

Southern African

Vision

For

Water, Life and Environment

In the 21st Century

CONTENTS

Executive Summary

Acknowledgements

1. Introduction
 2. A Vision of Equitable Social and Economic Development in Southern Africa
 3. A Vision of Equitable Access to Water of Acceptable Quality and Quantity for All
 4. A Vision of Proper Sanitation for All and Safe Waste Management
 5. A Vision of Food Security for All
 6. A Vision of Energy Security for All
 7. A Vision of A Sustainable Environment
 8. A Vision of Security from Natural Disasters
 9. A Vision of Integrated Water Resources Development and Management
 10. Southern Africa Vision for Water, Life and the Environment in the 21st Century and Strategic Framework for Action Statement
 11. Concluding Statement
- Appendix 1: Glossary of Terms
- Appendix 2: Programme for Creation of the Regional Vision and Framework for Action in Southern Africa

EXECUTIVE SUMMARY

The peoples of Southern Africa recognise that water is essential to: their own personal and community survival; the production of the food that they eat; the sanitation and conveyance of waste; the generation of the energy that supplies their needs; the commodities that they produce for national consumption and export; and the integrity of the environment and the survival of other living forms with whom they share the world

It is recognised that the present “water world” in Southern Africa contains many situations that are evolving, some of which are undesirable. These include:

- A rapidly growing population
- A rapidly urbanising population
- Widespread and increasing poverty
- Widespread food insecurity
- Inadequate coverage of water and sanitation services especially among the urban, peri-urban and rural poor:
- Disease and premature death from water related illnesses
- Dependence on agriculture for livelihoods
- Polluted water bodies
- Low levels of energy supply
- Degraded watersheds
- Transboundary river basins with complex water rights issues
- Constraints within water management institutions

Recognising that the potential water world could be substantially improved from that which exists at present, the peoples of the region express a desire to derive the maximum benefits from the water resource during their own lifetime. They also wish to bequeath the same benefits to their children and to successive generations. Indeed, they would wish themselves to take steps to bequeath an improved water situation than that which they have inherited. In order to move the Southern African “water world” from that which now exists, the peoples of the region wish to express their desirable future, their Vision for Water, Life and the Environment in the 21st Century in a regionally integrated Southern Africa. Their Vision is therefore

Equitable and sustainable utilisation of water for social, environmental justice, and economic benefit for present and future generations.

This Vision is an expression of the desire for:

- Equitable and Sustainable Social and Economic Development in Southern Africa
- Equitable Access to Water of an Acceptable Quantity and Quality
- Proper Sanitation for All and Safe Waste Disposal
- Food Security for all Households
- Energy Security for All Households
- A Sustainable Environment
- Security from Natural Disasters
- Integrated Water Resources Development and Management

The peoples of Southern Africa wish to see their Vision become a reality. Their Vision is therefore accompanied by a Framework-for-Action, through which it is proposed that the Southern African water world will be moved from the situation that we presently experience, and its associated problems, to that situation which is desired.

The peoples of Southern Africa, as individuals, as families, as communities, as social groups, as nations, and as a common people of a common Region are committed to achieving the Vision. It is requested that those players who are in a position to provide leadership respond by seizing the initiative, and lead the Southern African Region to the people’s expression of their desired future.

ACKNOWLEDGEMENTS

This document has been constructed from a combination of stakeholder consultations and a series of pre-existing documentation and processes, which include:

- SADC First Round Table Conference Regional Strategic Action Plan on Integrated Water Resources Development and Management in SADC
- SADC Sectoral Summaries as available at www.sadc.int
- Vision and Framework for Action - Rapid Review of Existing Material in Southern Africa – report compiled by the Institute for Water and Sanitation Development (Harare, Zimbabwe) in association with the Southern Africa Research and Documentation Centre (Harare, Zimbabwe).
- Report of the Sub-Sectoral Specialist Working Group on Macroeconomics and Development, chaired by the Botswana Institute for Development Policy Analysis (Gaborone, Botswana) through Dr. Jan Isaksen.
- Report of the Sub-Sectoral Specialist Working Group on Energy, chaired by the Energy Research Institute of the Zimbabwe Scientific and Industrial Research and Development Centre (Harare, Zimbabwe) through Prof. Elmissiry.
- Report of the Sub-Sectoral Specialist Working Group on Biotechnology, chaired by the Biotechnology Research Institute of the Zimbabwe Scientific and Industrial Research and Development Centre (Harare, Zimbabwe) through Dr. Gopo.
- Report of the Sub-Sectoral Specialist Working Group on Infrastructure and Technology, chaired by Rand Water (Gauteng, South Africa) through Eng. Stefan Malan.
- Report of the Sub-Sectoral Specialist Working Group on Information and Communications Technology, chaired by the Council for Scientific and Industrial Research (Gauteng, South Africa) through Dr. Nick King.
- Outputs from the 1st Regional Stakeholder meeting in Pretoria (July 1-2nd 1999) attended by 60 representatives of the regional water sector, including representatives of government, parastatals, non-governmental institutions, community-based organisations, academic organisations and UN organisations. The Meeting adopted five working groups, focusing on
 - Water, sanitation and health
 - Water management institutions
 - Food security and agriculture
 - Poverty, population, economic and industrial development, and energy
 - Environment, Water quality and watershed management
- Reports of the consultations carried out by National Vision Contact Points and involving interviews with various key national stakeholders before and during the SADC Water Weeks in ten SADC member states. The Water Weeks workshops were held between August and November 1999 in eleven of the fourteen SADC countries. The in-country consultations also captured the views of some women and youth groups. The National Vision Contact Points Workshop held in Harare (October 18-22) produced the Draft Final Vision and draft Preliminary Framework for Action Statement that formed the basis for the regional Stakeholder consultations and endorsement processes which took place in Gaborone in November 1999. These consisted of:

- Second Regional Stakeholders Meeting 8-9th November 1999 attended by 80 people representing the regional water sector, including governments, parastatals, non-governmental institutions, community-based organisations, academic organisations and individuals.
- Third Reference Group Meeting 10th November 1999 held to review and endorse the document which is the product of a process they guided since its inception.
- Special SADC WRTC Meeting 10th November 1999 called to review the Vision with a view to endorsing it and recommending it to Senior government officials of the SADC Water Sector for their consideration and forward recommendation to the SADC Water Sector Committee of Ministers of Water.

The document was subsequently presented to the Extra-ordinary Meeting of SADC Water Sector Committee of Senior Officials for their consideration and presentation to the Extra-ordinary Meeting of SADC Sectoral Committee of Water Ministers for endorsement. The Ministers endorsed it on December 3 1999.

This Vision to Action document incorporates the inputs from all these deliberations and processes.

1.

INTRODUCTION

A brief review of water in Southern Africa

The Southern African region in the context of this document consists of 14 countries¹ that are members of the Southern African Development Community. Twelve of the countries are continental, with a total land area of some 9.1 million square kilometres, and the island states add another 590 000 square kilometres to the land area. The region has a population of approximately 193 million people.

Renewable freshwater resources approximate to an annual average of 1400 billion cubic metres, although different sources vary in their definition and estimation. This water resource is unevenly distributed in time and space amongst surface and groundwater bodies. There are fifteen major shared rivers in the area covered by the continental states, with each country sharing one or more river basins. Eight of the states possess coastlines with access to marine resources. Facilitate effective stakeholder participation at all levels

Per capita annual renewable freshwater resources within the region average some 9,000 cubic metres, equivalent to approximately 27,000 litres per person per day. Yet, most individuals in rural areas struggle to gain access to a minimum human requirement of 25 litres per day. This illustrates that the availability of water is unevenly distributed in time, space and in its source, with the large bulk of the available water occurring as river flow concentrated in large perennial rivers to the north of the region. A substantial proportion of the regional population inhabits rural areas in the semi-arid south to southwest of the region, characterised by ephemeral rivers, and relies on groundwater.

Rainfall patterns vary dramatically within the region, as some areas have an abundance of water and others a scarcity. Average annual rainfall ranges from 4,000mm to less than 50mm. It is a climatic feature that those areas with lowest rainfall coincide with the areas of highest potential evaporation, exacerbating water shortage.

Rainfall in most of the region is characterised by a strongly seasonal distribution, with a three-six month summer wet season and a winter season with little or no rainfall. Therefore, even those parts of the region that are relatively well endowed with rainfall experience availability problems within the year, creating needs for storage and irrigation of winter crops.

Wide meteorological variations occur naturally from one year to the next – often creating water shortages and sometimes triggering severe drought, often excess rainfall and occasional flooding.

Drought conditions normally trigger serious hydrological imbalance, causing loss or damage to crops shortage of water for people, livestock and wildlife, as well as famine and disease.

¹ The other southern African countries of Madagascar and Comores, and the French territories of Reunion and Mayotte were not involved in the process of compiling the vision but are free to consider and adopt it.

Droughts exert a severe impact on a wide range of environmental and economic activities in the region.

Excess rainfall, depending on the natural vagaries of timing, amounts and distribution on the ground can create problems for rain-fed agriculture. Flood prone areas (particularly those prone to severe cyclones in the southeast of the region) can experience extensive damage to property and infrastructure, death to people and animals, and economic disruption.

Water management is institutionalised as a Government line-Ministry function, within Departments of Water. Water is often associated at the Ministerial level with other sectoral interests according to different national priorities (such as agriculture, energy, mines, forestry, public works or rural development). Line Ministry responsibilities tend towards the provision and administration of bulk water, while distribution and administration of water within concentrations of population is handled by local Councils.

Water-related functions other than bulk supply can lie within line Ministries which are not always directly associated with water at Ministerial level, reflecting the wide sectoral interests. Ministerial mandates for rural water management often lie with Ministries of Local Government, and responsibility for small dams and irrigation with the Ministries of Agriculture. Environmental safeguards may lie with Ministries of Environment or Natural Resources. As a consequence, overall Government mandates and functions related to water are fragmented. Government administration of water has traditionally been along Provincial or administrative lines, but increasingly, management is moving towards catchment-lines.

Some countries in the region have, or are in the process of moving many water management responsibilities to Parastatals and decentralised national water authorities. In certain instances in the region, commercial interests in water have led to strong water management within estate-based commodities, for example within the sugar industry.

The international status of many Southern African rivers calls for international water management mechanisms. These are evolving and include Joint Technical Committees, River Basin Authorities and River Basin Commissions.

Background to the Vision and Framework for Action

Against this background of water in Southern Africa, the region experiences a number of present-day problems, which include

- A rapidly growing and urbanising population
- Widespread absolute poverty
- Widespread food insecurity
- Minimal coverage of water and sanitation services among the urban and rural poor:
- Disease and premature death

- Dependence on agriculture for livelihoods
- Polluted water bodies
- Low levels of energy supply
- Degraded watersheds
- Transboundary river basins with complex water rights issues
- Constraints within water management institutions

Within the geographical setting and present day institutional arrangements of Southern Africa, it is considered that continuation of business-as-usual will not address these problems and will not deliver significant improvements in quality of life to the majority of the population. A new approach is called for.

In March 2000, the region's Ministers responsible for Water will attend the 2nd World Water Forum and Ministerial Conference in The Hague, The Netherlands. At those meetings, Ministers will discuss and carry forward a global Vision for Water, Life and the Environment in the 21st Century. The regional Ministers have been invited to present a regional vision as a contribution within the global context. To facilitate the creation of the global Vision, the World Water Council established a Vision Management Unit to guide the development of the Vision. In parallel, the Global Water Partnership (GWP) is developing mechanisms to translate the commitment arising from the Vision into actions. This transformation of the vision into action will be set out in a Framework for Action that will also be presented at The Hague. Ultimately the Framework for Action will:

- Generate the momentum to start inclusive grass-roots movements for water action
- Facilitate the political commitment required to enable optimum resource use
- Facilitate the mobilisation of additional investment
- Enable stakeholders to develop their own detailed action plans for implementation
- Identify clear opportunities where immediate support can be provided

In parallel with the Ministerial Conference at The Hague, the Global Water Partnership in Southern Africa, through its Southern African technical Advisory Committee (SATAC) and its Harare-based Secretariat will make an informal presentation of the regional vision. SATAC facilitated the creation of the regional vision and framework for action for Southern Africa, working in very close association with the SADC Water Sector Coordination Unit (WSCU). The role of both SATAC and WSCU was to ensure the participation of as many different stakeholders, representing as diverse a set of experiences and opinions as possible in the creation of the vision and framework for action. The process of creating the vision is described in Appendix 2.

The main objective of the regional Vision for Water, Life and the Environment is to develop a widely-shared vision of a desirable future and the action required to accomplish that

Vision. The vision horizon is the year 2025, twenty-five years from now. The reader is invited to consider the world as it existed 25 years ago – in 1975, and to see the magnitude of change that can take place within a time period of 25 years. It is easy to foresee that changes of a similar or even greater magnitude might take place over the next 25 years.

Structure of the document

This introduction has presented a short summary of water in Southern Africa and set out a number of problems faced at the turn of the Millennium. The rationale for creating a regional Vision and Framework for Action has been described, within the context of global processes enabled by the World Water Council and the Global Water Partnership.

The overall process for creation of the Vision and Framework for Action is described in Appendix 2, including the status and origins of this document.

The remainder of this document presents the region's vision and strategic framework for action for Water, Life and the Environment in Southern Africa in the 21st Century. The statement is structured into **eight detailed component parts** or sub-visions. The sub-visions are:

- ***Vision of Equitable and Sustainable Social and Economic Development in Southern Africa***
- ***Vision of Equitable Access to Water of an Acceptable Quantity and Quality***
- ***Vision of Proper Sanitation for all and Safe Waste Management***
- ***Vision of Food Security for all***
- ***Vision of Energy Security***
- ***Vision of a Sustainable Environment***
- ***Vision of Security from Natural Disasters***
- ***Vision of Integrated Water Resources Development and Management***

These “visions” are discussed in separate chapters, with the overall Vision presented last.

2

A Vision of equitable social and economic development in Southern Africa

The people of Southern Africa call for a desirable future in which the region has a healthy population that is developing sustainably, both socially and economically, and is at an acceptable level and rate of growth with an overall commitment to achieving the eradication of poverty.

The present situation

The **population** of Southern Africa is growing rapidly and becoming increasingly urbanised. By the year 2025, the present population of approximately 190 million at the turn of the millennium will have doubled. Seventy percent of this population will live in urban areas and in many countries in the region the urban population will have tripled.

Water is increasingly becoming a limiting factor for economic development and social upliftment. **Scarcity** of this essential resource makes improved management and further harnessing of water absolutely essential.

The social and economic development of Southern Africa is threatened by relatively new pandemics such as HIV/AIDS. At the same time, the traditional water-related diseases and causes of **ill health** such as malaria and bilharzia remain.

Throughout the region, as a result of an unfavourable macro-economic environment, **economic growth rates** are low, averaging 1-2% per annum. According to SADC sources, regional real GDP rose by only 1.7% in 1998. This represented a **decline** from growth rates of 2.2% in 1997 and 4% in 1996. The causes of decline included turmoil in world financial markets and the impact of armed conflict in parts of the region on investor confidence. However, some individual country growth rates above 5% were recorded, with one state reaching a phenomenal 11.2%.

The benefits of development in the region are highly skewed. The majority of the population live on less than 1US\$ per day on average. In fact, more than half of the region's population lives in **absolute poverty**. This is reflected in low life expectancy, high infant and maternal mortality and poor childhood health and nutrition. Low levels of adult literacy, inadequate access to safe water and low income levels are the norm, particularly among women.

Due to the burden of international **debt servicing**, the majority of the region's governments find it difficult to commit sufficient resources to development. In this context, it needs to be realised that development of the agriculture, industries, tourism and fisheries sectors would make a significant contribution to economic growth.

Economically, the region is moving towards an **integrated economy**. Tariff as well non-tariff barriers towards a SADC Free Trade Area are being removed. At the same time, however, a contradictory development also sees individual countries seeking **national self-sufficiency** in key water-derived industries.

The transport sector is crucial in the conveyance of goods and services to markets. Many crossing points of roads and rail exist over watercourses and when bridges are damaged, people's **access to markets** is occasionally disrupted.

The potential which exists

In all its competing economic, social and environmental uses among individuals, communities and governments, water has the potential to improve the **quality of life** for all.

Only **good governance** and **people centred** development can facilitate the improvement of the existing macro-economic situation.

There are on-going efforts among the region's national governments and regional institutions to establish a **regionally integrated economy**. Such efforts must tap into the potential of water and water-based resources in the achievement of economic prosperity based on the **equitable and sustainable** use of natural resources.

The social, economic and environmental importance of water can assist in the **diversification** of industrial development from a low base to serve both domestic and international markets. Furthermore, water is essential to the **expansion** of the tourist sector throughout the region. Such developments could increase foreign exchange income and promote re-investing in the region.

If the possibilities of integration, diversification and expansion were realised, this would enable **women and youth** to play a more significant role in the social and economic development of the region. Such an eventuality would enable the **poor and disadvantaged** to benefit from social and economic development in their countries. This would redress some of the existing **social realities** and also enhance **free and equitable trade** throughout region.

The Vision

The people of Southern Africa therefore call for a desirable future in which **the region has a healthy population that is developing sustainably, both socially and economically, and is at an acceptable level and rate of growth with an overall commitment to achieving the eradication of poverty.**

Implications

This vision places certain requirements on the water sector. However, the water sector alone cannot itself determine the desirable outcome of equitable and environmentally

sustainable development. This can only be the result of a **broad-based, people centred** process that takes into account the social realities of the region. Nevertheless, important improvements within the water sector will **contribute** to such an outcome. The following factors will, therefore, need to be taken into account.

Economic growth and **increasing** populations will drive the consumption of water upwards. Those who are presently disadvantaged will also want to improve their opportunities to create wealth in the water sector without making those who will come after them poorer.

The **size of the increase** in the demand for water resulting from economic growth will depend on the details of the social circumstances. The specific sectors in which growth will take place will also be important. The increase in consumption will also depend on **where** the people live, where economic growth takes place and the extent to which both industry and agriculture - with attendant work forces - can **relocate** within countries as well as regionally.

For example, **regional planning** which takes water into account may concentrate agriculture in well-endowed parts of the region to the north, reducing water demand for irrigation. Low water-use industry would concentrate in the more water-scarce regions. Finally, demand will be determined by the extent to which individual countries opt for national or **regional self-sufficiency**.

As a result of its economic, social and environmental value, **water has a cost** and is not a free good. The investment required for infrastructure and maintenance, the social impact of choices on water uses and the environmental impact of abstracting the water all contribute to that cost.

Proposed actions

For the Vision of dynamic, equitable and sustainable social and economic development to be achieved, the people propose a number of **STRATEGIC ACTIONS**. These include creation of an enabling environment through:

- **Regional cooperation** and integration.
- **Promotion of private sector participation** in the economy.
- **Promotion of public/private sector partnership** in the water sector, *taking into account the social dimension*.
- **Good governance** and accountability.
- **Effective health and hygiene education**.
- **Improvement of education and training** in terms of relevance, quality and access.
- **Putting effective institutional mechanisms in place**.
- **Promotion of equitable trade and investment**.
- Further **economic diversification**.

- Programs to **involve women and the youth** in all aspects of decision-making in all spheres of the economy.

Through these and other means, the achievement of equitable and high economic growth, led by dynamic and internationally competitive manufacturing, agricultural, industrial, fishery and mining sectors as well as a thriving tourism sector can become a reality.

3

A Vision of equitable access to water of acceptable quality and quantity for all

The people of Southern Africa call for a desirable future in which they have sustainable and equitable access to water of a sufficient quantity and quality to meet basic human needs and to have priority over all other water uses.

The present situation

At the turn of the millennium, more than 40% of the people in Southern Africa have no access to **safe water** for their basic human needs. As a consequence, avoidable water-related diseases which prevail in the region result in high mortality rates. The diseases also lower the productivity of large numbers of affected people and result in reduced human welfare.

Women carry the disproportionately heavy burden of conveying water for domestic use over long distances and difficult terrain.

A good measure of the problems in providing water supply services results from **uncoordinated planning** of the services and of the settlements which require servicing.

Finally, a serious constraint towards the provision of access to safe water arises from the limited availability of **funds**.

The potential which exists

A good deal of progress would result from **decentralising** and delegating responsibility for the provision of water services to the most appropriate local level.

Involvement of local communities in the decision making process regarding the provision of water services would assist the **empowerment** of disadvantaged women and youth to actively participate in the management of their affairs and to also benefit from development in the water sector.

Incentives need to be put in place to encourage **efficiencies** and reductions of quantity in the use of water. Water resources need to be protected through increased **demand management**.

Much more could also be done to develop and put into use **new ideas and technologies that are more appropriate** to the sanitation and safe-water supply situations of local communities.

The Vision

The people of Southern Africa call for a desirable future in which **the region's people have sustainable and equitable access to water of a sufficient quality and quantity to meet basic human needs and to have priority over all other water uses**

The implications for the water sector of the Vision and of the potential that exists are that a **massive effort** and a **massive amount of finance** will be required to provide access to safe water for all within a reasonable time frame.

Proposed actions

In order for this Vision to be realised, the people propose that **STRATEGIC ACTIONS** be carried out which include the following:

- I. PLANNING AND MANAGEMENT OF ACCESSIBILITY TO SAFE WATER
 1. Access to, and coverage of safe water need to be planned through:
 - a) Policies that **ensure sustainability** in the long term.
 - b) Tariff structures that achieve **social equity and cost recovery**.
 - c) Integrated planning processes that **meet the needs of all the people and all water use sectors**.
 1. Legislative and institutional arrangements are required which:
 - a) Promote **integrated development and management** of water resources.
 - b) Ensure **effective participation of women and youth** in decision-making and management.
 - c) **Promote the ownership and management** of water supply programmes by local communities.
 - d) Strengthen the role of governments of **creating an enabling environment** for water supply programmes.
 - e) **Strengthen the role of the private sector, parastatal organisations and NGOs** in the implementation of water programmes with due regard to national priorities and objectives.

- f) Establish an appropriate regulatory framework to **ensure accountability and equity** in the provision of water services.
1. Water resources need to be protected by:
 - a) **Water conservation** strategies.
 - b) **Efficient utilisation** of available water.
 - c) **Adequate assessment and monitoring** of water service programs.
 - d) **Integrated management** of river catchments.
 1. **The capacity of various stakeholders needs building** through:
 - a) Appropriate training.
 - b) Education programmes.
 - c) **Mobilisation of financial resources for research.**

I. PROMOTION OF APPROPRIATE RESEARCH

In order to support the realisation of this Vision, the need to allocate sufficient resources for appropriate research to be carried out cannot be over emphasised.

4.

A Vision of proper sanitation for all and safe waste management

The people of Southern Africa call for a desirable future in which the region's people have sustainable and equitable access to proper sanitation and that waste in the region is safely managed and managed in an environmentally and socially just manner.

The present situation

More than half the population of Southern Africa does not have safe sanitation.

A high incidence of **water-borne diseases** (typhoid, cholera, dysentery, gastro-enteritis, hepatitis) results in illness and premature death. Health problems also arise from other illnesses related to inadequate sanitation. Water – including clean water – is also a key factor in the transmission of diseases like malaria and schistosomiasis.

There is widespread use of water bodies as receptacles of treated as well as untreated waste. Domestic, agricultural and industrial waste and also mining effluent are often dumped into water bodies. Intentional or unintentional and authorised as well as

unauthorised discharges often combine with seasonal low river flows and result in **polluted water bodies**.

The problems are more acute in upper catchments where large urban areas coincide with small rivers, with serious implications for human health, environmental damage and for the re-use of water. Rapid and unplanned urbanisation also exacerbates the problem of **waste management**.

The potential which exists

The **decentralisation** of responsibility for sanitation services to elected and community-based institutions needs to be promoted and encouraged. Increasingly, water management and the provision of sanitation services are being delegated to the most appropriate local level, **empowering** people to make the decisions that influence their water and sanitation futures. Accelerating decentralisation accompanied by appropriate capacity building would continue to yield greater benefits.

The shift to **catchment area** as the appropriate management and administration unit for the water sector needs to be consolidated. The attendant ownership and associated pride can facilitate pollution monitoring leading to greater social and environmental benefit for all.

Awareness of the detrimental impact of the activities of individuals and communities on the environment and communities downstream can be intensified. Increasing the realisation that **“people live downstream”** *inculcates* a culture of responsibility towards water and the environment.

International cooperation, which is gaining strength through International Protocol arrangements and institutional structures, can be further strengthened.

Increasingly, the emphasis in water and sanitation as well as waste management is being directed towards the plight of the poor. This augurs well for **equitable access** to water and sanitation and needs to be intensified.

Finally, potential for appropriate **technological advances** that would lead to improved sanitation, waste minimisation, recycling, re-use and safe waste management exists. This potential should be seized.

The Vision

The people of Southern Africa call for a desirable future in which they have **sustainable and equitable access to proper sanitation and they require that waste in the region is safely managed and managed in an environmentally and socially just manner**.

Implications for the water and sanitation sectors

What this implies for the water sector, is recognition of the following:

Massive effort and finance will be required to provide access to proper sanitation for all the rural, peri-urban and urban communities of the region in an equitable manner and within a reasonable time frame.

In addition to massive effort and finances, **massive political will** is going to be required to ensure environmental and social justice in waste disposal throughout the region.

Proposed actions

The people therefore propose that the appropriate water sector stakeholders carry out the STRATEGIC **ACTIONS** listed below so as to achieve this Vision.

1. **Promote integrated education programmes** for water supply, sanitation, health and hygiene.
2. **Create and impartially enforce appropriate national regulatory frameworks** for proper sanitation and safe waste management.
3. **Effectively monitor** the social and environmental impacts of sanitation and waste.
4. **Adopt full cost accounting methodologies** in integrated people-centred planning for sanitation and waste management.
5. **Provide adequate technical and financial support** essential for community planning, implementation and operation of sanitation and waste management works.
6. **Develop and promote sanitation and waste management technologies** *more appropriate* to the specific local communities and environment.
7. **Develop and promote appropriate incentives** for minimisation of solid waste and wastewater, and for the re-use and recycling of both.
8. **Adopt and enforce the polluter-pays principle.**

5.

A Vision of food security for all

The people of Southern Africa call for a desirable future in which every person has equitable access to a diet adequate for a healthy life that is guaranteed by regional food security rather than national self-sufficiency.

The present situation

Throughout the region at the turn of the millennium, more than half of the rural population and a sizeable proportion of the urban population live in **absolute poverty**. This is reflected in poor childhood health, malnutrition and also in starvation.

Agriculture, wildlife, fishing and mariculture play important socio-economic roles in most of the national economies and in the regional economy.

Food security has **deteriorated** significantly throughout the region for the last 10-15 years and nearly half of the population is considered food-insecure. Average annual growth rates of food production during the period 1979-93 were **negative** in every country in the region for which data are available.

Drought still poses a serious threat to food security in the region. The region is characterised by large rural populations that depend on non-intensive, often subsistence farming, **without facilities for irrigation**. Thus, crop failures due to drought leave them without food or the money to purchase any, making it necessary for governments and other agencies to utilize funds that could be used for development for food handouts. **Floods** often have similar disastrous consequences.

Irrigated agriculture plays an essential role in food production. However, most irrigation systems are **inefficient and are poorly managed**, resulting in water losses that average 40-60%.

A combination of poor agricultural practices and the reliance on woody biomass resources for energy has resulted in **environmental degradation** in many river catchments.

The region is characterised by **shared river basins**. However, the issues of water rights and “ownership” of international water remain unresolved and national interests prevail.

The potential which exists

Southern Africa is well endowed with productive agricultural land, which presents a lot of potential.

Water is, however, unevenly distributed throughout the region. Efforts that are necessary for national food self-sufficiency may lead to inefficient and inappropriate uses of water resources, which situation might also be unsustainable. It is **regional food security** rather than national food self-sufficiency which has potential. Looking at the region as a single “bread basket” frees land and water resources to the economic activities for which they are best suited. There are obvious implications for national sovereignty, but ways must be found to deal with this, including the potential for better trade or the possibility of regional economic integration.

Potential does exist in efforts by nations in the region to address the development, use and management of shared watercourses in the spirit of the SADC Protocol on Shared Watercourses.

The Vision

The people of Southern Africa therefore call for a desirable future in which **every person has equitable access to a diet adequate for a healthy life that is guaranteed by regional food security rather than national self-sufficiency.**

Implications

The vision of food security for all makes it imperative for the water sector to recognise that increased agricultural production will **increase the demand for water** and place additional stress on the region’s fragile water resources and environment.

Proposed actions

The people therefore propose that for the achievement of the Vision of food security for all, **STRATEGIC ACTIONS** be enacted which:

1. **Promote cooperation** between the water sector and other sectors that plan, manage and engage in activities that also impact on food security, in the interest of Integrated Water Resources Development.
2. **Create and also implement an appropriate regulatory framework** which facilitates sustainable food production in a socially and environmentally just manner and which also ensures equity in trade arrangements and access to markets within as well as outside the region.

3. **Deliver the required social change** by means of programmes that build public awareness, **ensure effective public participation**, capacity building, training and technical education for food security.
4. **Deliver and monitor water-efficient and sustainable technological advances** that increase regional food security.
5. **Develop the necessary infrastructure** that is socially, economically, financially and environmentally justifiable.
6. **Promote sustainable agricultural production** especially through *viable small-scale farming* to ensure social development and food security.

6.

A Vision of energy security for all

The people of Southern Africa call for a desirable future in which the region's energy needs are provided for on an equitable and sustainable basis with minimum negative impacts on water and the environment

The present situation

Despite vast renewable and sustainable energy resources, 80% of Southern Africa's population relies heavily on **wood fuel** to meet basic energy needs. This reliance often results in environmental degradation. This population is largely based in rural areas.

Throughout the region, urban and industrial energy supply is largely generated from **coal burning** thermal power plants.

The estimated water requirements of some of the region's thermal power stations are increasing becoming **unsustainable** in the context of other water demands.

Irrigation pumping requires the commitment of significant water resources to satisfy the energy consumption. Thus, **improved efficiencies in irrigation can result in significant reductions of water for power generation**. It must be noted that significant amounts of energy for irrigation in Southern Africa are derived from diesel fuel.

The Southern Africa Power Pool (SAPP), formed in 1994, is a **positive** driving force for regional cooperation and efficient use of energy.

The potential which exists

A lot of potential exists in the energy sector, considering the rich regional endowment with renewable and sustainable energy sources that include:

- Hydropower – equivalent to 20% of world's total – whereas only 6.6% of potential capacity is installed at present.
- Direct Solar energy – average daily insolation of 220w/m².
- Wind energy.
- Natural gas.
- Biomass.

Significant energy, finance and water **savings** can be attained through a **regionally integrated approach**, instead of a national self-sufficiency approach to energy.

Integrated energy and water resources planning, development and management also presents considerable possibilities.

Significant savings in water demand could also be achieved through **demand management** of energy throughout the region.

Finally, a lot of potential exists in monitoring the variable impacts of **global warming** in the region with a view to appropriate exploitation and mitigation of the respective opportunities and hazards.

The Vision

In the above context, the peoples of Southern Africa call for a desirable future in which **the region's energy needs are provided for on an equitable and sustainable basis with minimum negative impacts on water and the environment**.

Implications

For the water sector, this Vision requires recognition of the massive effort and finance required to supply electrical energy to **the many unserved**. There is also need to acknowledge the problems of **affordability** and how it affects sustainability. It is equally important to acknowledge the **environmental impacts** of heavy reliance on wood fuel.

It might become necessary to increase development of hydro and thermal power. In view of the inevitable **social and environmental impacts** arising from increased hydropower and thermal generation, the possibility will require implementation of **integrated inter-sectoral** planning and mitigation measures.

Proposed actions

The people of Southern Africa therefore propose the following **STRATEGIC ACTIONS** to achieve equitable and sustainable energy security for all:

1. **Regional integration** in energy – as through the Southern African Power Pool.
2. **Regional self-sufficiency** replacing national self-sufficiency in energy.
3. **Integrated energy and water resources planning, development and management**, through, for example, IWRM principles.
4. **A shift to power generation which uses clean, renewable and water efficient technologies.**
5. Meticulous utilisation of hydrocarbon fuels, where appropriate, in an **environmentally sustainable** manner.
6. **Demand management** to conserve energy and water.
7. **Promotion of research and utilisation of renewable and sustainable energy** resources that *minimise or avoid* use of water.
8. **Promotion of community education** for forestry conservation.
9. **Adoption and application of the “user pays” principle** with due consideration to the issue of social equity and justice.
10. **Factoring adaptive measures to global warming** in regional planning.
11. **Provision of alternative, reliable and affordable technologies** especially for rural communities.

7.

A Vision of a sustainable environment

The people of Southern Africa call for a desirable future in which the region's environment is conserved among all the competing uses of water, recognising the constraints inherent in natural ecosystems so that the environment can be sustainably improved, used and managed in the spirit of social and environmental justice.

The present situation

The people of Southern Africa recognise **poverty** to be the major cause of environmental degradation, low per capita GDP, skewed incomes and poor investment profile prevailing in the region. Environmental degradation also causes poverty, so that cause and effect fuel each other in an intimately related cycle.

There is inadequate recognition of the environment as a **legitimate user** of water, to the extent that many small streams have been impounded and diverted so much upstream that they no longer flow in a normal season. The environmental consequences downstream are not even thought of.

A combination of factors has led to **environmental degradation**. Inequitable land allocations resulted in high population densities in specific areas while farming methods together with poor livestock management and deforestation due to unsustainable use of woody resources aggravated the situation.

The environment of Southern Africa is a **rich diversity** of ecosystems. About 75% of the land has tree cover, some of it dense forest, with more extensive savannah woodland or grassland with trees and 13% of the region being wetland.

A large number of species endemic to the region are threatened by environmental **degradation of water systems**. Meanwhile, indigenous species face competition from exotic forest species which consume a lot of water.

The lakes, rivers and wetlands of Southern Africa contain many fish species endemic to the region and fisheries provide an important source of protein especially for the rural people.

Hazardous wastes from within the region as well as imported waste dumped into the region by unscrupulous elements threaten the environment.

Ground and surface water systems and estuarine resources face **contamination** from poor waste-management practices. Some of these practices are carried out by willfully reckless members of the region's own citizens – a situation which calls for appropriate education and rigorous enforcement of legislation.

Ineffective monitoring of environmental pollution, **low penalties and poor enforcement** of regulations that do exist are the norm, commonly due to lack of capacity.

There is also inadequate awareness of the impacts of **climate change** in the region which are bound not to be fully understood.

The potential which exists

Community based resource management and agro-forestry can go some of the way in addressing some of the **causes of poverty**. In addition, increasing awareness of environmental issues among all stakeholders is an essential prerequisite for sustainable management and use of ecosystems.

A combination of effective **monitoring and implementation** of national regulatory frameworks could bring about effective pollution management in order to minimise degradation of the region's environment.

Implementation of international and regional agreements such as the SADC Protocol on Shared Water Course systems and the SADC policy and strategy on environment and development would assist the cause of having an integrated regional framework for sustainable use of the environment.

The Vision

The people of Southern Africa therefore call for a desirable future in which **the region's environment is conserved among all the competing uses of water, recognising the constraints inherent in natural ecosystems so that the environment can be sustainably improved, used and managed in the spirit of social and environmental justice.**

Implications

For the water sector, the implications are that massive effort, finances and political will are going to be required to **remediate** existing environmental degradation, taking into consideration increasing competition for water resources among different sectors.

Proposed actions

For the Vision to be realised, the following **STRATEGIC ACTIONS** need to be put in place in order to:

- I. PROTECT BIODIVERSITY AND OPTIMISE MULTIPLE WATER USE :
 1. **Establish protocols for catchment management** while ensuring stakeholder participation.
 2. **Establish sustainable funding mechanisms** for catchment management.

3. **Establish mechanisms for creating awareness, empowerment and capacity building** for all stakeholders inclusive of women and disadvantaged groups.
 4. **Allocate sufficient water to maintain ecosystem integrity**, including marine and estuarine life.
 5. **Incorporate full environmental and social costs** in all policymaking and planning processes.
 6. **Adopt and implement of pollution control mechanisms** such as the *Polluter Pays* principle.
- I. ENABLE LOCAL COMMUNITIES TO MANAGE THEIR OWN ENVIRONMENT :
1. **Accelerate capacity building.**
 2. **Further develop and use** indigenous knowledge.
 3. **Develop and teach appropriate technologies** that are adaptable and affordable.
 4. **Decentralise administration and decision-making** to lower levels including local government, supporting this with adequate capacity for true empowerment.
- I. ENSURE **ALL** WATER DEVELOPMENT SCENARIOS REFLECT CONSTRAINTS IMPOSED BY NATURAL SYSTEMS IN MAINTAINING RESOURCE BASE INTEGRITY:
1. **Determine environmental constraints to development** through institutionalization and implementation of Strategic Environmental Assessment (SEA).
 2. **Require compulsory Environmental Impact Assessment (EIA)** for individual development projects prior to decision to proceed or not – including evaluation of the **no-go** option. Where the EIA indicates potential harm to society or the environment or both, the project must not be allowed to proceed until satisfactory implementable management plans are in place to *eliminate* such potential harm.
 3. **Site development projects as determined by EIA and implement effective environmental management plans** derived from EIA.
 4. **Improve the Integrated Environmental Management (IEM) process** to ensure sensitisation of policy decision makers to environmental issues.

5. **Promulgate, promote and effectively enforce Legislation** to ensure that regulated systems are operated in accordance with natural flow variations as much as possible.
6. **Harmonise** standards in the region's freshwater and seawater quality.

8

A Vision of security from natural disasters

The people of Southern Africa call for a desirable future in which water-related natural disasters are predicted and effectively mitigated so that they do not impact negatively on the people's quality of life and on the environment.

The present situation

The Southern African region is prone to extreme meteorological events. The events can be at either end of the extremity spectrum. The region is **drought-prone**.

Extreme **floods** also occur, even when they may not be frequent. Floods often have disastrous consequences in some parts of the region.

Other extreme meteorological events occur and some of them are attributable to or influenced by **global warming**.

Disasters from extreme meteorological events are sometimes induced by **human activities** which often also exacerbate them. At the same time, **human action** is capable of influencing the severity and the frequency with which they occur.

The potential which exists

There is much that could be achieved through the medium of **disaster planning**. It is possible to determine the vulnerability of communities to natural disasters arising from extreme climatic events and to prepare for them in advance.

Much can also be achieved in the area of **forecasting** extreme natural climatic events. This makes it possible to prepare effective responses when events are likely.

Accelerated **implementation** of the SADC Protocol on Shared Watercourse Systems would enhance adoption of catchments as the management and administrative units of the shared water courses which characterise the region.

A lot of potential to influence the severity and frequency of climatic natural disasters also exists in the adoption of **sound land use planning and management** throughout the region.

It is possible for a shift to occur from protection to **risk management** in the region's disaster preparedness.

The Vision

The people of Southern Africa therefore call for a desirable future in which **water-related natural disasters are predicted and effectively mitigated so that they do not impact negatively on the people's quality of life and on the environment.**

Implications

For the water sector, realisation of this Vision implies recognition of the massive effort required to **coordinate disaster prediction, planning and management** on a national and regional level.

Proposed Actions

Towards this end, the people propose that the following **STRATEGIC ACTIONS** be carried out which:

1. **Establish early warning systems** and long-term predictive climate models.
2. **Promote effective coordination** at all levels involving all governments and other stakeholders in order to mitigate the effects of natural disasters.
3. **Develop strategic disaster management plans** at both the regional and national levels.
4. **Commit national and regional resources** to effective readiness and cooperation within the region to assist in times of natural disaster.
5. **Build strategic infrastructure and implement development planning mechanisms** to ameliorate the impact of natural disasters.
6. **Contribute to effective reduction of community vulnerability** through poverty reduction.
7. **Encourage capacity building** at all levels.

8. **Make budgetary allocations** for mobilising resources for disaster management.
9. **Establish disaster loss insurance schemes** where possible.
10. **Encourage local initiatives** for disaster preparedness including community awareness.
11. **Promote research** into appropriate technologies and strategies to mitigate the effects of natural disasters.

9

A Vision of integrated water resources development and management

The people of Southern Africa therefore call for a desirable future in which there is integrated water resources development and management that results in efficient utilisation, equitable access and sharing of the region's water resources to ensure sustainable social, environmental and economic benefits for all.

The present situation

There are many internationally shared river basins throughout Southern Africa. However, there is a lack of comprehensive, **integrated**, inter-sectoral and **basin-wide coordination** in water development, planning and management.

Development of infrastructure in the water sector is primarily through **public sector** investment that narrows the **finance base**.

Lack of adequate infrastructure and **inefficient water use** present a hindrance to optimal distribution of domestic water and sanitation services especially to the poor.

Institutions managing water face a number of constraints which include **inadequate** and/or weakly **enforced** national legislation as well as lack of finances.

Lack of **awareness** and knowledge of the state of water resources obstruct capacity to address their economic, social, environmental and management implications.

There is lack of **effective participation** by all stakeholders, particularly women and the disadvantaged, in water resources management. This compounds the general lack of **social and environmental justice** arising from **poor governance**.

The allocation of water favours economic rather than social and environmental issues. Furthermore, users of water generally do not pay a price commensurate with the benefits that they desire from water. The situation is characterized by **a lack of mechanisms and incentives** to encourage water conservation.

From a **planning** point of view, water availability is often not a factor in determining the location of high consuming activities.

The potential which exists

A lot of potential could be realised through implementation of **integrated** water resources management, as evidenced by the adoption and implementation of the Regional Strategic Action Plan for Integrated Water Resources Development and Management in the SADC Countries (1999-2004)

Much could also be achieved from managing water as a limited and **finite** resource that is also a social, environmental and economic good.

The introduction of **demand management** would also assist towards the conservation of water resources.

Broadening the finance base through **appropriate** public and private sector partnership would assist the development of sanitation and water supply infrastructure.

The issues of **social justice and empowerment** of local communities to participate effectively in decision-making and management of their water and sanitation futures would be better served through **delegation** of responsibility for integrated water service development and management to the most appropriate local level, particularly if women and disadvantaged groups are effectively involved.

The responsibility of protecting water resources as a public trust must continue to reside in government while regional cooperation can accelerate the shift to **catchments** as the appropriate units of management and administration, as exemplified in the SADC Protocol on Shared Watercourses.

Women and youth could play an important role in water resources management if empowered through **awareness and capacity building**. They also have a crucial role to play in increasing the realisation that “**people live downstream**” which inculcates responsible attitudes towards water and the environment in communities and individuals alike.

Furthermore, **technological innovation** and advances are capable of delivering benefits to communities and institutions.

Benefits would also accrue to the region from implementation of effective, equitable and efficient **pricing mechanisms** in tandem with incorporation of the **virtual water** concept in integrated water resources development.

It is also important for decision-makers to realise that policy development is a **dynamic process** of review and developing strategies of ensuring that water management issues are adequately harmonised.

Key IWRM principles

A lot of the existing potential could be realised by adopting the following **accepted water management principles** of:

- **Effective public consultation** and involvement of users in integrated water resources development and management.
- **Focusing on integrated, people-centred planning** by addressing gender specific needs, working towards poverty alleviation, social justice, equitable access to water and the provision of affordable safe water and sanitation for basic human needs.
- **Efficient use of water** through demand management, conservation and re-use and the efficient use of water for agriculture.
- **Recognition of the environment as a legitimate user** of water.
- Ensuring protection of the environment through **appropriate user charges and enforcement of the polluter pays principle**, taking into account equity and social justice.
- **Integration** of water supply, sanitation and health and hygiene education programmes.
- **Capacity building** to ensure that managers of water, waste and sanitation have requisite knowledge and tools.
- Ensuring that waste is safely managed **close to the point of generation**.
- **Preventing the export of harmful waste** across national and regional boundaries **and also preventing import of harmful waste into, or disposal in the region**.

The Vision

The people of Southern Africa therefore call for desirable future in which there is **integrated water resource development and management that results in efficient utilisation, equitable access and sharing of the region's water resources to ensure sustainable social, environmental and economic benefits for all**.

Implications

For the water sector as a whole, this implies recognition of the massive effort, finances and political will that will be necessary to :

- **Implement** the Regional Strategic Action Plan for Integrated Water Resources Development and Management in the SADC Countries; the SADC Protocol on Shared Watercourse Systems; and other relevant multilateral and bilateral agreements in order to effectively implement integrated water resources development and management.

- Strengthen and/or establish appropriate **institutional frameworks**.
- Establish appropriate **policy and legal frameworks**.
- **Build capacities**.
- Formulate appropriate arrangements for **cross-sectoral** planning, development and monitoring of water resources utilisation.

Proposed Actions

To aid the achievement of this Vision, the people of Southern Africa propose national and regional **STRATEGIC ACTIONS** that include those listed below:

1. **Enhance capacity building** through appropriate programmes
2. **Promote development of integrated water resources development and management strategies**.
3. **Rationalise and strengthen water institutions** that:
 - Facilitate **appropriate participation** by the private sector in partnership with the public sector.
 - Ensure **gender balance** in management at all levels.
 - Prevent **conflicts of interest** between and among stakeholders.
 - Facilitate **effective stakeholder participation** at all levels.
 - Facilitate **community participation**.
4. **Establish well-coordinated and accessible water resources information systems**.
5. **Harmonise policies and legal frameworks** for:
 - **Equitable water allocation** mechanisms.
 - **Equitable pricing mechanisms** to ensure sustainability.
 - Managing pollution through the “**polluter pays**” principle.
 - **Effective monitoring and enforcement** mechanisms.
 - Ensuring proper implementation of SADC Protocols for Shared Watercourse Systems and other trans-boundary or international agreements.
6. **Promote the development of performance targets and indicators** and to **harmonise standards** within the region for:
 - Water quality, particularly effluent discharges.
 - Environmental protection and management.
 - Control of alien invader species.
 - Pollution management.
 - Monitoring processes.
 - Monitoring for compliance and conformity with agreed standards.

There is also the requirement to **empower stakeholders through training and publicity programmes** and this goes hand in hand with the need to **promote good governance, transparency and accountability** at all levels, in both the public and private sectors.

Finally, the need to **promote a regional commitment to coordinated research efforts** also needs to be supplemented with **implementation of actions that create an enabling environment** for mobilisation of financial resources for integrated water resources development and management and the allied management tools to ensure **sustainability**.

10.

Southern Africa Vision for Water, Life and the Environment in the 21st Century and Strategic Framework for Action Statement

The people of Southern Africa therefore call for a desirable future in which the norm is:

equitable and sustainable utilisation of water for social and environmental justice, regional integration and economic benefit for the present and future generations.

The present situation

The people of Southern Africa recognise that water is essential to their own personal and community survival, to the production of the food that they eat and to their sanitation and the conveyance of waste. Water also is essential to the generation of the energy that supplies their needs, the commodities that they produce for national consumption and export and the integrity of the environment and the survival of other living forms with whom they share the world.

They recognise that the present “water world” in Southern Africa contains many situations that are evolving. Some of the situations are undesirable. These include:

- A rapidly growing population that continues to impose **increasing demands on water resources**.
- A rapidly urbanising population that places **increasing stress on both the water resources and the necessary infrastructure** needed to sustain an urban environment.
- Widespread and **increasing poverty** which is both a cause and a result of environmental degradation, including the degradation of water resources.

- **Widespread food insecurity** resulting from the vagaries of nature and, in part, from non-optimal agricultural uses of water.
- **Inadequate coverage of water and sanitation services** especially among the urban, peri-urban and rural poor.
- **Disease and premature death from water-related illnesses** continue to be dominant, in part as a result of lack of knowledge and lack of capacity that can be addressed through inter-sectoral water-related actions.
- Dependence on agriculture and other water-related activities such as fishery for livelihoods in the region calls for **integrated water resources development and management** and this is still at its early infancy in the region.
- Polluted water bodies due to **poor waste management and lack of accountability** against a backdrop of lack of resources and inadequate capacity for effective enforcement action that is often already stipulated in national legislation in the region.
- **Low levels of energy supply.**
- **Degraded watersheds** that now require vast resources to maintain or improve.
- Trans-boundary river basins with complex water rights issues that call for international cooperation, an issue **already being addressed by SADC governments.**
- **Constraints within water management institutions** among which are inadequacies in capacity and financial resources.

The people of Southern Africa recognise that the potential “water world” could be substantially improved from that which exists at present.

The Vision

The people of Southern Africa therefore call for a desirable future in which the norm is **equitable and sustainable utilisation of water for social and environmental justice, regional integration and economic benefit for the present and future generations.**

Proposed actions

To achieve this Vision, the people propose national and regional **STRATEGIC ACTIONS** which include the following:

1. The SADC Water Sector should **develop and implement** the projects presented in their Regional Strategic Action Plan on Integrated Water Resources Development and Management in SADC in the short to medium term. Regional

institutions including NGOs and consultants with the necessary capacity for implementation should be identified and commissioned within the next five years.

2. The people call on their national governments to **urgently implement** the SADC Protocol on Shared Watercourses.
3. Governments within the Region should **accelerate and finalise** their water sector legislative and institutional reforms as part of the creation of an enabling environment for water sector activities in the short term, including facilitating appropriate involvement of the private sector. To promote a climate of collaborative participation, governments should facilitate the involvement of appropriate NGOs, CBOs and other stakeholders in these processes.
4. Institutions and Governments in the region should **facilitate the development of guidelines** for effective public/private sector participation in the water sector.
5. Institutions and Researchers in the region should **urgently develop and publicise guidelines for the provision of water and sanitation services** to *non-traditional consumers* such as peri-urban informal settlements.
6. Responsible authorities and stakeholder networks in the region should urgently **set up mechanisms** for the institutions and consultants to **develop capacity building programmes** in IWRM for water sector planners and managers. These programmes should be implemented by institutions to be identified during the development of the programmes in the short to medium term.
7. Leading stakeholders in the region, including stakeholder networks, the media and religious leadership must **establish mechanisms for awareness raising**, capacity building and empowerment of all other stakeholders including women, youth and disadvantaged groups.
8. There is need to **develop guidelines for incorporation of IWRM principles** in the planning, development and management of energy, agriculture and other sectors that place high demands on water, be it of quantity or quality.
9. These actions will call for a **multi-disciplinary cross-sectoral effort** that can be led by the emerging regional water partnership supported by SATAC.
10. The global community, especially cooperating partners are invited to **complement** the regional effort by assisting with financial resources and relevant expertise when this is not available in the region.

11

CONCLUDING STATEMENT

The peoples of Southern Africa, as individuals, as families, as communities, as social groups, as nations, and as a common people of a common Region are committed to achieving this Vision. It is requested that those players who are in a position to provide leadership respond by seizing the initiative, and lead the Southern African Region to the people's attainment of their desirable future. Members of the global community are invited to participate in any way they can, including support with financial resources and relevant expertise when this is not available in the region.

In conclusion, we the people of Southern Africa commit ourselves towards the attainment of this Vision and will collectively constantly appraise ourselves of progress towards this.

Appendix 1

GLOSSARY OF TERMS

basic human needs means a sufficient quantity and quality of water and food to sustain a healthy human life

demand management means applying incentives to achieve efficiency in the use of and protection of water resources by a decrease in specific water consumption

Dublin-Rio Principles means the fundamental principles for sustainable water resources management endorsed at conferences on water (Dublin, 1992) and environment (Rio-de-Janeiro, 1992) and stated in Agenda 21. The main issues identified in the principles are:

- *fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment*
- *water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels*
- *women play a central part in the provision, management, and safeguarding of water*
- *water has an economic value in all its competing uses and should be recognised as an economic good*

full cost accounting in the context of this document means taking into consideration all economic, social and environmental costs.

social and environmental justice means social transformation directed towards meeting basic human needs and enhancing our quality of life - economic quality, health care, housing, human rights, environmental protection and democracy. In linking social and environmental justice we seek to challenge abuses of power which result in poor people having to suffer the effects of environmental damage and social degradation and to ensure the right of those most affected to participate in all levels of decision-making.

integrated water resources management (IWRM) means the holistic water resources management philosophy that seeks to integrate water resources planning, development and traditional management across all use sectors. It is water resources management that fully recognises

- all natural physical aspects of the surface water and groundwater resource systems, including variations in time and space
- all sectors of the economy that depend on water and hence the complete inputs and outputs related to water (including waste water)
- relevant national objectives and constraints, including social, legal, institutional, financial and environmental objectives and constraints
- the complexity of spatial resource distribution and competing “demands”, such as upstream-downstream interactions, inter-basin transfers, shared watercourses, etc.

The overall aim of IWRM is to achieve integrated and sustainable use through proper policies, institutions, regulatory instruments and economic and financial incentives.

no-go option means the decision not to proceed with a proposed development as a response to an environmental impact assessment.

sustainability is achieved through optimisation of the following:

- physical sustainability occurs when demand and supply are harmonised with resource availability

- environmental sustainability occurs when supply use and management of water and wastewater do not result in irreversible or long-term negative impacts
- financial sustainability occurs when costs of development, supply, maintenance, improvement and resource conservation are recovered, regardless of the means of recovery
- social sustainability occurs when social justice and equity prevail
- institutional sustainability occurs when institutions' capacity to plan, manage and operate systems is enhanced

virtual water means the water that has been saved in a country by importing food which used water of the country in which it was produced as opposed to that of the country in which it is consumed.

polluter pays principle means the management principle which recognises that waste disposal imposes a major cost in remedial actions and requires that those who have created the need for "cleaning up" should bear the full cost of the remedial action. For effectiveness, it may be necessary to set rates and tariffs that are punitive in order to encourage waste minimisation.

Appendix 2

PROGRAMME FOR CREATION OF A REGIONAL VISION AND FRAMEWORK FOR ACTION IN SOUTHERN AFRICA

The following outlines the general programme for creation of the Regional Vision and Framework for Action, from inception to presentation in The Hague in March, 2000.

The general programme is composed of 12 stages, each providing a sequential development in the process, as summarised below.

Stage I Programme design (November 1998 – March 1999)

1.1 Preliminary Implementation Plan – based on guidance from global GWP and World Water Council structures, development of a Preliminary Plan and associated budget

1.2 Rapid Review Consultants – quick review of existing Vision and Framework for Action material in Southern Africa

1.3 Reference Group – GWP SATAC establishes a Programme Reference Group, composed of key individuals representative of different groups within the regional water sector to guide the overall process at key stages.

1.4 Revised Implementation Plan – GWP SATAC, with advice from the Reference Group, designs the overall process and the specifics of individual stages

Stage II Creating a Draft Initial Vision and Framework for Action Statement (April-June 1999)

2.1 Regional Sub-Sectoral Specialist Working Groups - five small specialist groups are assembled from across the Southern African region to consider the future water world in relation to Energy, Biotechnology, Infrastructure and Communications, Information and Communications Technology, and Macroeconomics and Development

2.2 Draft Initial Vision and Framework for Action statement - Chairpersons of the Sub-Sectoral Specialist Working Groups write a Draft Initial Statement

Stage III Securing stakeholder feedback to produce an Initial Vision and Framework for Action Statement (June - July 1999)

3.1 1st Regional Stakeholder Workshop – Preceded by the 2nd Reference Group Meeting, the Draft Initial Statement is presented to the 1st Regional Stakeholder Meeting, in Pretoria, South Africa 1-2 July 1999, securing feedback from approximately 60 regional water sector stakeholders.

3.2 Initial Vision and Framework for Action Statement – Based on feedback from the Pretoria Workshop, an Initial Statement is produced.

Stage IV Securing substantive national inputs into the Regional Vision and Framework for Action (June – October 1999)

4.1 Engagement of National Contact Points – a Call for Expressions of Interest in issued for National Contact Points, and selected institutions are engaged under contract to GWP

4.2 Individual consultations by National Contact Points – National Contact points within most Southern African countries hold one-to-one discussions with influential individuals and key stakeholder groups based on the Initial Statement, and identify any existing Vision and Framework for Action-type documents produced previously.

4.3 National Consultative Meetings – partly in conjunction with SADC Water Weeks, national consultative meetings, attended by approximately 30-50 stakeholders representing different water interests, are held in most Southern African countries between August and November 1999, facilitated by the Initial Vision statement and by the findings of the National Contact Point.

Stage V Wide and targeted public consultation on Initial Vision (June to October)

5.1 Wide and targeted public consultation – distribution of Initial Vision to as wide a range of civil society and interest groups as possible, securing feedback to be synthesised ahead of the 2nd Regional Stakeholder Workshop.

Stage VI Creating a Draft Final Vision Statement, Draft Preliminary Framework for Action and process for moving from a Preliminary to Final Framework for Action (October 1999)

6.1 Assembly of National Contact Points - on 18-22nd October 1999, all National Contact Points assemble in Harare to use the feedback from national consultations to modify the Initial Vision Statement to a Draft Final Vision Statement, to develop a Draft Preliminary Framework for Action statement, containing specific actions required to attain the Vision (expressed in terms of overall goals, purpose and end of action status), and to define the process for moving from a Preliminary to Final Framework for Action.

Stage VII Securing stakeholder feedback to produce a Final Vision Statement and Preliminary Framework for Action (November 1999)

7.1 2nd Regional Stakeholder Workshop - The Draft Final Vision Statement is presented to the 2nd Regional Stakeholder Meeting, in Gaborone, Botswana 8-9th November 1999, securing feedback from approximately 60 regional water sector stakeholders, to agree the Final Vision Statement. The Draft Preliminary Framework for Action statement is presented to secure feedback on goals, purpose and end of action status to agree a Preliminary Framework for Action statement. The Workshop will provide feedback on the process to move from a Preliminary to Final Framework for Action. This Workshop is immediately followed by the 3rd Reference Group meeting to endorse outputs.

Stage VIII Endorsement by SADC Water Ministers prior to The Hague (November 1999)

8.1 Endorsement by SADC Water Resources Technical Committee – through participation in the 2nd Regional Stakeholder Workshop, members of the SADC WRTC meet to endorse the Final Vision Statement and Preliminary Framework for Action and the process to move from a Preliminary to Final Framework for Action, and to recommend all three elements to national Ministers responsible for Water

8.2 Endorsement by Southern African Water Ministers – At the end of November 1999, Southern African Water Ministers attend an extra-ordinary meeting to discuss and endorse

the Final Vision Statement and Preliminary Framework for Action Statement, and endorse the process to develop the Final Framework for Action.

Stage IX Production, dissemination and awareness of Final Vision Statement and Preliminary Framework for Action (December 1999 – February 2000)

9.1 Production of Final Vision Statement and Preliminary Framework for Action – Following endorsement by Water Ministers, reproduction of the Final Statement

9.2 Dissemination and awareness of Final Vision Statement and Preliminary Framework for Action – wide dissemination and awareness of the Final Vision Statement and of the future Framework for Action processes

Stage X Development of a Final Framework for Action (December 1999 – February 2000)

10.1 Development of Final Framework for Action – through combined National Mapping and Framework for Action Contact Points, elaboration of the Preliminary Framework for Action into a Draft Final Framework for Action.

10.2 Final Framework for Action Statement – Assembly of National Mapping and Framework for Action Contact Points to develop Final Framework for Action

Stage XI Presentation at The Hague (March 2000)

11.1 2nd World Water Forum and Ministerial Conference - the Final Vision and Final Framework for Action for Southern Africa are presented to a global audience by SADC Water Ministers as an expression of Southern Africa's desirable future and the actions required to accomplish that Vision.

Stage XII Follow-up processes (after March 2000)

This stage precedes the implementation of the Framework for Action, and remains undefined at present. The purpose is to activate the Framework for Action to bring the Vision to reality at the soonest opportunity. Development of the Framework for Action is intended to be a "living" process that will continue even after the 2nd World Water Forum and Ministerial Conference.