

# NAMIBIA WATER RESOURCES MANAGEMENT REVIEW



## INSTITUTIONS AND COMMUNITY PARTICIPATION THEME REPORT

Windhoek, August 2000

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## List of Abbreviations

CBM	Community Based Management
CSG	Committed Management Team
DWA	Department of Water Affairs
DRWS	Directorate of Rural Water Supply
FAO	Food and Agriculture Organisation of the United Nations
GRN	Government of the Republic of Namibia
IWRM	Integrated Water Resources Management
MAWRD	Ministry of Agriculture, Water, and Rural Development
MET	Ministry of Environment and Tourism
MRLGH	Ministry of Regional, Local Government and Housing
MOHSS	Ministry of Health and Social Services
NWRMR	Namibia Water Resources Management Review
NGO	Non-Governmental Organisation
NSW	New South Wales
OPM	Office of the Prime Minister
RC	Regional Councils
SADC	Southern African Development Community
UNDP	United Nations Development Programme
USA	United States of America
UK	United Kingdom
WRMA	Water Resources Management Agency
WAC	Water Advisory Council
WASCO	Water Supply and Sanitation Coordination Committee
WASP	Water and Sanitation Sector Policy

# 1. INTRODUCTION

## *Why a Review of Water Resources Management in Namibia?*

Namibia receives the lowest amount of rainfall of all Southern African countries, which makes it the driest in the Southern African Development Community (SADC) region<sup>1</sup>. Water is therefore Namibia's most precious and scarce resource.

Namibia's water resources are unevenly distributed over the country and generally not located near the current demand centres. For example, the country's only perennial rivers, viz. Kavango, Kunene, Kwando/Linyanti/Chobe, Orange and Zambezi, are far from the central parts of Namibia and all are shared with neighboring countries.<sup>2</sup> Some of the northern west-flowing rivers have potential for development, but as yet demand from this source has not been exploited. The same applies to the largely undeveloped potential of the Fish River<sup>3</sup>. Policy response has been to seek expensive schemes to transport water over long distances to existing centres of demand growth. This policy approach has mainly been due to immense pressure on the Government to redress the issue of rampant poverty and social inequities in the rural areas where 70 percent of the country's population lives.

The Government due to financial constraints and negative impact on the environment soon realized the need to expand the country's policy approach in a strategic way that looks beyond merely setting out to meet demands. Therefore, Namibia needs a new kind of water management that seeks to have these very scarce resources put to the very best uses in supporting social and economic growth, while at the same time ensuring that water development is environmentally sustainable.

The Government has already taken two major steps in water reform. Firstly, it has created a State-owned corporation to put bulk water supply on a firm commercial and financially sustainable basis. Secondly, it has put in place a comprehensive program to devolve rural water supply responsibility to the rural communities being served, and to require the recovery of water supply costs from the beneficiaries through tariffs and fees.

The third critical major reform needed is of the management of the resource itself. With this in mind, the Government of the Republic of Namibia set out in 1998 to review the full spectrum of water resource management, with the long-term objective:

*'To achieve equitable access to and the sustainable development of freshwater resources by all sectors of the national population, particularly for the rural and urban poor, in order to promote long term social and economic development.'*

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<sup>1</sup> Namibia Water Resources Management Review Booklet

<sup>2</sup> See Shared River Theme Report

<sup>3</sup> Namibia's Water: A Decision Makers' Guide

### *Why a review of Water-related Institutions and Community Participation?*

Institutions of all kinds (departments and agencies, local government, user groups, service providers, industry associations etc) together with the frameworks, rules and policies that link them, form the formal *process* of management. It is obviously desirable that these institutional arrangements are designed to facilitate, rather than to frustrate our objectives.

These objectives may include generic goals such as efficiency and effectiveness, together with goals of openness and accountability, as well as water management goals relating to the Government's long-term objective quoted above.

In Namibia, the goals of efficiency and effectiveness are at the center of the Government's public sector reform process, which is one of the key features of the First National Development Plan. At Independence Namibia inherited an administrative structure designed and steeped in colonial tradition of Apartheid that at its core did not have a participative and consultative culture with the majority of the Namibian population.

Against this background, community participation is a fundamental part of reformed governance in the new Namibia, and is enshrined in the Constitution. Also, as is shown later in this paper, community participation is not just part of good government, but is also a major ingredient of success in achieving good integrated water resources management. Initiatives in reform are discussed later in the report.

These objectives of good governance come together in the policy of decentralisation, which seeks to promote efficiency and effectiveness in the delivery of public services, and to provide the vehicle for greater regional participation in these services. With public officials located where services are delivered, it is clearly much simpler to create institutions or structures of consultation so that community views are built into the decision processes. In this way, accountability will be heightened as complementary levels of delegation accompany these decentralised services. The decision-makers will become part of the community, known to all, and easily accessible for discussions. They will also be able to understand in a much more comprehensive and sensitive way, the aims and aspirations of their community.

It is against this background of institutional arrangements that the Review process is analysing, with the participation of all stakeholders, the existing water-related institutions' responsibilities, accountabilities and linkages.

The review of this theme starts with Section 2 which is considering what might constitute good integrated water resources management and drawing out guidelines and principles. Section 3 of the report then gives a simple listing of the many water-related institutions and their present functions. Section 4 expands upon the background environment in which Namibian water management is currently taking place and leads to an analysis in Section 5 of the shortfalls between the goals and current achievements.

The Theme then proposes ways in which these institutional arrangements can be reformed to meet the principles of modern integrated water resources management and the national goals of the Government of the Republic of Namibia.

### *Links with other Review Themes*

No theme stands alone. In reviewing water-related institutions and community participation, reference is made to many themes, but particularly to the other two fundamentals without which water reform will fail. These are the development of human resources<sup>4</sup>, and the development of a sound legal foundation<sup>5</sup> to the management of the resource with an emphasis on equitable and economically sound water allocation.

## **2. DEFINING THE GUIDELINES, PRINCIPLES AND GOALS**

### **2.1 What is Integrated Water Resources Management?**

In recent years, there has been growing international consensus on what the key principles of good integrated water resource management have become (See Appendix 9.1 International Trends in Water Resource Management).

#### **2.1.1 Management Principles**

These Integrated Water Resource Management Principles are underpinned by the premise that water is a finite resource, vulnerable to degradation and essential for life.

They involve:

- Water allocation to competing uses and users both nationally and externally with other riparian states.
- Water protection to ensure access for present and future generations to acceptable quality water.
- Water supply to all citizens is based on fairness and equality.

#### **2.1.2 Components of Water Management**

How the three components of water management described above are achieved varies greatly from one country to another and need to take account of the social and cultural factors that influence government and community values and aspirations. What can be said however, is that, in whatever country good integrated water resources management is evident, there are four common features that constitute best practice.

These are:

- An institutional framework is developed which is both robust and flexible and, includes modern legislation and an integrated policy framework.

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<sup>4</sup> See Human Resources Development (HRD) Theme Report

<sup>5</sup> See Legal Theme Report

- Planning and management activities are knowledge driven. Strategic assessment of water and related resources receives high priority and, does not stop at mere data management, but actively pursues the generation of strategically focused information and knowledge.
- Integration is built into institutions, resource management and policy. There is recognition of the holistic nature of ecosystems and, all policies, decisions and projects are evaluated against this background.
- Community participation is built in the processes. It should be the way of doing business in the public sector. It recognises also that the natural resources of a country belong to its people, and they have a right to participate in its management. Not only that, but community participation leads to government efficiency, ownership of policies and actions by the community and, to readily accepted principles of cost sharing.

### **2.1.3 Namibia's Position**

Measured against these concepts, it is clear that, whilst Namibia is moving in the right direction, it has not yet achieved a high status in water resource management. These issues are discussed in greater depth in Section 4 but in brief, the current institutional arrangements are conflicting and overlapping, are not always clear or transparent and, only partially achieve community participation.

We therefore recommend that the above-mentioned four key features of good integrated water resources management should be adopted and promoted as part of Namibia's future vision and goals and are used to underpin the institutional structures and their activities as we review and refocus our efforts.

## **2.2 Integrating Policy Strategy and Activity**

During the review the team found that there was general agreement about the importance of integrating policy, strategy and activity in line with sound water resource management principles. However, there were found to be a number of examples of gaps and weaknesses within the current institutional arrangements.

The team therefore recommends that these principles are reinforced and should form part of the guiding policy that shapes the institutional reform. In particular, future focus and effort needs to reflect the following dimensions of integration:

- Between the various levels of government and other organisations involved in water management and environmental related issues.
- Between levels of government and other organisations with an interest or who have operating functions relating to water.
- Across sectors where common national goals are shared.
- Across geographical zones or river basins to ensure sound basin wide development and management.

## **2.3 Roles and Responsibilities**

In establishing the links between the various institutions and allocating responsibilities, care will be needed to ensure that each role is clearly defined and that no overlaps or duplications exist. Care must also be taken to ensure that there is no



confusion about what the core business is, no confusion about who the customers are and, that there is no straying into new activity that deflects attention away from core responsibilities.

The team consider that there should be no overlap or confusion in the following roles and recommends accordingly:

- Regulation/Standard setting/Organisational audit.
- Water resource management.
- Water operators and providers of technical support.

#### **2.4 Separation of Roles**

Separation of water supply service providers from resource management has become the international norm and Namibia has already started this process with the creation of NamWater. However, there is a great deal less consensus about regulation, standard setting and organisational audit roles from that of the resource management role. The benefit of this approach needs to be balanced against the costs involved.

On balance, the view of the review team is that the benefits of separating these roles help to strengthen transparency and provide greater accountability. The team therefore recommends that in allocating roles and responsibility, separating these roles should continue to be accommodated.

Separating roles for water resource management functions from that of water quality and water pollution licensing has a number of drawbacks. In particular, it does not provide the complete picture for managing the resource effectively, it can lead to confusion or duplicate of effort and may not be the most cost effective arrangement.

The team therefore recommends that water quantity, quality and pollution management roles and responsibilities should be integrated.

#### **2.5 Institutional Principles for Integrated Water Resource Management in Namibia**

From our research into institutional arrangements elsewhere in the world and from the results of our wide consultation throughout the water and related sectors in Namibia, we strongly recommend that the integrated water resource management principles discussed in this section are used to guide water reforms in Namibia. In summary these are:

- Water resource management, if it is to be done successfully in Namibia, must focus on mechanisms for:
  - Allocation.
  - Protection.
  - Supply.

- So that scarce water resources benefit all citizens through:
  - Clear, non-overlapping institutional arrangements.
  - Integrated across institutions, policies strategies and activities.
  - Participation from communities.
  - Based on sound knowledge of natural resource issues.
  
- Are transparent and accountable through clear separation of roles and responsibilities in:
  - Regulation, standard setting and organisational audit.
  - Policy.
  - Resource Management.
  - Operator and service provider.

Later sections use these principles to test existing arrangements and the proposals being put forward in order to ensure that Namibia's future water resource management institutions reflect international best practice within the context of our national environment. A summary of these principles and the underpinning rationale is set out at Appendix 9.3.

### **3. AN INVENTORY OF EXISTING WATER-RELATED INSTITUTIONS**

The Constitution of the Republic of Namibia declares that water below and above the surface of the land shall belong to the State unless “otherwise lawfully owned”<sup>6</sup>. Consequently, the Government assumes overall responsibility for the management of water resources in Namibia and the main responsibility is delegated to the Ministry of Agriculture, Water, and Rural Development. This responsibility was re-affirmed by Cabinet in 1993 as part of the Water and Sanitation Policy of the Government of the Republic of Namibia.

However, due to the wide range of functions that make up the management of water resources (see previous section), there is a corresponding wide range of institutions with a variety of roles and responsibilities that have direct roles in water management. Such institutions also have roles of influence on water management through the setting of standards (for example, for drinking water quality), provision of information, or through such activities as policy development (for example, land-use planning).

Firstly institutions, in the sense of discrete organisations, are listed here by reference to the three basic components of water resources management: Sharing, Protection, and Supply. This is followed by descriptions of some of the institutional arrangements that influence how these organisations perform and how they interact.

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<sup>6</sup> Constitution of the Republic of Namibia: Article 100

### **3.1 Institutions with Direct Water Allocation Functions**

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

The water sharing or allocative functions of this Department within the Ministry of Agriculture, Water, and Rural Development are contained within its Directorate of Resource Management. This Directorate contains most of the functions required to manage the water cycle. That is, the Resource Management Directorate has responsibility for:

- water resources management strategy formulation;
- quantifying Namibia's surface water and groundwater resources;
- water planning at international, national and regional levels;
- administering the water allocation system contained within the Water Act; and
- managing the water environment.

### **3.2 Institutions with Functions that Influence Water Sharing (Allocation)**

#### *National Planning Commission*

The Commission has broad national planning responsibilities, which, among other things, include management of water and natural resources, with focus on the development of Namibia. Its views are expressed in the Government approved and published National Development Plan No 1.

The Commission also has significant influence over capital works programs.

#### *Regional Councils*

The most important function of a Regional Council in the public administration of the country is related to socio-economic planning of the region over which it has jurisdiction. A key part of this planning involves the way water is allocated, managed and used in the region. However, at the moment Regional Councils are not involved in planning and allocation of water resource. They are only involved to some extent in the water supply. When decentralized functions are more fully implemented, Regional Councils will have significant influence on water resource management and planning.

#### *Ministry of Regional, Local Government and Housing*

One of the main functions of this ministry is to provide the administrative services of the Regional Councils on behalf of the Government, by containing Town and Regional Planners within its planning division. Moreover, it is also responsible for the proclamation of town and for providing services i.e. water supply, to settlement areas. Therefore, this Ministry has some influence on water allocation functions.

#### *Namibia Water Corporation (NamWater)*

NamWater is described more fully under Water Supply in section 3.5, but is included here because of the provision in the enabling legislation that gives NamWater powers

to “explore, develop and manage water resources for the purpose of water supply”<sup>7</sup>. This clearly creates a position of influence and also, as later discussed, is a source of confusion of roles with the water resource manager in matters of resource assessment.

#### *Ministry of Works, Transport and Communications*

Meteorological Services (the Namibian Weather Bureau) is contained within the Civil Aviation Directorate of this Ministry. It provides vital data for water resources planning and for flood forecasting.

### **3.3 Institutions with Direct or indirect Water Quality and Water Environment Protection Functions**

#### *Department of Water Affairs*

The Resource Management Directorate has responsibility for water environment management functions including environmental impact assessments and some research activities. This has included such activities as developing and administering environmental releases from dams.

Specifically, the Department also has responsibility for water quality and pollution control through the assessment, approval and administer of pollution permits for effluent discharges to water bodies.

#### *Ministry of Environment and Tourism (MET)*

This Ministry has over-arching broad responsibilities for the natural environment of Namibia. It is the primary Ministry responsible for overseeing the Constitutional goal of “...maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future...”<sup>8</sup>

The Ministry is responsible for environmental impact assessment policy and for establishing a statutory basis for environmental impact assessment of proposed public and private physical projects and for proposals entailing new Government policies, plans and programs.

Its maintenance of natural resources includes the provision and supply of water to the wildlife in the National Parks managed by MET.

Additionally, MET has been assigned the responsibility of implementing international environmental conventions and programs to which Namibia is a signatory. These include the RAMSAR Convention dealing with wetlands of international significance.

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<sup>7</sup> NamWater Act 12 of 1997

<sup>8</sup> Ministry of Environment Official: personal interview

### *Namibia Water Corporation Limited (NamWater)*

NamWater has a statutory duty to conserve and protect water resources. This duty requires the Corporation, in carrying out its functions, to utilize the water resources available to it on a long-term sustainable basis; and to take steps to ensure that those water resources are protected from pollution caused by its operations.

In the transfer of functions from Department of Water Affairs, the country's main water quality laboratory was transferred to NamWater. This has clear implications for integrated and focussed water data management. It is for this reason that the Review recommends setting up a Drinking Water Inspectorate (National Water Laboratory) within the proposed Water Resources Management Agency.<sup>9</sup>

### *Regional Councils*

Regional Councils' development and socio-economic planning functions include land management and the natural environment. The Councils therefore have an important role to play in management of the water environment within their areas. As with water allocation, it can be expected that as this role matures, regional councils will exert significant national influence in water environment management.

### *Ministry of Health and Social Services(MOHSS)*

This Ministry is the custodian of all health-related functions in the country. One of its functions is to develop and monitor water quality standard and recently it has been given responsibility for sanitation in rural (communal) areas. It is therefore one of the player who has a major influence in the water quality and water environment functions.

### *Local Authorities/ Municipalities*

Responsibilities of local authorities include among other functions, water supply, the provision and maintenance of systems of sewerage and drainage for the benefit of residents in its area. The connection with the water environment is clear and requires administer by the water resources management body.

### *Private Sector*

Under the existing Water Act there are rights associated with the ownership of river frontage and with groundwater under privately owned land. Using these rights, businesses such as mining companies and commercial farmers develop and operate their own water supply schemes.

### *Community*

There is a growing direct community responsibility for rural water supply that arises from the implementation of community based management policies.

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<sup>9</sup> See Section 7 of this Report and Sections 3.2.4 and 6.9 of the Water Conservation and Reuse Theme Report

### *Ministry of Regional and Local Government and Housing*

The Ministry promulgates model regulations to guide Local Authorities in their provision of water supply, sewerage and drainage services. The connection with the water environment has already been mentioned and again this activity requires administer and input from the water resources management body.

### *Ministry of Lands, Resettlement and Rehabilitation*

Land use management is nearly inseparable from water resource management. This is particularly so in respect of the management of the water environment. Inappropriate land use planning can have disastrous effects on erosion, water quality and aquatic ecosystems. Coordination of planning effort is clearly critical.

### *Non-government Organisations (NGOs)*

NGOs are typically prominent players in the water sector in most countries. Whilst they often participate in debate on water sharing (allocation) and water supply, they are most active in the area of protection of water and the water-related environment. Namibia is no exception and within the country, the Desert Research Foundation of Namibia has done extensive and very useful work in promoting awareness of water and water related issues.

## **3.5 Institutions with Direct Water Supply Functions**

### *Namibia Water Corporation Limited (NamWater)*

NamWater is a commercial entity created by statute in 1998 for purposes of bulk water supply throughout Namibia, and is incorporated under the provisions of the Companies Act. The State, in the person of the Minister for Agriculture, Water, and Rural Development, is the sole shareholder.

The main business of the Corporation is the development, operation and management of an efficient and economic system of water supply, in particular the supply of water in bulk to customers, in sufficient quantities, and of a quality suitable for the customers' purposes.

Prior to 1998, the functions of NamWater were contained within the Department of Water Affairs. The transfer of functions included the transfer of assets (including waterworks and related infrastructure) and liabilities to the Corporation.

For the purposes of the Review, the more salient functions, powers and duties of NamWater are to<sup>10</sup>:

- explore, develop and manage water resources for the purpose of water supply;
- acquire, plan, design, construct, extend, alter, maintain, repair, operate, control and dispose of waterworks;

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<sup>10</sup> NamWater Act

- supply water to customers, notwithstanding any provisions of the Water Act to the contrary;
- investigate, research and study matters relating to water resources, waterworks and environment;
- determine and levy, in consultation with the Minister, tariffs on a full cost-recovery basis for water supplied;
- utilise the water resources available to it on a long-term sustainable basis;
- protect those water resources from pollution caused by its operations;
- conserve and protect the environment from damage, destruction or degradation;
- keep prescribed records in respect of its operations that are publicly available;
- furnish DWA with information on rainfall, river flows, groundwater levels, water abstraction from water resources, and water quality; and
- formulate, maintain, and publish service standards.

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

The DWA Directorate of Rural Water Supply is the primary national Government body directly involved in the supply of water to rural (communal) areas.

The Directorate plans, implements and operates rural water supply schemes. It is also the primary body responsible for the ongoing transfer of responsibility for rural water systems to local communities through water point committees and other community based mechanisms. Its staff is largely situated in the Regions where they assist with capacity building for the water point committees, and provide operation and maintenance services.

#### *Local Authorities/ Municipalities*

Local Authorities, comprising mostly town councils, are responsible for the reticulation and supply of water to the communities they serve. Bulk water is purchased from NamWater, generally downstream of treatment plants, and is piped on to the authority's consumers through infrastructure owned and operated by the Local Authority.

Local Authorities are responsible for the ultimate water quality provided to end consumers. They are required to monitor water quality and to take an active and direct role in public health matters associated with water and sanitation within their boundaries.

### **3.7 Institutional Policies and regulations that cross Organizational Boundaries**

#### *Namibian Statutes – Acts and Regulations<sup>11</sup>*

These are dealt with in more detail in the legal review theme, but are simply listed here as pieces of legislation that influence water management directly or indirectly.

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<sup>11</sup> These Acts and Statutes were identified with the help of DWA

### *Pre-Independence*

Public Health Act, 1919  
Water Act, 1956  
Forest Act, 1968  
Soil Conservation Act, 1969

### *Post-Independence*

Local Authorities Act, 1992  
Regional Councils Act, 1992  
Mineral (Prospecting and Mining) Act, 1992  
Namibia Water Corporation Act, 1997

### *Bills in Draft Form with Institutional Implications*

Environmental Management Bill  
Pollution Control and Waste Management Bill  
Rural Water Supply and Management Bill  
Untitled draft Namibian Water Act

### *Water Supply and Sanitation Coordination Committee (WASCO)*

This is the only semi-formalised coordinating arrangement in place currently. It is comprised of a number of Permanent Secretaries and its role is to administer and coordinate the Water and Sanitation Policy of 1993. This policy has a strong rural focus, but contains a number of more general principles about water at large.

### *Other Mechanisms for Coordination and/or Consultation*

There exists a plethora of committees, particularly at regional level, that exist primarily for purposes of one sponsoring Ministry or another, but as the list of Ministries above shows, may have some role or influence in water management. No mechanisms were apparent to the Review for coordinating these committees, except perhaps through the important regional Development Committees.

In the particular field of rural water supply, an intricate structure of hierarchical committees exists, starting at the lowest level with Water Point Committees. These are characterised by continuing centralised control.

### **3.8 An Organisational Responsibility Matrix**

The table below does not deal with linkages or coordination, but attempts to give a very simple picture of the multitude of organisations and their current roles.



<b>Organisations with some responsibility Or influence in water management</b>	<b>Water allocation</b>	<b>Water Protection</b>	<b>Water Supply</b>
National Planning Commission	<b>X</b>		
Department of Water Affairs	<b>X</b>	<b>X</b>	<b>X</b>
Regional Councils			<b>X</b>
Local Authorities/ Municipalities		<b>X</b>	<b>X</b>
Communities			<b>X</b>
Non-government Organisations		<b>X</b>	
Private sector			<b>X</b>
NamWater		<b>X</b>	<b>X</b>
Ministry of Environment & Tourism		<b>X</b>	<b>X</b>
Ministry of Regional & Local Government & Housing	<b>X</b>	<b>X</b>	
Ministry of Works, Transport & Communications	<b>X</b>		<b>X</b>
Ministry of Health & Social Services		<b>X</b>	<b>X</b>
Ministry of Lands, Resettlement & Rehabilitation		<b>X</b>	

The issues, which arise from this clearly tangled web of jurisdiction, are analysed and discussed in detail in Section 4.

However even without analysis, it is obvious that

- There are confused set of responsibilities
- Regional Council are not involved in both water allocation and protection functions
- Lack of co-ordination among different role prayers
- Communities are yet to be involved in water resource management and protection

In summary, the above matrix clearly shows the status quo in terms of linkages and responsibilities is far from the desired outcomes and principles of good water management.

#### **4. CURRENT SITUATION ANALYSIS**

This section of the report is concerned with the identification of problems and issues in Namibian water resources management. It draws on many sources and examines the current institutional arrangements and performance, then compares these with the principles of good integrated water resources management, international practice, and policies of GRN.

Options to meet the various problems and issues, and to better manage the sector and the water resources themselves are developed in Section 6. Summarised preferred

arrangements are presented in Section 7 and diagram for proposed institutions is at **Attach 6**.

#### **4.1 Policy and Planning Issues**

Whilst the Water and Sanitation Policy (WASP) provides a very solid beginning, it really deals only with the priority water issues facing post-colonial Namibia. This was well understood by Cabinet at the time and it was recognised that WASP principles indeed only laid a foundation, but nonetheless provided a firm set of guidelines for the further expansion of the sector in Namibia.

The most critical current gap in policy is the absence of a comprehensive, national, integrated water resources policy. Without such a policy there is nothing on which to base the urgently needed legislative reform in management of the water cycle, and particularly in dealing with comprehensive allocative management of water.

The shortcomings of the outmoded and unsuitable Water Act are covered in detail in the report of the legislative theme of the Review.

It also deals poorly with groundwater, has inadequate conflict resolution processes, deals inadequately with pollution and the water environment, and contains no mention of principles of sustainable development. Finally, and most critically, the Act does not provide a workable vehicle for the wise allocation of resources to meet the changing needs of Namibia, her citizens, and her water-related natural resources.

Without modern legislation to give effect to the principles of integrated water resources management that were discussed in Section 2, there can be no real progress in development of a national water plan, or even an integrated approach to the development of the much needed regional water plans.

***... there is an urgent need for a policy on Integrated water resource management and planning***

#### **4.2 Performance Issues of Current Institutions**

The colonial-style and over-centralised public administration inherited at Independence has been remarked upon earlier. The Government is pursuing change across the public sector to achieve a more appropriate administration and management culture for modern times. Public sector reform, which is the overriding framework for this review requires that government institution, should work towards more efficient and effective service provision. The water sector is therefore required to improve its performance and services in order to achieve the overall government objectives.

#### 4.2.1 Department of Water Affairs

##### *Functions and responsibilities*

The DWA as it stated in section 3 is entrusted with the following functions and responsibilities:

- To develop a cohesive national policy for managing water
- To manage, coordinate, monitor and control water resources.
- It also has the responsibility to ensure that all Namibians have access to potable and adequate water, especially the rural population.

##### *Current performance and shortcomings*

It is important first to acknowledge that although there were many constraints which, hampers performance and the efficient delivery of services in DWA, they have continued to carry out their functions in many aspects. The review has identified the following gaps in the current DWA in relations to its operational and organizational performance as follow:

- Lack of a properly integrated resource management system.
- Lack of comprehensive legal framework
- Absence of a formal regulatory framework.
- Absence of clearly defined objectives and accountability mechanisms.
- Absence of strategies for delivering Value For Money(VFM).
- Absence of strategies for meeting devolution policies.
- Lack of community ownership.

More pertinent to the institutional theme however was the limited readiness and capacity of DWA to meet new challenges. The Ministry and DWA did in fact set out to initiate change. They agreed to carry out the recommendation of the study that was done by the Consultancy Service Group (CSG) from the Office of the Prime Minister in 1996, but so far little have been achieved. It is however important to reflect on some of the observations and recommendation from said study:

##### *Committed Management Team*

In 1996 CSG noted that managers are “...*overwhelmed by operational tasks and constraints, and have adopted an introverted culture*”. Further it was noted that “...*attitudes among some managers range from abdication and resigned apathy to cynical or misinformed*”. The CSG went on to say, “*We believe the highest priority should be given to aligning the activity and focus of managers with operational goals. In addition, we do not believe that the Department will succeed in achieving its goals unless it has a highly motivated management team that is committed to the task*”.

The 1999-2004 Strategic Plan draft says merely that planning processes will be aligned to the broad based direction of the First National Development Plan (promulgated four years ago) and details some very general proposed Actions – for example:

- Align all planning processes on all levels to national objectives
- Introduce a participatory Management Planning process
- Strengthen senior management capacity....
- Review the roles, responsibilities and structure of our senior management team
- Empower middle and operational managers

### *Financial Management*

CSG in 1996 identified the shortcomings of the Public Service wide financial management system in supporting financial performance management for individual departments. CSG commented that, *“The Department will, in our view, need to review their internal arrangements for meeting budget requirements and develop further financial systems for performance purposes.”*

The 1999-2004 Strategic Plan draft says a proposed Strategic Management Review Board will – *“...commission the development of our own financial information and control systems”*.

### *Management Information*

In 1996, CSG formed the view that, *“...the systems currently in place fall short of those required to meet the business needs and therefore limit the effectiveness of managers.”*

The 1999-2004 Strategic Plan draft says that, *“...we will develop a monitoring and evaluation system that will enable us to monitor, measure and improve the performance for all business groups.”* Further, it lists an Action for a proposed Strategic Management Review Board, *“...to commission the development of key performance indicators for each Business Group.”*

If DWA is to meet its aims and objectives as well as its challenges the issues raised above still needs urgent attention and the whole organization need to realign its current structure. The response to the current shortcomings and gaps identified are addressed later in section 7 of this report..

***... DWA needs an enabling environment before it will be a responsive and flexible water manager***

## **4.2.2 Namibia Water Corporation Limited**

### *Functions and responsibilities*

NamWater as it is described in section 3.5 is a government-commercialized entity, which was created by statute in 1998 for purposes of bulk water supply throughout Namibia.

The main functions of the Corporation is the development, operation and management of an efficient and economic system of water supply, in particular the supply of water in bulk to customers, in sufficient quantities, and of a quality suitable for the customers' purposes.

Other responsibilities, powers, and duties of NamWater are to<sup>12</sup>:

- explore, develop and manage water resources for the purpose of water supply;
- acquire, plan, design, construct, extend, alter, maintain, repair, operate, control and dispose of waterworks;
- supply water to customers, notwithstanding any provisions of the Water Act to the contrary;
- investigate, research and study matters relating to water resources, waterworks and environment;
- determine and levy, in consultation with the Minister, tariffs on a full cost-recovery basis for water supplied;
- utilise the water resources available to it on a long-term sustainable basis;
- protect those water resources from pollution caused by its operations;
- conserve and protect the environment from damage, destruction or degradation;
- keep prescribed records in respect of its operations that are publicly available;
- furnish DWA with information on rainfall, river flows, groundwater levels, water abstraction from water resources, and water quality; and
- formulate, maintain, and publish service standards.

#### *Current performance and shortcoming*

As NamWater has only been in existence for one year and it's in a process of finalizing its first Annual Report at the time of writing, performance is not easy to gauge. However, It is importance to note that its performance in terms providing bulk water supply to its customer is highly on the course. But as with any institutions there are many teething problems and shortcomings that were identified amongst others:

- lack of transparency to gain consumer confidence
- lack of information dissemination to the consumers
- lack of a formal contract with some of its client, i.e. Municipalities
- lack of proper separation of operation between Namwater and Rural water Supply in the communal areas
- absence of a formal agreement on the relationship with DWA
- NamWater's involvement in the resource management role
- Lack of a regulator

These are some of the critical issues that need urgent attention and considerations by all affected stakeholders.

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<sup>12</sup> NamWater Act

### 4.2.3 Regional Councils

#### *Functions and responsibilities*

Regional Councils are still quite new, with the first Council elections held only relatively recently. Suffice it to say that there is a mixed picture at present. Some are clearly rapidly developing confidence and capacity, but it will naturally be some time before Regional Councils are fully effective across their range of functions.

From the water management point of view, the importance of Regional Councils in water supply and in regional water planning will be critical. Capacity building must continue to be vigorously promoted.

Regional consultations by the Review showed impatience and frustration among Regional Councilors who could see clearly what needed doing and how to do it in their region, but were unable to access the human and financial resources still under central control. Connected with this, is a very slow transition to regionalisation that has not yet delivered benefits to regional communities. The consultations also revealed that delegation to regional officers was very low and that central agencies had yet to transfer functions to the regions in a way that makes them accessible to the local community.

***... Regional Councils are being held back by central reluctance to transfer staff and budgets***

### 4.2.4 Local Authorities

#### *Functions and responsibilities*

The Local Authorities main responsibilities according to Local Authorities Act of 1992 is to provide services to the people residing within their boundaries jurisdiction. One of its main functions is to provide reticulated water services and sanitation to their respective towns. With the decentralization process in the pipeline the functions of the Local Authorities are due to increase.

#### *Current Performance and shortcomings*

The Local Authorities in Namibia differ in terms of sizes and capacity and it is perhaps inappropriate to group them together. However, since they all have same operational objectives, it is fair to analyze their performance in terms of water reticulation and sanitation together. Well-established local authorities have capacities and good infrastructures for reticulation and sanitation services as compared to the newly established ones. At the other end of the scale, small towns will need help for some time to come. This makes even more important the matter of quickly developing capabilities in the Regional Councils. What is abundantly clear is the desire of Namibian communities to manage their own affairs to the maximum extent that is still compatible with national goals.

***... Local authorities need capacity building to become effective***

### **4.3 Issues of Integrated Water Resources Management**

#### **4.3.1 Integrated Water Resources Management Issues**

The Review is absolutely of the view that integrated water resources management requires singular management of the entire water cycle, coupled with strong coordinating mechanisms to link management of water related natural resources.

The Review has noted that the draft ‘Pollution Control and Waste Management Bill’ being circulated does not follow this concept, giving both water quality currently monitoring and pollution licensing to the proposed pollution control agency.

Similarly, the draft ‘Rural Water Supply and Management Bill’ mixes allocative functions with water supply services, which also breaches the concept of a singular accountability for water resources management.

The research available to the Review strongly suggests that this is very much against the bulk of current worldwide practice. In fact FAO legal experts have advised that such an approach is contrary to a variety of international pronouncements (eg. Dublin Declaration 1992, and the International Association for Water Law) and against recent developments to strengthen water management integration in many countries (eg. Mexico, Brazil, Jamaica, Morocco, Ivory Coast, Uganda, South Africa, China, Vietnam, France, Spain).

There is some argument for the institutionalized integrated pollution control concept in large, highly industrialized cities of the world, but no apparent benefits in the Namibian context to offset the fracturing of integrated water resources management. It is important however to recognise that maintaining integrated management of the water cycle does not prevent particular pollution problems being tackled in an integrated manner. It simply shifts the boundary at which coordination must occur.

*“This impressive body of evidence supporting integrated management of water resources and its reflection in legislation and in the institutional arrangements for its administration ought not to be dismissed lightly, lest Namibia single itself out as a lone exception – for no apparent compelling reason”. (FAO, 1999)*

In examining the water sector, it can be seen that there is no one body that has the legislative or any other sort of power to enforce sustainability of water resources in either the public or private sectors. It follows from this that there is no imperative for any existing institution to really plan for sustainability.

A related issue arises from this matter of sustainability. It is that of efficient and effective coordination. Whilst there is an urgent need to establish a singular

accountability to achieve sustainability, it involves many players. The Department of Agriculture is well aware of unsustainable land use practices, the Ministry of Lands, Resettlement and Rehabilitation has responsibilities in land use planning, the Ministry of Environment and Tourism has skills to offer, but there is not anyone pulling it all together for water resources and integrating this with land use planning. Nor at this stage is there a body clearly responsible for setting targets and standards in matters such water quality which in turn relate strongly to land use planning.

*... there is a need to establish a singular accountability for water resource sustainability*

### **4.3.2 Separation and Clarity of Roles**

Apart from the focus needed on water resource management discussed in the preceding section, there is the corollary that flows from the principle of separation from resource management of the water supply services functions. This suggests that the water services utilities and organisations such as municipalities should concentrate solely on these service functions, in the interests both of removal of conflicts of interest and in achieving efficiency in service delivery.

The inventory of institutions at section 3 shows however a number of small players in the water supply business, particularly in relation to the provision of water supplies to remote government facilities such as schools, clinics, defense facilities, and so forth. There would seem to be a clear case to improve efficiency by putting all these technical services together.

Another example, which appears to the Review to be not totally attuned to these principles of separation and clarity of roles, is within the proposed Environmental Management Act. Overall, the Review is strongly supportive of this approach to better environmental management, but notes that it adopts an all embracing approach in matters that must reach the ‘Environmental Commission’. This implies that issues as minor – in environmental impact terms – as the granting of a water extraction licence, sinking a bore, construction of a canal (see schedule to the draft legislation) must be referred before the so-called Competent Authority can grant an approval.

The concept of a “resource manager” in the separation of roles mentioned earlier would suggest that a more appropriate, integrated and efficient process would be for the Competent Authority to first assess the likely impact and then only refer those proposals to the Environmental Commission that appear to impact beyond certain agreed limits.

*... there are efficiencies available from separation and clarity of roles*

### **4.3.3 Water Sector Coordination**

Whilst arguments are mounted in this theme report to support integrated water resource management, there are many other institutions within the sector.



This was well recognised when WASP was developed and a Water Supply and Sanitation Coordination Committee (WASCO) was created for this specific purpose. WASCO was to have a WASCO Sector Council (of relevant Permanent Secretaries), a set of permanent sub-committees, and be serviced by a small interdisciplinary WASCO secretariat situated within the Ministry of Agriculture, Water and Rural Development.

All evidence suggests that WASCO is not achieving its objectives. A well managed and energetically driven WASCO would long ago have been expected to have completed a review similar to NWRMR and to have implemented change.

It is not totally clear to the Review as to why, after a promising start, WASCO, is almost universally regarded as no longer effective. Opinions were given to the Review that Permanent Secretaries are very busy people and found it difficult to attend meetings. This, if true, is extraordinary when considering the critical role of water in Namibia's future. Other opinions suggest that there is insufficient accountability.

Clearly, a mechanism similar to WASCO remains essential, and clearly the means must be found to make it perform the quite vital task of sector coordination.

***... the vital task of sector coordination requires reform***

#### **4.3.4 Knowledge Generation and Data Management<sup>13</sup>**

A key principle underlying successful integrated water resources management is that all planning and management should be knowledge driven. To achieve this, there should be an active pursuit of the generation of strategically focussed information and knowledge. Finally, because land, water and vegetation all interact, it is also important to pursue data and knowledge integration across these natural resources.

The two primary Ministries involved in water and the water related environment are the Ministry of Agriculture, Water and Rural Development and the Ministry of Environment and Tourism. The technical staff of these Ministries are all generating data as part of their regular activities, but there is, as yet, no focussed drive for comprehensive data acquisition and management in terms of the principles above.

In fact, there are some signs that even within one Directorate, the message about integrated databases is seemingly not heard or understood. The Hydrology Division of Water Resource Management has just installed 'state-of-the-art' time-series data management software to manage surface water data. At the same time the water quality and the Geohydrology people are each pursuing other independent systems to manage 'their' data<sup>14</sup>.

Data management, and information management and technology are now professional specialties in their own right. Failure to recognise this can be costly – firstly in terms of diverting professional officers from their main functions, and secondly in the

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<sup>13</sup> For details on Data Management see Strategic Water Resources Theme Report

<sup>14</sup> Hydrology Division in DWA

inevitably inefficient data management that results from failing to employ information professionals.

In managing water resources ahead into the next century, the Review sees an urgent need to better focus on research for the data management and information generation that will underpin critical resource decisions.

***... a focus on research for integrated data services and information generation is urgently needed***

#### **4.3.5 Economic Regulation**

Along with the financial management and pricing policy matter, the complementary issue of creation of a pricing or economic regulator requires consideration. If not immediately, then sooner or later with development of increasing commercialisation in this sector, there is a need for a body that ensures that national economic and social goals are not distorted by monopoly or other entities that are not acting in the public interest.

Already, there is some public concern about bulk water prices. NamWater has power to set its own tariffs after consultation with the Minister. A pricing or economic regulator acting in the public interest would create greater transparency in this process and should at the same time be able to pursue matters of efficiency of the Corporation.

The charter of such a body should include the capacity to publicly inquire into the efficiency and effectiveness of NamWater and the financial impacts of its proposed tariffs. Matters to be taken into account would include social and economic effects, both local and national. Also matters of equity, cross-subsidies, regionalisation, and so forth. The review notes that Cabinet has already resolved to establish a policy for the governance and regulation of State-owned entities and enterprises<sup>15</sup>.

***... a public enquiry into pricing, tariffs and efficiency is required***

#### **4.3.6 Sustainability of Community Based Management**

The application of community based management (CBM) to rural water supply is a commendable and well-developed initiative of the Government. Developed under the Water Supply and Sanitation Policy, the strategy for implementation of CBM in rural water supply, including cost recovery aspects was endorsed by Cabinet in June 1997.

CBM is an ambitious initiative with potentially significant benefits. As might be expected with such an initiative it also carries risks. In this regard, the experience of South Africa is illuminating. Media reports (*African Eye News Service, May 9, 1999*) concerning South Africa's similar CBM approach to rural water supply indicates that significant problems are arising. Reported problems include schemes that are too costly, insufficient attention to capacity to pay, too rapid phasing in of cost recovery,

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<sup>15</sup> For details on Section 5.7 and 5.8 see Economic & Financial Theme Report

inadequate consultation, inadequate training, poor management and maintenance, vandalism and water piracy through illegal connections.

Without commenting on South Africa's problems, Namibia would do well to heed the implications for its own CBM program, which is not yet two years old. The institutional issue is that for such a critical and politically sensitive program, central Government must be able to 'keep its finger on the pulse' and be in a position to mount early intervention should problems arise.

*... monitoring of CBM is needed*

#### **4.3.7 Community and Stakeholder Participation Issues**

DWA has done a commendable job in the start-up of CBM in rural water supply, which hopefully will obviate at least some of the problems of its southern neighbour.

There is a structured arrangement from water point committees to Regional Councils. While this may be streamlined in the future, it has the merit of involving much of the community. Regional Councils, as the administering institutions of the future, have a responsibility to maintain, and even enhance, the good start.

There is less participation in other matters of integrated water resources management. The Minister has recognised this and has initiated a move towards the establishment of basin committees. Such committees are a highly appropriate means also of achieving integration of natural resource management and development strategies across land, water, vegetation and fauna.

The institutional issue here is to dovetail the basin committees into a framework of regional community and stakeholder participation, in harmony with other regional management provisions.

The review also believes there is a need at national level for coordinated stakeholder advice to the Minister on matters of water resources management. The institutional arrangements to achieve this should be simple but effective. It needs to include key stakeholders affected by water policy and in turn, whose actions can impact the country's water resources. Any institution set up would not be an executive body, but would exist to provide advice to the Minister at the highest level and to focus strongly on an integrated approach.

*... there is a need for resource management consultation at both catchment and Ministerial levels*

#### 4.1.2 Principles compared to Practice – a Scorecard

Finally, in this analysis of the current situation, it is instructive to assemble the issues raised in this section with the principles developed earlier of good integrated water resources management.

This is presented as a simplified tabulation overleaf.

#### Integrated Water Resources Management in Namibia- A Scorecard

<b>Principle</b>	<b>Practice</b>
<i>Clear accountability</i> Single accountability for sustainable planning and allocation of water resources and for overall management of the water cycle.	Partially recognised in Water & Sanitation Policy, but completely blocked by obsolete legislation.
<i>Clarity of roles – 1</i> Separation of regulator/resource manager from operator/resource user as clear as possible to protect public interest.	Partially adopted – eg NamWater – but not endorsed as general policy – eg no comprehensive regulator exists
<i>Clarity of roles – 2</i> Separation of regulator/standard-setter/auditor from water resource manager where sensible.	This separation is yet to be addressed. Some current initiatives are intruding on water resource manager role in allocation.
<i>Efficiency and effectiveness – 1</i> Commercialisation of operator or service provider functions. (Being more business-like; not necessarily corporatisation etc.)	Accepted in the case of parastatals. Not yet applied to other public services. Poor understanding of being business-like in public service.
<i>Efficiency and effectiveness – 2</i> Freedom to manage efficiently through removal of unnecessary constraints and restrictions.	Public sector management is still strongly centralised. Reform initiatives planned, but delegations have not moved far.
<i>Being knowledge-driven</i> A focus on knowledge generation. (Including data acquisition and management)	Principle requires endorsement and adoption. Presently poorly coordinated, split even within the Ministry, and generally inaccessible.
<i>Integration</i> Provision for integration across other natural resources and economic planning. Moreover, integration allows a holistic approach.	Principle not apparently recognised, at least not in any institutional way.
<i>Community participation</i> Community participation to be built-in to both policy development and ongoing operations. Participation will achieve greater community ownership of policy and local activities, effective decision making, promoting awareness and responsibility for water which is a scarce resource.	Principle recognised – e.g. Rural Water Supply water point management, but limited implementation to date, and no (basin) catchment bodies in existence yet. (Planning started)

<p><i>Regionalisation</i> Water management devolved to regional and district levels in a meaningful way, accompanied by necessary resources.</p>	<p>Principle recognised – eg Regional Councils now in place, but no devolution yet of real empowerment in water supply or resource management, and staff and funding still controlled centrally.</p>
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## 5. CURRENT INFLUENCES AND INITIATIVES

The water sector in Namibia is evolving in response to the needs of consolidation of governance following Independence. This is in response to water demands and scarcity, to the emerging international consensus on the principles which underlie sustainable management of water resources in the face of growing regional (SADC) and global scarcity.

These influences and initiatives are described below.

### 5.1 International Trends and Consensus

Appendixes 9.1 and 9.2 to this theme report detail international experience as to how various countries have addressed integrated water resources management. They draw on this experience to develop a set of principles that should be embraced in whatever policy framework is adopted for Namibia.

#### ❖ **Integrated water resource management**

There is a growing awareness that integrated water resources management cannot be successful if improvements in institutional arrangements to create better coordination across the natural resources areas only occurs at the Departmental or agency level. Good coordination must also be created at the Government/Cabinet/Ministerial level to ensure that policies and strategies, say in the water sector, are integrated, or take account of impacts with other parts of the natural resources base.

Some countries are creating ‘National Water Resources Councils’ comprised of Ministers from the water or related portfolios (eg. water, soils, forests, land, fish, power, regional and local government, planning etc) to administer high-level policy issues. China, Vietnam, Thailand and Sri Lanka are examples.

In some of the so-called developed countries where water development has reached acceptable limits or is in a ‘mature’ phase, managing the whole spectrum of natural resources and their interface with productivity is more the issue. In such countries, a broader ‘Natural Resources Council’ has been created. Australia and U.S.A. are examples.

At the Department or agency level, there is wide variation internationally as to what responsibilities are given to each of the organisations relating to water. The Review has drawn on the principles detailed in Section 2 of this theme report to assess the merits of international examples. That is, good practice suggests that there should be separation of roles between:

- Regulator, standard setter, auditor/reporter
- Resource manager
- Operator and technical service provider

A large number of countries have followed this path very closely by integrating water resources management, legislation and administration across all aspects of the water cycle. That is, water quality and quantity for both surface water and groundwater are managed together in one administration with the 'regulator' confining activities to setting water quality objectives and standards, and checking or auditing on how well the resource manager goes about achieving the standards.

The separation of resource manager and operator/provider is another where international experience varies. For example, Zimbabwe has created a National Water Authority with responsibilities covering water allocation and other resource management aspects as well as supplying bulk water to users, and constructing new water infrastructure. Of course, regulation also extends to economic policy regulation through the concept of an independent body to assess pricing and tariff issues from the water services providers.

Sri Lanka has created the same-named organisation, but has excluded all bulk water supply functions, thus concentrating solely on resource management and promoting a basin wide approach. South Africa is following a similar path of strict separation of roles.

Namibia is well down this path with the creation of NamWater and the regionalisation of water management. Once a new legal framework is created through the proposed Water Resources Management Bill and the Water Services Bill (refer to the legal theme report), the Review believes that Namibian water management will have generally followed international conventional wisdom in creating separation, transparency and accountability.

#### ❖ **Basin wide Management**

Managing on a basin wide basis is a further issue where international experience is relevant to Namibia, as rivers and aquifers defy provincial and district boundaries. Appendix 9.1 also covers this and spells out a range of options of varying complexity that are used to better coordinate natural resources issues across entire river basins.

River basin coordination must be linked to the existing administrative and technical arrangements that already exist in a river basin. In the Namibian case, the Regional Council concept is firmly in place and recent initiatives have been giving them strong responsibilities for water planning and management.

In this context, international best practice would suggest not a large basin organisation with strong statutory power, but a basin coordination committee approach where functions are confined to basin wide policy and strategy development, with no intrusion into the more routine water management/operation aspects.

#### ❖ **Shared watercourses**

Finally, international experience offers a picture of how institutional arrangements address the matter of shared rivers. The countries of the Lower Mekong Basin – Thailand, Laos, Cambodia and Vietnam – are a useful example as cooperation on

Mekong water issues has existed since 1957 and a formal agreement was signed in 1993 to share the resource and allow joint development.

Each country has a dedicated unit (called 'National Mekong Committees') that covers all aspects of international water cooperation. In three of the countries the unit is located in the water Ministry reporting directly to the Permanent Secretary level (either as part of a broader policy unit, or separately). The other country links the unit with the Prime Minister's Department.

The lesson for Namibia in approaching its international rivers, is that irrespective of which Ministry is home to the 'shared rivers' function, it should be a dedicated unit and possibly close to, or in, a policy unity covering other aspects of water management.

Finally, a key observation drawn from water management experiences elsewhere is that no two countries have adopted precisely the same institutional arrangements. There is a growing accord on the general principles that it is wise to observe, but the actual arrangements adopted are unique to the geography and culture of each country.

Most important is the lesson that water management will continue to evolve in response to development patterns, to socio-political needs, and to changing community values. This means that water reform should build on what exists and seek smooth transitions to improved management.

## **5.2 Public Sector Reform**

The primary initiatives within the water sector to date are designed to address the imperatives to achieve financial sustainability in bulk water production, and to put rural water supply in communal areas on a sound and sustainable basis that meets community needs.

The Namibia Water Resources Management Review(NWRMR) represents the first move to re-shape the whole sector to ensure that the resources are wisely managed and put to their best use into the next century.

At Independence, Namibia inherited an administrative structure designed and attuned to a previous era of public administration, steeped in colonial tradition and remote from what was the previous centre of government in Pretoria. As a result, there were virtually no public officials with experience of ultimate leadership within a Ministry – particularly modern public sector leadership which emphasises strategic planning, imagination and innovation, participative styles, performance-based management, and freedom to manage without undue reference to central agencies, but coupled with a strong discipline of transparent accountability.

At the same time, the need to establish a self-contained public service, coupled with policies to redress previous inequalities has led, inevitably, to a growth in staff numbers. The Government was well aware of these issues and made public sector reform a feature of the First National Development Plan. There is a clear

determination to move from reactive public administration to a dynamic, vibrant and proactive management culture attuned to the future of Namibia.

This means that the Review is proceeding in a climate where Government is pushing ahead with downsizing/rightsizing and promoting the restructure of government bodies along modern business-like and responsive lines.

A key and quite urgent necessity is for the public service to recognise that the vast majority of their work is indeed the delivery of services as distinct from policy advice. This means they are providers of services to (for the most part) paying customers. More specifically, the First National Development Plan calls for the restructuring, decentralisation and increased efficiency of central government, improved cost recovery and parastatal reform. There is accordingly a need to reassess the number, size and functions of Offices, Ministries and Agencies, and to address capacity building, the reduction in size of central government, improved planning, the cutting or re-deployment of unproductive or wrongly placed staff, and the introduction of computerised management information systems.

### **5.3.1 Decentralization**

One specific major policy initiative is the decentralisation of public administration in Namibia<sup>16</sup>. There are two elements of this that are highly relevant to the Review.

Firstly, there is a major and fundamental restructure, initially foreshadowed by the Constitution, towards a system of regional government through Regional Councils. This is a genuine, fully empowered second tier of government with a wide range of responsibilities. The geography and demographics of Namibia with a capital remote from the majority of her citizens inevitably results in a feeling of disconnection, and even neglect, by these citizens. The improvements in governance from locating the centres of service provision at the centres of demand are almost too obvious to comment upon.

From the perspective of the Water Resources Management Review, the central duty of a Regional Council to perform regional planning is of most significance. This planning, which has a strong regional development focus, covers a broad range of socio-economic activities:

- distribution, increase and movement of people in the region;
- economic infrastructures and utilities such as water, electricity, transport and communications;
- land use management;
- the natural environment.

Every one of these elements is central to considerations of integrated water resources management and particularly regional water planning.

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<sup>16</sup> Policy of Decentralization, 1998



Secondly, there is the well-developed Government initiative in community based management of rural water supply on communal lands. This involves nothing less than a wholesale shift of management of water points particularly into the hands of the immediate community. Water point committees are taking up the task of operating and maintaining their own water supply and in raising the necessary funds through levying of charges upon the users. Most of the DWA staff involved in rural water supply are already located in the regions and the intent is that they will come under the local management of Regional Councils. Inevitably, a major upfront effort in capacity building is required.

This was the focus of many remarks made by Regional Governors and others during the consultations<sup>17</sup>. It is apparent that although the framework for decentralisation has been created, the necessary staff and budget have not yet passed to the regions.

### 5.3.2 Commercialisation and Outsourcing

The key commercialisation initiative, as already mentioned, has been the creation of a State-owned corporation, NamWater, to develop, operate and maintain a financially sustainable bulk water supply service. Around the world, water supply bodies have realised they are operating a capital-intensive business, but that the charges allowed to be raised barely covered operations and maintenance, and almost everywhere entirely neglected asset renewals. With a major asset base, annualised renewals can typically run at 1 to 2 percent of the replacement valuation of the assets. Higher figures are not unknown where a backlog of renewals and refurbishment exists.

The primary feature of this sort of commercialisation is actually the application of the so-called 'user-pays' or 'beneficiary-pays' principle. Also, apart from relieving Government of a fiscal burden, other than the provision of social subsidies to groups in society with limited capacity to pay, the adoption of 'user-pays' coupled with well-structured tariffs is a powerful demand management mechanism.

'**Commercialisation**' in the context of the Namibia Water Resources Management Review is taken to include other processes of simply making public service delivery more business-like. These involve recognition of all customers, including government, and also involve a more business-like approach to public finances. This may include adoption of zero-based program budgeting and the ring-fencing of service delivery costs to give management the information it needs to drive more efficient service delivery.

Apart from a change of culture to one that is customer-focussed it is also intended that the public sector only perform itself those activities that are truly the business of Government. This process of pursuing efficiencies involves business process re-engineering and creation of a competitive environment where appropriate activities, particularly say service inputs such as vehicle maintenance, can be outsourced to the private sector. Experience elsewhere shows initial efficiency gains of 20 percent or more and long-term efficiencies of around 10 percent arising from outsourcing initiatives.

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<sup>17</sup> NWRMR Regional Consultations July – August 1999

The following table illustrates the nature of varying degrees of applying business principles to public sector service delivery.

Commercialisation is: -

- Making service delivery business-like
- Becoming customer focussed
- Ring fencing costs and making them transparent
- Readily done within the Public Service

State-owned corporation or parastatal is: -

- Moving from the Public Service to the Companies Act
- The State as a single shareholder
- Full trading status and a return on investment

Privatization is: -

- A sale of a State-owned corporation to private interests
- Generally done in a competitive environment
- and may require setting up a State regulator.

### 5.3.3 Creation of Agencies

The Review has encountered a great deal of confusion surrounding this initiative. Some high-level policy documents refer to creation of agencies as a form of outsourcing<sup>18</sup>. Other people think of creation of agencies as only applicable to units of government that are involved in some form of trading, or are capable of being financially independent. Perhaps the difficulty arises from the adoption of a very specialised meaning to a simple word that has a much more generic meaning to the average person.

For the purposes of this Review, the word ‘**Agency**’ will be used in the context of the public sector reforms in the United Kingdom. There the word simply refers to units of government that perform executive functions as distinct from policy advice. The full title is **Executive Agency** and such bodies typically reside within Departments or Ministries. The Namibian Cabinet has indicated a desire to apply this approach.

An ‘agency’ is :-

- A group delivering executive functions
- Exists within a Ministry staffed by public servants
- Built on performance-based management
- Driven by outputs and customers
- A means to release energies and enthusiasm

<sup>18</sup> Cabinet Action letter, (1997)

#### **5.4 Community Participation Initiatives**

Community participation in service provision has been mentioned already in relation to community based management of rural water supply infrastructure.

However there is a wider aspect to community participation in the broad management of water and related natural resources. This is built around the Constitutional declaration of State ownership of land, water and natural resources. If the people of Namibia own these resources then there is a need to create ways in which the people can have a voice in management of these resources. Regional Councils are a clear response to this need. The Minister has begun exploring concepts of Basin Management Committees that further respond to this need as well as being a prime focus for resource management coordination.

Whilst there are more urgent imperatives in relation to the development and extension of safe drinking water supplies to all citizens, the Review is cognisant of the wider issue of water resources planning and management. The Regional Councils are ideally placed to be the focus of community consultation and participation.

In line with the GRN drive to achieve public service reform, which is efficient, decentralised, and customer-focussed, some thought could eventually be given to the notion of **customer service committees**. Formalising small committees of this type, composed of representatives of service users, can be a very good way of ensuring that service delivery is meeting clients' needs. Ideally, these would quickly follow the establishment of regionalised service delivery.

#### **5.5 Water and Sanitation Sector Policy of Namibia**

In 1993, in response to the post-colonial need to have long-term objectives and policies for the critical water and sanitation sector, the Government developed an over-arching policy. This Water and Sanitation Policy (WASP)<sup>19</sup> has four major statements of overall long term policy:

- Essential water supply and sanitation services should become available to all Namibians, and be accessible at a cost which is affordable to the country as a whole.
- The equitable improvement of services should be as a result of the combined efforts of the government and the beneficiaries, based on community involvement, participation and responsibility.
- Communities are to have the right – with due regard for environmental needs and the resources available – to determine which solutions and service levels are acceptable to them. The beneficiaries shall contribute towards the cost of the services and at gradually increasing rates for standards exceeding those determined by the basic needs.
- The environmentally sustainable development, harnessing and utilisation of the water resources of the country is to be pursued to accommodate the various needs.

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<sup>19</sup> Water and Sanitation Policy 1993

## **Water Supply**

Provision of improved water supply should:

- i. Contribute towards improved public health
- ii. Reduce the burden of collecting water
- iii. Promote community based social development
- iv. Support basic needs for subsistence
- v. Promote economic development

The social objectives have been ranked highest as the attainment of these is a prerequisite for economic growth in the long term.

## **Sanitation**

Provision of improved sanitation should:

- i. Contribute towards improved public health
- ii. Ensure a hygienic environment
- iii. Protect water sources from pollution
- iv. Promote the conservation of water
- v. Promote economic development

## **Irrigation**

Development of irrigation should:

- i. Promote improved nutrition and surplus production at household level
- ii. Improve sustainable national food self-sufficiency
- iii. Promote economic development

## 6. PROPOSALS FOR MATCHING ‘BEST PRACTICE’

The recent initiatives impacting on the water sector, namely,

- Water and Sanitation Sector Policy,
- creation of NamWater,
- approval of a ‘Master Computerization Plan’,
- approval of community based management for rural water supply and devolution of powers to Regional Councils, and
- commercialisation and outsourcing of services,

have all helped to move the management of water and related resources towards new and improved levels. However, when present and emerging performance is compared with international best practice, the Review believes that there is clear evidence for continuing to move forward towards developing a national water resources policy and a modern and flexible institutional framework to support it.

**Simply, our existing institutions and policies and strategies are creating inefficiencies that our country, with its scarce water resources, cannot afford.**

Leading on from the issues and needs revealed in the previous section, the Review has developed a series of functional components to address these gaps in performance or to streamline present arrangements. The functions are grouped into those at Ministerial level, and those that operate within the Ministry.

The functional components are discussed below, and an institutional response suggested.

The resulting institutional arrangements, with their linkages and accountabilities are summarised in **Attach 6**.

### **6.1 Ministerial Level**

#### **6.1.2 High Level Ministerial Coordination and Policy Direction**

International trends are clearly showing the need for some form of on-going or regular coordination amongst the ministers of government dealing with water and related issues, or what might be said to be natural resources issues. The Review supports adoption of this concept for Namibia.

In other countries, this has taken the form of a National Water Resources Council (Vietnam, Sri Lanka and soon, China) or a Cabinet Committee on Water Resources, which seems to be more common in former colonial countries.

In the more developed countries, this concept is often expanded into a “Natural Resources Council” (Australia and USA) but the Review believes that the scarcity and

management of water in Namibia is so important that high level ministerial coordination should at this stage, focus on water issues.

Amongst other things, such a Cabinet Committee would:

- Approve and overview implementation of the components of a national water policy;
- Approve action plans and strategies to address the component policies – an example is the current WASP and related implementation plans;
- Administer compliance and performance of the commercial, urban and rural water sectors in regard to strategic water issues;
- Develop a regulation framework to achieve accountability for all water users;
- Approve community awareness programs covering water and river ‘health’ issues.
- Approve water data and information strategies covering availability, pricing etc. and other related issues.

The Cabinet Committee would be chaired by the minister responsible for Agriculture and Water Affairs, with ministerial membership covering Environment and Tourism, Regional and Local Government, Works, Health, Trade and Industry and Lands.

**The Review supports the creation of a Cabinet Committee on Water Resources to provide high level strategic policy direction on water and related resources.**

### **6.1.2 Senior Officials Group Relating to Water Resources**

There needs to be a mechanism to support the Cabinet Committee on water Resources through:

- Developing policy and strategy proposals on all strategic water issues;
- Preparing reports on the performance of the water sector;
- Implementing decisions and strategies of the Cabinet Committee and other related issues;

This group should comprise senior officials – perhaps at Permanent Secretary or Deputy level – of the Ministries represented on the Cabinet Committee. It would be chaired by the Permanent Secretary of the Ministry of Agriculture, Water and Rural development, who would also act as the ‘advisor’ to the Cabinet Committee.

This group could be called a Standing Committee and would basically be similar to the existing WASCO sector Committee, but expanded in terms of functions in that it would administer all aspects of water management, not just water supply and sanitation as at present. As envisaged with the WASCO arrangements, it would establish a series of semi-permanent committees to advise and undertake work on key areas such as the strategic human resource training, water data and information, and so on.

The Standing Committee would thus provide a strong integrating influence over all aspects of water resources management – something that is lacking at present.

The Review heard that for a number of reasons, the improved coordination and communication that was to be achieved through establishing WASCO has been slow to eventuate.

The expanded role that is now envisaged, particularly in regard to supporting the proposed Cabinet Committee on Water Resources, is seen as critical in the new arrangements of developing and implementing a national water policy so it becomes vital that any problems that have occurred, or are occurring, in the WASCO process, are addressed.

To achieve continuity of membership of the Standing Committee and the maintenance of quality advice to the Cabinet Committee, it is suggested that membership be at Permanent Secretary level, with the only substitute delegate permitted being at Deputy level. No further delegation downward should be permitted with the aim of achieving quality advice and equality of membership. However, ministers should have the right to nominate any person of choice to serve on the Standing Committee.

**The Review strongly supports the concept of a ‘Standing Committee on Water Resources’ (incorporating WASCO) to support the Cabinet Committee on Water Resources to provide coordination, direction and program evaluation to the line agencies in the water sector.**

### **6.1.3 Regulation of Water (or Public) Utilities**

Cabinet has already resolved to establish a policy for the governance and regulation of State-owned entities and enterprises. As well, the Water and Sanitation Policy has set target dates for achievement of cost recovery in the water sector. Given the large gap between current prices and costs and the social impacts and sensitivities of large price rises, such increases must be seen to be justified. Increases should not be the result of inefficient practices in, say, NamWater or local authorities, inflating the costs. A fair price for an efficient service must be the aim. Transparency in this process can only come from some form of independent pricing review.

The process would need to consider financial sustainability of the supplier’s assets and operations and drive efficiencies into the service providers. Price rises to cover inefficiencies must not be tolerated.

As at this stage, a regulator operating across all GRN utilities has not been established, the Review has concentrated on the water sector needs separately, but having in mind that a broader form of regulator may eventually be adopted.

There are a number of options of varying complexity for achieving administer/regulation of water utilities:

1. A review role in the proposed 'Policy and Strategy' Unit within MAWRD to advise the Minister, and the Cabinet Committee on Water Resources of the appropriateness of annual charges for water.
2. An independent review team set up by the Cabinet Committee and driven by the Standing Committee on Water Resources to provide advice on water prices that would be sent on to the Cabinet Committee.
3. An independent and statutory water regulator (similar to Office of Water (OFWAT) in the United Kingdom (UK) to administer all aspects of the cost, service and quality of supply to users. It would report its findings to the MAWRD who would then take the proposal to Cabinet. The recommendations made by the regulator would be the upper limit for prices and it would be expected that a Cabinet decision to lower prices for, say, social reasons, should lead to a compensatory government payment to NamWater to bridge the gap. Otherwise the principles of commercial cost recovery are abandoned.
4. An independent and statutory regulator covering all service industries – water, electricity, transport etc. – that would report to the relevant minister, as above, for each particular sector enquiry. This approach applies in the State of New South Wales in Australia and may be the best long-term solution for Namibia.

Either of the two statutory approaches will provide a good permanent solution. The preference depends on the scope of activities to be considered. In countries where the water, electricity and gas sectors are large, separate regulators have been created for each. In smaller countries or states, one regulator seems to be more efficient in covering all sectors. The Review suggests this process should start at a more modest level and only later progress to the statutory model that is assessed as best for Namibia.

**The Review supports the approach of a small independent pricing review group reporting through the Standing Committee on Water Resources and to the Cabinet Committee on Water Resources.**

**The Review also supports a two-year target for the Standing Committee to recommend the appropriate statutory regulation model to be introduced.**

#### **6.1.4 Stakeholder Advice to the Minister**

Again, world best practice is increasingly moving toward a mechanism for high level independent stakeholder advice to the Minister, particularly covering periods of change in water management and community involvement as is occurring in Namibia.



This can take the form of a Water Advisory Council. It need not be large, but needs to include or represent stakeholders affected by water policy and in turn, those whose actions can impact on the country's water resources. It would be empowered to initiate policy proposals, after endorsement of the Minister or to make comment on matters referred to it. It would not be an Executive body but exists to provide advice to the Minister at the highest level and to focus strongly on the integrated approach. Typically, such an advisory body would include representatives of tourism and industry, "Regional Councils", community representatives, farming, environmental groups (NGO's), academic institutions, and union officials and women's affairs in view of impacts of policies on people. It would be chaired by a person with an accepted reputation in, and knowledge of, natural resources issues, appointed by the Minister. It would be supported by the 'Policy and Strategy Unit' mentioned later.

**The Review supports the creation of a Water Advisory Council of stakeholders from across the whole water sector to advise the Minister on high-level water policy and strategy issues.**

### **6.1.5 Basin Wide Water Management**

There is a considerable body of evidence that suggests that improved natural resource management occurs if policies and strategies are developed on a basin-wide or catchment wide basis. By this approach, these policies that reflect the sensitivities and stresses within the basin's natural resource base can then be followed, or adhered to, by the various administrations to ensure some uniformity of approach or impact.

Without such a basin-wide policy and strategy approach, it is likely that each regional administration would adopt a different emphasis on use of the water and related resources with possible adverse and unintended affects on the basin's ecology.

The Review visited Australia in the company of the Hon Minister Helmut K Angula and, amongst other things, reviewed advances made in water management at the basin level. Australia is recognised as being at the forefront of managing its water resources on a basin wide basis and is a country with similar climate and resource problems to Namibia.

The Review has tested these international experiences within the Namibian context and strongly believes that some form of high-level coordination should exist across or between the various regional councils in the major drainage basins of the country.

The Namibian situation is such that each Regional Council has acquired strong planning, management, and operational powers in water resource matters. The idea of establishing basin committees is not intended to take the power from the Regional Council but to compliment their efforts by empowering and involving the people in the management and planning of water resources.

The Review believes that the “Coordinating Committee” concept is highly appropriate for Namibia. It is noted that the Minister has already initiated debate in this regard and action is underway to establish a high level technical committee to evaluate the best composition of the basin water management committees and what functions and responsibilities they will have.

The Review has reviewed the suggested functions for these committees and will continue to participate in this evolutionary process to assist in linking this initiative for basin water management committees to the institutional options for sound IWRM. Once established these committees should be administered by the Policy and Strategic Unit and the Agency should provide the necessary technical support and information to them through its regional offices.

**The Review supports the current activities towards establishing a mechanism to promote basin-wide water management at the policy and strategy level. Such a mechanism should not extend downwards to the extent that it interferes with the delegated role of Regional Councils in water planning and management.**

## **6.2 Within Ministry Level**

Centralised rural water supply and water resources management functions presently lie within the Department of Water Affairs in MAWRD.

For the purposes of an analysis to move towards best practice, the Review has grouped activities as

- Water resources management
- Water related data systems
- Policy/strategy development and evaluation
- Rural water supply

### **6.2.1 Water Resources Management Function**

This function is very much at the centre of the “good water management” jigsaw. It presently is undertaken by the DWA Directorate of Resource Management with Divisions of Geo-hydrology, Hydrology, Water Environment, Planning and Law Administration (Formalising water allocation and pollution licensing).

The first three of these Divisions are “collectors and providers” of technical information and advice, whilst the last two Divisions would tend to use this information and advice to produce planning outputs or water sharing /pollution licensing products.

The Review believes that, whilst this Directorate will continue to obtain the bulk of its funds from the government budget, it needs to better reflect an internal business environment. This will be helped by the notion of customer service, with two of the Divisions “buying” a product from the three technical provider Divisions.

This must create a more vigorous and efficient business culture and attitude and in effect, simulate the “outsourcing” concept that GRN is seeking to create.

The concept of clarity of roles and efficient service delivery of an integrated product, also leads to questioning whether the present make-up of the Divisions best suits the need to produce effective resource management. Should the data unit in the Hydrology Division be separated and cover all water related data and information? Should it be constituted as a “stand alone” group outside the Water Resources Management Directorate? (this is discussed in the next section). Should hydrology and Geo-hydrology i.e. surface water and groundwater, be better integrated to allow conjunctive use to be better addressed? How should targeted research be handled across all Divisions? Should the Data and Research functions be combined, and inside or outside the Directorate?

The Review is not in a position to further explore all of these questions but believes that in line with the GRN moves to increase efficiency and effectiveness in the public sector, the size and structure of the WRM Division will be addressed during the implementation phase.

As indicated in the following section, policy matters should be removed from this Directorate to the proposed ‘Policy and Strategy Unit’.

This will allow the immediate conversion of the Directorate to an “agency” under the concepts being developed by GRN and as mentioned in Section 4 of this report. This would provide a greater ‘enabling environment’ for the Directorate and allow it to operate more in line with business principles. In effect, it allows Government to delegate maximum authority and responsibility to the head of the Directorate, who then becomes totally accountable for organizational performance. In this case the bulk of Directorate funding would still come from Government funds, but efficiency and effectiveness should improve as existing constraints on the business environment are removed.

**The Review supports the retention of the existing Water Resources Management Directorate functions but suggests that a review be undertaken of its internal structure to ensure that WRM is delivered in the most efficient and effective way.**

**Further, the Directorate should be converted to an ‘agency’ under the policies now being developed by GRN.**

### 6.2.2 Consolidation of Water and Related Data/Research

The Review considered a number of options for collecting and managing a water (or natural resources) data network.

Adjusted for Namibian conditions, these options range from:

- i. Consolidating all water data within a specific Division in the Resource Management Directorate (i.e. surface water and ground water, quantity and quality, plus ecological and water use/licensing data). Research administrator may or may not be included.
- ii. Separating this function from the Resource Management Directorate and creating a stand alone “Data Services and Research Division”;
- iii. Merging data units from all natural resources related ministries and creating a Natural Resource Data and Research Institute.**

The Review believes that **option iii)** is the desirable option for Namibia but first steps must be to lay the groundwork of such an option therefore this option is well into the future and should not be considered at present. Option ii) has some attractions but again it may be best to see this as a ‘step’ process and first consolidate the water data function in WRM directorate, have a strategic data and information needs analysis undertaken, and then decide whether a separate ‘agency’ is warranted.

The Review believes that an important initial piece of work is the creation of a computerised Natural Resources Data Directory that would allow all users of data to determine what data and information is held by whom, what is its extent and quality and how can it be obtained. In concert with this Data Directory, there needs to be an ‘Availability and Pricing Protocol’ determined so that data is not over priced and inaccessible.

The Review has noted advice from international experts that good policy development and good IWRM can only come about if good data and information is available – data cannot be made inaccessible or over priced by those seeking to retain it as a ‘personal and private’ asset.

**The Review supports the creation of a Data Services Division in the WRM Agency and suggests early attention be given to a strategic water data needs analysis and to developing a Natural Resources Data Directory. Also, the need for a water related research program within this Unit should be explored.**

### 6.2.3 Water Policy/Strategy Development and Evaluation

The Review considered the advice of external experts and international practice (Australia, Sri Lanka, Vietnam to name a few) in determining how best to consolidate water policy advice (including that relating to shared rivers) and evaluation of the performance within the water sector.

In the past these functions have been fragmented in Namibia, but the bulk of the work appears to have been carried out within the WRM Directorate.

The Review believes this work is of a specialised nature and should be separated from both the resource manager (who basically contributes to policy, and then manages to it) and from the service provider (the rural water supply group). In fact, removing policy matters from the resource manager is not just achieving ‘clarity of roles’ but paves the way for that Division to become an ‘Agency’.

The policy work would cover:

- developing national policies on all aspects of water – environmental, social and economic, including national pricing policies. Liaison would be necessary with other ministries;
- undertaking high level strategic planning across all of the water sector;
- dealing with shared rivers – strategic policy, liaison and secretariat functions (technical input would be obtained from the WRM agency)
- evaluation of performance of the water sector against national and sector goals – eg. Progress on the water sector training program;
- secretariat role to the proposed Water Advisory Council.

This group should be relatively small – say 10 persons – but of high quality and preferably trained policy specialists covering various disciplines. It would operate by creating project teams or Task Forces with input from specialist agencies for particular projects.

It would be important for this group to be trained in policy development and preferably establish a ‘training’ or twinning arrangement with a like organisation in a country of similar climate and natural resource problems. Australia offers some good opportunities.

**This is seen as a critical issue.**

**The Review supports the creation of a ‘Policy and Strategy Unit’ within MAWRD reporting directly to the Permanent Secretary as a means of concentrating high level policy and strategy development separate from the resource management agency and the water supply sectors.**

#### 6.2.4 Rural Water Supply Function

GRN has made a number of recent decisions as to how this function is to be delivered in the future:

- Regional Councils have been delegated responsibility for rural water supply with appropriate assistance from appropriate line agencies<sup>20</sup>. It is noted that training of staff and the transfer of functions, staff and budgets to the regions has been slow to occur.
- The creation of NamWater;
- Policies exist for outsourcing and other efficiency measures;
- Implementation policies have been endorsed for community management and cost recovery for the water supply and sanitation sectors.

To implement this latter policy, MAWRD is required to investigate ways to confer legal status on Water Committees and allow ownership of water supply facilities. Other responsibilities includes, the upgrading of water points, the training of water point committee leaders, and investigate the establishment of a revolving Rural Water Supply Development Fund. All of this follows world best practice by decentralizing/regionalising service delivery and achieving appropriate cost recovery and accountability processes.

Consistent with these policies, the question must now be asked as to what water supply functions and staff should remain in 'head office', and of these, what work should be outsourced and what remains as an 'in-house' function.

The Rural Water Supply Directorate has worked with the Review to analyse this situation. This will be a rapidly changing role as functions and personnel devolve to the regions. The Review considers that the only functions that may not pass automatically to the regions would be:

- i. sector planning, and technical assistance with scheme planning, efficiency measures and other specified matters;
- ii. design and construction of major rural water schemes;
- iii. application of, and compliance with, national standards and the development of appropriate regional standards;
- iv. administer of the sector training program;
- v. major contract supervision;

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<sup>20</sup> Decentralization Policy: Functions of the Regional Councils

The real issue here is what will be the immediate technical/professional/project management capability of the regions. If outside assistance is required to assist regions, can external consultants under the outsourcing policies provide this or must it be done from “head office”?

The Review has made a preliminary assessment of each of points i) to v) along the above lines and has come to the following conclusions.

- i) Sector planning will increasingly become a smaller issue as the regions become more competent in planning. The major role appears to lie with developing planning standards and procedures to ensure regions follow best practice. Also, there are numerous consulting firms that have expertise in the water sector and they are used now from time to time to assist with government projects. It is likely that Regional councils will increasingly use these services and there will be a decreasing need for a separate government rural water supply unit within the MAWRD.
- ii) the same applies as with i);
- iii) this role should remain in MAWRD;
- iv) the actual training can be outsourced and the Review understands that this occurs to a degree at present;
- v) until regions become expert in this function, some ‘head office’ assistance should be available.

The Review has considered a number of options to address this reduced centralised function of rural water supply. Basic to all options must be a recognition that the water supply and sanitation policy (WASP) is an absolute key policy of the government and whilst it is to be delivered by a decentralised and community driven program, any changes in the role of “head office” must not be so rapid as to place the program in jeopardy.

Of relevance here are the comments in Section 5.8 of this report. That is, the regions must still be able to access whatever technical help they need (either through the public and private sectors) over the length of the 10 year implementation program of the WASP, to ensure that adequate support is available to overcome the inevitable problems that will occur.

The Review has reduced reform in this area to two options. Both are based on the premise that the changes at “head office” as spelt out in points i) to v) above, are so significant that there is no longer a need for a full blown “Rural Water Supply Directorate”.

### ***Option 1***

Create a relatively small, highly skilled ‘Rural Water Supply Task Force’ reporting directly to the Permanent Secretary of MAWRD, tasked with managing the transition to regional planning and management, administering progress of the 10 year WASP

implementation program and liaising with the private sector to promote the outsourcing program.

### ***Option 2***

Immediately relocate the centralised technical expertise that is still required to, say, the Department of Public Works (DPW), where some expertise already exists to provide technical input and project management to water supply matters for schools and other government buildings. This would provide an enhanced or core technical group that would provide efficiency in service delivery across all of the government sector and could still contract to Regional Councils as required in water planning, design and operation.

Policy matters concerning compliance with national standards and developing regional standards (if in fact this should be done outside regions) is just that – a policy issue. As such it could be administered by the ‘Policy and Strategy Unit’ in MAWRD, with technical input from the technical unit wherever it is located.

The human resources training program could be delivered through consultants or the technical unit, but administered as to progress against target and general performance issues by the ‘Policy and Strategy Unit’.

The Review has not been able to test thoroughly all aspects of these arguments and be precise in detail.

However, the Review has a strong preference for Option 1 in the first instance as it will keep a strong focus on implementing the 10 year WASP program and will keep these responsibilities firmly within the control of the minister responsible for water affairs. It also provides a technical capacity to safeguard against many of the implementation problems that seem to be emerging in the South African decentralisation program.

Option 2 may have long term merit as it leads to a very clear separation of the roles of ‘policy’ and ‘service delivery’ in the rural water supply area. In time, the consolidated unit in Department of Works, or the retained unit within MAWRD, if this is the preferred option, would have to compete with the private sector in providing technical advice to regional councils and in fact, to other central government administrations relating to water issues or project management.

In fact, the RWS Project Team should develop a business plan as if it were competing with external consultants to provide a service. This will sharpen its business focus and prepare it for what might be a separation from the Ministry in some future move for greater commercialisation.

It is suggested that the Management Consultancy Group within the Office of the Prime Minister or the proposed Implementation Team to review Option 1 immediately to determine the appropriate size of the Task Force. As well, Option 2 should be considered to determine the best approach for the future.



**The Review supports the creation of a small highly skilled ‘Rural Water Supply Task Force’ reporting directly to the Permanent Secretary of MAWRD to manage the WASP implementation program, to liaise with the private sector to enhance the ‘outsourcing’ program, and to provide a technical service to regional councils as required.**

**The Review also support engaging the Management Consultancy Group to review these arrangements within the next two years to determine the effectiveness of consolidating what ever technical skills that should remain centralised, within the DPW or some other appropriate location.**

### **6.2.5 Regional Accountability**

Devolution of responsibility to Regional Councils has already occurred and the structure is starting to develop to deliver integrated water resources management. Training programs have been endorsed and there is no valid reason why quality planning or management of water resources will not occur at regional level, supported under contract by both private sector expertise and specialist units in Department of Public Works. In effect, the skeleton is in place, but training and the transfer of staff, functions and budgets needs to occur as soon as possible to place the “meat on the bones”. It is unreasonable to expect Regional Councils to embrace this new role if staff and budgets are not forthcoming.

To achieve proper accountability within these new institutional arrangements proper water-licensing arrangements need to be in place. Regional Councils need to be able to license or regulate water point committees and local authorities themselves must be licensed to divert bulk water.

The proposed Water Resources Management Bill will cover the water allocation and licensing issues as well as the legal status for the water point committees and to allow ownership of the water supply works.

These concepts are covered in the ‘Legal and Regulation’ theme report of this review but are repeated here because of the effectiveness of institutions will depend on a clear regulatory framework being established.

Elsewhere in this theme report, comment is made on the unsuitability of the proposed ‘Rural Water Supply Management Bill’ in the overall context of good IWRM.

It would be more appropriate to extract those provisions that create and legalise water point committees and merge into a “Water Services Bill” that will also cover the

water regulation of local authorities or other parastatal water companies. In fact, this issue is seen as so urgent by Regional Councils that some of the legal mechanisms should be employed now to legalise the Water Point Committees and then, if appropriate, fold them into the broader “Water Services Bill” when it is ready. This is discussed further in the theme report covering legal aspects, and could involve use of the Namibian ‘Close Corporations Act’ in its present or amended format or, perhaps more suitably, the Cooperatives legislation. Whatever approach is adopted, this needs to occur as soon as possible.

**The Review supports the immediate skilling of Regional Councils to enable Water Planning and Management to be delivered efficiently and effectively at regional level.**

**The Review also supports moves to create a legal status for water point committees, but not through the proposed ‘Rural Water Supply Management Bill’ which is flawed as an instrument of good IWRM.**

## **7. PROPOSED INSTITUTIONAL FRAMEWORK**

The result of the research, evaluation, and analysis discussed in the report so far, has resulted in a series of views by the Review of how Namibia can move towards ‘best practice’ in integrated water resources management. It is useful now to summarize these views and to assemble the preferred framework of functions requiring new or reformed institutions. The various institutional components of functional accountability and the Review’s associated recommendations developed in the preceding Section 6 of this report are, in brief:

- Creation of a Cabinet Committee on Water Resources for government level strategic policy
- Creation of a Standing Committee of officials to support the Cabinet Committee and provide coordination, direction and program evaluation.
- Creation of a small independent pricing review group reporting through the Standing Committee to the Cabinet Committee on Water Resources.
- Creation of a small Water Advisory Council of key stakeholders to provide high-level advice to the Minister.
- Retention of the existing Resource Management group within MAWRD, but for immediate review of its internal structure and conversion to an ‘agency’ under the policies now being developed by GRN.
- As a first step to creating a Natural Resources Data and Research Institute, a Data Services Division (**including Drinking Water Inspectorate - National Water Laboratory**) within the Water Resource Management Agency is needed to drive strategic water data needs and management.

- A ‘Policy and Strategy Unit’ within MAWRD reporting to the Permanent Secretary as a means of concentrating high level policy and strategy development separate from the resource management agency and the water supply sectors.
- Conversion of the Rural water Supply group in MAWRD to a small highly skilled ‘Rural Water Supply Project Team’ to manage WASP implementation, and to provide a technical service to regional councils as required.
- Immediate skilling of Regional Councils to enable Water Planning and Management to be delivered efficiently and effectively at regional level. (In this regard the Review also supports immediate moves to provide legal status for water point committees, but not through the proposed ‘Rural Water Supply Management Bill’ which is flawed as an instrument of good integrated water resources management.)
- Support for present moves towards establishing a mechanism to promote basin-wide water management at the policy and strategic level.

Proposed institutions with their roles and functions are in **Attach 1**. The linkages between components of this framework are shown in **Attach 6**. This is meant for individual organization and not necessary to reflect lines of command or accountability.

### *Implementation Steps*

Whilst this theme of the Review has been developed with due regard to the emerging directions of other themes, it does not of course stand on its own. The institutional and community participation theme is but one element of the overall proposed reforms and associated Policy Framework.

The Review’s final report will recommend a ‘National Water Management Policy’ for Namibia and a preferred institutional, legal and human resources framework to form the three corner-stones that will support the policy.

Matters of implementation will require development by a dedicated implementation group following adoption and endorsement by Cabinet of the overall Policy Framework. Nonetheless, the Review has given consideration to implementation and its implications in order to inform the reform process.

For the institutional theme, the key implementation steps arising from the preferred framework are briefly discussed below.

- *Creation of Ministerial level coordination*

A straightforward cabinet decision to proceed. Negligible cost.

- *Re-focussing water coordination at senior official level with an emphasis on integration.*

Can be done simply by Cabinet direction. No additional costs.

- *Creating a vehicle for high-level water sector stakeholder advice to the Minister.*

Composition of the advisory group requires political judgement, but there is considerable regional enthusiasm. Costs limited to those of a twice-yearly meeting.

- *Creating a strategic water policy function to advise the Ministry.*

An appropriate, dynamic and committed manager will be required, but all other members of this policy group can be transferred or seconded from within existing Ministries.

- *Creating an enabling environment and re-focussing Water Resource Management and integrated water data through application of the 'Agency' concept.*

Government already has appropriate procedures through the Office of the Prime Minister and the Public Service Commission to rapidly implement this option. No additional staff numbers are envisaged, and this will be cost neutral.

- *Accelerating regionalisation of Rural Water Supply and substituting a project management based approach through a task force or 'Project Team' with a tightly specified task of completing implementation of the community based management elements of WASP and providing technical support to regional councils.*

This requires a conversion of an already existing Directorate to a performance-based team using existing restructuring procedures. This will be cost neutral.

- *Creation of a small group to provide independent and public review of water pricing and tariffs.*

This would involve assembling and resourcing the appropriate experts, such as independent economists, for a limited time only. Can be done immediately and will involve the equivalent of about 2 full-time salaries.

- *Creation of a mechanism for basin-wide coordination for water management.*

This builds on initiatives already underway by the Minister. It will involve regional people and some expenses for occasional travel for central officials, plus some costs for development of information. This latter activity of gathering intelligence on the catchments is partially happening at present and could be expected to attract donor support.

- *Skilling of Regional Councils to take up their roles in regional water planning and management.*

This is possibly the most costly part of the exercise. It is addressed further in the human resources theme paper, but will pay dividends in the future as it is the primary vehicle for achieving successful and effective regional water management 'on the ground'.

These implementation issues are not of course a detailed matter for a theme report such as this. Further consideration of matters of implementation and its implications will be contained in the overall submission of the Review on the totality of sector reforms proposed.

It is clear however, that as discussed in the preceding section on achieving best practice that a dedicated implementation team will be required. This can be assembled for the purpose from among existing personnel in government and externally as required.

## 8. CONCLUSIONS

The Review has drawn on examples of other countries, plus an analysis of Namibian needs, to identify a strong and proven set of institutional guidelines. It has also drawn from international consensus the key characteristics of good integrated water resources management, which include principles of participation.

Namibia's present water sector and water resource management has been tested against these attributes or goals of best practice.

The Review has found that Namibia as yet falls short of these goals, but that there is a clear and inexpensive way to re-focus the sector and to move forward.

Many people within the sector are well aware of issues and are enthusiastic about how these things might be done better. However, lack of a comprehensive resource management framework, institutional barriers, a public service geared to administration rather than dynamic management, a lack of project management capacity to make things happen, a reluctance from the centre to really devolve power to the regions, and no effective way for the sector to bypass bureaucratic filters and deliver high level advice to the Minister, are all creating frustration among those who wish to progress.

The Review believes there may well be enough people and enough funds already in the sector to remove these frustrations if the impediments can be obviated. The available management resources simply require refocus on high priority outcomes and particularly an immediate transfer of resources and decision-makers to where the problems and activities are, not hundreds of kilometres away. Regional Councils are a great deal more capable than central bureaucrats give them credit for. What is more, the Councils are accountable directly to the people through democratic processes.

The refocus of resources also requires revitalisation of central functions through performance-based management, empowerment and accountability, creation of a capacity for strategic policy development, mechanisms for transparency, mechanisms for consultation and advice, and mechanisms for coordination and integration to ensure efficiency and effectiveness.

This latter issue of coordination and integration are really quite critical. There is firstly a coordination required to achieve clarity of purpose at Government and Cabinet level, rather than for example limited coordination of the preparation of legislation by various Ministries. Secondly, there is a coordination on the ground that ensures for example that placement of water points takes into account land use matters and regional planning. Integration of effort across catchments and aquifers not only recognizes the inter-action of natural resources but ensures best outcomes based on consultation and agreement.

This theme report dealing with institutional and participation issues has demonstrated a new and revised framework that will make of all these elements work better towards common goals agreed to by all of the stakeholders. It also presents means by which action rather than inertia will come to be the characteristic of Namibian water management.

However, the Review cautions that the best institutional framework in the world is meaningless unless the people involved have adequate capacity to make it work. Whilst we conclude that the number of people in the sector may well be adequate, the levels and mix of skills certainly is not adequate. The human resources theme details and discusses these issues.

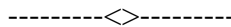
The sector requires leaders who have a clear vision of the future and a passion to achieve it. They must be energetic, unafraid of decisions and be able to communicate and empower others with their vision. Equally, the sector requires practitioners at all levels to be trained and competent. A substantial, sustained and potentially costly effort is required to produce the mix of skills needed.

This theme report concludes with a truism, which was stated at the outset.

The three foundation stones of water reform are:

- Z sound institutions which are dynamically managed and involve communities**
- Z a comprehensive policy framework underpinned by modern legislation**
- Z a comprehensive and ongoing human resources development.**

*None of these will achieve anything without the other two.*



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## APPENDIX 9.1

### **International Trends in Integrated Water Resources Management**

In recent years the key principles of good integrated water resource management have become a matter of international consensus.

These principles are based on the often poorly appreciated fact that water is a finite resource, vulnerable to degradation, and essential for life. From the 1992 Rio Summit on Sustainable Development one of the clearest sets of management principles was developed and agreed. Agenda 21 describes them as follows.

*“Integrated water resources management is based on the perception of water as an integral part of the ecosystem, a natural resource and a social and economic good, whose quantity and quality determine the nature of its utilisation. To this end, water resources have to be protected, taking into account the functioning of aquatic ecosystems and the perennality of the resource, in order to satisfy and reconcile needs for water in human activities. In developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems. Beyond these requirements, however, water users should be charged appropriately.*

*Integrated water resources management, including the integration of land- and water-related aspects, should be carried out at the level of the catchment basin or sub-basin. Four principal objectives should be pursued, as follows:*

- (a) To promote a dynamic, interactive, iterative and multisectoral approach to water resources management, including the identification and protection of potential sources of freshwater supply, that integrates technological, socio-economic, environmental and human health considerations;*
- (b) To plan for the sustainable and rational utilisation, protection, conservation and management of water resources based on community needs and priorities within the framework of national economic development policy;*
- (c) To design, implement and evaluate projects and programs that are both economically efficient and socially appropriate within clearly defined strategies, based on an approach of full public participation, including that of women, youth, indigenous people and local communities in water management policy-making and decision-making;*
- (d) To identify and strengthen or develop, as required, in particular in developing countries, the appropriate institutional, legal and financial mechanisms to ensure that water policy and its implementation are a catalyst for sustainable social progress and economic growth.”*

Stated simplistically, this is all about:

- Water sharing amongst competing uses and users;
- Water protection to ensure access for present and future generations to acceptable quality water;
- Water supply to all citizens in a fair and equitable manner.

How these three components of water management have been achieved varies greatly from country to country and must take account of all the social and cultural factors that dictate government and community values and aspirations.

What can be said however, is that in both developing and developed countries where good integrated water resources management is practised, there are four common features that constitute best practice.

They can be simply stated as follows.

- 1) An institutional framework is developed which is both robust and flexible, and includes modern legislation and an integrated policy framework.
- 2) Planning and management is knowledge driven. Strategic assessment of water and related resources receives high priority, and does not stop at mere data management, but actively pursues the generation of strategically focussed information and knowledge.
- 3) Integration is built into institutions, resource management, and policy. There is recognition of the holistic nature of ecosystems, and all policies, decisions and projects are evaluated against this background.
- 4) Community participation is built into all processes. It is the normal way of doing business in the public sector. It recognises also that the natural resources of a country belong to its people, and they have a right to participate in its management. Not only that, but community participation leads to government efficiency, ownership of policies and actions by the community, and to readily accepted principles of cost sharing.

This review of international trends concentrates on the institutional framework and approach to IWRM – the first of the four principles above - but makes reference to the other aspects where relevant. It looks at various nation-wide approaches but also considers some cases of water management on a whole-of-river basin basis.

## **APPENDIX 9.2**

### **Sri Lanka**

#### *Background*

This country has an administrative system not unlike Namibia with a central government supported by regional or provincial administrations.

Its history of water management has been largely a history of supply development. Extensive investments in water management have created large operation and maintenance costs for government. A lack of sound watershed management and inadequate system maintenance has resulted in the need for major system rehabilitation. Issues such as financial sustainability of water agencies and the integration of water issues – both quantity and quality aspects – with watershed management have become critical.

Sri Lanka lacks a comprehensive approach to water allocation or an adequate system of water rights. The irrigation sector which accounts for over 80% of water consumption and a large part of the nation's water management infrastructure, also provides vital national food supplies and employment for a large portion of the rural labor force.

There is no comprehensive water policy – water being managed as an input to a number of major national sectors such as irrigation, hydropower production and urban water supply, with little coordination between them.

It has been recognised that there is a need for a mechanism for joint planning amongst line agencies and to revise roles based on a coordination section.

Water information is not extensive and public participation in water planning and management needs strengthening.

#### *Current Initiatives*

A total review of water management is being undertaken (very similar to Namibia). A high level Water Resources Council has been set up for a 3-year period to oversee the review and recommend permanent institutional arrangements for the sector. It has a membership at senior government level (Deputy Minister/Permanent Secretary) and representatives from peak stakeholder/industry groups.

It is supported by a Secretariat that is tasked to do the review work and analysis of options, international experience etc. It is concentrating on:

- Developing a National Water Policy.
- New laws and regulations to support the Policy.
- Institutional development.
- River basin planning and coordination.
- Information systems and public consultation.

The review presently has recommendations before Cabinet as below:

1. Formalise a Water Resources Council at Vice Minister/Permanent Secretary, level reporting to the minister for water issues and possibly through a Cabinet Committee.
2. Establish a National Water Resources Authority (NWRA) with a “Board of Directors” administering policy direction and the Chief Executive performance in responding to policy. The chief Executive reports directly to the Ministry.
3. A strong customer consultation mechanism that reports through the Water Resources Council.
4. River Basin Committees to provide uniform responses by the Provinces to basin wide policy matters relating to natural resources.

The NWRA will concentrate on all aspects of resource management and policy/regulation matters covering water quantity and quality issues. It will license and regulate the bulk suppliers through the licensing/allocation principles of the new Water Act, once it is proclaimed.

The Provinces remain responsible for operational and management issues at local level subject to compliance with the policies and strategies developed by NWRA.

This overall approach will provide Sri Lanka with an excellent platform to achieve good integrated water resources management.

## **Mexico**

### *Background*

Mexico has a system of a national government supported by numerous State governments. It has had a variety of fractured arrangements for water management for much of this century.

It created the National Water Commission (NWC) in 1989 as the sole federal water authority to resolve the internal conflict and confusion.

Its role covers water distribution among users, water allocation and effluent discharge, planning, construction and operation.

Although clearly empowered to advance toward better water management, the Commission dedicated itself to reducing the enormous gap between water supply and demand, particularly for urban use.

A more modern water law and accompanying regulation were enacted in 1994 giving clarity to water sharing and allocation, greater community participation.

### *Current Initiatives*

Despite their reforms, the NWC has a confusion in roles and focus in that it was both resource manager and water supplier, with an emphasis on the latter.

Environmental deterioration and water pollution specifically, forced the adoption of new policies and strategies to bring development objectives more in line with environmental concerns.

Thus by the mid 1990's, the NWC became part of the new Environment, Natural Resources and Fishing Secretariat which is a Federal (or National) ministry. This is the first time that Mexico has managed natural resources under global objectives to support sustainable development.

This also heralded a new role for State Governments and River Basin Councils. Before 1992, state governments participated little in water management. The new legal framework gave them a role for direct participation in new 'River Basin Councils' that execute and finance different programs and actions that flow from national objectives set by the NWC. This removed the lack of clarity in roles of the NWC as most of the water supply work and direct community consultation was now done by the river basin councils.

The river basin councils play a basic role since they are multi-faceted, open forums where existing problems are ventilated and actions to be carried out are agreed upon for the benefit of the people and the resources or health of the basin. There are now three basin councils in the most stressed regions and more are to follow.

As an example, in the Lerma Chapala river basin, perhaps Mexico's most important, the Council (which is comprised of all stakeholders and institutions with a key interest at a high level) undertook a strategic assessment and decided on four main objectives for achieving sustainable development.

- Distribution of water amongst users according to a new allocation policy.
- Improvements in water quality by treating urban raw effluents.
- Increasing water use efficiency.
- Conserving the river basin system.

The Council set up a Technical Work Group to "make things happen". Despite any obstacles, extensive community participation and debate was able to resolve the differences of opinion, technical views and political tensions and good progress has occurred.

The Lerma Chapala basin council has become a model to follow in Mexico, and in other countries. Its objectives broadened as its success began to appear. It now focuses on the following:

- To establish a new way of managing and using water.
- To improve water efficiency.
- To achieve greater availability with reasonable quality.
- To improve water quality through wastewater treatment.

- To seek new financial ways of funding the water sector.
- To achieve greater user involvement and greater community and school awareness.
- Physical and economic sustainability.
- Continued environmental improvement.

Achievements so far are:

- 100 treatment plans finished or underway.
- More equity in surface water distribution.
- A river basin master water plan.
- Distribution of a vast amount of ‘public awareness’ material.
- Greater regionalisation and clarity of roles.

River Basin Councils will eventually take over several tasks now done within NWC, which itself, will become more of a consulting agency to the councils.

## *Australia*

### *Background*

Like Mexico, Australia has a federal system supported by separate states. Each state has sovereign powers over its natural resources so coordination across all states is important, particularly so as much of the continent is arid, and water is scarce.

This is even more so across the large Murray – Darling River basin which covers about one seventh of Australia and includes parts of four states.

Australia has had a long history of coordination across its water management. The first agreement to control the sharing of water within the Murray Darling was shortly after 1900 and this has progressively changed to the extent that all aspects of natural resource policy and strategy across the basin are now covered by the agreement. Each member state continues to plan and manage its own resources but within the policy framework developed by the Murray Darling Basin Commission.

Coordination at ministerial level on water issues has occurred since the 1960’s at the national level through the Australian Water Resources Council (water ministers from the six states and from the federal government). This was supported by a ‘senior officials’ Standing Committee that in turn, set up specialist working groups to administer/investigate key aspects of a strategic water management agenda. Recently as all major water development has been completed, the Council was changed to be more of an ‘Agriculture and Resource Management’ Council to give greater attention to sustainable development across economic, social and environmental aspects.

Each state has varying but similar coordinating arrangements covering natural resource matters. In the state of New South Wales, there is a Cabinet Committee on Natural Resources that is supported by a Standing Committee comprising the Chief Executives of all the departments having a direct involvement in natural resource management.

Each major river valley has a ‘catchment or basin natural resource’ committee (eg., within the major Murray Darling basin there are about 15 individual catchment committees) and each develops a strategic plan to drive the planning and management of its water and related resources. The Chairpersons of these committees come together to form a forum of stakeholder advice directly to ministerial level.

### *Current Initiatives*

Despite this impressive array of arrangements that have successfully applied for some 30 years, there have been concerns, supported by increasing information and knowledge, that too much water is being extracted and the environment is suffering beyond acceptable limits. That is, the use of the water, soil and vegetation resources is not sustainable.

The various ministerial councils have agreed on a whole range of water and natural resource reforms to bring water use back to more acceptable levels. New policies are being developed that better reflect the needs of the environment, and water pricing and demand management strategies now exist that place more emphasis on the realisation that water must be used sparingly and sensibly.

The catchment or river basin committees are being given stronger powers to the extent that government regional administrations are now concentrating on giving technical support to these groups much more than in the past. In effect, there is much greater input to water planning and management matters by the stakeholders than at any time previously.

The water utilities and major irrigation companies (formerly government run) are now either state-owned corporations or privatised so there is very clear demarcation between the resource manager and water supplier or operator. An independent pricing regulator, the best example being in the state of New South Wales, regulates prices charged by the utilities.

## **Vietnam**

### *Background*

Vietnam has a national government that is supported by a second ‘tier’ system of provincial governments that operates through delegated powers via its constitution.

Traditionally, its water policy has been developed and controlled through its central water ministry, which also undertook the major development work. The provinces were responsible for operating the local irrigation and urban systems, but even then, the local provincial water bureaus were under dual control – administered by the provincial governments but under technical control by the central ministry.

There was no coordination between the components of the water sector – irrigation, urban, navigation, power, etc.- and no means to develop integrated policy and planning across the entire sector. There was no separation of roles between regulator, resource manager and operator and, in effect, poor accountability for performance. Also, within the large river basins, there are between 12 to 20 provinces and there was no mechanism to coordinate or integrate efforts between them.

### *Current Initiatives*

A new Water Law has recently been passed to give a legal framework for better coordination, better definition of provincial responsibilities and the notion of managing on a river basin basis.

It has the following features;

- creates a National Water Resources Council, comprising ministers of water and related ministries.
- a specialist policy secretariat to support it.
- A provision to create river basin organisations in the major basins.
- A new and more equitable system of sharing water and issuing allocations or licenses.
- More regionalised powers for the provinces in both water quantity and quality matters.

The challenge is to now make all of this happen, particularly the concept of river basin management and coordination. The Vietnamese administrative system is strictly tiered, from central to provincial to county/town to village. River basins cross these boundaries and it is totally foreign to tradition to undertake some form of management across administrative boundaries.

Nevertheless, the new water law and the institutional arrangements that are in place now provide the framework for good integrated river basin management.

### **Thailand**

#### *Background*

Thailand is undergoing review at present. It has a national government supported by provinces that have strong powers for water management. However the focus for major water development schemes comes from central government agencies such as the Royal irrigation Department, the Department of Energy Development and Cooperation and the Electricity Generating Authority of Thailand.

#### *Current Initiatives*

Recently a Water Resources Council was established (Vice Minister level) supported by a secretariat that operates out of the office of the Prime Minister.

A major task is to develop a new water law to put into effect new policy arrangements reflecting water allocation/licensing procedures and a provision for river basin management and coordination. Thailand has much competition for water with virtually all of the river basins heavily developed and crossing numerous provincial boundaries.

An example is the Chao Phraya basin that drains much of the central area of the country and includes the capital, Bangkok. It covers many provinces and each year there is much competition between irrigation, urban supply, and water quality/salinity



intrusion and flood mitigation. Water shortages are not uncommon and there is no developed process whereby all the stakeholders (ie the provinces) can contribute to major policy and strategy decisions to share shortages and quality problems.

The Water Resources Council is now studying ways to better achieve integrated river basin management and it is likely that new legislation will soon be introduced to achieve this.

At present, it can be said that there is inadequate coordination at central and provincial government levels, poor integration across river basins and a need to clarify roles by better separation of regulator, resource manager and operator/supplier.

## China

### *Background*

China has a central government that develops policy and laws and provinces that implement, but with a close involvement of central agencies.

The central government provides the national focus in water resources management by establishing national goals and objectives, national framework policies, legislation and master plans, and by implementing major projects such as inter basin transfers, flood control works etc.

The Ministry of Water Resources handles these functions and is basically responsible for water administration for the whole country. Permanent “leading groups” or coordination committees used to be the vehicle for driving a focused effort on things such as flood control, pollution and so on but they have largely been abolished with the aim of clarifying responsibility and accountability at ministerial and agency level – things were becoming very clouded.

It takes a long time for laws and regulations to become effective within the Chinese system as implementing decrees and regulations must be enacted first at the central level and then the provinces before a law can become totally effective and this often takes years. Hence, the policy aims of the central ministry can become ineffective and often the provinces are left to interpret and implement water management as best as they can manage.

As well, there is no mechanism for coordination amongst the central government ministries relating to water. Therefore water management policy tends to develop without proper input with regard to power, navigation, industry etc sectors.

River basin commissions do exist to provide some coordination across the various provinces in a basin but they only cover bulk water sharing, flood control and perhaps pollution and do not embrace all aspects of natural resource policy and strategy across the basin, nor do they include all the provinces in the management structure of the basin commission. Hence it is hardly a ‘team’ approach to solving basin problems and is therefore rejected by the provinces as a means of integrated water resources management.

### *Current Initiatives*

China is presently undertaking a major strategic review of water management to better define options to achieve greater integration and coordination.

It will be some time before any changes occur as they must go through the prolonged process of policy and law making that typifies the Chinese government system.

A 'National Water Council' at the central ministerial level has been suggested with a secretariat from within the Ministry of Water Resources. A national water policy framework is seen as the first task for such a body.

As well, the role of the central water ministry is recommended to be one of technical advice to the provinces with provinces assuming full responsibility for the management, use and regulation of all resources within their boundaries. In line with this new clarity of roles the river basin commissions are suggested to be reconstituted to give:

- The provinces a role on the 'Board of Management'.
- Better legislation for natural resource policy issues.
- Better resolution of provincial shares of the basin's water resources.
- Better data and information so that the provinces can better evaluate sharing options and pollution problems.

The direction that China is proposing follows the principles of good integrated water resources management but the size of the country and its population and somewhat strict 3-tier level of administration makes it difficult to achieve these reforms in practice.

### **France and Spain**

France and Spain have long histories of integrated water resources management that come from a strong system of central/regional government that has existed for hundreds of years. They therefore reflect a very mature water management structure attuned to European climatic conditions and one could argue that it is not totally relevant to a developing country in an arid climate. Only brief details are provided.

Both countries have a central government agency for broad national policy and planning guidelines, but the real planning/management is done at the river basin level – "Basin Agencies" in the case of France, and "Hydrographic Confederations" in the case of Spain. Both of these act like "water parliaments" with a peak level Board of Management or Basin Committee, and then the more technical groups that develop project plans to implement the policy and strategy decisions of the Board level. Funds can be raised through levies on pollution, water charges etc., and these are returned to undertake new works.

Although the systems in France and Spain are long standing and European in nature, they clearly have lessons in that they reflect the basic principles of IWRM,

- A sound integrated framework for coordination of water issues from central government down through the river basins,
- Separation of roles of,
  - Regulator – done at central government level,
  - Resource manager – the basin agency,
  - Operator – the town or municipal level

### *United Kingdom*

The UK experience has covered the full spectrum of water management reform over the last twenty years.

The water utilities were separated from resource management in the late 1980's and were subsequently privatised and are now regulated as to pricing and efficiency performance by an independent regulator – the “Office of Water Services” – with very wide reaching powers.

The resource manager function was consolidated at the same time as the ‘National Rivers Authority’, with some seven regional offices for better delivery of service to the community. The Authority provided a real focus for most resource management work but pollution control was still fragmented with other groups or agencies having critical roles.

In the late 1990's, there was a further reorganisation and the “National Rivers Authority” was brought together with the Pollution Inspectorate and other environmental issues, into the Environment Agency.

This has provided an excellent response to integrated water quantity and quality management and has overcome any of the previous problems where all of these related issues were not dealt with in the one consolidated agency.

The only issue that must be treated with caution is the setting of environmental objectives and standards. It is important that as the Environmental Agency covers both environmental standard setting and then managing water issues to achieve them, that the criticism of being both “gamekeeper and poacher” is avoided.

This is achieved by a very clear separation of these functions within the agency. Also it must be remembered that the European Union sets overall water quality standards so the role of the UK Environment Agency is somewhat diluted in standard setting compared with a country that singularly manages its own resources.

The UK is an excellent example of a sound institutional structure and clarity of roles within the water management sector. However, like Spain and France, it is a mature water sector framed to best meet European conditions and may be far too much of an advanced model to apply strictly in developing countries.

## Zimbabwe

A major review of water management occurred in Zimbabwe in the mid 1990's to better reflect the pressures, goals and aspirations being felt in post colonial Zimbabwe. A new Water Act was developed and a new agency created – the Zimbabwe National Water Authority.

The new Water Act is based on the following principles:

- Stakeholders should be involved in all important water decisions.
- Water resources should be managed on a catchment basis.
- The present racially skewed allocation and distribution of water must be addressed.
- Water prices should be based on the user pays and polluter pays principle.
- Water is seen as an 'economic good' and should be managed accordingly.

Three overriding goals drove the change process.

- Equity
  - Access to water for all.
  - No water rights in perpetuity.
  - No private water.
  - Decentralised catchment councils to manage water.
  - Social considerations in tariff setting.
- Environment
  - Polluters pay for discharge permits and fines or penalties for non-compliance.
  - Drought preparedness and control of siltation.
- Efficiency
  - Commercialise engineering or technical services of government water agencies.
  - Finance water management from water levies.
  - Users pay for water.
  - Demand management; reduce water losses.
  - Encourage water saving technologies and crops.

The new Water Act comprehensively addresses these issues in a modern, contemporary way and will allow good IWRM to be practiced.

The principal institutional change to implement the new legislation is the creation of the Zimbabwe National Water Authority (ZINWA). It is a statutory corporation, which will be charged with the operation and water management roles of the former Regional Water Authority and the Department of Water Development. Policy and regulation will remain with the department.

ZINWA will be primarily a water management and bulk raw water supplying parastatal. It will work closely with the catchment and sub-catchment councils

involving a very high degree of stakeholder participation and amongst other things, will assist with catchment planning, environmental protection and water allocation.

The technical and engineering service component will be carried out “within a commercial environment”. This presumably means that it must price these services at commercial rates and be prepared in time to contest with the private sector to ‘win’ contracts. In time, it may actually privatise the function.

This package of initiatives moves Zimbabwe a long way down the track toward good integrated water resources management. The only reservation is the bundling together within the one agency of resource management and bulk water supply. This can lead to the criticism of “the supplier managing or regulating itself” with the consequence of being seen to go “soft” on itself when difficult or expensive resource management decisions need to be made.

A strong sense of internal discipline and propriety, and the presence of an “Independent Pricing Regulator” are needed to give total confidence with the Zimbabwe initiatives – nevertheless, it is an excellent advance for a developing country.

### **South Africa**

South Africa has been through the same process as occurred in Zimbabwe and is occurring in Namibia.

- Creating a National Water policy that reflects the notion of fairness and equity.
- Developing a new legislative package that supports and empowers the policy framework.
- Developing new institutional arrangements and a community based participative management style appropriate to the policy principles.

A ‘white paper’ was prepared that detailed the new policy and from that, a National Water Bill and a Water Services Bill were drafted.

Institutional arrangements were to reflect as much regionalisation and commercialisation of water supply delivery and distribution as possible, with central government retaining the functions of policy formulation and regulation, and certain water resource management functions including:

- Strategic and technical planning and the maintenance of a national water plan,
- Joint management of international catchments,
- Overall management of catchments on a national basis,
- Water information services.

The ‘White Paper’ was silent on the need, or otherwise for coordination between the water sector and the related natural resource areas at the ministerial or government level.

The implementation of South Africa's new approach to water resources management has not been plain sailing accordingly to regional media reports. Some rough waters are being encountered.

It is reported that South Africa's move to community based management of rural water supply is in difficulty as water schemes are turning out to be too costly, insufficient attention has been paid to 'capability to pay', too rapid phasing in of cost recovery, inadequate consultation, inadequate training, poor management and maintenance, vandalism and water piracy through illegal connections.

The questions that must be asked here are:

"Are the administering coordination arrangements at ministerial and senior official levels effective? Do they exist? Is one agency or unit accountable for reporting on progress and problems with the implementation? Is no-one listening?"

This alleged breakdown of a highly desirable, forward-looking reform program is not an unusual circumstance. Poor coordination, reporting and accountability together with the slowness or inability of entrenched views to embrace change are the formulae for missed opportunities and are lessons that must be heeded by developing countries promoting reform in water resources management.

### **Lessons for Namibia on Institutional Arrangements**

As can be seen from the above, there is no one process that is 'right' for all circumstances. However, there are both good principles to follow and lessons to learn.

#### *High Level Coordination*

All countries that are successfully undertaking 'good water resources management' have in place some form of on-going coordination at ministerial and senior official level that brings together all the water and related resources (or impacts) to ensure integrated policy and strategy development. Spain and France have done it for almost centuries but were more about addressing financial and water quality sustainability rather than sustainable management across all aspects of the resource.

Australia has had these mechanisms during its 'water development' phase and has expanded them to embrace all aspects of natural resource management now that it is in more of a management, rather than development phase.

Developing countries like Mexico, Thailand, Vietnam and Sri Lanka (particularly the latter) are following this path with either 'National Water Resources Councils' or a 'Cabinet Committee on Water Resources', supported by a senior official group or Standing Committee.

It could be argued that the perceived problems in implementing the community-based reforms to water management in South Africa could at least be reduced if there was a better form of coordination, monitoring and reporting at ministerial level.

### *Separating Bulk Water Supply from Resource Management*

This is almost a universal prerequisite to achieving efficiencies and accountability within the water sector. The UK, France, Spain and Australia have very strong separation, whereas Zimbabwe in its recent reforms has allowed both of these functions to be within the Zimbabwe Water Resources Authority.

The Namibian approach of creating a separate bulk water supplier – NamWater – is consistent with good practice although it does seem to need better regulation in terms of a water license and in its price setting process.

### *Separating Policy from Resource Management*

Policy should be developed and its implementation monitored by a separate unit to that which undertakes the broader resource management function. For example, a policy unit would develop water-planning guidelines that reflect national goals and aspirations, then the resource manager would do the planning to comply with these guidelines.

Australia and Sri Lanka are examples whilst South Africa appears to have a clear separation but within the one agency. It matters little whether the policy function is within the resource management agency – the issue is that it is developed and administered by a separate unit.

### *Separation of Standard Setting from Resources Management*

This is evident in most developed countries with an environmental agency developing water quality objectives and standards and the resource manager following a variety of strategies etc. to seek to achieve the standards. The key issue here is for water quantity and quality monitoring, and the issuing of water extraction licenses and pollution permits to be carried out in the one agency.

In this way, a whole range of integrated strategies covering quantity and quality can be developed to attempt to meet standards.

If the standard setting and the pollution permitting functions are together, there will always be criticism that a ‘soft’ standard is set by the environmental agency so that it can easily (rather than with difficulty) manage the permitting to achieve a high performance in meeting the standard.

The UK is a good example of this approach, whilst Sri Lanka, Vietnam and China are going down this path. It is an important issue for Namibia.

### *Regulation of Water Utilities*

There are very few aspects that raise the ire of the community more than the notion that water utility inefficiencies are raising the water prices levied on users to unfair levels.

The UK, Australia, Spain and France, as well as other developed countries, have some form of administer or enquiry process to ensure that price setting is fair and equitable. The UK has the 'Office of Water Services' that has very strong powers to ensure water utilities are operating efficiently and that its internal business environment is at 'external market level'. The State of NSW, Australia has an 'Independent Pricing and Regulatory Tribunal' (IPART) which looks at the pricing proposals and efficiencies of all entities – water, electricity, gas, transport etc.

Perhaps the Australian model is an appropriate long term goal for Namibia as a country with a small population the size of Namibia cannot afford separate regulators for each service area.

### *High Level Stakeholder/Community Input*

France, Spain, Mexico, Australia and the UK all recognise the need for some form of high level stakeholder forum that gives close or direct access to the relevant minister. As well, such mechanisms provide links out into the general community that act both ways – promoting awareness of water issues to schools, villages etc, and in return obtaining greater input from the community on major issues.

Namibia should adopt such a mechanism in whatever format is seen to be appropriate.

### *River Basin Coordination*

This works successfully in Spain,, France, Mexico and Australia, to name a few and is being introduced in Sri Lanka and Vietnam, and slowly in China. South Africa and Zimbabwe both have mechanisms for catchment or basin committees.

Again Namibia would do well to provide some mechanism that gives administer and policy direction across a river basin, but without interfering in the day to day water management role of Regional Councils.



## APPENDIX 9.3

### Summary of Institutional Principles

Based on these examples of international experience, it is plain to see that Namibia, whilst moving in the right direction, has not yet achieved a high status in water resources management. The institutional arrangements are to a degree, conflicting and overlapping, and roles and functions are not always clear or transparent. Similarly, Namibia has only started on achieving a high level of community participation.

International experience shows the benefits of achieving no overlap or confusion of roles between the components of:

- Regulator, standard setter, auditor;
- Resource manager;
- Operator and provider of technical services

In the case of Namibian, this equates to:

- An environmental/pollution administer agency – setting water quality standards through a community participation process, and reporting or auditing on how well they are being achieved by the resource manager.
- A water resources manager responsible for water planning, allocation and management that shares water between various uses and users, manages or polices how these shares are extracted and used, and manages to water quality standards and objectives.
- Water services operator, or the municipalities, or the technical service providers, for example, consultants.

### Further Study

*Considering Namibia's state of development and its arid climate and its "Namibian context", close relations and exchange of views and experiences should occur with Zimbabwe and South Africa (really, all the countries of SADC) and Sri Lanka, in view of its very similar 'path toward review of water management'. In terms of knowledge from a developed country, Australia, where arid conditions and natural resource problems are similar and where water resources management and community participation have been practiced successfully over a long period, provides an excellent opportunity. It provides what could be said to be a "non European" or "Australian" way.*

**Functions, roles and responsibilities**

**Cabinet Committee on Water Resources**

*Objectives*

- To provide high level policy direction across all aspects of integrated water resources management.
- To endorse strategic goals and action plans aimed at implementing endorsed policies.
- To evaluate performance across the water sector in terms of complying with policies and meeting objectives, goals and annual targets.

*Functions*

- To develop and approve a suite of high level component policies flowing from the National Water Policy.
- To agree on a set of strategies and action plans to deliver quality IWRM, consistent with the national water policy.
- To consider advice through the MAWRD from the Water Advisory Council on stakeholder perceptions of strategic water issues.
- To consider the findings of the 'Independent Water Pricing Regulator' and recommend to Cabinet the acceptance or reduction of suggested pricing levels.
- To approve a 'Strategic Water Research Agenda' and evaluate progress against target.

*Membership*

- Minister for Agriculture, Water and Rural Development (Chair)
- Minister for Environment and Tourism
- Minister for Health and Social Services
- Minister for Lands, Resettlement and Rehabilitation
- Minister for Regional and Local Government and Housing

(The Chair of the Standing Committee on Water Resources will advise the Cabinet Committee)

*Operating Criteria*

- To meet quarterly, or as determined by the Chair of the Committee.
- Decisions will be by consensus
- The Chair will submit an annual report to Cabinet on the activities of the Committee.

## **Standing Committee on Water Resources**

### *Objectives*

- To develop policy and strategy proposals and action plans to achieve IWRM
- To provide co-ordination across relevant departments in all aspects of water management
- To report on performance of the water sector in relation to sector goals and targets
- To commission quality independent advice on water tariffs for the urban and rural sectors

### *Functions*

- To coordinate policy, strategy and key projects across the water sector to ensure an integrated response and to evaluate performance against national policies and goals
- To administer direction and output of basin “Water Management Committee”
- To evaluate the work of the Independent Water Pricing Regulator and recommend to the Cabinet Committee on Water Resources the appropriateness of the tariff recommendations
- To review the research needs of the water sector, prepare a targeted and priority agenda including funding options, seek endorsement of Cabinet Committee to the agenda, administer progress.

### *Membership*

Permanent Secretaries for the Ministries of

- Agriculture, Water and Rural Development (Chair)
- Environment & Tourism
- Health and Social Services
- Lands, Resettlement and Rehabilitation
- Regional and Local Government and Housing

Deputy Permanent Secretaries are the only alternate delegates permitted to ensure continuity and quality of debate and advice.

### *Operating Criteria*

- To meet quarterly, or as determined by the Chair
- Decisions will be by consensus and recorded for information or decision to the Cabinet committee on Water Resources
- An annual report of activities will be prepared and released publicly after endorsement by the Cabinet Committee
- At least one meeting per year will be the Chair of the Water Advisory Committee

## **Water Advisory Council**

### *Objectives*

- To provide high level stakeholder consultation and advise to the MAWRD on strategic water issues

### *Functions*

- To debate and report on high level water issues and policy matters referred to it by MAWRD
- To develop response on key water matters raised by the community and report to the MAWRD

### *Membership*

Up to members appointed by MAWRD representing:

- Regional councils
- Tourism
- Non Government environmental groups
- Farmers
- Major urban centres/areas
- Trade unions
- Basin water management
- Mining industry
- Other members appointed by minister

The Minister will appoint one member to be Chair. The Secretariat will be the 'Policy and Strategy Unit' within MAWRD.

### *Operating Criteria*

- To meet six monthly or as decided by the Chair. One of these meetings will include a 'National Water Forum' at which a broader representation (down to Water Point committees) will attend. The Minister would attend opening and closing sessions.
- Decisions should desirably be by consensus but normal majority vote procedures can occur with up to two opinions reported.
- An annual report of activities will be prepared and submitted to the MAWRD

## **Independent Regulator of Water Utilities**

### *Objectives*

- To provide quality independent assessment of the acceptability of water pricing proposals of water utilities and suppliers (e.g. NamWater and Local Authorities)

### *Functions*

- Respond to referrals from the Standing Committee on Water Resources for advice as to the suitability of water pricing proposals
- Undertake investigations on the financial sustainability, efficiency of services and compliance with national goals of water utilities as a means of evaluating pricing proposals.
- Recommend the maximum price structure that can be set by the water utilities

### *Membership*

3 persons appointed by MAWRD after referral to the Cabinet Committee on Water Resources, with skills covering;

- financial/economic management
- water supply infrastructure management
- water resources management relating to water quality

The MAWRD will appoint one member as Chair

The Chair can recruit other expertise for specific tasks to assist in any enquiry.

### *Operating Criteria*

- internally investigate and assess pricing proposals
- call for public submissions and consult with user groups
- report to the Standing Committee on Water Resources
- release the results of enquiries to the public after endorsement by the Standing Committee

## **Basin Management Committee**

### *Objectives*

- To oversee and co-ordinate natural resource management activities at the water/river basin level
- To plan for achieving sustainable natural resource management for the water basin in partnership with Government at all levels
- To encourage the most beneficial use with a view to maximising social and economic benefits
- To embody full consultation and participation by local committees and stakeholders

- To incorporate wide sectoral involvement in relation to the impact of development on the natural resource base in a river basin

#### *Functions*

- To promote and co-ordinate implementation of basin-wide water management policy and action
- Liaise on a local, regional and national level
- Co-ordinate and assess and advise on the natural resource management activities of authorities, private sector and other groups as they impact on water
- Identify a basin water policy and strategy framework consistent with national policies
- Monitor and report on the health of the river basin and effectiveness of policies and actions in achieving sustainable management.
- Identify and resolve natural resource conflicts
- Develop an appropriate water research agenda in liaison with WRM agency
- To educate water users, schools and the community in general on water issues

#### *Membership*

- The direct stakeholders, i.e. the land and water users and other people who are dependent on, or affecting the availability and quality of water within the water basin area. To be included are representatives of the private sector.
- Officials of government departments or authorities being competent in and responsible for natural resource management within the water basin area.
- Representatives of regional and local authorities within the water basin area.
- Persons with an interest in environmental matters, in the broader sense, within the water basin area.

Members should have the full competence and mandate to represent broad groups of stakeholders and should keep effective liaison with them.

Management committees should be limited to maximum 12 full members, with the provision that associated members are identified who may be called to attend meetings to discuss specific matters where their expertise or input is required, or who may be asked to perform particular activities in their field.

The Water Resources Management Agency within MAWRD should be the leading agency and will be responsible to ensure that all required responsibilities are duly executed. This will include the regular supervision of environmental monitoring and remedial activities.

#### *Operating Criteria*

- The Committee shall administer the development by the leading agency of a suite of natural resource policies and strategies for the basin that will be the guideposts upon which development proposals will be evaluated to ensure basin sustainability.

- Any development plans or other envisaged action by responsible authorities that have a significant impact on the natural resources of a basin will be forwarded to the Committee for review. The Committee's advice will be advisory.
- These plans should be discussed during regular and /or ad-hoc committee meetings with members present, either being full members or being associated members called upon to report on specific issues.
- The purpose of the discussions should be to establish whether additional information is required and whether the proposed plans will contribute to the sustainable development of the water basin, or whether the plans will be contrary to this.
- Proposed environmental and other monitoring and remedial action should be given due attention.
- During the meetings, the committee should also discuss any development or potential development within the water basin, as well as the reports on monitoring and remedial action, and other relevant activities within the water basin.
- The committee should attempt to arrive at consensus, but in case this is not possible make use of normal majority-vote procedures, and accordingly make recommendations to the Water Board or, if applicable, to another responsible institution. In this process the committee should closely liaise and harmonise its position with the other institutions involved, such as the proposed Environmental commission and Land Board.
- The committee should also forward the annual assessment of the ecological health of the water basin to the same institution, together with its comments and recommendations for additional activities.
- The committee may have sub-committees.
- The members of the committee are responsible to provide funding for their own operational activities.

## **Policy and Strategy Unit**

### *Objectives*

- To ensure the adoption and implementation of a full suite of water related policies and strategies consistent with the national water policy
- To ensure implementation of good integrated water resources management across the water sector and performance that meets agreed goals and aspirations

### *Functions*

- Develop national policies on all aspects of water resources management – environmental, social and economic, including national water pricing principles
- Undertake strategic planning and program evaluation at the highest level of the water sector
- Evaluate performance of the water sector against national goals and aspirations
- Undertake the strategic policy, liaison and secretarial role dealing with shared rivers
- Act as secretariat to the :
  - Cabinet Committee on Water Resources
  - Standing Committee on Water Resources
  - Water Advisory Council
- Assist, as required with the work of the ‘Independent’ Regulator of Water Utilities

### **Staffing –**

Head of Unit appointed by normal recruitment processes. Staff of policy analysts (about 10) by way of secondment from within MAWRD for two years. Call for expressions of interest. Appointees bring budget and expenses with them from ‘home’ department.



### **Funding and Staffing**

The new institutional arrangements proposed center around a restructure of the Department of Rural Affairs to better reflect the approved policy of decentralization to Regional councils, and to separate the roles of policy development and evaluation, from that of the water resource manager. This separation and clarity of roles and functions is fundamental to achieving good IWRM.

Apart from the internal restructure within the Department, five new co-ordinating bodies are recommended, one of which – the basin water management committee concept – is already under discussion within Government.

As is detailed below, it is considered that these new arrangements can be implemented virtually on a cost neutral basis and in most cases, by transferring or re-arranging staff from within the present Department of water Affairs. After the initial three years or so of the new arrangements there will be savings as displaced staff resulting from the re-organization and efficiency savings retire or move to other vacancies in the public sector.

Offsetting this however, is the need to invest more in water and related data monitoring and assessment, in communication/consultation with the community and in key and important water related research. In time, it will be legitimate to find some of these resource management charges from monies collected from water users – after all some of the monitoring is only necessary because of the need to check on the impact of water taken from human use. However, water charges are unlikely to reach a level for this to occur for some time.

Proposals for funding each component of the new arrangements are as follows:

#### **1. Cabinet Committee on Water Resources**

- COST NEUTRAL; member organizations meet what ever costs involved

#### **2. Standing Committee on Water Resources**

- COST NEUTRAL; member organizations meet what ever costs involved

#### **3. Water Advisory Council**

- 10 members with two meeting per year
- meeting expenses, travel, accommodation costs plus expenses for the 'National Water Forum'.
- About N\$50 000

#### 4. Independent Pricing Regulator

- Initially funded by government budget, ultimately by levy on the water utilities that are being regulated
  - Assume one enquiry/year of about 3 months duration
  - 3 members of the Enquiry Board
    - fees for 3 months, about N\$180 000
    - expenses of about N\$25 000
    - junior investigations/analysts on secondment (university students) N\$100 000
- (Policy and Strategy Unit would also assist at no cost)  
Total – about N\$350 000

#### 5. Basin Water Management Committee

- Up to 12 members, with the right to include associate members for particular matters or projects
- Meeting expenses, travel accommodation costs, but no meeting fees or allowance
- About N\$20 000/committee - to be met by WRM Agency; the leading agency for this committees.

Assume committees in 3 largest and most ‘stressed’ basins

Total Cost about N\$ 60 000

#### 6. Internal Re-organization with Department of Water Affairs

- Policy and Strategy Unit
  - About 10 persons skilled in policy analysis or components of natural resource management
  - Expressions of interest called within MAWRD for two year secondment
  - Appointees bring budget with them, including an allowance for expenses
  - COST NEUTRAL (from within MAWRD resources)
- Water Resources Management Agency
  - Agency created as per GRN procedures
  - Chief Executive position advertised and filled
  - Internal re-organisation proposed to best reflect IWRM
  - Structure approved and staff re-adjusted as per GRN recruiting/staffing guidelines
  - COST NEUTRAL with on-going efficiency savings directed toward improved water data and information and the development of a water research agenda.

- Rural Water Supply Task Force
  - Initially comprising the present RWS Division
  - Review undertaken by Management Consultancy Group and Implementation Task Force to determine what functions, staff and budget;
    - Should be decentralized to Regions
    - What can be outsourced
    - What should remain in Ministry to administer the 10 year WASP program
    - Whether, in longer term, the necessary within-government water supply technical expertise should be consolidated with similar groups (e.g. DPW) to provide an efficient ‘care’ of expertise.
  - COST NEUTRAL initially but savings as the function is re-organised following the Management Review.

## Summary

- Costs for points 3 and 5 to come from internal savings or budget re-allocation from within Department of Water Affairs. Total Cost about N\$150 000 or less than 1% of the ‘Recurrent’ budget of Department of Water Affairs – IMPACT INSIGNIFICANT.
- Costs for point 4, will need to come from government budget sources initially. This could be directly from Treasury funds, or by an equal buy on the Ministries of AWRD, Health and Social Services and Environment and Tourism. NamWater should make some small contribution in the first years to make very clear its responsibility in this matter.
- Recommended equal shares between NamWater, MAWRD and MHOSS i.e. about N\$110 000 each
- Staff for investigator/analyst positions to be by expressions of interest for short term (3 month) secondment with compensatory payment to home department for salaries etc.
- Alternatively the two ministries involved can provide suitable staff for a 3-month secondment to offset part of financial contribution.

Water resources management agency

**Framework document/ memorandum of understanding/performance contract**  
**(all three apply)**

1. Framework objectives and functions

The Water Resources Management Agency is attached to and sponsored by, the MAWRD and has been created by decision of Cabinet as an 'Agency' as defined in the Public Service Act 1995)

Its principle objectives are:

- To ensure the water resources of Namibia are of acceptable quantity and quality in regard to the communities legitimate needs and aspirations.
- To ensure equitable sharing of and a fairness in benefits from, the bulk water resources
- To resolve conflict between users through a formal allocation system

More specifically the Agency will

- Conduct strategic water assessments for all river basins.
- Develop national water plans in accord with national economic, environmental and social goals.
- Assist regional councils with water planning at regional and river basin level.
- Contribute to developing modern integrated water resources management.
- Develop and implement a water allocation and discharge permit system and monitor compliance.
- Manage water quality through monitoring and laboratory analysis resource protection schemes and catchment management plans.
- Build, own, operate and maintain a network of data facilities and process, publish and make available the data.

2. Resources

- The principal resources of the Agency is its staff and the knowledge and expertise which they possess. Programs must be on-going to maintain and update these skills.
- Other assets include the data banks and information of the water and related resources of Namibia, water measuring and investigatory equipment, laboratories and ancillary equipment, buildings, cars, computers etc. They must be managed for future effectiveness.

### 3. Corporate and business planning

- The Agency must prepare a Strategic overview that translates national goals, directions, and aspirations and the objectives and policies of its sponsor, MAWRD, into a strategic direction for the agency.
- An annual Business Plan must be prepared that stipulates outputs proposed to achieve progress against objectives and goals, performance measured, reporting arrangements, three year efficiency strategy and a management philosophy and style that promotes the GRN social justice ideals.

### 4. Reporting and accounting

- The Chief Executive of the agency is responsible for ensuring that the requirements of government accounting in regard to agencies are met.
- Progress reports of performance against targets, or performance against the business plan, will be provided quarterly, or as determined by the sponsoring Minister.
- An annual report will be prepared in accordance with the requirements of the Public Service Act and will specifically include progress or output on:
  - Against specified annual targets in the business plan;
  - On targets in the “Efficiency Plan”;
  - On human resource development programs;
  - On community consultation and complaints resolution.

### 5. Personnel management

- The agencies staff are public servants;
- The Chief Executive has delegated responsibility for all Agency human resource matters, subject to compliance with the provisions and conditions issued for the public sector by the Office of the Prime Minister.
- The Chief Executive may bring forward personnel policies designed specifically to meet the business objectives and operational needs of the agency. These will require discussion and negotiation with the appropriate department within the Office of the Prime Minister and staff and trade unions where changes in terms and conditions are envisaged.
- The Chief Executive is responsible for ensuring that there are equal opportunities and treatment of all staff and applicants for employment to the agency.
- The agency and the sponsoring Ministry will encourage transfers of staff and secondments between them where operational efficiency and career development opportunities exist.

6. Financial management

- The Chief Executive is responsible for allocating the agencies budgeted within the programs, projects and Divisions in a way that maximizes progress against targets in the business plan.
- Movement of monies from one funding vote to another (e.g. from Capital to Recurrent) can be done in accordance with public sector financial rules, or by approval of the Minister after consultation with central agencies, for amounts beyond normal limits.

## **CHIEF EXECUTIVE – WATER RESOURCES MANAGEMENT AGENCY**

### ***POSITION DESCRIPTION***

The Chief Executive of the Namibia Water Resources Management Agency is responsible for the implementation of the GRN policies relating to the sustainable economic and social development of the country's water resources.

Through the sponsorship of the MAWRD, the Chief Executive will be responsible for

- Conduct strategic water assessments for all river basins.
- Develop national water plans in accord with national economic, environmental and social goals.
- Assist regional councils with water planning at regional and river basin level.
- Contribute to developing modern integrated water resources management.
- Develop and implement a water allocation and discharge permit system and monitor compliance.
- Manage water quality through monitoring and laboratory analysis resource protection schemes and catchment management plans.
- Build, own, operate and maintain a network of data facilities and process, publish and make available the data.

The Chief Executive will achieve this through-

- Efficient management of the agency providing leadership and motivation.
- Developing a well focused statement of strategic intent and detailed annual business plan.
- Provision of quality advice to the sponsoring Minister on emerging water Management problems and issues.
- Adopting an open, participative management style – developing a progressive culture and set of values and managing to them.

**CHIEF EXECUTIVE CONTRACT –**  
**WATER RESOURCES MANAGEMENT AGENCY**

- 1) The appointee will be appointed to the position of Chief Executive (or Head), Water Resource Management Agency, for a period of 5 years, at a salary of N\$ .....
- 2) The salary will be subject to review as part of the routine deliberations of the Office of the Prime Minister in regard to the whole of the Namibian public sector.
- 3) The general terms and conditions of employment are equivalent to those applying to the Permanent Secretary and Deputy Permanent Secretary levels within the public sector.
- 4) The appointee will manage according to the “Framework Document” endorsed for the agency and will meet all the reporting requirements specified in that document. In particular, the Chief Executive will prepare annually a detailed business plan as per the Framework Document and will manage to the requirements in the plan, after its endorsement by the Minister.
- 5) The Minister will review annual performance against the business plan and a performance report submitted by the Chief Executive and may recruit persons of relevant skills to assist in this assessment.
- 6) In the event that performance is deemed to be well below targets specified, the matter will be referred to the Public Service Commission for advice as to whether the contract should be terminated.

The Chief Executive will be expected to contribute to the development and implementation of major public sector reforms through participation in high level initiatives promoted by the Office of the Prime Minister.



## **JOB ADVERTISEMENT**

### **CHIEF EXECUTIVE** **NAMIBIAN WATER RESOURCES MANAGEMENT AGENCY**

The agency has recently been created by Cabinet decision and absorbs the role undertaken by the previous Water Resources Management Directorate of the Department of Water Affairs.

The agency manages the quality and quantity of the Namibian surface water and ground water resources and advises the government, through the sponsoring Ministry of Agriculture, Water and Rural Development on the conservation, measurement, management and sustainable use of these resources in an integrated fashion.

#### *ESSENTIAL REQUIREMENTS*

- Outstanding achievement in management at a senior level;
- High level of experience at a senior level in water resources management;
- An understanding of integration of policy and strategy across all aspects of natural resource management;
- Demonstrated understanding of contemporary issues affecting natural resource management;
- Capacity to establish strategic direction, vision and leadership in a multi-skilled medium to large organization.
- Capacity to embrace and deliver change
- Commitment to equity issues and ethical work practices.

Enquiries to:

**HEAD, POLICY AND STRATEGY UNIT –**  
**MINISTRY OF AGRICULTURE, WATER AND RURAL DEVELOPMENT**

***POSITION DESCRIPTION***

- 1) The position will head up and direct a small, highly skilled unit reporting to the Permanent Secretary, MAWRD.
- 2) The duties and responsibilities of the position are:
  - Develop national policies on all aspects of water resources management - environmental, social and economic, including national water pricing principles;
  - Undertake strategic planning and program evaluation at the highest level of the water sector;
  - Evaluate performance of the water sector against national goals and aspirations;
  - Undertake the strategic policy, liaison and secretariat role dealing with shared reviews;
  - Act as secretariat to the :
    - Standing Committee on Water Resources
    - Water Advisory Council
  - Assist, as required, with the work of the Independent Regulator of Water Utilities.

The appointee will need:

- Demonstrated skills in policy development and review of strategic issues;
- Liaison and interpersonal skills operating at a high level;
- Experience in managing a small team to meet defined outputs in a target timeframe;
- An understanding of aspects of contemporary integrated water resources development;
- Excellent skills in communication, leadership and negotiation;
- Capacity to embrace major cultural and structural change within and external to the Unit.

Salary will be at level \_\_\_\_ in the public sector and appointment will be under normal public sector conditions.

Enquiries to:

**Business planning in the WRMA**

The MAWRD has already conducted a strategic planning workshop and from this a draft strategic or corporate plan has been developed.

Once GRN has decided on its preferred approach to delivering integrated water resources management and the new institutional arrangements that will underpin it, it will be necessary to revise the strategic plan to test whether the overriding or umbrella elements of the plan such as –

- Purpose or mission
- Vision
- Objectives

are still valid or need change to better reflect GRN objectives and goals for the water sector.

The vision, objectives, goals and strategies that are developed from this process become the guiding principles or guideposts within which the WRM Agency must develop its annual business plans.

These guiding principles or guideposts will be a central plank of both the “Framework Document” that accompanies the setting up of the WRM agency and also the performance agreement that the Chief Executive of the Agency will sign annually with the responsible Ministry.

It would be normal for a business plan to be part of the annual agreement, spelling out what the agency intends to achieve, how it will monitor and report its performance and most importantly, how it will manage its affairs – what style it will use (opening and consultative) and how it will relate to its customers and treat its staff – that is, a statement of its corporate values.

An annual performance review would basically be an assessment of how well the agency and its Chief Executive have delivered on its business plan – did it achieve its targets and did it do so with a management style and approach consistent with its stated corporate values. It is counterproductive to meet project targets but have a staff with low morale and a customer/community base unhappy with consultation and participation.

Business planning does not stop with the annual agency plan that is presented to the Minister. It must flow downward and lead to Divisional, Unit and Team work plans. In this way, all staff are embraced within a plan – they know what output is expected of them, how they are to manage or go about doing their work.

The following outlines the steps that could be followed in developing an agency business plan. There is no one format or approach to business planning that is “right” so it must be tailored to suit an organization’s functions and responsibilities. It would

normally cover a twelve month period, specify the “Key Result Areas” for the organization – those areas or activities that must be performed well if the organization is to be seen to be achieving its objectives – performance targets, actions, responsibilities, completion dates, budget requirements and monitoring and review, customer charter and management style or philosophy.

### **1. Introduction**

- Describe how the business planning is to be done;
- Spell out how it will cascade down throughout the organization;

### **2. The Strategic Plan of MAWRD**

- Describe the Ministry strategic plan and how it incorporates the national goals and aspirations of GRN and the particular goals and targets for the water and natural resources sector.
- Describe the over arching key areas and the management approach that the Ministry has defined as its way of doing business.

### **3. The Agency Response**

- Overview of the Agency and its functions and responsibilities;
- Its purpose, vision and the broad outcomes it hopes to see eventuate for water resources management;
- How it structures its internal business and budgeting e.g. by Branches or by Work Program areas e.g. River and Groundwater, land and vegetation etc. (often, program areas go across more than one Division requiring a matrix style of reporting, but is often the preferred approach as government is more interested in whether it is achieving progress in say “Land and Vegetation” management program, rather than the performance of a Forestry Division, or a Desert Division)

### **4. Analyzing the Operating Environment**

- Explore or review the external environment in which the agency operates – have things changed “outside” since the last review that would tend to change the range of products or services that the agency delivers, or how it goes about delivering them;
- Are there emerging government policies or aspirations that should be considered;
- Are the previously defined “Key Result Areas” (KRA’s) still the right focus areas to direct the most important things that must be achieved.
- Undertake a SWOT analysis (strengths, weakness, opportunities and threats) to determine in more detail how the agency should respond to its business environment and how to maximize its performance in the KRA’s.

- Strength which will assist in achieving the KRA's
  - Weaknesses that will hinder achieving the KRA's
  - Opportunities which will assist in achieving the KRA's
  - Threats which will hinder achieving the KRA'S
- Confirm the KRA's that apply to this business planning cycle.

## **5. The Budget Environment**

- Constraints and Initial Break-up over KRA's or Programs/Divisions
- Review the likely overall budget, taking on board government cutbacks or pronouncements
- Broadly allocate shades of budget to programs or Divisions, to best reflect achievement of objectives, goals or KRA's

## **6. Developing Program or Project Plans to Achieve KRA's (and other required outputs)**

- Develop projects etc., with clearly defined outputs that are to be achieved and performance measures.
- Specify performance measures for each project/activity – some will be quite subjective.

Note: Project plans at agency level are really a composite of sub-projects developed at the lower Unit level. Consequently planning should be progressing simultaneously at all levels.

## **7. Asset Management Plan**

- A review of the condition of assets (gauging stations, laboratories, etc)
- A statement of refurbishment/renewal needs

## **8. Reporting Requirements**

- Specifying how and when reports against target will be made, and what they will contain.

## **9. Efficiency Plans**

- A statement of the efficiency strategy for the next three years.

## **10. Customer and Community Liaison**

- Spell out the approach to be adopted in liaising with the Community, how it will occur, when etc.;
- Develop a 'customer charter' re timeliness of responses to enquiries, complaints registers etc.

## **11. Management Philosophy and Commitment**

- Responding to MAWRD requirements on “how to do business”
- Agency culture and values
- Business philosophy
- Innovative
- Quality customer service
- Can-do attitude
- Excellence
- Equity and integrity
- Human resource program
- Skilling staff to achieve quality performance
- Succession planning

*An Implementation Strategy*

The Review's final report will recommend a 'National Water Management Policy' for Namibia and a preferred institutional, legal and human resources framework to underpin the policy. This implementation strategy covers all aspects of the Review's findings – not just the institutional arrangements – as the themes of Review do not stand alone. In effect the implementation strategy should be the path forward for introducing integrated water resources management to Namibia.

Once GRN has approved its preferred version of the policy it will be necessary to:

- Prepare the necessary documents and submissions to the relevant Ministers and to Cabinet to formalize those components of the new institutional arrangements that require empowering;
- Finalize, in conjunction with line agencies, the necessary draft Bills to give legal backing to the new arrangements and approaches to water management e.g. Water Resources Management Bill and Water Services Bill;
- Review, with line agencies, other pending Bills to ensure compliance with the new National Water Policy e.g. Environmental Management Bill and Pollution Control and Waste Management Bill;
- Prepare documents and submissions to allow the transfer or hiring of staff to comply with the new arrangements.
- Ensure training of regional staff – a critical issue for the success of the new arrangements – is organized to proceed without delay.

Of the options available to administer and complete this after Cabinet approval, the favored approach is to convert the Review team into an 'Implementation Task Force' with a specific life of one (1) year or some other determined period.

The Review team received advice on this approach from international experts with a long involvement in institutional design and change management. Line agencies are not favored as "implementers" as they have not been involved in the project to anywhere near the same degree as the Review team and in any case, with understandably entrenched views, are hardly ideally placed to be drivers of change.

It is therefore proposed that the Review Team become the Namibian Water Policy Implementation Task Force, to exist for a specified period from the date of Cabinet approval of the national Water Policy. It would report to the MAWRD and would need to provide a project plan to the Minister within two weeks of commencement.

It would work with line agencies as required and handle the following tasks amongst other things :-

### ***Institutional***

- Prepare the necessary documents to create:-
  - Cabinet Committee on Water Resources
  - Standing Committee on Water Resources
  - Water Advisory Council
  - Independent Committee on Water Pricing/Regulation
  - Basin Water Management Committee
  
- Prepare necessary submissions to re-organise the Department of Water Affairs by creating a “Water Resources Management Agency”, a Policy and Strategy Unit, and a Rural Water Supply Task Force if approved by Cabinet. This will include some further assessment of technical capabilities and may require input from the Management Consultancy Group. An early resolution of the ‘Policy and Strategy Unit’ will be important in view of the strategic nature if it work.

### ***Legal***

- Prepare, in conjunction with relevant line agencies, final drafts of the necessary legislation to underpin the National Water Policy, and related Cabinet decisions (e.g. Community based Management, decentralization, outsourcing)

### ***Human Resources***

- Integrate existing training programs with the requirements in the Cabinet approval.
  
- Develop a responsibility matrix for implementing the training program and performance targets for approval of the Minister.

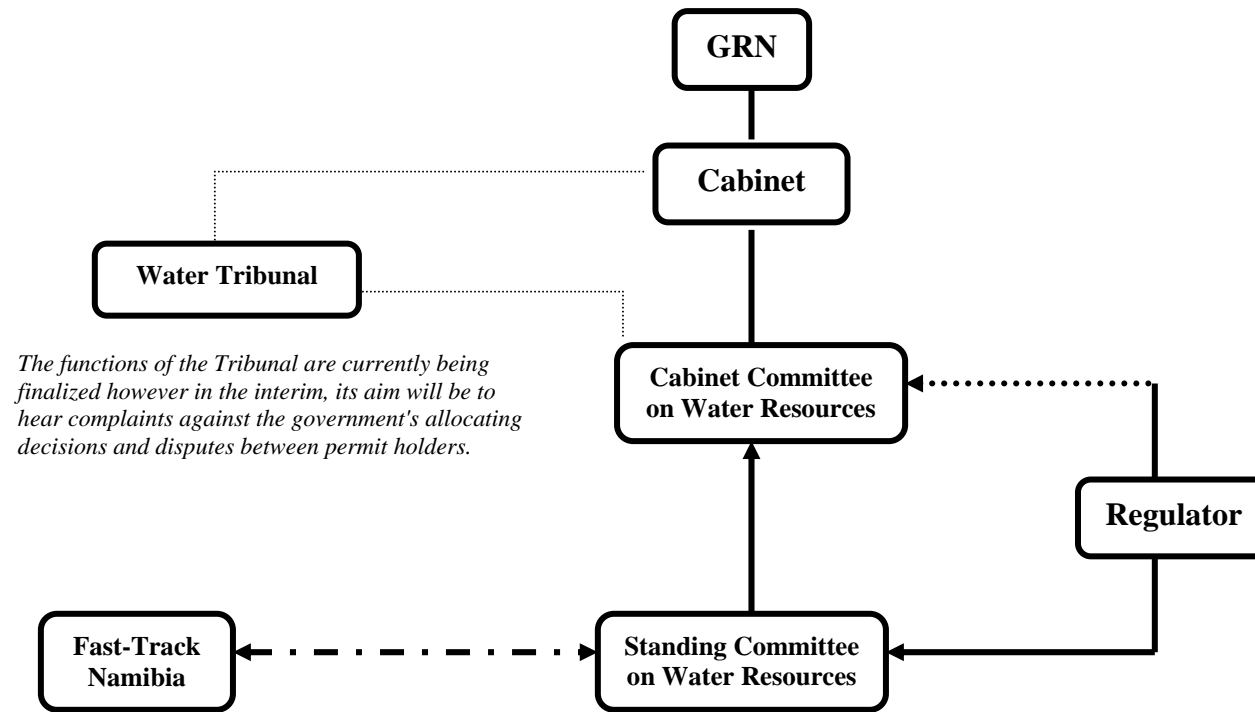
The Implementation Task Force should report monthly to the MAWRD and also to the periodic meetings of the Standing Committee on Water Resources to ensure no delays or blockages.

The salary of the leader of the Task Force and the General operating costs will be sought from the donors who have supported the Review so far. Other members will remain seconded from their parent of home organization and it is suggested that their salary be met from the home agency.

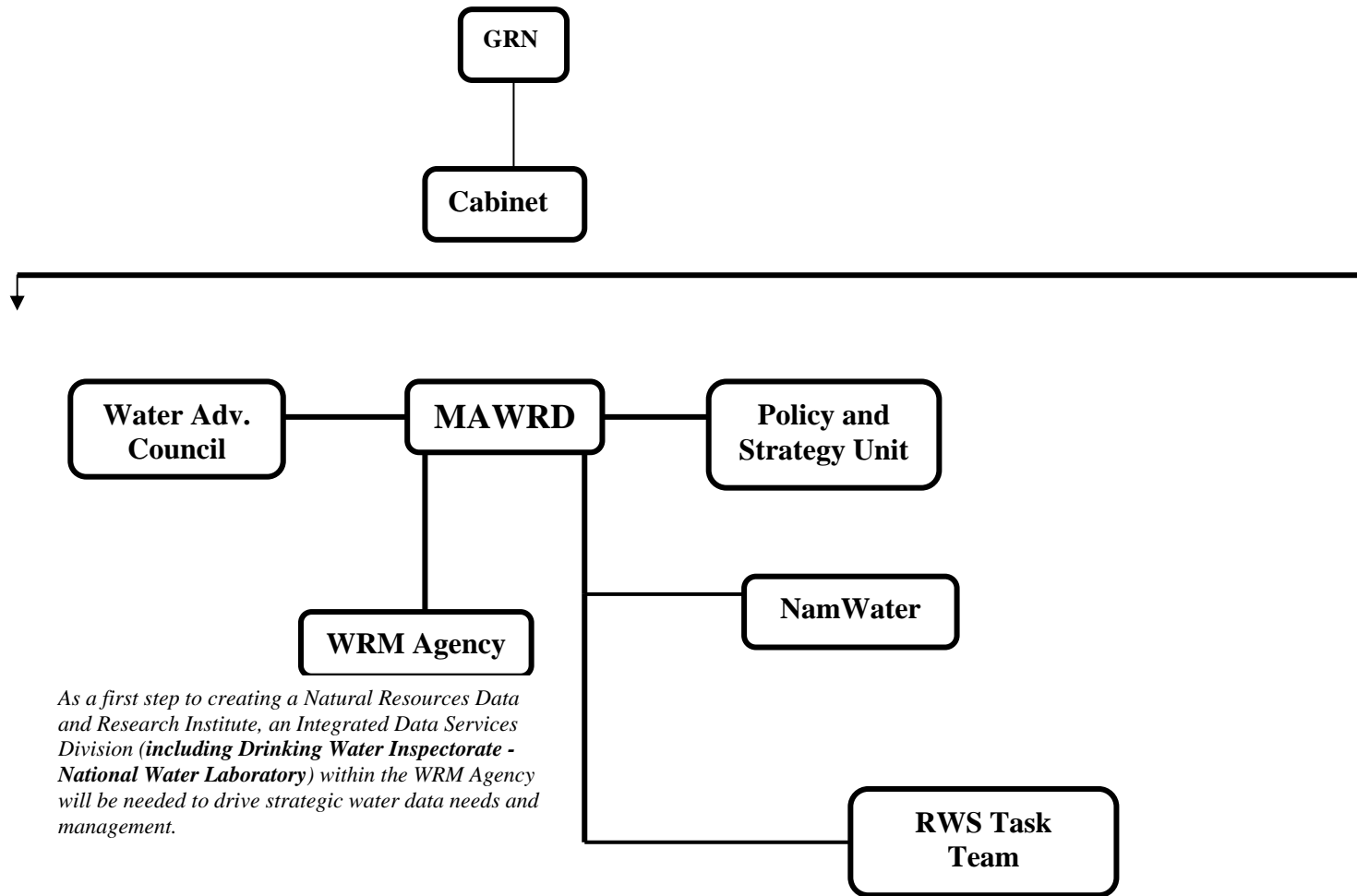


Proposed Institutional Arrangements

Cabinet Level



Ministry Level



Regional Level

