the 29th June 2006. The IUCN Office in Maputo was nominated to be host institution for the partnership and the PAWD – IWRM Planning project. A Memorandum of Understanding was signed with IUCN in August 2006. However, only in May 2007 was the MCWP Office was formally established. The recruitment of the Project Manager was a challenge as expected remunerations of the identified candidates could not be met. This led to a delay in engaging a Project Manager and also led to the project suffering in terms of having a high level manager to steer the process. A Project Coordinator was also identified within DNA to manage the relationship between government and the country water partnership.



Figure 1: Summary of the timeline framework of the IWRM planning process in Mozambique.

2.4.1 Steering role of the Country Water Partnership

During the implementation of the PAWD programme in Mozambique the country water partnership had two champions who steered the process. During the inception phase a senior DNA staff member led the process of launching the Mozambique Country Water Partnership and also ensuring that government can trust the role that the partnership could play. It is important to bear in mind that in Mozambique, a lot of decentralisation had already taken place and a lot of water resources management activities were taking place at the basin level through the ARAs. The role of DNA was therefore to develop policy and strategies for the water sector – the involvement of a stakeholder group which was outside government to facilitate such a processes, which was seen as one that was purely to be driven by government work was a first. This meant that trust had to be built in order to ensure that a working relationship could be nurtured. The role of the senior DNA officer was therefore critical in building this trust at the inception stages. It was also an important role in that he knew the Water Sector priorities and he was also motivated to see the programme running. However, the double role that had to be assumed as a senior DNA officer and the PAWD program coordinator in Mozambique had contributed negatively to drawing up of work plans and implementation of some activities. For example, the issue mentioned earlier of DNA desire to have the partnership play a role more at the basin level and not at the national level in strengthening River Basin Committees took a long time to resolve and also up until the end of the project officials from the DNA still felt that the country water partnership back tracked on their earlier commitments.

At the launch of the country water partnership it was decided that a high-level chairperson be selected to lead the partnership in a strategic manner. This was also to allow the MCWP to play its role as an effective neutral platform that brings together state actors and non-state actors to dialogue and work together in promoting better water resources management. The MCWP selected the Vice-Chancellor of ISRI – School of International Relations to be the chair – he is a well respected man who has clout in Mozambique and can advocate at higher levels. His diplomatic skills and his clout led to the signing of a MoU between DNA and the MCWP. The MoU was discussed at the highest level with the Minister of Public Works and Housing.

2.4.2 The project implementation structure

The MCWP was hosted by the IUCN Office in Maputo and a memorandum of agreement was signed to clarify the roles and responsibilities. This was pertinent and very much appreciated by both the MCWP members and the GoM (DNA). The Project Manager ws housed at the IUCN offices and provided secretarial services for the partnership.

In Mozambique, the project institutional structure comprised the general assembly⁴, the technical team⁵, the steering committee⁶ and the project coordination team⁷ and this was according to the MCWP rules of procedures (MCWP, 2007a). In at least three levels of the project institutional structure the government institution responsible for water resources management in the country (DNA) is represented. Although the structures were representative in nature, the effectiveness in the operation and implementation of PAWD project activities was not efficient due to poor communication among the members representing the institutions. For example, the substitution of members representing the institutions (e.g., at technical committee sessions) was not

⁴ Government Institutions; Non-government institutions; Private Sector; Community Based Organizations; Research Institutions and Universities; Press and Media.

⁵ Government Institutions (DNA & MICOA), Academia (UEM-FAEF) and NGO (Justiça Ambiental).

⁶ Government Institutions (DNA), Academia (UEM); the MCWP-President; NGO (WWF); Media & Press (Vozes do Zambéze, Wamphula Fax and Soico), CBO (UPCT)

⁷ MCWP Secretariat and the Chair of MCWP

accompanied by exchange of information and previous work that had been done so as to maintain the momentum of the process.

Moreover, the fact that some members of the technical committee were also DNA staff sometimes affected their partiality in some issues. This does not mean however, that DNA should not be a member of to technical team – it is very important to have DNA as a member of these structures to also provide the overview of the water sector and the government priorities.

2.4.3 Linkages of the project with government structures

At national level – since water is a cross cutting issue it was envisaged that engagement would be made with the National Water Council and other water related ministries (e.g. MICOA, Fisheries and Agriculture) however this was not to be. The National Water Council was supposed to give a cross-sectoral oversight to the development of the IWRM Plan.

In the current institutional arrangement water is a unit in the Ministry of Public Works and Housing this is however meant to meet the needs and priorities of the GoM, which are to promote and improve Urban and Rural water supply and sanitation that requires the construction and rehabilitation of infrastructures. This setup within needs to be elevated in the government system in order to fulfil its expected role as outlined in the respective Water Law and National Water Policy. For example, the current institutional arrangement does not allow efficiency and flexibility on handling processes related to water issues which require approval at the highest level, process driven from the water unit tend to take time e.g. the signing of the MoU between DNA and MCWP took almost a year, the procurement of consultancy services also took a very long time.

2.5 Joint planning – DNA and MCWP

The MoU between DNA and the MCWP led to a working relationship between the two in PAWD process. As mentioned earlier in Mozambique the entry point for the PAWD programme was the elaboration of NWRMS and revision of NWP which were developed in the water sector reform process. The development of an Implementation Plan for the Water Strategy was a natural for the development of the IWRM Plan. This also led the DNA to be interested in the support that was being provided under the Dutch funded PAWD II project. The identification and anchoring of PAWD programme within the country's institutional and policy frameworks was relatively clear.

It is fine to have the right policy context; however it is important that the program agenda and the national agenda are aligned. In Mozambique, for example the MCWP was committed to support the GoM on the development of the IWRM Plan (Water Resources Management Master Plan) building on the approved NWRMS and NWP – these were only approved in 2007, two years after the project had started. This issue led to the delay in developing a joint work plan as the government at one stage waited for the approval of the NWRMS. This delay led to under expenditure of funds and thus constant revision of budgets at the regional GWP-SA and the global office. A joint work plan was developed in 2008 and it was agreed that a consultant to draft the Plan would be identified. At the same time the MCWP established a Technical Team to provide technical back stopping to the stakeholder platform. In the development of the activities to be carried out.

The DNA expected the Country Water Partnership to provide funds to pay the consultant to add on to money that they already had, however, the MCWP needed to fund tangible outputs contributing to the development of the plan as per contract with the funder. This misunderstanding and the delays in procuring the consultancy services led to the PAWD project coming to an end in December 2009 without the consultant on board. It must be noted that DNA involved the Country Water Partnership in commenting on the terms of reference for the consultant and this was in line with the MoU signed between two – this was a major achievement in the working relationship between the two parties. However, the project mode of the PAWD process and the need to follow government procedures affected the implementation of the work plan.

In the work plan the MCWP had a number of activities it was tasked with carrying out – these included capacity building, raising awareness of the water management instruments in Mozambique, supporting the Licungo Basin in stakeholder identification and developing stakeholder contributions into the IWRM Plan. All these were carried out successfully.

2.6 The role of the stakeholder platform in the IWRM planning process

As mentioned above the MCWP had a number of activities that it had to carry out to support the IWRM planning process in Mozambique. The MCWP members with support from the secretariat carried out a number of key activities that contributed to IWRM processes within Mozambique.

2.6.1 Capacity Building

During the PAWD process a comprehensive capacity building work plan was developed. The Capacity Building Plan look identifies the capacity required to implement IWRM in Mozambique. The plan looks at capacity required for NGOs, ARAs, DNA, research and academic institution and other water related professionals have participated in several capacity building. The capacity building plans targets all institutions in Mozambique to ensure that it makes a difference in IWRM planning by providing similar opportunities nationwide taking into consideration the identified specific training needs. The capacity building plan matches the strategic objectives in the NWRMS (MCWP, 2009).

During the implementation of the PAWD project the MCWP facilitated the participation of a number of practitioners in regional and national level IWRM related capacity building courses organized by GWP-SA in partnership with Cap-Net, WaterNet and other institutions. A training course for Lusophone countries on Climate Change and Water Resources was organised successfully by the Mozambique Country Water Partnership. The training brought together participants from Angola, Mozambique, Sao Tome, Portugal and Brazil.

2.6.2 Raising awareness on Water Resources Management issues

Under the coordination of MCWP awareness raising activities were carried out to disseminate and increase the understanding of the National Water Policy, the Water Law and the National Water Resources Management Strategy. This nationwide initiative contributed to the better understanding of the legal framework of the water sector and also helped stakeholders realise the role their need to play in water resources management. The role of the country water partnership in sensitising stakeholders was greatly appreciated however, the challenge remains in ensuring that this information is

also translated to local languages as a way of engaging local communities in water resources management.

2.6.3 Broadening stakeholder involvement

During the process of formulating and review the NWRMS and NWP respectively, although dominated by government institutions, Mozambique had a reference stakeholder platform, the GTA. The launch of the PAWD project in Mozambique coincided with the ending of GTA mandate in 2005. One condition to implement the PAWD programme was the existence of a stakeholder platform, which would facilitate the engagement of a broader range of stakeholders. In this context, the GTA was broadened to be the stakeholder platform through the establishment of the MCWP with about 32 member institutions (governmental, none-governmental, academia and research, media and press, private sector and community based organizations).

The MCWP therefore played a critical role of ensuring the engagement of stakeholders with regards to water resources management went beyond the few government stakeholders who were in the GTA. It was envisaged by DNA that the platform would play a key role in involving stakeholders at all levels and raising awareness of water resources management issues like water pricing, allocation, stakeholder involvement among others. The MCWP would become a neutral platform for DNA to become accountable and also to jointly address critical issues in the water sector with stakeholders. UNICEF also plays a similar role within water supply and sanitation planning and the Dutch Government on institutional development. However, the effectiveness of the partnership needs to be improved and there is a huge opportunity for the MCWP in supporting stakeholder involvement at all levels particularly at the basin level.

2.7 Development of stakeholder contributions to the IWRM planning process

As mentioned earlier the MCWP had a number of activities it was tasked to carry out within the joint work plan with DNA. A situational analysis of the Mozambique water sector had been carried out during the formulation of the National Water Resources Management Strategy – it was therefore felt that another situational analysis would not be necessary however, there was need to carry out studies on emerging issues and take these to stakeholders for inputs. The emerging issues were identified by stakeholders and the technical team was tasked with ensuring the elaboration of these studies. These studies will form an important component of the IWRM Plan and these studies were led by the Technical Team. A study on Integrating IWRM into the national development planning was also carried out, however more work needed to be done to align with ongoing DNA initiatives. Mozambique is currently developing its PARPA III and the water sector has an opportunity to issue that IWRM is integrated into this plan. The water, climate change and development nexus also provides an entry point for the sector to ensure that water resources management is strengthened.

2.7.1 Stakeholders' analysis for the establishment of Licungo River Basin Committee

From the inception phase DNA expressed the need for the MCWP to facilitate the establishment of River Basin Committees in Mozambique. River Basin Committees are stakeholder bodies which comprise of water user groups in a hydrological basin and these are institutions that are stipulated within the Water Law. The Licungo River Basin Committee lies within the ARA Centro Norte. The ARA's are tasked with the responsibility of assisting stakeholders in establishing these committees. However, issues of capacity and financial resources have hampered the establishment of the River Basin Committees. The MCWP in its work plan as part of strengthening stakeholder involvement in water resources management agreed to support ARA Centro Norte in identifying stakeholders and water user groups who will form part of the Licungo River Basin Committee. Stakeholder consultations were held in the basin and different stakeholder groups and water uses were identified. A report was prepared for the ARA Centro Norte – the MCWP also produced guidelines for developing Internal Regulations and Procedures for the committee.

2.7.2 Setting up River Basin Committees: Learning from Pungwe, Licungo, Rovuma and Zambeze in Mozambique

As part of contributing to the establishment of the River Basin Committees the MCWP also developed a document which captures lessons learnt from the establishment of four River Basin Committees namely Pungwe, Licungo, Rovuma and Zambeze. The document explores the different modalities used to setup the committees – this document forms the basis of the Guidelines on setting up River Basin Committees in Mozambique.

2.7.3 Guidelines for setting up River Basin Committees in Mozambique

The work done in the Licungo Basin Committee and the Lessons Learnt on Setting up River Basin Committees in four basins was used to develop a set of guidelines for ARAs to consider in the establishment of these committees. The guidelines also highlight issues that need to be considered in the IWRM planning process with regards to river basin management and involvement of stakeholders.

2.7.4 Financing Water Resources Management in Mozambique

The issue of financing water resources management was identified as a priority. Financing of water supply is understood but there is a gap in the financing of water resources management. It is important therefore to understand how the IWRM Plan will be financed once developed. Two studies were carried out the first one was a situational analysis on financing water resources management in Mozambique. The second study was a strategic options paper for financing water resources management in Mozambique. The paper proposes mechanisms for financing water resources management in Mozambique based on the proposed water sector reforms.

2.7.5 Integrating gender into the Mozambique IWRM planning process

Gender issues are important in water resources management especially in the involvement of different stakeholders with different roles and interests. MCWP also developed a report which proposes some strategies for integrating gender into water resources management in Mozambique.

2.8 Stakeholder contributions to the Mozambique IWRM Planning Process

The MCWP and DNA organised a stakeholder forum which brought stakeholders from the regions, academia, NGOs and government to make contributions to the studies and also suggest strategies that need to be taken into consideration in the development of the IWRM Plan. The stakeholder contributions are expected to be the foundation on which the IWRM Plan will be develop – as the contributions highlight issues to be considered and also propose strategic options to be considered by the planners. At the stakeholder forum – the stakeholders also highlighted the envisaged role of the country water partnership in Mozambique. This is the main contribution by the PAWD project to the development of the IWRM Plan which will now completed by the DNA as mentioned earlier.

3.0 Lessons learnt for the Mozambique IWRM planning process

- Understanding the country context in planning processes is important in ensuring a successful implementation of a project. For example in Mozambique although there was a clear entry point for IWRM Planning at the national level – there was more pressing demands from the ARAs.
- There is need for flexibility from funding agencies in IWRM planning processes the delay in setting up the stakeholder platform, establishing a working relationship between the DNA and MCWP and the procurement of consultancy services led to the consistent changes in the budget for Mozambique due to under expenditure. Flexibility could have led to a full development of the IWRM Plan.
- A champion is needed to drive the process and should be well respected, knowledgeable, and able to advocate at the highest level, but not directly linked to the government water management institution, even though the need to have internal mechanisms to streamline the process is of extreme relevance.
- Engagement of water using and water influencing sectors is important for effective IWRM planning processes. The role of the MCWP facilitated this engagement of other sectors. It is therefore important to have a neutral platform to ensure that a broad range of stakeholders can contribute to water resources management.
- Capacity building is important in IWRM planning process as this sustains the implementation of the IWRM plan.
- The involvement of stakeholders in identifying emerging issues and strategies to deal with the challenges in water resources management is critical as water is

integral to development therefore joint management ensures sustainable use of the resource.

4.0 Reflections and insights

- Defining the role of the Mozambique Country Water Partnership: Water • resources management in Mozambique is the domain of DNA. Already a lot of work has been done in setting up regional water management bodies and river basin committees. From the onset of the implementation of the PAWD project the role of the MCWP versus DNA was misunderstood. Although, the main role of the partnership is to create a neutral multi-stakeholder forum that facilitates the IWRM planning process it was still unclear how this role can be carried out at the national level. DNA is also a facilitator of IWRM processes and spearheads the creation of an enabling environment for the ARAs to manage water resources effectively. Since ARAs have already been established it is becoming clear that interventions by the MCWP at this level will have a bigger impact. The MCWP can become the national platform that brings together regional bodies and national level institutions to dialogue and interact on water resources management issues. Also the MCWP can play a key role in capacity building and raising awareness of water resources management level at the regional level and ensuring that concerns are taken up by DNA as the custodian of the resource.
- **Development of Basin Plans:** Under the water sector reform, the basin management plans are seen by DNA as key documents for ensuring the successful implementation of IWRM. The MCWP can act as a facilitator in the development of these from formulation to implementation, by ensuring that stakeholders' participate in the process and are capacitated to do so effectively.
- **IWRM as a process and not a means to an end:** IWRM is an approach to manage water resources better. The Mozambique IWRM planning process has been on-going for years emanating in the development of the policy and a strategy. The PAWD project has also made a contribution to the process by ensuring broader stakeholder involvement in water resources management. The documents on developed like the guidelines on stakeholder involvement in river

basin management will go a long way in ensuring that stakeholders are effectively involved in IWRM processes. The financing of water resources management work will contribute in ensuring the sustainability of water management institutions at all levels.

• Integrating IWRM into national development: water is integral to development and in Mozambique floods and droughts over the past 15 years have cut the gross domestic product by almost 6%. It is therefore important to ensure that water is managed properly so as to ensure that consistent economic growth. The IWRM planning process in Mozambique should be integrated into development planning processes and work needs to be done in this regard. With the reality of climate change and its impacts on water resources it is important to ensure that adaptation responses are develop to ensure water security. It is important therefore to ensure that in the IWRM planning process water resources management strategies to ensure water security are prioritised.

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