

Acknowledgements

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On behalf of the Malawi Water Partnership,

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Acronyms and Abbreviations

CBO	Community Based Organisation
CGIAR	Consultative Group on International Agricultural Research
COMESA	Common Market of Eastern and Southern Africa
COMWASH	Community Water, Sanitation and Health
CP	Cooperating Partners
DFID	Department for International Development
DMC	Drought Monitoring Centre
ESCOM	Electricity Supply Commission of Malawi
FEWS	Famine Early Warning System
FFA	Framework for Action
GESI	Global Environmental Sanitation Initiative
GWP-SA	Global Water Partnership – Southern Africa
IUCN	World Conservation Union
IWRM/WE	Integrated Water Resources Management / Water Efficiency
ITCZ	Inter-tropical Convergence Zone
JPCC	Joint Permanent Commission of Cooperation
M&E	Monitoring and Evaluation
MASAF	Malawi Social Action Fund
MDG	Millennium Development Goals
MERA	Malawi Energy Regulatory Authority
MWP	Malawi Water Partnership
NFFA	National Framework for Action
NGO	Non-Governmental Organisation
NEPAD	New Partnership for Africa's Development
PoA	Plan of Action
PRSP	Poverty Reduction Strategy Paper
RBO	River Basin Organisation
REWS	Regional Early Warning System

RFFA	Regional Framework for Action
RISDP	Regional Indicative Strategic Development Plan
RSAP	Regional Strategic Action Plan
RWP(S)	Regional Water Policy (and Strategy)
SADC	Southern African Development Community
SAPP	Southern Africa Power Pool
SARDC	Southern African Research and Documentation Centre
SEA	Strategic Environmental Assessment
Sida	Swedish International Development Cooperation Agency
TOR	Terms of Reference
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WDM	Water Demand Management
WEHAB	Water, Energy, Health, Agriculture and Biodiversity
WSCU	Water Sector Coordination Unit
WSSD	World Summit on Sustainable Development
ZRA	Zambezi River Authority

Executive Summary

The Southern Africa Development Community (SADC) Water Vision for Water Life and Environment was adopted by the SADC Ministers of Water in December 1999 and presented at the World Water Forum II in The Hague in March 2000.

The Vision calls for:

“Equitable and sustainable utilisation of water for social, environmental justice and economic benefit for present and future generations.” (SADC, 2000).

It has the following eight sub-Vision statements:

- 1) Equitable and sustainable social and economic development in Southern Africa
- 2) Equitable access to water of an acceptable quantity and quality
- 3) Proper sanitation for all and safe waste disposal
- 4) Food security for all households
- 5) Energy security for all households
- 6) A sustainable environment
- 7) Security from natural disasters, and
- 8) Integrated water resources development and management.

The target date of the Vision is 2025. It encapsulates the contribution of the water sector in achieving the SADC goals of regional integration and poverty eradication. It has guided the drafting of the SADC Regional Water Policy and Strategy (RWPS) as recommended by the SADC Regional Indicative Strategic Development Plan (RISDP) (SADC, 2004).

At the national level, the process of formulating this Vision had been consultative. The development of a Framework for Action (FFA) to achieve the Vision followed a more intensive consultative approach. The FFA process at the regional level however, first consisted of an information drive, which has disseminated the Vision since the year 2000. The process gained greater momentum after the end of 2002, with studies of a regional dimension being commissioned and regional stakeholders brought together to reflect on the actions required to achieve the Vision. This report is the outcome of initiatives carried out both at the regional level and in Malawi.

The consultations in Malawi had the major objective of taking ownership of the Vision in the national context and identifying the actions required for its achievement. At the same time, they reflected on their contribution to the regional dimension of the

Vision in all its sub-Vision statements.

The World Summit on Sustainable Development (WSSD), which took place while the FFA process was unfolding, resolved that countries develop Integrated Water Resources Management and Water Efficiency Plans (IWRM/WE Plans) by 2005, with the objective of fast-tracking the achievement of the Millennium Development Goals (MDG) with a target date of 2015. The MDGs themselves provide a milestone towards the achievement of the Vision in that they are measurable. Target 10 of MDG No. 7 on Sustainable Environment specifically aims to halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. It relates directly to sub-Visions 2 and 3. The IWRM/WE Plans are therefore a logical follow-up of the FFA process which has indeed provided an enabling environment for these plans to be developed in Malawi.

This logical development is in line with the expectations and recommendations of the FFA country coordinators' workshop that took place in January 2003. This was the first of the three regional FFA workshops that were organised during the process of developing the FFA and which discussed the draft regional desktop study which received a component from Malawi. From this first strategic gathering of regional stakeholders, and apart from recommending that the MDGs be integrated into the FFA, the following issues were identified as key considerations essential to the success of a Framework for Action:

- An appropriate policy framework
- A demonstrated political will and the commitment of resources needed to achieve the Vision
- A good institutional framework
- A strategy for human resources development, capacity building and sharing of experiences
- A framework for appropriate information systems to support the implementation of the FFA, and
- Regional and international cooperation.

These recommendations have been captured in greater detail in the different actions recommended under each sub-Vision statement. The actions have been grouped according to four specific strategic objectives, namely:

- 1) Regional integration
- 2) Poverty eradication
- 3) Integrated Water Resources Management (IWRM), and

4) Resource mobilisation.

It is worth noting that the first two objectives coincide with the SADC goals, whereas the third objective (IWRM) is specific to the water sector, in line with the recognised international approach to managing and developing water resources. The fourth strategic objective is cross-sectoral and calls for the same action under the other strategic objectives. The focus areas that further guide the identification of the actions required under each strategic objective are given in **Table 1**.

Table 1: Focus areas for each strategic objective

Strategic objective	Focus areas
1. Regional integration	Harmonisation of the enabling environment Coordinated management of shared watercourses Effective institutional mechanisms Good governance Equitable trade and investment
2. Poverty eradication	Water supply and sanitation Food security Energy security Safety from disasters
3. IWRM	Integrated planning and development Environmental sustainability Mainstream IWRM principles in other sectors Empowerment and participation of stakeholders Improvement of education, training and research Private sector participation
4. Resource mobilisation	Cross-sectoral, no specific focus area

The last sub-Vision statement, IWRM, is scattered throughout the other sub-Vision statements and relates specifically to the strategic objective on IWRM and the different focus areas. No specific actions have therefore been developed for this sub-Vision.

The development of the Framework for Action (FFA) to achieve the Southern African Vision for Water, Life and Environment has also included a Monitoring and Evaluation (M&E) component in order to guide the implementation of the recommended actions. This has, however, proved to be an ambitious undertaking, given that commitment to these actions, and the necessary resources required to undertake each action, first need to be confirmed. In addition, the nature of the recommended set of actions is, by definition of the “Framework” for Action, often broad, without always being measurable. The FFA report nevertheless provides a generic M&E component with associated Terms of Reference to guide those who will later develop specific actions inspired by the FFA.

The Vision document states that the development of the FFA is intended to be a “living process”. This will remain true until the Vision is achieved fully in Malawi and throughout the entire SADC region. During the process, it will entail continuous integration with new and ongoing initiatives such as the IWRM/WE Plans, the action plans that will follow, and any other country initiatives of local or national dimension. The key is to maintain the drive towards the Vision by maintaining focus on the sub-Vision statements through continuous revival and adaptation of the commitments undertaken by our region at the World Water Forum II in The Netherlands in March 2000. Although this commitment was part of a global initiative aimed at formulating regional visions at this world gathering, the Southern African Vision for Water, Life and Environment has proved its relevance to the development of the region through the FFA consultations that were undertaken at the country level.

The responsibility is therefore on future managers of water resources in Malawi to continuously raise the profile of the water sector so that this precious commodity plays its due role in unlocking the socio-economic development of the country.

Chapter 1: INTRODUCTION

1.1. Background

In collaboration with Global Water Partnership-Southern Africa (GWP-SA), the Southern African Development Community (SADC) developed a *Southern Africa Vision for Water, Life and Environment in the 21st Century*. The vision was ratified by SADC countries' Ministers of Water in 1999 when they met in Tanzania and was subsequently presented to the international community during the Second World Water Forum that was held in The Hague in the Netherlands in 2000.

The Southern Africa Vision for Water, Life and Environment calls for:

“Equitable and sustainable utilisation of water for social, environmental justice and economic benefit for present and future generations”
(SADC/GWP-SA, 2000).

The Vision has since guided and defined the drafting of the SADC Regional Water Policy and Strategy. GWP-SA was technically entrusted by SADC to turn the Vision to reality.

The Southern Africa Vision for Water, Life and Environment in the 21st Century has the following eight sub-Vision statements:

- 1) Equitable and sustainable social and economic development in Southern Africa
- 2) Equitable access to water of an acceptable quantity and quality
- 3) Proper sanitation for all and safe waste disposal
- 4) Food security for all households
- 5) Energy security for all households
- 6) A sustainable environment
- 7) Security from natural disasters, and
- 8) Integrated water resources development and management.

1.2. Context

The FFA process was developed in the context of several other initiatives taking place at both global and regional levels. The key initiatives with which it had to integrate are:

- The Millennium Development Goals (MDG) which were announced by the Secretary General of the United Nations (UN, 2000) during the same year as the Vision. Of direct relevance is Target 10 of MDG No. 7 on Environmental

Sustainability which aims to halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. Because of its cross-sectoral nature, the water sector can equally contribute to all the MDGs.

- The resolutions adopted at the World Summit on Sustainable Development (WSSD) which saw the world leaders committing themselves to developing Integrated Water Resources Management and Water Efficiency Plans (IWRM/WE Plans) by 2005.
- The development of a regional water policy and strategy for the SADC. This started during 2003 and was strongly linked to the FFA process by integrating the sub-Vision statements and through two supporting studies that were undertaken under the FFA process.
- The development of the Regional Indicative Strategic Development Plan (RISDP) which is the new blueprint for socio-economic development of the SADC region.
- The revision of the Regional Strategic Action Plan (RSAP) which is the SADC Water Sector's plan of action for creating an enabling environment for the sustainable development of the region's water resources. The revised RSAP has to focus on infrastructure development which supports the implementation of the RISDP. The FFA process report provides pointers towards the priorities of the region in order to achieve the RISDP and contribute towards the SADC's objective of regional integration and poverty eradication.

1.3. Design of the FFA process

It was after the conference that was held in The Hague that GWP-SA launched an information dissemination and awareness drive on the Vision, and the development of a comprehensive Framework for Action (FFA) approach was used to turn the Vision into reality by 2025. The FFA process comprises three basic components:

1) Information dissemination

Information dissemination is always considered to constitute an important component or cornerstone in any process, which often leads to increased levels of education and awareness among the citizenry of a country. Several actions, such as literature reviews relevant for the development of an FFA, were carried out at the regional level, and other activities included desktop studies and country coordinators' and partners' workshops. FFA-related documents such as posters, leaflets, banners and, in some cases, videos were used in the FFA-promotion process. This information greatly assisted in building awareness and influenced a feeling of ownership of the Vision by the people of southern Africa, urging them to take on the path of attaining the Vision and developing and establishing relevant structures and processes for the Framework for Action.

2) Development of FFA

The development of both the Regional and National Frameworks for Action (RFFA and NFFA respectively) is considered to be vital in the development of the regional and national water strategies which aim at realising respective water policies.

3) Development of National FFAs and supportive guidelines

In planning the way forward, the FFA Country Coordinators' Workshop highlighted the need to initiate stakeholder consultations in each country in order to facilitate the development of their own FFAs. This process was vigorously undertaken in Malawi with stakeholder consultations held in Blantyre, Lilongwe and Mzuzu, where a large cross-section of expertise and experiences considered the process and formulated the way forward for Malawi.

1.4. Objectives of the FFA process

The principal objective of the Southern Africa Vision for Water, Life and Environment in the 21st Century is to develop a widely-shared vision of a desirable future and the actions needed to accomplish the Vision by 2025. The specific objectives of the Vision are:

- To generate the momentum needed to start inclusive grass-roots movements for activities in water resources conservation, development and management
- To facilitate the political commitment needed to enable optimum natural resources use and management
- To facilitate the mobilisation of required financial, human and technological investment for activities leading to the achievement of the Vision
- To enable stakeholders to develop their own detailed action plans for implementation, and
- To identify clear opportunities where immediate support can be provided.

1.5. Target audience and role players

Water management in Malawi is often the jurisdiction of government through its line ministries or parastatals or organisations such as the Regional Water Boards, Blantyre Water Board and Lilongwe Water Board. Line ministry responsibilities tend towards the development of policy, its implementation and monitoring processes, while the development of water infrastructure and water supply activities for both rural and urban consumers lies within the domain of the Water Boards.

However, other institutions and organisations have also been responsible for the

development of water-related infrastructure and water supply. These institutions and organisations have not necessarily taken this responsibility for the commercial purpose of selling water to consumers but rather because of other activities such as provision for agriculture and educational and health institutions. In the tea-growing districts of Mulanje and Thyolo, for instance, many commercial farmers have had to develop their own water supply infrastructure, including dams and distribution systems. Elsewhere in the country, religious institutions have played a vital role in water supply development, especially for education and health institutions.

Taking the international river basins which Malawi shares with its neighbours into consideration, international water management mechanisms have been instigated and effected with these neighbours at the bilateral level. In particular the following players are targeted:

- Government departments in the country and at all levels (regional and local), including those in charge of water resources management (throughout the full hydrological cycle) and water services and sanitation. The FFA will assist them in formulating their own government strategies and in gaining insight into the regional aspirations so that they can align their own approaches consistently, while remaining faithful to their respective countries' specific circumstances.
- Shared watercourse institutions, as they seek to develop their basins in an integrated manner.
- Cooperating partners who are interested in supporting the socio-economic development of the country. The report outlines priority actions that will guide their involvement in capacity building, institutional strengthening and/or infrastructure development.
- Non-governmental organisations (NGO) which have always added great value to the development agenda. The report outlines issues that have been identified by stakeholders and on which they could indeed complement efforts by governments.
- The private sector, as the country embarks on private-public partnership ventures to fast-track its socio-economic development. The actions outlined in the FFA report offer the opportunity for defining such ventures, and the private sector will contribute its acumen in assuring efficiency in the management of those areas that will fall under its responsibility.
- The research and capacity building community, as the added value of the understanding that it will bring could greatly enhance the efficiency through which these actions will be undertaken. Aspects of rainwater harvesting, technologies for productive and efficient use of water and virtual water are example of areas where research will add value. Continuous capacity building will be needed to support the actions that the FFA recommends.

- Every citizen of Malawi, and any other interested individual or institution from within the region or outside, rich or poor, empowered or not, young or adult, male or female, needs to understand the role that water has to play in the socio-economic development of our country. The report outlines areas where they can contribute, through behaviour, action or advocacy to the tall order that the FFA report outlines.

The SADC, established in 1992, calls for the regional cooperation among Member States. The SADC Infrastructure Department, following SADC's overall objective, promotes collective self-reliance and forging of closer links by coordinating water-related projects and issues within the region in order to create equitable regional cooperation among Member States. The SADC Infrastructure Department helps to integrate what the region is doing in the various countries that form the Community.

GWP-SA, on the other hand, aims to link all stakeholders, in particular government departments, in an effort to implement Integrated Water Resources Development and Management (IWRM) principles. Overall, it is quite clear that mandates and functions related to water resources management are fragmented at the national level and often require a coordinated effort among all stakeholders if equitable sharing of the resource and its sustainability are to be achieved and if the Vision is to be realised at all.

It should therefore be clear that the target audience and role players are diverse and not only limited to government institutions alone. The same scenario applies to role players for implementation. What needs to be realised is that there must be a pulling together of institutional, organisational and individual efforts in order to adapt to and adopt the new realities, hopefully guided by local, national and regional priorities.

1.6. Approach and methodology

Based on the background of water resources development and management in which the SADC countries find themselves, especially with regard to policy development, implementation and monitoring, a strategy process becomes essential in order to show the critical role that water plays in the cultural, environmental, social and economic development of Malawi. Through its Ministry of Water Development, the Malawi Government developed the Strategic Plan 2003-2006 (Malawi Government, 2003) whose vision is:

“Water and sanitation for all, always.”

This vision is supported by the ministry's mission statement which is:

“To ensure that potable water is available in sufficient quantity and

sanitation is available and equitably accessible to everyone in Malawi at all times for the sustainable social and economic development of the country.”

The FFA process in Malawi is highly essential to empower Malawians and encourage them to take ownership as they work towards attaining the Water Vision by 2025. The FFA process that was assigned to GWP-SA by SADC for its development and implementation has taken the following form since inception:

- A regional review of initiatives relevant for the development of a Framework for Action which led to the first regional workshop in January 2003
- Dissemination of information related to the Vision where extensive education and awareness campaigns were mounted in different forms and materials produced and disseminated throughout the region
- In April 2003, three countries, Malawi, Mozambique and Tanzania, were selected to carry out extensive national consultations on the FFA and set the pace for other countries in the region
- In July and August 2003, national FFA consultations were held in Blantyre, Lilongwe and Mzuzu and a country report produced
- Country reports were presented to the Cooperating Partners (CP) Meeting held in Lusaka, Zambia in August 2003
- Lessons and emerging issues were established by the CP which would feed into development of the FFA at both the regional and national levels
- Core Group Meeting was held in Pretoria in October 2003 to forge the way forward for the FFA development process
- A Drafting Team from around the region, including an expert from Malawi, was appointed in August 2004 to prepare a regional FFA report and country reports.

This FFA country report for Malawi is therefore a fulfilment of the various initiatives that have been undertaken within the region in the FFA development process and it stands as a road map towards achieving the southern Africa Vision for Water, Life and Environment by Malawi in 2025.

1.7. Structure of the Report

The report is divided into six sections starting with the **Executive Summary** which gives a synopsis of the report content. **Chapter 1** is the introduction and provides a

detailed explanation of how the FFA process was carried out at both the regional and national levels. **Chapter 2** looks at the national context with respect to the FFA process in Malawi, especially with respect to its design and how it was conducted. **Chapter 3** outlines the FFA process and its relationship with other sectors of the economy. **Chapter 4** discusses the Vision, its sub-Vision statements and linkages to national and regional policies, strategies and other instruments. **Chapter 5** is a discussion of the key issues and proposed actions and processes necessary for the formulation and implementation of a National Framework for Action. **Chapter 6** considers the monitoring and evaluation component for the national FFA process. **Chapter 7** completes the report by emphasising the need for integration and resource mobilisation by the way of a forward vision.

Chapter 2: DESIGN, DEVELOPMENT AND IMPLEMENTATION OF THE FFA PROCESS

2.1. Background

Preceding the consultations, there was a need to strengthen the partnership with the Ministry of Water Development, especially as it had been established that the Ministry viewed the Malawi Water Partnership (MWP) as a club, by virtue of the way it had been introduced into the country. Even though the Ministry was regarded as a partner of the Partnership, the loose cooperation existing between them arose from the independent decisions that were seemingly being undertaken by the Partnership without the indulgence of the Ministry. To this end, and during the Country Coordinators' Workshop held in Pretoria, South Africa, and the LFA Workshop held in Harare, Zimbabwe, the Malawian participants were informed that they needed to address the issue between the Partnership and the Ministry as a matter of urgency. The Ministry's support would be crucial in facilitating IWRM and other related programmes and activities in the country, including the FFA.

2.1.1. Formalising the Malawi Water Partnership

Upon their return to Malawi, certain members of the MWP, including the GWP-SA Chairperson, the MWP Secretariat, the General Manager of the Central Region Water Board and CEDRISA, arranged meetings with the Ministry with a view to remedying the challenges that existed within the Partnership and to lay the foundation for a strong vibrant Partnership, with the Ministry to the fore. During one particular meeting, and realising that the Ministry was not intending to destroy the MWP structure (as had been advised by the Director of Water Resources), the MWP Chairperson informed the meeting that MWP would strive to provide the Ministry with all relevant information pertaining to MWP initiatives in the country. As a way forward, it was resolved at another meeting that MWP should request GWP-SA to write officially to the Ministry of Water Development introducing the Ministry to the GWP-SA principles, goals, objectives and outputs, so that this would serve as a formal introduction of GWP-SA into Malawi.

A second intention for the meetings was to continue with the plans already laid down with the Director of Water Resources for the national consultations for the development of the Framework for Action, in order to achieve the Southern Africa Vision for Water, Life and the Environment.

These detailed meetings also required that a background to the whole process be presented, especially as some ministry officials were not aware of the FFA. The Chairperson informed one meeting that CEDRISA had been requested by GWP-SA to undertake two studies, the first a literature review and the second initiatives

towards the development of an FFA at the country level, and that these had been completed. He also indicated that, during the Country Coordinators' Workshop held in Pretoria, South Africa, earlier in the year, CEDRISA had been chosen by the Malawi delegation to coordinate the FFA process in Malawi. Three countries, Malawi, Mozambique and Tanzania, were selected by GWP-SA to prepare their country reports on initiatives towards the development of the Framework for Action and were also requested to proceed with country consultations. The intention of the three countries undertaking national consultations was to produce reports that would be merged into one document and feed into the regional FFA development process which has now been published.

This initiative was welcomed by the Ministry of Water Development which indicated that it would no longer be questioning but rather supportive of the MWP activities. The Ministry indicated its appreciation of the efforts that were being pursued to normalise the issues and said that government could benefit from both GWP-SA and MWP. These meetings therefore erased the difficulties that existed between the MWP on one hand and the Ministry on the other, and laid a strong base for the future of the GWP in Malawi.

2.2. Formation of a Working Committee

Noting the amount of work that would be required for national consultations, the need was recognised for a committee to be responsible for arrangements needed by the workshops in the three regions. As a result, a Working Committee was instituted which comprised the following members:

- Representative of the Ministry of Water Development (Chairperson)
- Chairperson of GWP-SA (Member)
- Chairperson of the Malawi Water Partnership (Member)
- Secretary of the Malawi Water Partnership (Member)
- General Manager of the Central Region Water Board (Member), and
- CEDRISA (Member)

2.2.1 Solicitation of guidance from the parent ministry

This group was instrumental in the planning process for the FFA consultations and gave valuable advice to the Consultant during and after the consultations. The Consultant was required to deal with the following issues and report to the Ministry of Water Development during meetings at which other Partners would be present:

- Dates for the national consultations

- List of participants
- Invitation letters
- Workshop programme
- Confirmation form for participants
- Venue for the regional workshops
- Opening of and officiation at the workshops
- Background information for participants, with clear objectives
- Involvement of the media during the workshops
- Press releases
- Budget and financial resources
- Presentations, facilitation; and other issues.

2.2.2 Preparation of background material

Having been entrusted with the responsibility of preparing the material required for the consultations, CEDRISA went ahead with the task and looked forward to successful workshops in all three regions of the country. Preparations included compilation of lists of potential participants to the workshops, budget formulation, bookings for conference venues, preparation of background material and presentation papers, media invitations, mailing invitation letters (which were also followed up by telephone calls), arranging travel to venues for the workshops and keeping in touch with the Ministry of Water Development regarding officiation. In brief, this task was an exciting challenge, and it was managed and accomplished with great satisfaction.

The dates initially arranged for the three workshops were retained in order to meet the tight schedule of reporting back to the Cooperating Partners (CP) meeting on 8/9 July 2003 in Lusaka, Zambia. The final dates for the three workshops were set for:

- Lilongwe Workshop 26/27 June 2003
- Blantyre Workshop 30 June / 1 July 2003, and
- Mzuzu Workshop 3/4 July 2003.

Due to uncertainties over workshop funding, conference facilities were booked and cancelled during the preparation period. Final bookings were confirmed with the Kalikuti Hotel in Lilongwe, the Shire Highlands Hotel in Blantyre and the Mzuzu Hotel in Mzuzu. The workshop programme and other papers had already been sent to participants.

2.3. The consultations

The first of the three regional workshops was held in Lilongwe on 26 and 27 July 2003. The workshop was opened by the Deputy Minister of Water Development, the Honourable JK Luwe, MP. In his speech, the Deputy thanked GWP-SA for supporting the consultations with funds and technical assistance. He said that the results of the consultations would be true Malawian aspirations for the Vision for Water, Life and the Environment. He further appealed to participants to take the consultations seriously, so that the country could develop an effective and implementable Framework for Action. This would contribute towards achieving a national vision and the Southern Africa Vision for Water, Life and Environment.

The atmosphere at the opening ceremony is illustrated in **Figures 1, 2 and 3**.



Figure 1: Opening of the workshop in Lilongwe

Left to Right: Mrs Theresa Mkandawire, Secretary - Malawi Water Partnership; Mr Jean Boroto, Water Expert - Global Water Partnership - Southern Africa; Mr Chimwemwe Chikusa, Chairperson of the Malawi Water Partnership; The Honourable J K Luwe, MP, Deputy Minister of Water Development; Mr Naphiyo, Deputy Secretary, Ministry of Water Development; Mr Owen Kankhulungo, Director of Water Supply (partly hidden); and Mr S Mainala, Director of Water Resources, Ministry of Water Development.



Figure 2: Mr Chimwemwe Chikusa delivering his welcome speech

Left to Right: Mr Jean Boroto, Water Expert - Global Water Partnership - Southern Africa; Mr Chimwemwe Chikusa, Chairperson of the Malawi Water Partnership; The Honourable J K Luwe, MP, Deputy Minister of Water Development; and Mr Naphiyo, Deputy Secretary, Ministry of Water Development.



Figure 3: Group photograph of the Deputy Minister with workshop facilitators and participants

Front Row: C Chikusa, T Mkandawire, J Boroto, the Deputy Minister, Mr Naphiyo, a participant. The Consultant is standing second from the left.

2.3.1. Facilitation

During the national consultations, a total of nine presentations were made in Lilongwe and a film on the Southern Africa Vision for Water, Life and the Environment was shown. The presentations made in Lilongwe were:

- *The Southern Africa Vision for Water, Life & Environment – Introduction*
by Osborne Shela
- *The Southern Africa Vision for Water, Life & Environment – From Vision to Action*
by Elton Laisi
- *Moving away from Poverty in Malawi*
by Chimwemwe Chikusa
- *The Relevance of IWRM in Malawi*
by Christopher Zulu
- *The Global Water Partnership – Southern Africa*
by Jean Boroto
- *IWRM, MDGs and the Framework for Action – A Living Process*
by Jean Boroto
- *The Regional Indicative Strategic Development Plan*
by Osborne Shela
- *The Role of Water in Malawi’s Social and Economic Development*
by William Chipeta
- *Developing a Framework for Action*
by Elton Laisi.

2.3.2. Participation

All three workshops were well received and participants showed much enthusiasm and willingness to participate. They indicated their support to the Malawi Water Partnership programmes and activities, and provided a list of other activities that could be considered for implementation in future. These proposals and suggestions were generated from the group discussions which were deliberately tailored to encourage participants to come up with suggestions for the MWP to consider in carrying out its programmes under IWRM. As a measure to assess understanding and the approach to IWRM in the country, and strategies towards developing the FFA, two sessions were allocated for group work. Participants and facilitators are captured at the Mzuzu workshop in **Figures 4, 5 and 6**.

The record of the group work for the three workshops, given in **Appendix 3**, clearly

shows the seriousness with which participants accepted these consultations. The approach by participants to this MWP initiative also indicated that they would be willing partners in carrying out or participating in IWRM and other MWP activities in the country. Now that the momentum has been set, any delays in implementing such programmes would therefore only kindle the fire of frustration.



Figure 4: Participants during the workshop in Mzuzu, Northern Malawi



Figure 5: Participants listen attentively during the workshop in Mzuzu, Northern Malawi



Figure 6: Group photograph of facilitators and participants in Mzuzu, Northern Malawi

2.4. Findings from the consultations

Some of the outcomes from the regional consultations are given below. These outcomes are crucial to the development of a Framework for Action for the country.

2.4.1 Level of understanding

The level of understanding in respect to the value of water is minimal. It is considered that many people are not even aware of Integrated Water Resources Management (IWRM), including those who are in decision-making positions. Participants in the regional consultations conceded the fact that, technically, the principles of IWRM are known to those who have been trained but not by rural communities. They further indicated that they were hearing about these principles for the first time during these consultations. As a result, it was observed that people thought that fresh water was finite at the national level but not at the household level. The following points were made with respect to water resources in the country:

- It is subject to scarcity and is easily polluted
- It is important for sustaining life and development
- It plays a major role in the environment as it supports biodiversity

- IWRM principles are not widely known in Malawi.

Stakeholders at the workshops recognised the vulnerability of water as a resource that sustains life and is finite. They resolved that it should be properly managed.

2.4.2. Conclusion from group discussions

In discussing what areas can be considered successful in terms of how Malawi has managed its water resources, workshop participants pointed out that freshwater management has been successful because it is institutionalised, human resources are available, capacity building for staff is in place. Further, institutional and legal instruments are being prepared, reviewed or are already in place.

In urban areas, water is sustainably managed because consumers have to pay for the services offered by the water services provider. However, this differs from rural areas where water is regarded as a free commodity and is therefore wasted. Improved access to fresh water is the result of increased number of boreholes, increased number of shallow wells, extension of piped water systems, and more irrigation schemes and systems. There are now more players (NGOs) helping the government to supply fresh water to the communities.

Stakeholders further observed that Malawi can be proud of the introduction of improved technologies and a participatory approach to project identification. In general, management has improved with the presence of regulatory institutions such as the Water Resources Board, the National Committee on the Environment and the parent ministries. Another positive development is the management of catchment areas by local authorities. These include the Mudi Basin by the Blantyre Water Board, the Mpira Dam catchment by the Local Authority, and the Mulunguzi dam catchment by the Southern Region Water Board.

2.5. Challenges as perceived by participants from group discussions

In spite of the successes outlined during the workshops, participants also presented what they recognised as national challenges during the development of the FFA and the actual achievement of the Southern Africa Vision for Water, Life and the Environment. These challenges include:

- Lack of participation by all stakeholders in national programmes
- Rapid population growth and urbanisation
- Lack of water harnessing infrastructure
- Scattered settlement patterns which lead to excessive loss of resources in the provision of services

- Land Acts empower the village headmen to have ownership powers and there is no control on the use of the land
- Pollution of fresh water by chemicals (e.g. fertilisers)
- Lack of adequate civic education for communities in natural resources management
- Weak information managements systems
- Slow access to new technologies
- Low water harvesting capacity
- Negative attitude by communities towards development
- Poor financial support
- Poor land use practices which have led to excessive land degradation
- Inadequate research and monitoring systems for groundwater, and
- Absence of standards for water quality in the rural areas and disregard for these in the urban areas.

The conclusions and challenges assembled by participants at the Cooperating Partners Meeting in Lusaka, Zambia, give more insight into what is required at both country and regional levels. Some of the observations made at this meeting call for both country and regional actions while other actions are specific to countries. The views from the Lusaka meeting, as well as the decisions made by the Malawi Water Partnership at its meeting held on 17 July 2003 in Blantyre, point to the next phase of activities to be undertaken in order to achieve the goals set at the country level.

Chapter 3: THE NATIONAL CONTEXT

3.1. Water resources in Malawi

Malawi is a landlocked country with a geographical area of 118 484 km² and located between latitudes 9°S and 17°S and longitudes 33°E and 36°E. About 23.6 percent, or 28 000 km², of the area is occupied by Lake Malawi, Africa's third largest freshwater lake. The country shares its borders with the Republic of Tanzania to the north and north-east, the Republic of Mozambique to the south-east, south and south-west, and the Republic of Zambia to the west.

Once under British rule, the country gained its independence in 1964 and attained its republican status in 1966. By this time, the total population was four million (Agnew S and Stubbs GM, 1972). Today, the country's population is approximately 12 million people. The country is a member of several regional and international organisations, including the SADC, African Union, United Nations and Commonwealth.

Compared with other African countries, Malawi enjoys favourable biophysical characteristics such as its geomorphology, soils, climate, water resources and drainage. Stretching 852 km longitudinally and 160km wide, the country has a wider resource base than other African countries of its size (Agnew S and Stubbs GM, 1972). This resource base is adequate to support its population under conditions of sustainable resource use and management. The wide diversity of natural resources found in the country are a rare wealth that is able to support agriculture for food production, water resources and sanitation programmes for a healthy society, tourism and industry for economic growth and social emancipation, and energy and other services required for social and economic development.

3.1.1 Climate

The climate of Malawi is influenced by the country's geographical position. Lying northward of the sub-tropical high-pressure belt, the country is affected by south-easterly winds for about six months of the year. The dominant wind system influencing the country's climate is the position of the Inter-Tropical Convergence Zone (ITCZ), which oscillates north and south and brings with it the changes in seasons as it moves. Thus, when there is a strengthening of the south easterlies towards the ITCZ, which normally lies over the Central Region of the country, increases in cloud cover occur and result in rainfall.

Local topography also determines climatic conditions. Due to Malawi's varied topography and the great range in altitude between locations, climatic conditions may be complex. Variations between wet and dry places and between hot and cold areas are therefore not uncommon due to this characteristic.

3.1.2. Temperature

Temperatures and relative humidity are usually low during the months of May to about August. The advance of the rainfall season in October comes with higher temperatures and humid conditions, lasting until January. Much of the country enjoys favourable and tolerable temperatures, with the plateau areas registering the lowest temperatures. However, the Lakeshore and the Lower Shire Valley can sometimes be uncomfortable due to higher temperatures.

The mean maximum July temperature for a larger part of the west Mzimba plains, the Central Region plateau and the area extending from the southern boundary of the Thyolo escarpment to Lake Chilwa and beyond to Namwera is between 22.5°C and 25°C with an approximate range of 10°C to 12.5°C. During this time, the high plateau areas of the Nyika, the Viphya, Dedza, Zomba and Mulanje will record mean maximum temperatures of between 12.5°C and 15°C, with a range of about 5°C to 10°C. Along the Lakeshore and in the Lower Shire Valley, mean maximum July temperatures may normally be higher than 35°C.

3.1.3. Relative humidity

Relative humidity changes with the seasons, especially as it is influenced by wind speeds, cloud cover and temperatures. During the cool and dry months of May to July, relative humidity is generally low and wind speeds will be high, peaking up to speeds of 13 knots. During this period, the south-westerly winds over the lake, generally known as *mvera* are also frequent and strong and these are associated with fine weather (Agnew S and Stubbs GM, 1972).

An examination of relative humidity data for Malawi shows that the period between May and November is generally less humid, with RH figures ranging between 50 and 80 percent. Highest relative humidities are recorded between January and February. However, mean annual relative humidity is usually more than 60 percent.

3.1.4. Rainfall

The highest rainfall in the country occurs around the area north of Karonga Boma with an annual rainfall of more than 2 050mm. Such rainfall is also experienced around Nkhata Bay, Zomba and the south-eastern region of the country in Thyolo and Mulanje. A steep southerly gradient of rainfall intensity is evident from Mwangulukulu, increasing again towards the Nyika plateau. The direction of the prevailing winds has an important influence on the amount of rainfall received. For example, the tangential incidence of the south-easterly winds on the western lake shore of Lake Malawi brings with it high rainfall around the mentioned areas but, if the direction of the winds is parallel to the shoreline, this results in little or no rainfall.

Similarly, the great diversity of topography in Malawi gives rise to those areas on the windward side of the slope receiving much higher rainfall than those on the leeward side. Thus, Nkhata Bay receives a mean annual rainfall of more than 1850mm while Mzimba has only some 820mm to 1030mm. The lowest annual rainfalls are recorded in low altitude areas, such as in the Lower Shire Valley where the mean annual rainfall is less than 820mm.

3.1.5. Hydrology

Malawi is endowed with huge amounts of water resources in the form of Lake Malawi, Lake Chilwa, Lake Malombe and other smaller lakes and many rivers and streams. The prevalence of moderate to high annual rainfall makes Malawi one of the SADC countries that boasts adequate water resources for social and economic development, even though there are internal disparities in access. The country's average annual renewable water resource of 17.54 km³ is more than that of other countries in the region that are larger in geographical size. These include Botswana (2.90 km³), Namibia (6.20 km³) and Zimbabwe (14.10 km³) (UNDP/UNEP/World Bank/WRI, 2000). Surface and groundwater resources satisfy both domestic and industrial water requirements.

The Lake Malawi catchment is by and large, asymmetrical due to the fact that the eastern side of the catchment has been downthrown by faulting while the western part consists of a series of blocks stepping eastward parallel to the main fault. As a result, the major rivers found within the basin, both to the east and to the west of the lake, flow towards it.

The Songwe, North Rukuru, South Rukuru, Dwangwa, Bua, Lilongwe, Diamphwe and Linthipe Rivers, are the principal rivers found on the northern highlands and the central plateau of the country and all flow eastwards to the lake. This faulting has induced similar characteristics for those rivers that flow into the Shire River, the main drain plug of Lake Malawi, with rivers such as Rivi Rivi, Nkulumadzi and others flowing eastwards into the Shire River and down to the Zambezi River.

With a catchment area of 28 678 km² and a maximum depth of 706 metres, Lake Malawi is, after Lakes Victoria and Tanganyika, Africa's third largest inland freshwater lake (SADC/IUCN/ZRA/SARDC/Sida, 2000). The seasonal variation of the lake's water level is generally of the order of one metre, even though levels have fluctuated by more than two metres in some years. Since the beginning of records in 1896, the level of Lake Malawi has shown a general rise from 468 m amsl to more than 476 m amsl (refer **Table 2** and **Figure 1**), a situation that calls for independent research into the causes of and reasons for this phenomenon.

Lake Malombe, the third largest lake in Malawi, is an inflation of the Shire River and

is an important wetland for the people who live around it. It also acts as a reservoir, flood dissipater and regulator of flows from Lake Malawi to the Shire River.

Table 2: Water level of Lake Malawi, 1945 to 2001 (metres)

Year	Level	Year	Level	Year	Level	Year	Level
1945/46	474.43	1959/60	474.11	1973/74	474.97	1987/88	474.98
1946/47	474.74	1960/61	473.97	1974/75	475.26	1988/89	475.35
1947/48	474.99	1961/62	474.60	1975/76	475.55	1989/90	475.41
1948/49	474.31	1962/63	475.19	1976/77	475.38	1990/91	475.10
1949/50	474.20	1963/64	475.55	1977/78	475.59	1991/92	474.57
1950/51	474.21	1964/65	475.20	1978/79	476.30	1992/93	474.34
1951/52	474.48	1965/66	475.06	1979/80	476.53	1993/94	474.08
1952/53	474.26	1966/67	474.76	1980/81	476.41	1994/95	473.66
1953/54	473.81	1967/68	474.83	1981/82	476.05	1995/96	473.57
1954/55	473.63	1968/69	474.86	1982/83	475.91	1996/97	473.43
1955/56	474.14	1969/70	474.76	1983/84	475.41	1997/98	473.91
1956/57	474.88	1970/71	474.95	1984/85	475.17	1998/99	474.14
1957/58	474.89	1971/72	474.67	1985/86	475.39	1999/00	474.08
1958/59	474.33	1972/73	474.60	1986/87	475.38	2000/01	474.51

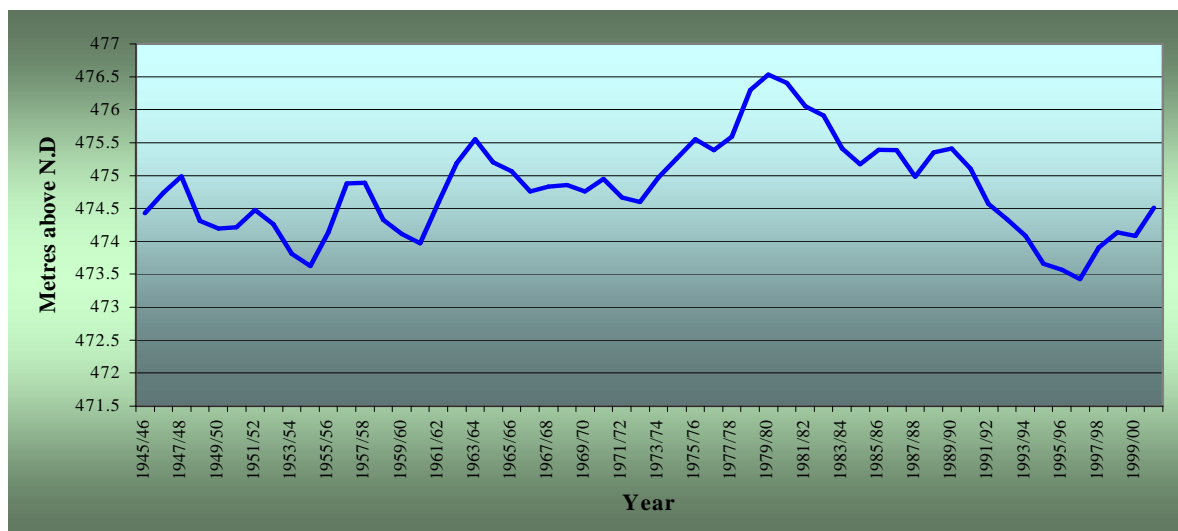


Figure 1: Water level of Lake Malawi, 1945 to 2001

Malawi has had its share of extreme events such as floods and droughts. During years

of exceptionally high rainfall, floods have devastated low-lying areas by wiping out people, crops and livestock. Due to excessive run-off from the Lake Malawi basin, there have been years when the lake level has risen abnormally high and flooded adjacent settlements on the shore, including hotels and other resorts.

The country's only telemetric warning system on the Ruo and Shire rivers has been very important for warning people to move to higher ground during these periods. There is no such system in place in other areas, such as in Salima, Karonga and Nkhotakota.

Malawi's water resource paradox is that, while having water resources during the rain season, cries of insufficiency are always heard in many areas where the "extra" water could have been harvested for use when quantities begin to dwindle. Droughts are also cyclic and these may be localised or occur on a regional scale. During such periods, agricultural production, on which the country depends solely for its economic development, is severely reduced and the country has to rely on food imports.

3.1.6. Geology and geomorphology

Igneous and metamorphic rocks of the Basement Complex of the Precambrian to early Palaeozoic age take up much of the geology of Malawi. Schists, quartzites, marbles, ultra-basics, granulites gneisses, charnockitic gneisses and granulites cover part of the Shire Highlands, much of the Mwanza, Ntcheu and Dedza districts, almost all of the Central Plateau, and the northern region extending to Chitipa. The western shores of Lake Malawi are, however, covered by alluvium of the Quaternary age, including the Lake Chilwa Basin, the upper and part of the middle Shire River, and the area extending from the Thyolo escarpment down to the border with Mozambique at Marka.

Although the country does not have many valuable minerals that can be exploited at scales equal to those in other countries in the region, some minerals are mined. Thus, coal is mined in the north and south of the country for domestic and particularly industrial consumption. While the country relied on coal imports from Zimbabwe for some time, the opening up of coalmines has had a positive double impact on the country – saving foreign exchange and providing alternative energy sources to the traditional fuelwood, used widely in the agricultural industry. Other precious minerals (e.g. agates) are also mined although at a relatively smaller scale. Bauxite is found in large quantities in the south of the country but its exploitation is currently under debate due to environmental challenges that would be associated with that exploitation.

The Great African Rift Valley, which extends from the Red Sea to the Zambezi River, crosses part of the country in a discontinuous fashion. This feature is a cause of the presence of several existing and potential hydroelectric sites on the Shire River that

drains Lake Malawi.

Five erosion surfaces are distinct in Malawi. These are the Gondwana of the Jurassic age, the post-Gondwana of the early and mid-Cretaceous, the African (late Cretaceous to early Miocene, Post-African (later Miocene and Pliocene) and Quaternary to the present. Much of the Nyika and Viphya Plateaux, the Dedza, Zomba and Mulanje massifs are of the Post-Gondwana period. The Shire Highlands, the central plateau, Mzimba plains and parts of Chitipa are dominated by African material. Geomorphologically recent areas are the Karonga Lakeshore plains, the Nkhotakota, Salima and Mangochi lakeshore areas and the strip of land forming the fringes of the Shire Valley. They all comprise material of the Quaternary period to the present (Agnew S and Stubbs GM, 1972).

A dense mosaic of different soil groups characterise much of the country and are a direct result of the underlying parent material. For example, the Nyika, Viphya Zomba and Mulanje massifs are dominated by humic ferallitic soils confined only to these areas.

Much of the west Mzimba plains and the central plateau is characterised by ferallitic soils with laterite in part. Ferruginous soils are also present, especially in the Lilongwe Plains. The escarpment zone contains lithosols interspaced with ferallitic soils. Both the plateau and the escarpment zones contain rich soils for tobacco, maize, groundnut and bean production and other crops. Rice production is made possible by the presence of calcimorphic alluvial soils, regosols and hydromorphic soils in parts of Karonga, Nkhotakota, Salima, Mangochi, Zomba and the Lower Shire Valley. To the south east of the country, ferruginous and ferallitic soils are present, especially in Thyolo and Mulanje, and are ideal for tea growing as well as tobacco and other crops.

3.1.7. Land use

Malawi is the most densely populated country in the SADC region, with an average population density of 107 people/km², after Tanzania (36 people/km²), Zimbabwe (29 people/km²) and Zambia (13 people/km²). Another reference source, however, puts Malawi's population density at 104 people/km² (UNDP, 2001). This reservoir of labour living in an environment of good soils and rainfall provides potential for infrastructure development in agriculture, industry, tourism and other sectors of the economy. Several factors explain the low economic and environmental gains made and these are associated with population pressures, adequacy in policy and policy enforcement, literacy, education and awareness, resource rights and access to resources, transparency and governance.

In 1998, the total population of Malawi was 11 407 000 people and an average annual population growth rate of 3.5 percent, the second highest after Angola (3.7 percent).

Of this population, about 87 percent is dependent on agriculture, which is therefore the country's largest employer. Land use in Malawi is influenced by whether land is arable or non-arable. Agricultural areas take up much of the arable land and evidence shows that, due to population growth, smallholder farmers are encroaching upon marginal and fragile areas such as hill and mountain slopes. These smallholder farmers constitute the majority of the farming community and usually have land holdings smaller than one hectare.

Apart from subsistence agriculture, part of the land is taken up by estate farms where major food and cash crops are grown. The advent of colonial settlers saw the sprouting up of large tea estates in Mulanje and Thyolo districts in the Shire Highlands, and coffee and tobacco production, which were all to play a major role in bringing foreign exchange earnings into the country. After independence, this activity intensified and the central and northern regions of the country saw the development of tobacco estates by both individuals and corporate bodies. Concentrating on sun- and flue-cured varieties of tobacco, the industry has required constant supplies of wood fuel for curing tobacco and constructing barns, resulting in widespread logging and land degradation. Other land use types include natural forests, plantations, protected areas, reserved areas, settlements and inland water systems.

The extent of forest areas in Malawi has been declining over the years. For instance, the total forest area in 1990 was 3 612 000 ha while this had reduced to 3 339 000 ha by 1995, reflecting an average annual decrease of 1.57 percent. This general decline is reflected for both natural forests and plantations.

The Viphya forest plantation in the northern region is one of the largest forests of exotic species in the SADC region. While the main objective of developing this plantation in the late 1950s and early 1960s was for paper production, the forest has now been largely exploited for timber production and related products. Within the plantation, and in other areas such as on Mulanje Mountain and Zomba Plateau, small pockets of rain forest are also found, varying in composition and consisting of *Brachystegia spiciformis* and other genera.

The major protected areas in Malawi are those that have been set aside for wildlife, a legacy of the colonial period that saw the designation of protected areas for wildlife conservation and hunting. These include the Nyika National Park in the northern region, Kasungu National Park in the central region and the Lengwe, Liwonde and Lake Malawi National Parks in the southern region. Government reserves are those that are again set aside for biodiversity conservation and these include the Vwaza Marsh Game Reserve in the northern region, the Nkhotakota Game Reserve in the central region and the Majete and Mwavi Game Reserves in the southern region. Other smaller reserves are scattered around the country as community conservation areas. There are also settlements in the form of villages, towns and cities, and government reserved areas such as parks and roads and other types of land use. The

inland waters provide the people with fishing opportunities.

3.1.8. Resource rights

Land tenure in Malawi, and therefore all the associated resources, has been organised under kinship, sexual division of labour and type of production. Land is the property of the State whose administration is delegated to Traditional Leaders (Malawi Government, 2002). The allocation of rights to customary land is therefore the responsibility of the chief who relies on clan and family leaders to identify and allocate pieces of land to individuals and households from land owned by that group. Once allocated, the family land is held and managed in all respects as private property (Malawi Government, 2002). Other land rights are in the form of, firstly, lease titles whereby an individual is granted a lease not exceeding 99 years, and secondly, freehold titles. Lease titles applied to most tea, coffee, tobacco and other estates and were a threat to most communal areas, as the powerful landholders would encroach upon the communal areas. Consequently, due to the displacement of communal rights by private estates and the shortage of unallocated customary land, most villagers now have a very clear understanding of the security of tenure provided by private and exclusive property rights (Malawi Government, 2002).

3.1.9. Access to resources

Access to resources is dependent on customary rights stipulating such access to resources. While customary land administration is vested in traditional authorities, once right to property (e.g. land) is granted, there is automatically direct access to all resources found thereon. Should the senior member lose such title, the transference of that right is possible among family members. However, in many cases, the right to access has more often favoured male members of the family than female members. This phenomenon is widespread in the region and studies indicate that, while women carry a heavier load in both production and reproduction processes, they do not enjoy the same or similar rights of access to resources (SADC/IUCN/ZRA/SARDC/Sida, 2000).

There are also differences in access to social services such as health, water, sanitation and other services. For example, it has been established that, for the health sector, 75 percent of the population takes more than 30 minutes to reach a health facility such as a clinic, dispensary or hospital. High percentages are characteristic of the population in districts such as Nkhosha (93.7 percent), Mwanza (91.2 percent), Mulanje (87.5 percent) and Karonga (86.7 percent.) (UNDP, 2001).

The new land policy in Malawi therefore provides a window for improved and

equitable access to natural resources. In addition, new measures and strategies are required for improved access to social services by promoting those macro-economic policies that will catapult the country towards economic development and growth.

3.1.10. Demographic pressures

Because of the high population density that is characteristic of the country, there are excessive demographic pressures over land, especially as the majority of people depend on agriculture for their livelihoods. These demographic pressures are evident both in the rural areas and in the urban areas. There are several reasons for the high population concentration in rural areas. Firstly, although the country's agriculture industry is dominantly smallholder and subsistence, there is still a need for labour. Families desire to have many children because larger families are able to work their fields in the growing season faster than smaller families. Secondly, male children have the direct benefit of receiving responsibility of tenure of land and property.

The insurance of land holding is dependent on establishing security that can be obtained by transferring some of the property from the senior family member to a junior member, thereby guaranteeing continuity in ownership.

Malawi has experienced a dramatic increase in population migration from the rural to the urban areas in recent years. One of the major reasons for this is that people have moved to urban areas in search of employment and assured access to social services and improved infrastructure. Analyses carried out on the 1998 Population and Housing Census showed that urban centres such as Mzuzu, Lilongwe, Blantyre and Zomba registered inter-census growth rates of 6.2 percent, 6.1 percent, 3.3 percent and 3.6 percent respectively (UNDP, 2001).

3.1.11. Water resources and development

The abundance of water resources in Malawi provides insurance for a stable economy, especially as it is highly dependent on agriculture. It provides for opportunities to expand access to water supply and sanitation to a large percentage of the population. This opportunity gives government a basis to encourage initiatives that aim at securing water of acceptable quality and quantity and safe sanitation standards for a large cross-section of the people of the country. However, it has been established that the country will suffer from absolute water scarcity by the year 2025 (Dalal-Clayton B, 1997). The quest for new and innovative approaches towards the provision of adequate water to the people of the country is therefore more urgent now than ever before.

3.1.12. Surface water

There are 18 major catchments or water resource units in the country that form part of the drainage basin of Lake Malawi or drain to the Shire River (**Figure 2**). Although found in vast quantities, the country's surface waters, dominated by Lake Malawi, pose a challenge for development as they are often located where it is difficult and expensive to exploit. Except for those areas along the lakeshore and on the fringes of major rivers, the exploitation of water for supply to urban centres, especially on the plateau areas, has been very challenging. For example, Blantyre, on the Shire Highlands, obtains its water through pumpage from the Shire River a respectable distance to the west. Lilongwe, the capital city, is unable to get its water from the lake as this would mean pumping water to a height of more than one kilometre. However, the majority of the rivers are able to supply water for domestic use, agriculture and industry.

The Shire River system is important for Malawi's energy requirements. The river has many rapids and falls, some of which have been developed for electricity generation (e.g. Nkula, Tedzani and Kapichira). However, due to land degradation problems in the catchment basins of many of the country's rivers, a number of the river systems are experiencing siltation and apparent reductions in flow.

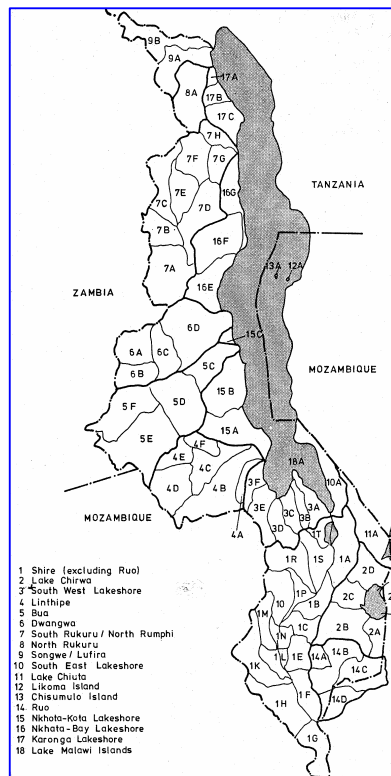


Figure 2: Major catchment basins

3.1.13. Groundwater

Two major types of aquifer are found in Malawi, firstly, the extensive but low-yielding weathered basement aquifer found mainly in the plateau areas, and secondly, the high-yielding alluvial aquifer of the lakeshore plains and the Lower Shire Valley. Groundwater is the single most dominant water supply source for the rural areas of the country. Until today, the development of groundwater resources has been primarily for drinking water supply for rural and peri-urban areas. Average yields vary between 1 and 2 litres/s in the weathered zone of the basement complex. The alluvial aquifers occupy parts of Karonga Lake Shore, Salima - Nkhotakota Lake Shore, and the Upper and Lower Shire Valley. Aquifer yields of more than 20 litres/s have been obtained.

Localised water quality problems have been experienced in some parts of the country such as in Dowa, Nkhotakota and the Lower Shire Valley. These problems are associated with high alkalinity, taste and pollution through faecal contamination.

3.1.14. Wetlands

There are many wetland areas in the country. These consist of Lake Malawi littoral, Lake Malombe, Lake Chilwa, Lake Chiuta, Lake Kazuni, the Elephant Marsh of the Lower Shire, other marshes and swamps, and the many rivers and streams and *dambos* that are found around the country. Wetlands are important in many ways as they act as a store of various resources, such as food in the form of fish and fruit, timber for construction, medicinal plants, and they also facilitate transportation. However, wetlands are subject to many threats including, but not limited to, over-abstraction and pollution, over-harvesting of the biodiversity found therein and encroachment by people for land and resources. It is therefore important to involve the community and focus on community-based activities in securing sustainable wetland use, development and management. Such engagement of communities would be in the areas of disaster mitigation and water resources development and management, especially in respect to sanitation issues. Local government should be in the forefront as a key player in promoting and implementing sustainable water management initiatives.

Malawi's wetlands face a critical challenge through pollution by chemical fertilisers from agricultural lands, siltation from erosion-prone surfaces due to poor cultivation practices, diminishing areal extent as a result of encroachment, and invasion by aquatic weeds such as the water hyacinth and others. Other threats include large-scale human activities such as urbanisation, industry and agriculture, and these have started to interfere with natural hydro-chemical cycles and are affecting resources beyond single watersheds.

3.1.15. Protected areas

Similar to elsewhere in southern Africa, protected areas in Malawi occur in a number of forms. The State is responsible for those protected areas that are gazetted for conservation of wildlife and promotion of tourism such the Nyika, Kasungu, Liwonde, Lake Malawi and Lengwe National Parks and other Game Reserves. There are also other protected areas, such as those controlled by local communities. These are identifiable by the way they appear, usually as a cluster of the original vegetation whose canopy rises well above the average tree line. These areas have a special place in the life of the people and they are usually well managed.

Protected areas require special mention as they have multiple functions. Firstly, they provide a habitat for a variety of wildlife, both flora and fauna. Such wildlife is important for the tourism industry that contributes to the country's foreign exchange earnings. It also provides for other important functions such as a haven for medicinal plants and a reserve of endangered and threatened species.

Secondly, protected areas are the hub of the country's tourism industry and its growth is dependent on how well the protected areas are managed. Thirdly, community-controlled protected areas offer communities a sense of identity as they have been closely associated with them for generations and their social and economic well being has depended vitally on their existence. Due to the widespread land and resource degradation that is evident in Malawi, it is important that protected areas are given the attention that they deserve in order to save them from encroachment and potential human pressures.

3.1.16. Shared watercourses

By virtue of the fact that Malawi shares some of its water basins with her neighbours, it has been necessary to establish trans-boundary cooperation in the way that the water resources of these basins are used and managed. Among some of the rivers that are shared are the Songwe River in the north, which forms the international boundary between Malawi and the Republic of Tanzania, and the Shire River that crosses the southern border of Malawi into Mozambique. To facilitate judicious management of these rivers, Joint Permanent Commissions of Cooperation (JPCC) have been established between Malawi and Mozambique and Malawi and the Republic of Tanzania.

The importance of the JPCCs is that they allow for the equitable sharing of water resources in the basins as well as maintaining a minimum acceptable level of water quality, particularly important for the downstream country. For example, it is incumbent upon Malawi to ensure that there is an adequate flow of water through the Shire River for the benefit of Mozambican water users. Similarly, such flows have to be of acceptable quality and void of pollution.

The international cooperation between Mozambique and Malawi reaches further than addressing issues relating only to water resources and river basins. Because Lake Malawi is shared between three countries Malawi, Mozambique and Tanzania, it has been established that any development projects and programmes that may directly or indirectly relate to or affect the waters of the lake should be referred to the riparian countries for information. This arrangement safeguards the other riparian countries from being affected by unforeseen detrimental impacts, such as reduced river flows, pollution or induced flooding of the lake, and developments, actions or activities on the Shire River that flows directly into Mozambique.

These bilateral agreements are important and justified since they conform to the provisions of the SADC Protocol on Shared Watercourse Systems, which all the three countries have signed and are party to.

3.1.17. Water demand and supply

Two Malawi water sector objectives are (Malawi Government, 1994):

- 1) To provide water infrastructure and services that will underpin the development of all sectors of the economy and to do so in the most economically efficient manner, and
- 2) To manage water resources and implement, operate and maintain water facilities for the benefit of the community and the preservation and enhancement of aquatic life and riparian environments.

In trying to fulfil these objectives, the Ministry of Water Development standard for a potable water source for a rural household is 27 litres per capita per day within a walking distance of 500 metres one way. Most water supply schemes, however, do not meet this demand, especially during the dry months of August to December when yields from boreholes and shallow wells are low or nil, and distances of up to 4 kilometres one way are not uncommon.

In the rural areas, the main supply of safe water is from boreholes. However, in areas where boreholes do not exist, communities resort to collecting water from rivers or dug-out wells. The deficiency in water resources infrastructure, especially in the rural areas (indeed the non-availability of water resources in many areas) reduces the amount of time that female members of the family can devote to more economic activities such as farming, tending to the family and trading. A number of communal water taps at village centres developed over the years have reduced the walking distance to within acceptable levels and have increased the time available for

economic tasks.

Through the Ministry of Water Development, the government has taken strides to improve access to safe water. Many NGOs have also participating in water delivery programmes to both peri-urban and rural communities in the form of piped water supply schemes and boreholes. The Malawi Social Action Fund (MASAF) has ably assisted in providing the financial resources required for the development of water supply schemes, as well as instituting organisational behaviour among Malawians in the management of community projects in the rural areas. However, it has been observed that, in the rural areas, of the 17 000 boreholes constructed to serve 4 million people, only 60 percent are operational at any one time (UNDP, 2001). In addition, more than 4 000 boreholes have no supporting data or construction reports (SADC-WSCU, 2000).

The preparation of the Water Resources Management Policy and Strategies by the government spelled out the institutional arrangements required for efficient water supply operations, and was a deliberate attempt to improve service delivery to the people. As a result, the delivery of water to the people is now the responsibility of three water boards – the Northern Region Water Board, the Central Region Water Board and the Southern Region Water Board. The three water boards are the water service providers for the district centres and the rural areas. In the case of the large cities of Blantyre and Lilongwe, two water boards, the Blantyre and Lilongwe Water Boards are responsible for all water supply operations in the two cities.

It should be mentioned that the principle of water demand management and conservation still remains a controversial issue. The failure to successfully implement water demand management in southern African countries, including Malawi, is attributed to three factors. Firstly, there is low level of understanding by decision-makers and users of the technical and financial benefits of conserving water. As a result, decision-makers cannot appreciate, approve and facilitate the use of water conservation, and stakeholders cannot accept and assist with implemented water conservation methods. Secondly, there is need for stronger legislation that will support this concept, and enforcement must be encouraged. Adequate political will, involvement and support are also necessary. Lastly, water utilities must inject capital investment into water conservation measures (depending on available technologies) over and above operational and maintenance budgets. Today, many water supply schemes in the country suffer excessive water losses through leakage (Laisi E, 2002).

3.1.18. *Water quality and pollution*

Water quality in Malawi is generally good, particularly in areas where a water service provider is available. This is not the case in rural areas, especially where neither boreholes nor piped water supply schemes exist. Pollution of water resources occurs

from both point and non-point sources. Point source pollution occurs from waste dumps and effluent in urban and semi-urban areas as well as industrial sites, power generation plants and the small mining activities found in the north and south of the country. While safe water is available for communities, one particular health trap is the inadequacy of hygiene standards of many people. The use of ineffectively cleaned buckets at water kiosks can pollute either the source of water or the otherwise safe water to be used in the household. Health campaigns have been put in place to educate people on sanitary methods of water collection and storage.

In the rural areas, water resources are affected by pollution from agriculture due to the large amounts of chemical fertiliser used on tobacco, maize and other crops. Even though there have been no clear examples of infection resulting from chemical pollution, it is important to bear in mind the intensity with which the government has promoted the use of chemical fertilisers in agriculture. Specific research is required to assess the levels of pollution found in many water supply points. Other pollution concerns are suspended solids and silt from erosion-prone surfaces, resulting in the degradation of many rivers systems. Through erosion, many rivers in the country suffer from excessive deposition of sand and silt, to the extent that many of them are now ephemeral.

Pollution from aquatic weeds is also worthy of note. Aquatic weeds are common in the Lake Malawi/Shire River system, from Mangochi to the Mozambique border, and have caused extensive problems to the electricity generation plants on the Shire River as well as the barrage at Liwonde. The Elephant Marsh in the Lower Shire Valley is heavily infested with aquatic weeds which have caused navigational problems and a potential challenge to fisheries in the area.

Pollution management in the country is provided for in the Environment Management Act of 1996. The Act encourages measures that are aimed at preventing the unsustainable use of natural resources and controlling the generation of pollutants (Malawi Government, 1996).

3.1.19. Review of integrated water resources planning and development

Policy exists to allow for integrated water resources planning and development in Malawi. However, as the policy is spread among a number of ministries and departments, the present legal arrangements do not streamline enforcement measures and procedures. For example, policy provisions related to water conservation are available with the Ministry of Water Development, Forestry and Agriculture as well as the Ministry for Environmental Affairs. It is therefore essential that policymaking, the design and planning of water-related programmes and projects, including those relating to the environment, should be harmonised by government in order to minimise duplication of human and financial resources in enforcement procedures.

Such policy needs to address issues relating to water allocation, monitoring, enforcement and conflict resolution. Legislation, regulations and by-laws should be strongly enforced. In this regard, roles must be clearly defined, especially between the state, provincial, regional and local levels, since enforcement occurs at different levels. Devolution of responsibility offers a better option for resources management at the local level. Government cannot take up the burden of environmental management on its own, and the private sector should play a part and be coerced into undertaking programmes in environmental rehabilitation. After all, the private sector is dependent on the natural resources for raw material supplies in its production processes. There must be private sector financing to secure investment security and to complement the resources that government is able to allocate for integrated water resources development and management.

At the international level, the JPCCs and the Protocol on Shared Water Systems in the SADC region are good testimony of Malawi's efforts in IWRM. Cooperation has been forged with her neighbours in the management of international river basins. In further promoting this cooperation, it should be incumbent upon the country to encourage and promote public awareness and education to influence behavioural change, especially among communities that live in the international basins. There must be regular exercises in environmental monitoring and river flow gauging, including environmental impact assessments.

Policy related to IWRM is available but it is spread wide among a number of ministries. Legislation and policy implementation needs to be accompanied by large information campaigns, and organisation, cooperation and empowerment of the masses and the illiterate. The concept of information-sharing among stakeholders should be promoted so that any failures or challenges are appreciated and rectified by all concerned parties. The ultimate solution to realising any successes in IWRM in Malawi should therefore be based on setting targets and monitoring performance.

3.1.20. Water supply situation

The water supply situation in the country is still critical, with an average of only 59.9 percent of the population having access to safe water. This national average takes into account both rural and urban populations and it is evident that much effort is still required to improve access to safe water in the country.

3.1.21 Rural water supply

Since Malawi is not highly urbanised, the majority of the country's population is resident in the rural areas. It follows therefore that, of the 59.9 percent of the people with access to safe water, the majority live in the urban areas. The low percentage

access to safe water is mostly caused by the frequent malfunctioning of boreholes and rural water supply schemes in the rural areas. This forces many communities to return to their traditional water supply points, such as rivers and dug-out wells.

However, the NGO community (e.g. UNICEF) has taken significant strides in developing water supply schemes in the rural areas. The Malawi Social Action Fund (MASAF), established by the government, also provides financial resources for community-based water development programmes, and this initiative should greatly assist in improving access to safe water for a large number of people. What is important, however, is to be able to monitor performance and to institute measures that enable communities to be responsible for their own schemes and to be in a position to provide maintenance services when the schemes break down. Training of local communities is therefore important and must be a built-in component of the development package.

3.1.22. Urban water supply

Urban water supply consists of piped water systems provided by either the water boards, the private sector, or developed by cooperative bodies and individuals. As previously indicated, many urban centre residents have access to safe water. However, the high levels of migration from rural to urban areas, especially to the large cities, will have an impact on water demand. More investment will be required to service those areas requiring safe water, especially in the peri-urban areas.

The success of water delivery programmes in both the rural and urban areas will depend on a number of factors. Firstly, it can be claimed that the message that water has both an economic and a social value has not been taken to the majority of consumers and people still regard water as a free commodity. This explains the considerable wastage through leakage, watering gardens and cleaning cars, even during times when the water sources show dwindling supply. Secondly, the element of affordability is important. Consumers should be able to afford the amount of water that they require. Block-pricing structures could assist in reducing water wastage, with increasing tariffs per block for those in the peri-urban areas. Thirdly, new measures should be adopted for the use of wastewater, which could be used to replace the clean water for such functions as watering gardens.

The implementation of the Water Resources Policy and Strategies has brought positive results. Previously, the government was directly responsible for the delivery of water services to communities in both the rural and urban areas.

This arrangement had the disadvantage that, for many reasons including a shortage of human resources, the government could not be policy-maker, enforcement agency and service provider. The transference of responsibility of delivering water to the water boards meant that water could be valued as a commodity at its true market rate. The

government now only has to ensure that the service providers comply with the prevailing water policy.

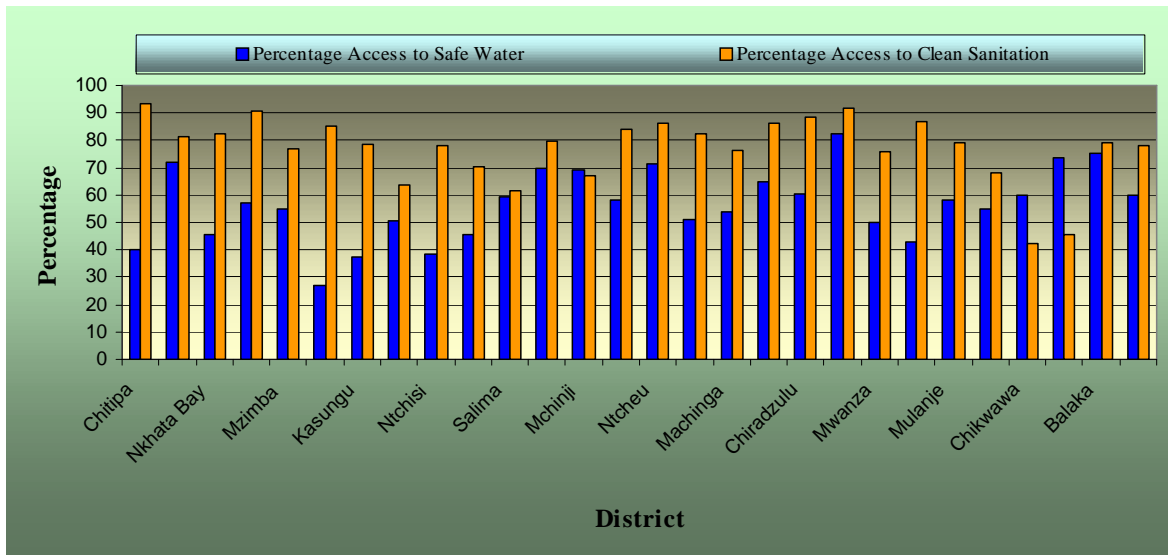


Figure 3: Malawi's population by District, access to safe water and clean sanitation

Note: Data obtained from United Nations Development Programme, Malawi National Human Development Report 2001, UNDP, Lilongwe, Malawi, December 2001.

3.1.23. Sanitation

The provision of sanitation services is the responsibility of District Assemblies at district centres and the Municipal and City Assemblies in the Municipality of Zomba and the Cities of Blantyre, Lilongwe and Mzuzu. Elsewhere in the rural areas, the responsibility of sanitation is borne by the communities themselves. The development of water and sanitation services in Malawi has been skewed, with sanitation projects lagging behind water projects. Since the International Drinking Water and Sanitation Decade of the 1980s, few sanitation programmes have taken place, especially in the rural areas. Although the percentage of people having access to safe sanitation is higher than that of people having access to safe water (**Figure 3**), this is only because many people in the rural areas have proper solid waste disposal facilities. There are few water-borne sanitation schemes in the urban areas. The journey towards achieving proper sanitation for all and safe waste management, which is one of the statements of the southern African Vision for Water, Life and the Environment, seems to be an arduous one.

3.1.24. Rural sanitation

Pit latrines are common in the rural areas of Malawi and are the standard human waste disposal point for many families. Until now, traditional design methods for pit latrines are followed and, even though attempts have been made to introduce Blair toilets, the pace at which this initiative has been taken up has lagged behind demand. Until now, even peri-urban locations do not have complete coverage.

Due to the dependence of rural communities on boreholes for their water supply, the location of pit latrines in relation to borehole sites has been stipulated in the Water Resources Act of 1969. It is recommended that boreholes should be sited more than the minimum distance from pit latrines, as provided for in the Act, and should, if possible, be above the borehole.

3.1.25. Urban sanitation

In spite of city bylaws that promulgate the enforcement of health initiatives in urban areas, it is common to see uncollected wastes left idle. These waste dumps are a source of pollution and are an environmental hazard in many urban locations. The reasons are beyond the scope of this report.

Sewerage disposal still remains the responsibility of the City and Municipal Assemblies. In the urban centres, however, water-borne sanitation has had fewer problems than solid waste disposal. As required by the Water Resources Management Policy and Strategies of 1994, water supply utilities in Malawi have been encouraged to operate not only the water supply systems in their areas but also to take responsibility for the sewerage systems. Many water supply development systems in the country now have a mandatory component of sanitation.

3.2. On-going water-related projects

Through its Ministry of Water Development, the Malawi government establishes water-related projects and programmes from time to time. The ministry itself carries out some of these projects while others are delegated to water boards, the private sector and the NGO community. Water projects are of different sizes, with some comprising boreholes for villages, educational or health institutions.

In pursuance of sustainable environmental management, a number of water projects have a built-in environmental component consisting of the provision of sanitary facilities, training in the use of water points, management of wastewater from water facilities, determination of safety standards from pollution sources and impact of water supply points on the general environment. The Ministry of Water Development has started to implement its strategy of involving and supporting local government

and the private sector in implementing community-based water supply schemes and improving local capacity and management. Local authorities play an important role in the planning and allocation of resources for rural water supply and an implementation manual for the development of water resources has already been developed and is in use. Some of the water projects that the ministry is currently implementing are (Chipeta, W. P. C., 2002):

- Lake Malawi Level Control Project
- Stabilisation of the Songwe River between Malawi and Tanzania
- ZACPRO II
- Lake Malawi Ecosystem Management Project
- District Centres Water Supply III Project
- Community Water, Sanitation and Health (COMWASH) Project, and
- The Lilongwe-Dedza Integrated Groundwater Project.

The projects are for both water resources management and water supply in both peri-urban and rural areas. For water supply projects, a component of human resources capacity building is included in order to impart a sense of ownership of the projects by the rural communities involved and to establish a long-term maintenance programme to be undertaken by the beneficiaries.

3.3. Key issues influencing the water agenda in Malawi

As elsewhere in the region, water is the engine for national social and economic development and growth in Malawi. The SADC goal, “*the attainment of an integrated regional economy on the basis of balance, equity and mutual benefit for all Member States*”, with the three key objectives of poverty alleviation, food security and industrial development, can best be achieved through the development and management of the water resources of the country.

Increased food production through better management of rain-fed and irrigated agriculture, aquaculture and livestock production; improving access to and availability of cheap energy through hydropower; increasing access to sustainable water supplies for domestic and industrial requirements, and for sanitation and waste management; will all require the development and effective management of the country’s water resources.

In addition there will be a demand for water to sustain biodiversity and natural ecosystems, including wetlands which are the basis for rural livelihoods and for tourism. Malawi will also need to manage its water resources to provide improved

security from severe incidents of drought and flood. For the country to achieve the southern Africa Vision for Water, Life and Environment, as well as the Millennium Development Goals for access to water supply and sanitation, and food production and energy, the country's water resources will need to be developed and managed in an integrated and sustainable manner.

In the early 1990s, the SADC Secretariat initiated the preparation of a Plan of Action for integrated development and management of water resources in the SADC region. The ***Regional Strategic Action Plan for Integrated Water Resources Development and Management in the SADC Countries (1999-2004)*** (RSAP) was formally approved by SADC Heads of States in September 1998. The review and analysis of the water sector in the various countries of the region, done in preparation for the Plan of Action, identified key issues or constraints that affected the development of the water sector. These issues or constraints included:

- Weak legal and regulatory framework
- Inadequate institutional capacities of national water authorities and regional or River Basin Organisations
- Weak policy framework for sustainable development of national water resources
- Poor information acquisition, management and dissemination systems
- Low levels of awareness, education and training with respect to social, economic, environmental and political issues regarding water resources development and management
- Lack of effective public participation by all stakeholders, particularly women and other disadvantaged social groups, and
- Inadequate infrastructure that is unable to meet the growing demands for services.

The RSAP proposes the following strategic interventions to address these mainly institutional issues:

- Improving the legal and regulatory framework at the national and regional levels
- Improving national and trans-boundary river basin management, planning and coordination
- Strengthening linkages among macro-economic, social and environmental policies
- Improving information acquisition, management and dissemination
- Supporting awareness building, education and training
- Promoting public participation, and

- Investing in infrastructure.

3.3.1 Policy development

SADC has embarked on the implementation of the Regional Indicative Strategic Development Plan (RISDP) with the aim of achieving regional integration and poverty eradication. Further, SADC Member States are committed to the achievement of the Millennium Development Goals (MDG), which particularly call for improvement in access to sustainable water supply, food and energy security. Water resources management, being a cross-cutting and multi-sectoral issue, has a vital role to play in national initiatives. This can only be effectively implemented in a more comprehensive policy framework.

SADC Water Division has also initiated the development of a Water Policy and Strategy to provide a framework within which the Framework for Action (FFA) will be implemented. This policy and strategy will complement overriding policy instruments such as the SADC Declaration of 1992, the Protocol on Shared Watercourse Systems in the SADC region and the Dublin Principles on Integrated Water Resources management (IWRM). The SADC Declaration, *“Towards the Southern African Development Community”*, calls upon all countries and people of southern Africa to develop *a vision of shared future, a future within a regional community* that will ensure economic well-being, improvement of the standard of living and quality of life, freedom and social justice and peace and security for the people of the region.

The revised SADC Protocol on Shared Watercourse Systems, whose overall objective is *“to foster closer cooperation for judicious, sustainable and coordinated management, protection and utilisation of shared watercourses and advance the SADC agenda of regional integration and poverty alleviation”*, contains principles and provisions for water resources management in southern Africa.

The Dublin Principles of Integrated Water Resources Management (IWRM) are commonly accepted as representing the best water management practice. A widely accepted definition of IWRM is that which was developed by the Global Water Partnership (GWP) as, *“a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant social and economic welfare in an equitable manner without compromising the sustainability of vital ecosystems”*. Other initiatives that have implications for national policies especially in the water sector include the MDGs and the New Partnership for Africa’s Development (NEPAD).

The MDGs are global targets that world leaders set at the Millennium Summit in September 2003 in Johannesburg, South Africa. These represent an ambitious agenda for reducing poverty and transforming people’s lives around the world in general and

within the southern African region in particular. They include the following targets for 2015, using the year 1990 as the benchmark:

- Reduce by half the levels of poverty and hunger
- Achieve universal primary education
- Empower women and promote equality between men and women
- Reduce by two thirds the levels of under-five mortality
- Reduce by three-quarters the levels of maternal mortality
- Reverse the spread of killer diseases, especially HIV/AIDS and malaria
- Ensure environmental sustainability, and
- Create a global partnership for development, with targets for aid, trade and debt relief.

The NEPAD agenda articulates the following goals related to water resources management:

- To ensure sustainable access to safe and adequate clean water supply and sanitation, especially to the poor
- To plan and manage water resources to become the basis for national and regional development and cooperation
- To systematically address and sustain ecosystems, biodiversity and wildlife
- To cooperate on shared rivers among Member States, and
- To ensure enhanced irrigation and rain-fed agriculture to improve agricultural production and food security.

Within the context of the above policy pronouncements, the SADC region has developed the following principles:

- Effective public consultations and involvement of users
- Focus on integrated, people-centred planning
- Effective use of water through demand management, conservation and re-use, including the efficient use of water for agriculture
- Recognition of the environment as a legitimate user of water
- The protection of the environment through appropriate user charges and the enforcement of the, “polluter-pays” principle, taking into account equity and

social justice

- Integration of water supply, sanitation and health and hygiene education programmes
- Promotion of capacity building to ensure that managers of water, waste and sanitation have adequate knowledge, expertise and tools
- Ensuring that waste is safely managed close to the point of generation, and
- Preventing the export (and import) of harmful substances across national and regional boundaries.

3.3.2. The Regional Vision and Framework for Action

SADC and GWP-SA started a process during the later half of the 1990s to develop a Regional Vision for Water, Life and Environment. This Vision was developed through extensive stakeholder consultations and participation over a number of years. The Vision was adopted by the SADC Water Sector Committee of Ministers on 3 December 1999 and then presented at the Second World Water Forum and Ministers' Conference that was held in The Hague, Netherlands, during 17–22 March 2000.

The Vision Statement is:

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

The Vision is structured into the following eight sub-Vision statements:

- 1) Equitable and Sustainable Social and Economic Development in Southern Africa
- 2) Equitable Access to Water of an Acceptable Quantity and Quality
- 3) Proper Sanitation for All and Safe Waste Disposal
- 4) Food Security for All Households
- 5) Energy Security for All Households
- 6) Sustainable Environment
- 7) Security from Natural Disasters, and
- 8) Integrated Water Resources Development and Management.

The Vision requires the development of a Framework for Action (FFA) for its achievement by 2025. Similar to the Vision, the FFA process is also facilitated by GWP-SA on behalf of SADC and with the financial support of DFID. In collaboration with GWP-SA, the SADC Water Division has now embarked on a process to develop an FFA to give effect to the Water Vision. The FFA comprises various activities on information dissemination, the development of a regional FFA and the facilitation of the development of national FFAs. While the first component continued after The Hague, the process for the regional and national FFAs were only initiated at the end of 2002 and early 2003. In contrast to the already well-developed, short-term SADC Regional Strategic Action Plan (RSAP), the FFA is intended to provide strategic direction in the long-term (up to the year 2025). It is therefore essential that the framework for the implementation of the Vision builds on the current initiatives carried out by the SADC Water Division by aligning the Regional Strategic Action Plan (RSAP) with the FFA.

3.3.3. The World Summit on Sustainable Development (2002)

The World Summit on Sustainable Development (WSSD) took place in Johannesburg in 2002 as a follow-up to the 1992 Rio de Janeiro United Nations Conference on Environment and Development (UNCED). Dubbed Rio+10, the WSSD resolved that all countries should develop Integrated Water Resources Management and Water Efficiency Plans (IWRM/WE Plans) by 2005 in order to contribute to the achievement of the Millennium Development Goals (MDG) by 2015. Though most SADC countries have their own plans or strategies, the challenge is to give them an IWRM focus to meet the MDGs challenge. A number of southern African countries have initiated the process of developing these plans, with the facilitation of GWP-SA in some countries such as in Malawi.

3.3.4. The Regional Water Policy and Strategy

PCN 11 of the RSAP provides for the development of a Regional Water Policy and Strategy (RWPS). This process started in 2002 and was supported by several studies through the FFA process. At the time of writing this report, the draft Regional Water Policy had just been adopted by the SADC Water Ministers while the Regional Water Strategy was being developed. The formulation of the RWP was strongly inspired by the Vision. A comparison of the core issues of the Regional Water Policy with the sub-Vision statements of the Southern African Vision for Water, Life and Environment is given in **Table 3**.

Table 3: Relationship between the Regional Water Policy and the Southern African Vision

Policy number	Pronouncement title/sub-title	Reference to Vision/ sub-Vision statement
3	Regional cooperation in water resources management	Vision and sub-Vision 1 and 8
3.1 to 3.5	Water for regional integration	Sub-Visions 1 and 8
4	Water for development and poverty alleviation	Vision and sub-Vision statements 1 to 5
4.1.	Water for socio-economic development	Vision and sub-Vision 1
4.2	Water supply, sanitation and hygiene	Sub-Visions 2 and 3
4.3	Water for food security	Sub-Vision 4
4.4	Water for energy development	Sub-Vision 5
4.5	Water for industrial requirements	Sub-Vision 1
5	Water and environmental sustainability	Sub Vision 6
6	Security from natural disasters	Sub-Vision 7
8	Water resources development and management	Sub-Vision 8

Most of the remaining policy pronouncements (7, 9, 10 and 11) can also be linked to the Vision or to the provisions of the FFA. It is expected that the Regional Water Strategy will equally demonstrate a strong linkage with the FFA.

3.3.5 The Regional Indicative Strategic Development Plan (2004)

The Regional Indicative Strategic Development Plan (RISDP) is the new SADC blueprint for socio-economic development, and was adopted by the SADC Heads of State in 2004. The RISDP recommends that the Southern African Vision for Water, Life and Environment, together with its sub-Visions, forms the basis for the development of the long-term water policy and strategy document. This has indeed been the case for the RWP document as reflected in **Table 3**.

The RISDP has also set targets for the different sectors, those for the water sector being (RISDP, 2004):

- Target 1: Long-term regional water policy and strategy developed and approved by March 2004
- Target 2: Increased awareness, broad participation and gender mainstreamed in water resources development and management by 2005
- Target 3: Centres of excellence for water research and technology development

identified, and strengthened by 2005

- Target 4: Water sector policies and legislation harmonised by 2006
- Target 5: Establish and strengthen at least eight River Basin Organisations (RBO) by 2006
- Target 6: Water data banks and planning networks established and fully operational by 2007
- Target 7: Training and institutional capacity strengthening programmes developed and implemented by 2008
- Target 8: Halve by 2015 the proportion of people without access to safe drinking water and sanitation services, and
- Target 9: Develop by 2015 the water resources infrastructure needed to double land under irrigation.

As far as possible and where relevant, these water sector targets have been used as milestones in the actions recommended in the FFA.

3.4. Linkages between the FFA and other initiatives

The FFA, which is expected to be a “living process”, is required to build on and integrate with other initiatives. Those initiatives mentioned above need to be taken into consideration and are indeed reflected as far as possible in each sub-Vision statement. The following considerations reflect the linkages with some of these initiatives:

Table 4: Linkage between the FFA process and the RSAP

FFA		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	Sustainable Environment	Security from Natural Disasters	IWRDM
RSAP									
Group 1 Legislation, Policy and Strategic Planning									
1	GL for Review and Formul. Of National Water Legislation		★	★	★	★	★	★	★
2	GL for Dam Safety				★			★ ★ ★	★
8	Support for the Implementation of the Protocol	★ ★			★	★	★ ★	★	★ ★
9+10	GL and Support for National Policy and Strategy		★	★	★	★	★	★	★
11	Formulation of Regional Sector Policy and Strategy		★	★	★	★	★	★	★ ★
Group 2 Capacity Building and Training									
3	Capacity Building for Joint RB Management				★	★	★ ★	★	★ ★ ★
7	WSCU Capacity Building	★ ★	★	★	★	★	★	★	★ ★
17+22	Capacity Building of the Water Sector		★		★	★		★	★ ★
23	Waternet						★ ★		★ ★ ★
Group 3 Awareness Creation, Consultation and Public Participation									
4+20+21	Awareness Creation on Water Issues				★ ★	★	★ ★	★	★ ★
13	Study for Expanding Private Sector Participation In Water and Sanitation Services	★ ★ ★	★ ★	★ ★					
24+25+26	Consultation and Participation of Stakeholders in Water Resources Management	★ ★ ★	★ ★	★ ★	★ ★	★	★ ★	★ ★	★ ★

FFA		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	Sustainable Environment	Security from Natural Disasters	IWRDM
RSAP									
Group 4 Information Collection, Analysis, Management and Dissemination									
<i>Improve national and transboundary river basin management, planning and Coordination</i>									
12	Economic accounting of Water Use	★	★	★	★	★	★	★	★
14	Assessment of surface water resources		★		★	★★	★	★★	★
15+19	Expansion of SADC Hycos					★★	★	★★	★
30	Int. Water Resources Manag. of the Orange/Senqu River Basin				★	★	★	★	★ ★
31	Integrated Basin Management Plan for the Okavango River				★		★★★	★	★ ★
Group 5 Infrastructure Investment									
18+27+28+29	Int. Water Resources Manag. of the lake Malawi/Nyassa/Niassa				★★★	★	★★★	★	★ ★
Group 6 Stand Alone projects									
5	Programme on Water Supply and Sanitation for the SADC Region		★★★	★★★	★			★	★
6	Groundwater Mangement Programme for the SADC Region		★★	★	★			★	★ ★
16	Regional Project to Control Infestation and Translocation of Aquatic Weeds		★	★		★★	★★★	★	★ ★
	Floods and Drought Programme	★★	★	★	★★★	★	★★	★★★	★ ★★

Chapter 4: SOUTHERN AFRICA VISION FOR WATER, LIFE AND ENVIRONMENT

4.1. The Vision

Malawi is rich in natural resources, embracing its soils, water and wildlife and to some degree, its minerals. These resources support the socio-economic well-being of the country, and its people are therefore heavily dependent on these natural resources. The use, development and management of Malawi's natural resource base require that sustainable measures and practices are developed and adopted so as to ensure their continued support for the various sectors such as agriculture, energy, water supply and sanitation, industry and environmental requirements.

The uneven distribution of rainfall and the occurrence of extreme events aggravate the level at which the people of Malawi are vulnerable to poverty, hunger and disease. However, the country is going through political, social and economic transformation, with the goal of attaining sustainable development and growth through its various pronouncements (e.g. Vision 20-20) which would ensure a positive and marked change in people's lives. Considerable progress has been achieved in the various sectors that have a direct or indirect impact on people's lives, especially in the water sector, sanitation, health, agriculture, energy, environment and in areas of natural disaster (although much more is required in this respect). To achieve sustainable development, there is need for political will and commitment, stakeholder awareness, involvement and participation, capacity building, institutional rearrangement, legal and policy reviews and the capacity to source adequate financial resources that will be needed in various nation-building programmes. The Southern Africa Vision for Water, Life and the Environment in the 21st Century states that:

“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.”

In addressing some of the existing challenges, southern Africa has come up with a regional Vision for Water, Life and the Environment that seeks to optimise the benefits of sustainability by reducing, capturing or reversing those adverse actions that impact on the environment. The people of southern Africa express through this Vision their desire to derive maximum benefit from the water resources of the sub-region and lay the foundation for prudence in natural resources management both now and in the future. It is recognised that there are intertwining processes that affect or are affected by the water resources of the sub-region and wholly or singly have direct impact on the lives of its people, especially regarding their social, economic and

cultural well-being. The direct and indirect impacts on the environment through people's actions also create a degree of vulnerability and uncertain future.

Malawi faces many challenges which must be considered and addressed if sustainable livelihoods are to be achieved. These include:

- A population that is rapidly increasing
- Sprawling urban centres with fast growing urbanisation
- Widespread and rising poverty
- Worsening food insecurity
- Poor access to water and sanitation services, both in rural and urban centres
- Poor health standards and reduced life expectancy due to disease incidence
- Limited economic activity and dependence on agriculture for food and economic development
- Under-developed energy sources and poor access to energy resources
- Excessive degradation of catchment areas and poor land use and management practices
- Lack of integrated resource use and management between or among sectors, and
- Lack of resources in various sector institutions to deal with these challenges.

The Southern Africa Vision for Water, Life and the Environment therefore encompasses the vital issues affecting Malawi, and is a direct call on the people of the country to follow the sustainable path of political transformation and integration and social, economic and environmental development and management.

Within the context of the regional Vision, specific areas affecting social and economic development in the country require consideration. These are: water quality, sanitation, waste disposal, food security, energy, environmental health, natural disasters and water resources management. These concerns have been considered in much detail by the sub-Vision statements and specific actions have been outlined for adoption so as to make the focus of the Vision a reality.

Although the Vision is seemingly rooted on water resources, it brings together sectoral aspirations that are themselves dependent on that resource. In this regard, there is clear inter-linkage between sectoral actions and the tools that need to be developed to achieve the goal of the Vision.

Since the inception of the Southern Africa Vision for Water, Life and Environment, several activities and initiatives have taken place to set the foundation for

implementation of the desired actions that would allow the people in Member States to realise the Vision. These initiatives and actions have been undertaken both at the sub-regional and national levels, and illustrate the relationship that exists between the Vision, the water sector and other related sectors.

In order to implement the strategic actions that would translate into realising the Vision, the restructuring process of SADC offers an enabling environment for action-oriented activities. While the Vision is shared by all sectors, its realisation depends on the formulation and implementation of a National Framework for Action (NFFA) that brings on board and harmonises sectoral interests.

The dependence on water resources by almost all sectors for their diverse activities requires that their individual organisational, institutional and corporate plans and programmes adopt the strategic actions proposed by those who have considered the Vision in greater detail. The development of the NFFA can be considered as the last stage prior to the implementation of all related country programmes and projects with the aim of achieving the Vision by 2025.

4.1.1. Sub-Vision statements

In order to deal with the challenges that southern African countries face and issues that fall within the various sectors of the economy, the Southern Africa Vision for Water, Life and the Environment has been unpacked into eight sub-Visions. The eight sub-Visions as they apply to Malawi's specific situation are described below (see also **Appendix 1**).

Sub-Vision 1: Equitable and Sustainable Social and Economic Development in Southern Africa

Because of the uneven distribution of resources and wealth within the country, as well as different levels of development and growth in its three regions, this sub-Vision calls for equitable and sustainable social and economic development. In dealing with this social and economic imbalance, it is desired that efforts be taken, for instance, to promote public, private and community partnerships in programme implementation. Other interventions should include the provision of adequate incentives to encourage private sector involvement in national programmes. Sub-Vision 1 therefore visualises a country where everyone has access to better social and economic services and there are no wide differences in the distribution of national wealth.

Sub-Vision 2: Equitable Access to Water of an Acceptable Quantity and Quality

The Vision calls for the equitable access to water of acceptable quantity and quality for all the people of Malawi, this being against a background of uneven distribution of the resource in both time and space. Nonetheless, efforts are required to realise this dream and specific actions have been outlined for adoption. The sub-Vision calls for the people of the country to examine the current constraints that limit access to safe water and sanitation by most of the population. They must then engage themselves in dealing with these challenges so that everyone can gain access to adequate and good quality water, and thereby reduce the incidence of disease.

Sub-Vision 3: Proper Sanitation for All and Safe Waste Disposal

Access to proper sanitation in Malawi remains an issue of grave concern as sanitation development programmes seem to lag behind those for water supply. While water-borne sanitation would have received the same attention as water supply, the majority of people, especially those in peri-urban areas, rely on solid waste disposal systems which lead to water pollution and are a catalyst for disease. The Vision therefore calls for proper sanitation and safe waste disposal for all people, with the aim of improving health standards and implicitly reducing the incidence of disease.

Sub-Vision 4: Food Security for All Households

Food insecurity in Malawi is caused by a number of factors, including:

- Erratic rainfall regimes
- Droughts that have destroyed crops in many parts of the country
- Floods that have swept crops away as a result of incessant rainfall
- Failure by the majority of rural people to purchase foodstuffs due to poverty
- Inability by farmers, especially smallholders, to access affordable farm inputs such as fertilisers and pesticides, and
- Unstable market prices that impact negatively on local farmers.

Since economic development and growth heavily depend on a healthy society, it is important that the people of the Malawi have access to adequate food and that the country is able to produce and feed itself at all times. To do this, the issues that impede food production and access to food sources need to be addressed. It is thus necessary to consider food production methods, agricultural inputs distribution and their allocation, affordability, the development or improvement of food reserves and

the deliberate introduction of mechanisms that generate increased food production in the country. Social and economic development depends on a healthy society and it is essential that everyone has access to adequate food.

Sub-Vision 5: Energy Security for All Households

The majority of Malawi's rural population and some of those living in peri-urban and urban centres currently have little or no access to renewable energy sources. The majority of the people rely heavily on non-renewable sources for cooking heating, lighting and for driving the machines of various industries.

While Malawi is endowed with vast resources from which hydroelectric power can be generated, the demand for renewable energy is still rising because the present facilities are unable to satisfy present demand adequately. The challenges to the national energy utility, the Electricity Supply Commission of Malawi (ESCOM), caused by the siltation of the Shire River channel at its power generation stations, further aggravates the situation.

Solar and wind energy resources are viable options that need to be given due recognition and steps taken to develop these potential energy resources.

Sub-Vision 6: Sustainable Environment

Sustainable utilisation of natural resources is a prerequisite for sustained development and growth in Malawi. Environmental degradation, however, is rampant, requiring the reversal of the current trend of resource degradation to a situation where people realise that their future depends on their own actions. This sub-Vision calls for an ecosystems approach to environmental management and the improvement of capacity for water resources management through training and provision of equipment. It envisages that the people of Malawi provide immediate response to emerging environmental issues, coordinate their efforts and increase collaboration on the sound utilisation and management of the environment.

Sub-Vision 7: Security from Natural Disasters

Southern African countries, including Malawi, face major challenges in dealing with disasters, such as droughts and floods, that impact negatively on social and economic development and growth. Due to the repeated occurrence of these extreme events in recent times, the people of Malawi are more vulnerable to droughts and floods than ever before.

Measures need to be taken to deal with natural disasters. Such measures may include,

among others, human-based communication systems, conceptualisation of early warning and interpretation of scientific predictions based on vulnerability and risk assessments. These measures should then be translated into effective actions through public participation and coordination of national, regional and international early warning activities.

In addition, consideration should be given to a number of important initiatives, including policy and institutional issues, organisational relationships, data availability, analysis and usage, equipment requirements, product services and guidance, professional and technical communications, public awareness and information dissemination to end-users and human resource requirements.

Sub-Vision 8: Integrated Water Resources Development and Management

One way of improving environmental management in Malawi is to change people's perceptions towards natural resources use and management. Incentives should be offered to encourage individual and corporate interest towards sustainable resource use and environmental protection. Economic incentive rather than enforcement often encourages changes in the behaviour of people and economic entities more effectively. Implementation strategies for water resources should now focus more on establishing an appropriate economic environment to promote sustainable natural resource use and less on traditional government-run development projects. Market failure resulting from water pricing mechanisms should be corrected through periodic assessment of consumer tariffs. Government could also consider the option of introducing tax reductions for service providers. Integrated Water Resources Development and Management would secure a healthy environment and prudence in resource use and consumption patterns.

The people of southern Africa have committed themselves to attain in the sub-region by 2025, a status of: equitable and sustainable social and economic development; 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; and Integrated Water Resources Development and Management. It is therefore now the opportune time for Malawi to take decisive steps to implement the programmes and projects that will see the country achieve this Vision. To make the Vision a reality, it must be accompanied by a "framework for action", which has a national dimension. This document represents the National Framework for Action, the NFFA.

4.2. Linkages between the Vision, FFA, Regional Water Policy and Strategy

This National FFA will exist within a fairly complex national policy and strategic environment. It must be consistent with regional and national processes in the water sector, as well as influence or align with the policy and strategy processes in other sectors. **Figure 4** outlines some of the key processes that have linkages with the Regional FFA, distinguishing regional from national processes, as well as the water sector from other sector processes.

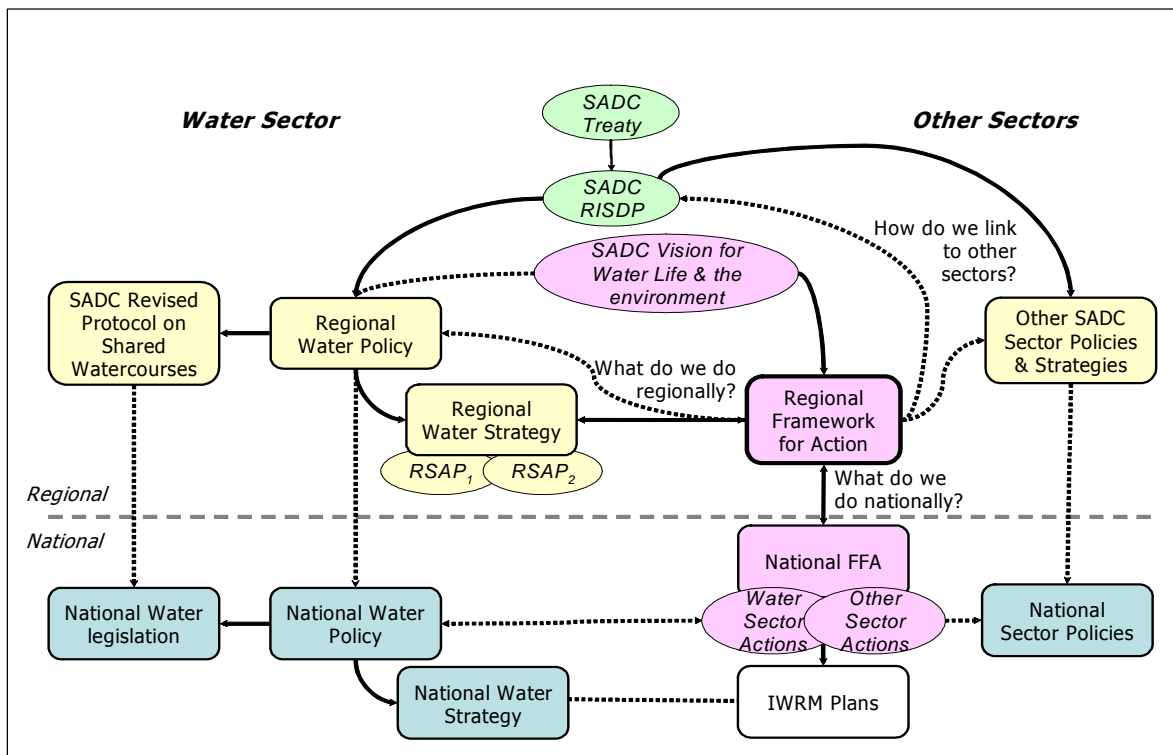


Figure 4: Strategic linkages with the Regional FFA

SADC obtains its mandate from the SADC Treaty and its strategic direction from the Regional Indicative Strategic Development Plan (RISDP), which covers all sectors. Together with the Vision, these form the basis of the Regional Water Policy and Strategy (RWPS), which must be distinguished from the Regional FFA. The RWPS primarily focuses on the SADC Water Sector and the way in which it can contribute to the SADC goals of regional integration and poverty eradication. While the Regional FFA does have a water sector focus, it links this strongly to actions within other related sectors, particularly agriculture (food security), energy, health and environment.

The Regional FFA is the regional integrated strategic framework that gives direct effect to the Vision. As such, it should be oriented towards actions for the water sector regionally, for other related sectors regionally, and for the national FFAs or Plans of Action (PoA). Firstly, from a regional water sector perspective, the Regional FFA should influence and be aligned with the development of the Regional Water Strategy, which will outline the regional objectives and strategic actions for the SADC Water Sector in giving effect to the Regional Water Policy. In turn, the Regional Strategic Action Plan (RSAP) may be interpreted as the five-year plan of action for the RWPS. Similarly, the SADC Revised Protocol on Shared Watercourses is the legal tool to give effect to the Regional Policy.

Secondly, in terms of other relevant sectors regionally, the Regional FFA needs to influence and be aligned with the objectives, targets and strategic direction of these sectors as outlined in the RISDP and in any relevant sector policies and strategies.

Thirdly, the Regional FFA needs to be taken into national processes that result in a National FFA/PoA. The National FFA/PoA must be consistent with the Regional FFA in order to ensure coherence and alignment between different national processes. It will, however, reflect the national context and national priorities in the water and other related sectors.

The National FFA/PoA must reflect, influence and be aligned with national water policies, legislation and strategies, which in turn should be harmonised with the RWPS, as well as the Revised Protocol on Shared Watercourses. The National FFA/PoA should also be consistent with national policies for other relevant sectors, where these are taken up as a national priority for implementation of the Vision.

Finally, the national IWRM/WE plans may be interpreted as a tool to implement the National FFA/PoA. Depending upon the scale of the IWRM/WE plans, these must be consistent with (and in some cases may even be the same as) national and/or catchment level water strategies.

4.3. Strategic objectives for the National FFA

Three broad strategic objectives may be defined to reflect national priorities and the strategic direction implied by the Vision, namely:

- National integration
- Poverty eradication, and
- IWRM/WE Plans.

The first two objectives importantly relate directly to country goals, while the third is a cornerstone of the Vision and the agenda of the water sector. Within each of these strategic objectives, a number of focus areas may be derived from the strategic actions incorporated in the Vision, as outlined below. A fourth strategic objective, financial resources mobilisation, cuts across all focus areas of the above three strategic objectives.

4.3.1. Strategic Objective 1: National integration

National integration and development implies that all three regions of the country move in tandem with each other in the implementation of the Vision. This approach will contribute towards the development of a national economy based on balance, equity and mutual benefit.

Harmonisation of the enabling environment. The creation of a consistent enabling environment for the water sector in Malawi is necessary for national integration and development, and IWRM in shared watercourses. This requires alignment of the national water policy, legislation and strategies between sectors and within shared watercourses, particularly in the creation of coherent regulatory frameworks for the water sector. Further, alignment with other regional and global initiatives enables the country's interests to be pursued regionally and internationally and assists the opportunities for international cooperation.

Coordinated management of shared watercourses. Cooperation in the planning, development and management of shared watercourses through the establishment of agreements and appropriate institutions is fundamental to the coherent and integrated management of the country's water resources and the implementation of IWRM in Malawi.

Effective institutional mechanisms. The establishment of effective water sector related institutional arrangements at national and river basin levels, together with effective national institutions, is necessary to support integration and development. This includes institutionalising cooperation within the water sector and with other sectors, including: the private sector; the establishment of appropriate financial and economic mechanisms for sustainability; and building adequate capacity within these institutions.

Good governance. Good governance at national, river basin and sub-basin levels in the country is a prerequisite for national integration and development. This should be based on: the clear definition of institutional roles and responsibilities; appropriate decentralisation of responsibility; transparency and accountability of decision-making; inclusiveness and representation of participation; efficiency and effectiveness of implementation; and social equity and justice.

Equitable trade and investment. Malawi is moving towards regional macro-economic stability through investment policy, as well as through free trade, being a member of SADC and COMESA. This regional integration must be supported by cooperation and alignment in the water sector, particularly so as not to constrain possible development. Economic diversification away from agriculture may contribute to equitable trade and investment.

4.3.2. Strategic Objective 2: Poverty eradication

Poverty eradication and development is a core goal of the Malawi Government and the implementation of the Vision. It relates to the country's objectives of socio-economic development, food security and industrial development, and will contribute to the improvement of the livelihoods of all people in the country.

Water supply and sanitation. Access to a basic level of water supply and sanitation service is necessary for health and dignity, and is a fundamental prerequisite for eradicating poverty at household and community levels. Particular attention is required in the peri-urban and rural areas of the country, linked with effective health and hygiene education.

Food security. Access to adequate food at household, community and national levels is necessary for the eradication of poverty and the development of a vibrant national economy. This requires effective management of land, appropriate allocation of water and effective development of water resources, together with institutional, managerial and technical capacity.

Energy security. Access to adequate energy at household, community and national levels is necessary for the eradication of poverty and the development of a strong national economy.

Safety from disasters. Managing the impact of disasters on households, communities and the nation is necessary to address poverty and to maintain development. Such disasters may broadly include floods, droughts, disease (e.g. diarrhoea and malaria) and the HIV/AIDS pandemic.

4.3.3. Strategic Objective 3: Integrated Water Resources Management (IWRM)

The integrated management of water resources is fundamental to the Vision and has been adopted by Malawi.

Integrated planning and development. The integrated planning, utilisation and development of water resources (particularly within shared watercourses) is fundamental to IWRM and national integration. A balance is required between

planning for infrastructure development and the allocation of water use, particularly for promoting social development needs.

Environmental sustainability. The environmental sustainability of water resources for continued utilisation must be addressed and considered in the planning, utilisation and development of water resources in the country. This approach is in the interests of integrated management of the resource for all users and particularly for those communities which are directly dependent upon the resource.

Mainstreaming IWRM principles into other sectors. It is not adequate for IWRM principles to be adopted only by the water sector, as they also need to be taken up in the planning of other key sectors, particularly agriculture and energy. This requires a multi-disciplinary approach to integrated development planning.

Empowerment and participation of stakeholders. Participation of stakeholders in decision-making around water resources development and utilisation is a cornerstone of IWRM, and this should be extended to all spheres of the economy. This requires empowerment (awareness and capacity building) of all groups to participate, particularly women, the youth and disadvantaged and marginalised communities (e.g. rural poor). It also requires institutional development at a local level and a leadership role by stakeholder networks, the media and religious leaders.

Improvement of education, training and research. Understanding water resources and related issues (including health, hygiene and HIV/AIDS) is critical for broad participation in IWRM decisions, as well as the improvement of household and communities' livelihoods. The relevance, quality and access to education and training must be appropriate, with foci ranging from primary to adult education and tertiary training. The coordination of regional research priorities and programmes can also contribute to effective regional IWRM.

Private sector participation. Participation of the private sector in water resources management provides a valuable opportunity to leverage technical, managerial and financial resources, and is strongly emphasised in the strategic actions of the Vision. This requires an enabling environment within the country and regions, but may also be fostered through the development of partnerships between the public, private and civil sectors.

4.3.4. Strategic objective 4: Financial resource mobilisation

Fundamental to all the above strategic objectives and focus areas is the cross-cutting issue of resource mobilisation, particularly financial resources. Member State financial and in-kind contributions are critical, but these should be used to leverage cooperating partner support and private sector participation.

Chapter 5: THE NATIONAL FRAMEWORK FOR ACTION

5.1. Introduction

The purpose of the Framework for Action (FFA) is to serve as a strategy for achieving the Southern African Vision for Water, Life and Environment considering the national environment and building on past, present and future initiatives. It also proposes new actions and aims specifically to:

- Initiate a momentum for inclusive grass-roots movements for water action
- Stimulate the political commitment required to enable optimum resource use
- Facilitate the mobilisation of additional investment
- Guide stakeholders to develop their own detailed action plans for implementation, and
- Identify clear opportunities where immediate support can be provided.

5.2. Proposed actions

The FFA proposes *actions* that will contribute to the achievement of the Southern African Vision for Water Life and Environment and its sub-Vision statements. It is presented in a tabular form, dealing with each of the eight sub-Vision statements separately. It proposes for each sub-Vision, actions linked to the relevant focus areas of the three strategic objectives as defined in Chapter 4:

- Regional integration
- Poverty eradication, and
- IWRM.

No action is proposed for the cross cutting strategic objective of *financial resources mobilisation* as it is an underlying pre requisite for each of the other actions proposed under the three key strategic objectives. This strategic objective is further discussed later on the way forward.

The actions proposed are a result of the process outlined in Chapter 2 of this report, through the several consultations that took place at regional and country levels. They also take into account the national context described in Chapter 3. For each action, a desired target date is suggested and the role players identified. In addition, where relevant, a milestone is set, in consistency with other regional initiatives (such as the RISDP) or global (such as the MDGs). As far as possible, and without being exhaustive, indicators and linkages with other existing regional initiatives have been

identified.

By virtue of the dynamic nature of the FFA, the tables will require regular updates as part of their monitoring and evaluation to ensure that new initiatives are identified and linked to the Vision and its sub-Visions for maximum synergy. The proposed actions are found in **Appendix 1** of this report and are arranged by sub-Vision statement. The Appendix therefore constitutes the FFA itself, while this report acts as an introduction and provides the context as outlined in the previous chapters and, in the following chapters, a framework for Monitoring and Evaluation and a proposed Way Forward.

Chapter 6: MONITORING AND EVALUATION FRAMEWORK

6.1. Overview

This chapter proposes a generic monitoring and evaluation (M&E) framework for the FFA to achieve the Southern African Vision for Water Life and Environment in Malawi. The main objectives of the Monitoring and Evaluation framework for the national FFA will be to:

- Track the contribution of the FFA to the achievement of the Vision for Water, Life and Environment and its sub-Visions
- Track progress towards meeting relevant Millennium Development Goals (MDG) in the country
- Provide regular information on progress of the implementation of the FFA in the country
- Guide the formulation of corrective actions in order to fast-track the achievement of the Vision by 2025
- Manage risks and adverse impacts (social and environmental) during the implementation of the FFA, and
- Demonstrate the contribution and integration of the FFA with the broader National Water Resources Policy and the SADC Water Resources Management Framework which are both guided by the Regional Indicative Strategic Development Plan (RISDP), the SADC Revised Protocol on Shared Watercourses, the Regional Water Policy (RWP), the Regional Water Strategy, the (revised) Regional Strategic Action Plan (RSAP) and other relevant SADC Sector policies and strategies.

It is neither practical nor advisable to be prescriptive towards a monitoring and evaluation (M&E) system at the level of the national FFA. It is more practical to recommend a broad system that can be adjusted to suit specific circumstances on the ground during FFA implementation. For this reason, the M&E framework proposed for the FFA is a simple manageable system that uses broad indicators, as suggested in Chapter 5. More detailed monitoring and evaluation will be carried out for each programme either at the regional level, catchment basin level or at the level of District Assemblies where specific activities will be developed for implementation through the Integrated Water Resources Management (IWRM) Plans that are currently being developed by the Malawi Water Partnership (MWP).

In addition, it is important to note that the FFA is expected to feed into both the National Water Policy and the SADC Water Policy and Strategy which are also

intended to contribute to the realisation of the Vision. To ensure synergy with all other national programmes, the M&E framework for the FFA will therefore need to be integrated into the national monitoring and evaluation plan which, if absent, must be developed.

6.2. Monitoring and evaluation process

6.2.1. Monitoring

Monitoring is an on-going process of collection, storage and analysis of data for the improved management and implementation of projects, programmes or plans. As the FFA is implemented, the Malawi Water Partnership and other players will be responsible for monitoring progress at both regional and District Assembly levels.

6.2.2. Evaluation

Evaluation is a time-bound exercise that attempts, systematically and objectively, to assess the impact, effectiveness, efficiency and relevance of projects or plans. The evaluation process will be used to provide analyses of the relevance of the FFA in achieving the three strategic objectives highlighted in the previous chapter. The milestones and indicators identified under each relevant sub-Vision will provide useful tools for effective evaluation of the FFA. A practical phasing of the evaluation process is every five years, with the base year of 2005. This will provide for the measurement of progress towards achieving the 2015 milestones set under the MDGs.

Table 5 provides a broad framework through which the actions proposed within each sub-Vision will be monitored to ensure that they are contributing to the achievement of the identified milestones and targets. The evaluation process will measure the variance between actual and planned achievements and will recommend corrective measures that might be needed to manage such variance. In addition, the process will identify any new initiatives that have started or are planned and which might contribute to the achievement of the Vision. Other new initiatives might be added as new actions that were not captured in the previous FFA.

Table 5: Monitoring and evaluation framework for the FFA

Strategic Objective	Focus Area	Action	Milestones/ target	Actual achievement	Deviation/ variance	Corrective measure (where necessary)	Remarks (including relevant new initiative)
Regional integration							
Poverty alleviation							
IWRM							

Chapter 7: THE WAY FORWARD

7.1. Integration with other initiatives

At the national level, the Vision has been integrated into the National Water Policy. It is expected that the FFA will be similarly integrated into the National Water Strategy that is to be published in the not too distant future.

The actions recommended through the FFA are also expected to guide the development of the National Strategic Action Plan which should focus on infrastructure development. At the regional level, the RISDP also requires infrastructure development to meet the socio-economic development challenges of the region. Consequently, the water sector at the national level is expected to play its due role through the targets of the RISDP which have been captured as milestones for the FFA.

The implementation of the WSSD resolution that all countries develop IWRM/WE Plans by 2005 in order to meet the MDGs by 2015 is gaining momentum in the country. It is expected that the IWRM/WE Plans should be ready before the first quarter of 2006. The IWRM/WE Plans can be considered as a logical follow-up to the FFA at country level and will therefore serve as tools to expand and implement the recommendations of the FFA at that level. The IWRM/WE Plans indeed build on the outcomes of the FFA consultations in the country. Several countries have embarked on this process whereas many still require assistance. The Malawi Water Partnership is committed to collaborate with the Government of Malawi in mobilising resources, and to provide technical guidance and facilitate the development of these plans.

7.2. Financial resources mobilisation

A key challenge to achieving the Vision is mobilisation of the necessary resources, human, technical and financial, to translate it into reality by 2025. It is therefore necessary to find innovative ways to broaden the sources of financing water sector activities. A conducive environment of peace and stability will attract such sources from both within and outside the country.

It is equally necessary to streamline and rationalise government financing to those areas that cannot be run on a commercial basis. The Malawi Government remains responsible for the socio-economic well-being of its people. Major initiatives of infrastructure development and further maintenance and refurbishment cannot be left to the private sector alone. Appropriate public-private sector partnerships should therefore be sought in order to benefit from the strategic inputs from the private sector. Nevertheless, the government should never relinquish its responsibilities as custodian of the country's water resources, their development and sustainable management beyond profit-making.

All these challenges will only be possible if good governance and better decision-making prevail in the country. The evidence of such political commitment is emerging in Malawi. It is therefore hoped that the country is well on track towards achieving the Vision, despite the daunting task of resource mobilisation that this entails.

7.3. Achievements

Throughout the formulation of the Vision and the development of the FFA, the following achievements have emerged:

- The “Southern African Vision for Water, Life and Environment in the 21st Century”, which is an official SADC document, has become the cornerstone for inspiring the water sector in its activities. The Vision has led to the process of developing the National Framework for Action (NFFA) for its achievement. The FFA process has strived to develop a strategic framework that will translate the Vision into reality by 2025.
- The FFA initiative was led at a regional level by SADC and facilitated by GWP-SA. At country level, the Malawi Water Partnership (MWP) facilitated the national FFA processes, which was led by the Government of Malawi.
- The uniqueness of the platform that the Malawi Water Partnership provides at the country level has made it possible to gather input from as many stakeholders as possible. The FFA consultations have often resulted in a momentum that has either revitalised the MWP or led to the establishment of new avenues that would lead to the goal of poverty eradication through the promotion of IWRM.
- A spin-off of the FFA process has also been the confirmation of SADC priorities in the water sector through the outcomes of the country FFA consultations. Using SADC’s own words: “*The FFA process has given us the comfort that the priorities that we have decided upon at strategic level are indeed the same as those perceived by the broad range of stakeholders on the ground, consulted through the FFA process in different countries.*” (SADC RSAP Programme Manager at the FFA Regional Workshop, April 2004).
- The FFA process has further had a strong impact on, and contribution to, the formulation of the SADC Regional Water Policy and Strategy, not only through funding supporting studies, but also through pertinent contributions that were made by GWP-SA during both report drafting and the consultative workshops. Evidence of this impact is the fact that the Vision, which the FFA process seeks to achieve, has defined the main objectives of the RWP as recommended by the RISDP.
- As previously stated, the FFA process has been prepared for the development of IWRM/WE Plans which will help to achieve the MDGs. With their target date of

2015, these are viewed as a milestone towards achieving the Vision by 2025. In this way, the MDGs provide a check point and hence will assist in refocusing the country's efforts and strategies.

7.4. Conclusion

The FFA will remain a “living process” which will have to integrate all future initiatives. The onus remains on the country to continuously revisit the Vision and to strive by all means and initiatives to work towards its achievement by 2025. It is highly unlikely that all the sub-Vision statements will be reached by then, but the work of the present generation, benefiting future generations, should be evidenced by the progress that it makes between now and 2025. We have 20 years from today, in 2005, to 2025.

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