

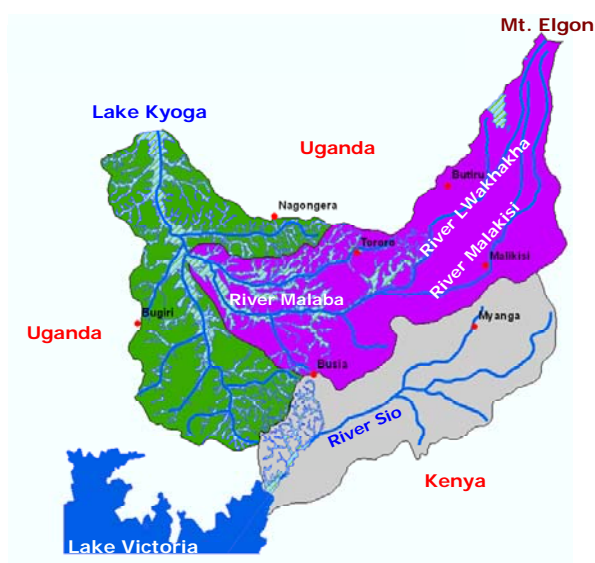


**NILE BASIN INITIATIVE
NILE EQUATORIAL LAKES SUBSIDIARY ACTION PROGRAM**

**Sio-Malaba-Malakisi (SMM) Transboundary Integrated Water
Resources Management and Development Project**
NBI/NELSAP/SMM-TIWRMDP/RFP01/2006

**SMM Policy, Legal, and Institutional
Cooperative Framework**

Final Report



**Water Resources and Energy Management (WREM)
International Inc.**

January 2008 (Revised July 2008)

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Atlanta, July 2008



Dr. Aris P. Georgakakos
SMM TIWRMD Project Director
President WREM International Inc.
Professor, Georgia Institute of Technology

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LIST OF ABBREVIATIONS AND ACRONYMS

AHA	Asset Holding Authority
BOD	Biological Oxygen Demand
CAO	Chief Administrative Officer
CBO	Community Based Organizations
CIDA	Canadian International Development Agency
COM	Council of Ministers
CSD	Commission for Sustainable Development
CWP	Country Water Partnership
DANIDA	Danish International Development Agency
DC	District Council
DEO	District Environmental Officer
DEAP	District Environmental Action Plan
DfID	Department for International Development – U.K
DWD	Directorate of Water Development
DWO	District Water Officer
EAC	East African Community
ECWSP	Eastern Centers Water and Sanitation Project
EIA	Environmental Impact Assessment
ERA	Electricity Regulatory Authority
FAO	Food and Agricultural Organization
GEF	Global Environmental Fund
GIS	Geographical Information System
GoU	Government of Uganda
HEP	Hydroelectric Power
IDA	International Development Agency
IDPs	Internally Displaced Persons
IHP	International Hydrological Program
ILM	Integrated Land Management
IGAD	Inter-Governmental; Authority on Development

IUCN	International Union for the Conservation of Nature
IWRM	Integrated Water Resources Management
LA	Local Administration
LC	Local Council
LG	Local Government
LGDP	Local Government Development Program
LVDP	Lake Victoria Development Program
LVEMP	Lake Victoria Environmental Management Programme
MAAIF	Ministry of Agriculture, Animal Industries and Fisheries
MDG	Millennium Development Goals
MEMD	Ministry of Energy and Mineral Development
MOLG	Ministry of Local Government
MoES	Ministry of Education and Sports
MIS	Management Information System
MoH	Ministry of Health
MTEF	Medium Term Expenditure Framework
MWLE	Ministry of Water, Lands and Environment
NBI	Nile Basin Initiative
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NEMA	National Environment Management Authority
NGO	Non-Government Organization
NWSC	National Water and Sewage Corporation
NGWD	National Ground Water Data Base
PEAP	Poverty Eradication Action Plan
QA	Quality Assurance
RGC	Rural Growth Center
RUWASA	Rural Water and Sanitation East Uganda Project
RWSD	Rural Water Supply Department
RWSS	Rural Water Supply and Sanitation
SIDA	Swedish International Development Agency
SIP	Strategic Investment Plan
SIP 15	Sector Investment Plan for RWSS 2000 -2015
SWRMD	Support to Water Resources Development Department

TAC	Technical Advisory Committee
TC	Technical Committee
TECCONILE	Technical Committee for the promotion of the Development and Environmental Protection of the Nile Basin
TLU	Total Tropical Livestock Units
ToR	Terms of Reference
TPC	Technical Planning Committee
TSU	Technical Support Unit
UK	United Kingdom
UMD	Uganda Meteorological Department
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Science and Cultural Organization
USA	United States of America
USD	United States dollar
UWASNET	Uganda Water and Sanitation Network of NGO's
UWSD	Urban Water Supply Department
UWSS	Urban Water Supply and Sanitation
WAP	Water Action Plan
WID	Wetland Inspection Division
WRAP	Water Resources Assessment Project
WiP	Water for Production
WPC	Water Policy Committee
WPU	Water Permit Unit
WRM	Water Resources Management
WRMD	Water Resources Management Department
WRMS	Water Resources Management Study
WSPS	Water Sector program Support
WSRIC	Water Sector Reform Implementation Committee
WSS	Water Supply and Sanitation
WWAP	World Water Assessment Program

EXECUTIVE SUMMARY

The SMM catchment, with a population of about 4 million people, is endowed with significant natural resources, which if managed sustainably present tremendous potential for social economic development. However, the catchment is also faced with tremendous issues and challenges, which undermine the realization of its development potential and sustainable utilisation of its resources. These include among others: poverty; high population growth; heavy disease burden; deforestation; wetland degradation; cultivation of ecologically marginal areas (e.g., hill slopes), swamps and river banks; land fragmentation; water pollution; and loss of bio-diversity. Despite the existence of various policies and laws and elaborate institutional frameworks in the two countries, the above issues and challenges still prevail in the SMM catchment.

SMM POLICY, LEGAL, AND INSTITUTIONAL FRAMEWORK

One of the main challenges to sustainable water resources management in the SMM catchment is the lack of a comprehensive cooperative framework for the joint planning and implementation of development activities in the basin by communities in the two countries. Activities in the catchment are often planned with a local or national focus without considering the catchment as one whole.

It is against this background that Uganda and Kenya initiated the current project to develop a comprehensive cooperative framework to promote sustainable management and development of the SMM water resources.

The first part of this report presents a detailed discussion of potential options for the development of a policy, legal and institutional framework for the SMM catchment. The options include: Maintain the status quo; Create a bilateral framework between Kenya and Uganda; Create a framework under the NBI; or create a framework under EAC. These options are summarized below.

(1) *Maintain the status quo*

In this case the two riparian states would maintain the existing water resources management arrangements in the catchments. This means that there will be no new formal institutional arrangement between the two states. Each state would take its own administrative and legal measures to manage the basin and when necessary, on *ad hoc* basis, the two states can meet to resolve any outstanding and emergent transboundary issues. This option does not provide any new solutions to the current issues in the catchment

but only serves to undermine the very fundamental principles of sustainable integrated water resources management.

(2) A bilateral arrangement between Kenya and Uganda

In this case the two States would enter into a specific agreement for setting standards, enforcing the standards, and co-operating in the integrated management of the SMM waters. Such an agreement would face two problems. The first problem is that the two countries have already agreed under the EAC framework to co-operate on issues of a transboundary character concerning water resources. The creation of an alternative bilateral arrangement would be a duplication of effort.

The second problem is that such a bilateral arrangement would flout the shared vision of the Nile Basin states envisioned under the Nile Basin Initiative. The shared Vision considers the Nile Basin as an integral whole. Such an arrangement may lead other basin states to suspect that their interests may not be necessarily taken into account which may lead to discord in the Basin.

A purely bilateral arrangement outside the EAC or NBI frameworks is therefore not recommended.

(3) An arrangement under the East African Community

The EAC has put in place the *Protocol for the Sustainable Development of the Lake Victoria Basin*. The Protocol lays down the legal framework for the basin and establishes the Lake Victoria Basin Commission as the entity entrusted to manage the basin. Kenya and Uganda can, therefore, take advantage of these existing arrangements to address the SMM issues.

However, it should be noted that, while the Sio is well covered by the existing Lake Victoria legal regime, an extension of the mandate of the LVBC would be necessary for the Malaba-Malakisi River to be brought under this management framework as this river is outside the Lake Victoria basin. The process for extending the mandate of LVBC is outlined under sections 3 and 4 in **Annex 4b**.

Discussions are already ongoing in the EAC to expand the mandate of the Lake Victoria Basin Commission (LVBC) to cover all East African inland transboundary waters in order to avoid a multiplicity of institutions. The proposal tendered here is therefore consistent with the direction of thinking within the EAC.

(4) A Management Scheme Under NBI

Since the SMM catchment is part of the Nile Basin, it is possible to anchor the SMM cooperative under the Nile Basin Initiative. This arrangement may be achieved in two ways. It may be organised under the present transitional arrangement or it may also be conceived under the proposed Nile Basin Cooperative Framework.

(a) Under the present transitional arrangement - A management mechanism can be put in place in the same way other arrangements under the NBI have come into existence. The Council of Ministers of the NBI, at its meeting, would establish the mechanism by resolution of the Council upon a proposal made by the Technical Advisory Committee (TAC). Like all NBI organs, this would be a transitional arrangement. A draft legal instrument under this model is set out in **Annex 4a**. The SMM institutional set-up thus adopted would remain in place to be inherited by the permanent cooperative framework, when established. This option would, however, have the following disadvantages:

(i) The NBI framework is only a transitional framework. The basin states are yet to adopt a permanent framework. Any proposal made under this arrangement must therefore anticipate future changes depending on the content of the eventual framework. Basing a proposal on an existing permanent framework seems to be more preferable.

(ii) Conflict with existing legal obligations of Kenya and Uganda: A management scheme for the SMM, which is a tributary of the Nile River, must necessarily take into account the national arrangements that both Kenya and Uganda have put in place among themselves and with third parties. It cannot ignore other complementing institutional and legal arrangements such as sub-regional arrangements under the EAC. These agreements involve other states. Under international law, a state must perform its obligations under treaties in good faith. If this principle is to be followed, Uganda and Kenya would be obliged to follow the existing treaty establishing the East African Community and operate accordingly under that treaty.

(iii) Duplication: With respect to the Sio River, which already falls within the Lake Victoria Basin and is governed by The Protocol for the Sustainable Development of the Lake Victoria Basin, a legal and institutional mechanism that subjects it to a different legal regime, would create unnecessary duplication and potential conflict.

(b) Under the Proposed Nile Basin Cooperative Framework - The proposed Nile Basin Cooperative Framework provides for the principle of subsidiarity. It specifically envisions the adoption of sub-basin agreements and other subsidiary legal instruments provided they are not in conflict with the

framework. Under these principles, it is possible to create legal frameworks that will embrace situations like those of the SMM in the form of protocols. The draft resolution proposed under the transitional arrangement set out in **Annex 4a** would easily be redrafted as a protocol. This proposal, however, has the following drawbacks:

(i) The cooperative Framework is not yet in place: The proposed Nile Basin Cooperative Framework has been the subject of negotiation for more than ten years. The riparian states are yet to agree on its provisions. Even when the Co-operative framework is finally adopted by the states, it must necessarily go through various processes before it comes into operation. It must be ratified by each of the states according to its ratification procedures and the right number of ratifications--under the proposed framework there must be 6 ratifications--must be deposited with the depositary before the agreement enters into force. This may further delay any concrete actions even where the two most concerned states wish to proceed.

(ii) The proposed Nile Basin Cooperative Framework accepts the notion of sub-basin arrangements. This provision will make sense only when arrangements for small transboundary sub-basins can be housed under already existing larger sub-basin frameworks of which they are part or from which they can be conveniently managed. The arrangements in the Lake Victoria Basin under the EAC system relating to transboundary water resources management are just such an arrangement that can be readily utilized. When the proposed Nile Basin Cooperative Framework comes into place, the EAC members will be obliged to harmonise any sub-basin arrangements with the framework thus leaving no opportunity for conflict.

Annex 4a provides a prototype resolution that could be used to anchor the SMM framework under the Nile Basin Cooperative Framework.

Recommended SMM Framework Option

The Consultant recommends the EAC as the preferred framework option under which the proposed SMM framework should be anchored. This would enable the exploitation of existing capacities and cooperation mechanisms in the LVBC (and EAC), create the necessary synergies, and avoid proliferation of organisations.

Means of delivering the SMM Cooperation Framework

Implementation of the EAC option would follow either of two modalities provided for under the EAC Treaty making binding decisions upon its member-states namely through the Council of Ministers or through the East African Legislative Assembly.

The legal instrument required here would be to create an enabling law that establishes a specific institutional framework to implement general platitudes

of the Protocol into detailed workable propositions in a specific geographical and social context, in this case the SMM catchment. The enabling law would, among other things, extend the mandate of the Lake Victoria Protocol and the Commission to cover the Malaba-Malakisi basin. The law would also establish an institutional framework to address the specific issues of the SMM basin discussed elsewhere in this report.

Organs of the SMM Cooperation Framework

The organs of the proposed SMM Framework would include: The Council of Ministers; The Sectoral Council; The SMM Sectoral Committee; The SMM Technical Committee; The SMM Secretariat; The SMM Consultative Forum; and The SMM Trust Fund. A detailed description of each of these organs including their respective functions and roles is given in **Chapter 6** and **Annex 4b**. In addition, the LVBC would designate a specific Program Officer responsible for SMM affairs. The officer would be resident at the LVBC Secretariat and would be instrumental in coordinating the initial process of rolling out the SMM cooperation framework.

The fundamental principles underlying the proposed SMM framework include among others: economy, appropriateness, flexibility, and effective stakeholder participation.

Funding for the SMM Cooperation Framework

If the countries decide to anchor the SMM cooperative framework under the LVBC/EAC then resources for implementation of the SMM regional projects will be mobilized as part of the overall LVBC recurrent and development funds.

The source of the recurrent funds will be local contributions from the two governments and private sector agencies that benefit from the commercial exploitation of the basin resources. Development funds will be mobilized from potential development partners and international aid agencies. In the short-term, these funds will be managed through the two proposed Lake Victoria funds, i.e., the Lake Victoria Trust Fund for management of the recurrent funds and the Lake Victoria Development Fund for management of the development funds. In the long-term, the two countries may choose to manage the SMM funds through a specific SMM Trust Fund.

In addition, since the upstream part of the SMM is part of the Mt. Elgon ecosystem, some of the SMM activities in these areas will benefit from funds from the proposed Mt. Elgon Trust Fund. Furthermore, since the SMM catchment is part of the Nile Basin, part of the funds for implementation of the SMM activities will also come from the Nile Basin Trust Fund based on a memorandum of understanding with the LVBC.

On the contrary, if the countries choose to anchor the SMM cooperative framework under the NBI then most of the funding for the SMM regional

projects will be mobilized as part of the overall Nile Basin development funds which will be administered through the existing Nile Basin Trust Fund.

HARMONIZATION OF POLICIES, LAWS, AND INSTITUTIONS

The second part of this report presents a comprehensive analysis of the existing policy, legal and institutional frameworks for integrated water resources management in the two countries including a detailed discussion of potential areas of harmonization in the two frameworks. This part also includes a presentation of specific recommendations on the scope and level of harmonization to be done.

The proposed harmonization strategy recognizes the differences in legal culture and traditions between the two countries, and the specific and unique circumstances in the countries. The main goal of the proposed harmonization is, therefore, not to make the two national frameworks similar but rather to try to eliminate the gaps and differences in the principles, objectives, coverage and capacities of institutions which, over time, can lead to differences in the management of the same river basin on different sides of the border.

Effective harmonization, however, depends on the existence of a cooperative framework governing the relationship between the two countries seeking to harmonize their laws, policies, and institutions. The co-operative framework would, among other things, stipulate the requirement for harmonization and set out the principles on the basis of which the respective frameworks are to be harmonized.

Recommendations for Harmonization

In presenting recommendations for harmonization that are specific to the SMM basin, the approach is to make recommendations with regard to the key water resources related issues whose sustainable management are seen as being critical to the achievement of the objectives of NELSAP. These recommendations are not exhaustive of all the harmonization issues but are illustrative of the framework for harmonization that needs to be adopted.

Harmonization of Policy and Legal Frameworks

(1) Harmonization of Constitutional Provisions

Unlike Uganda, Kenya does not have constitutional provisions, which deal directly with environmental and natural resources management and conservation. All the provisions dealing with the conservation of natural resources are found in the laws enacted under the Constitution.

To the extent that the Constitution is the supreme law of the land, and that certain fundamental principles for the governance of the country should be provided for in the Constitution, it is *recommended that Kenya also make provisions in its Constitution for natural resources management.*

(2) Harmonization of Water Policies and Legislation

The two national Water Policies do not have explicit provisions for the management of transboundary water resources. Although mentioned in both policies, no specific strategies and measures are outlined regarding how issues relating to the management of shared water resources are intended to be addressed. Recognizing this shortcoming Kenya has embarked on a process to revise its National Water Policy specifically to address the trans-boundary dimension. *It is recommended that Uganda similarly incorporate explicit provisions specific to trans-boundary water resources management in its National Water Policy.*

(i) Allocation of Water Rights

Efficient allocation of water rights is dependent on a clear definition of water quality and quantity standards, including the definition of in-stream flow requirements and determination of the reserve for ecological purposes and for meeting basic human needs. In both countries, there is a gap in the legal framework with regard to these critical aspects. Whereas Kenya has put in place a process for classifying its water resources and defining the reserve, this has not yet commenced in Uganda. *There is need to harmonize the respective legal frameworks by defining comparable water quality and quantity standards, classifying the water resources, and defining the ecological reserve and in-stream flow requirements for the SMM catchment.*

(ii) Strategic Planning for Water use

While Kenya is already implementing water resources management at catchment level, Uganda is still at the pilot stage and has not yet put in place the required legal and institutional mechanisms to support water resources management at catchment level. *It is recommended that Uganda expedite the process of establishing the enabling environment for water resources management at catchment level.*

(3) Harmonization of Environmental Policies and Legislation

Unlike Uganda, Kenya has no gazetted National Environment Management Policy. *Kenya needs to expedite the process of development and adoption of a National Environment Management policy to underpin the country's laws on the sustainable management of the environment and natural resources including institutional coordination in natural resources management, which presently is problematic.*

The EIA provisions in both countries are lacking in their capacity to ensure that trans-boundary water resources are managed in an integrated and environmentally sustainable manner. This is attributed to the fact that the relevant laws and regulations in both countries do not make specific provisions for the assessment of trans-boundary impacts. *This issue could be addressed through implementation of the recommendations of the Guidelines on Trans-boundary Impact Assessment, approved by the East African Community Council of Ministers in 2005.*

(4) Harmonization of Wetlands Management Policies and Legislation

Uganda has an elaborate National Wetlands Management policy and law. Whereas the law is flexible in providing a mechanism for permitting uses of wetlands, the Uganda policy is much more restrictive and calls for “*no drainage of wetlands unless more important environmental management requirements supersede.*” The strict implementation of this “no drainage policy” would perhaps prove impracticable in the circumstances of the SMM basin, where wetlands are often drained for rice cultivation purposes. *It is therefore recommended that Uganda adopt a policy based on a sustainable use rather than a no drainage principle.*

Kenya has no National Wetlands Management Policy and is just in the process of developing one. *It is therefore recommended that Kenya hasten the process of development and adoption of her National wetlands policy.*

(5) Harmonization of Agricultural and Land use Policies and Legislation

Uganda does not have a statute that is comparable to the Agriculture Act of Kenya, and therefore the power to control land degradation is not anchored in law. *It is recommended that agriculture laws patterned on the Agriculture Act of Kenya be introduced on both sides of the border in the SMM basin. In Uganda, these rules can be introduced as by-laws of the district councils within the SMM Basin.*

Regarding irrigation, both Kenya and Uganda promote irrigation as a means to enhancing agricultural production and food security. Irrigation is a major water use and tends to target wetland areas. *There is, therefore, a need for an Irrigation policy for the SMM basin that is consistent with the water policy and wetlands policy in both countries.*

(6) Harmonization of Fisheries Management Policies and Legislation

Both Kenya and Uganda have embraced the principle of local community participation in the management of fisheries resources within their localities through formation of Beach Management Units (BMU). However, unlike Uganda, Kenya does not have the appropriate legal framework for the establishment and operation of BMUs. *It is, therefore, recommended that*

Kenya introduce legal and policy measures enabling BMUs to be established in the SMM Basin. Consideration should also be given to the possibility of legalizing the establishment of a network of BMUs across the border.

(7) Harmonization of Forest Management and Wildlife Conservation Policies and Legislation

In both Kenya and Uganda, the law provides for the involvement of user groups and local communities in the management of forests. However, neither law recognizes the role of cross-border communities in forest management. *Given the importance of forests as catchments for the watersheds, it is recommended that consideration be given by both Governments to providing mechanisms for cross border collaboration by forest dependent communities in the management and utilization of transboundary forest resources.*

(8) Harmonization of Information Access Policies and Legislation

Both Kenya and Uganda regard public access to information as an integral part of sustainable water resources management development. In both countries several legislation articles provide for the right of the public to access information held by public authorities. However in Kenya, under the Water Act and the EMCA, this right is limited to information which is required to be placed on a public register, whereas in Uganda, the Constitution gives a more wide ranging right to information, including information which may not necessarily be required to be on the register.

It is recommended that with regard to the SMM Basin, the two countries harmonize their legal frameworks regarding access to information. Ideally information should be made available with little restriction, subject only to the need to protect information which is confidential or the release of which would have national security implications. The charges for the information provided should also be harmonized.

Harmonization of WRM Institutional Frameworks

Whereas an institutional framework exists in Ugandan law for the devolution of the management of water resources to lower level institutions, it is noteworthy that these institutions are not ecosystem-based like in Kenya. *It is recommended that, with respect to the SMM Basin, a catchment-based institution be mandated to be responsible for managing water resources, to match the catchment based approach on the Kenyan side.*

Additionally, Kenyan water resources management law provides for the establishment of water resources users associations as the institutional organ for community based user group participation in water resources management.

Whereas in Uganda there exist “water user associations” these associations are organisations dealing with the management of local community water supply systems, such as boreholes and protected springs. They have hardly any role with regard to water resources management. *It is, therefore, recommended that Uganda consider facilitating the establishment of water resources user associations within their side of the border in the SMM Basin. This would contribute to harmonising the institutional frameworks for local community participation on both sides of the border.*

SMM CAPACITY BUILDING, STAKEHOLDER PARTICIPATION, AND GENDER MAINSTREAMING PLANS

The third and final part of the report discusses the SMM Capacity Building, Stakeholder Participation, and Gender Mainstreaming Plans.

(a) The SMM Capacity Building Plan identifies the critical capacity building needs in the catchment and proposes specific intervention measures designed to address these needs. The Plan entails five strategic intervention measures to be implemented over a period of time to ensure sustainable management and development of the transboundary water resources of the SMM catchment. The measures include the following:

- (i) Promote public awareness and sensitisation campaigns on IWRM to enhance stakeholder awareness and appreciation of Integrated Transboundary Water Resources Management and its contribution to socio-economic development and regional cooperation.
- (ii) Strengthen capacity of relevant stakeholder institutions at central and local government levels to sustainably plan, manage, and develop the shared water resources of the SMM catchment.
- (iii) Support and promote collaboration with Educational, Research, and other Training institutions relevant to the SMM catchment to leverage their expertise and resources in the provision of continuous training and technical support required for sustainable management and development of the SMM water resources.
- (iv) Strengthen capacity and promote collaboration with relevant NGOs, CBOs, and the private sector as key partners in the mobilization and delivery of water related services to the local communities.
- (v) Promote and support the collection, management, and sharing of water resources management data and information to support the planning and decision-making processes in the SMM catchment.

Phase 1 of the Capacity Building Plan will be implemented over a three year period (2009 – 2011) with an estimated budget of 1.5 million US dollars.

(b) The SMM Stakeholder Participation Plan addresses stakeholder participation issues and makes specific recommendations on how to ensure

effective participation of all key SMM stakeholders in the management and development of the basin water resources. The Plan comprises of three strategic intervention measures aimed at enhancing effective stakeholder participation in the sustainable management and development of the transboundary water resources of the SMM catchment. These include:

- (i) Facilitate formation of stakeholder groups in the SMM catchment to provide a platform for discussions among stakeholders with similar interests and to provide an entry point for central and local government agencies responsible for coordination of development activities in the catchment.
- (ii) Capacity building and sensitisation of SMM stakeholders, especially in districts, lower local governments, NGOs, CBOs, women and youth groups, farmer groups, and local communities, to enhance their capacity to effectively participate in the planning and implementation of development activities in the catchment.
- (iii) Support data sharing and information exchange between different stakeholder groups in the SMM catchment to broaden understanding of water resources related issues in the SMM catchment and build confidence of stakeholder groups to participate in the development activities in the catchment.

Phase 1 of the Stakeholder Participation Plan will be implemented over a three year period (2009 – 2011) with an estimated budget of 0.6 million US Dollars.

(c) The SMM Gender Mainstreaming Plan analyses issues related to gender imbalance and inequity in the planning and implementation of water resources management and development activities in the SMM catchment and proposes specific intervention measures aimed at mainstreaming gender in water related decision making processes in the catchment.

The proposed SMM Gender Mainstreaming Plan comprises of four strategic intervention measures aimed at enhancing gender sensitive planning, management, and development of the SMM water resources. These include:

- (i) Sensitisation of policy makers, managers, and the local communities in the SMM catchment on gender mainstreaming in IWRM and its relevance to the socio-economic development of the basin.
- (ii) Build capacity of relevant SMM stakeholder agencies to enhance their ability to undertake gender mainstreaming in water related activities planned and implemented by them.
- (iii) Promote the formation of women groups in the SMM catchment and facilitate their operations through training, equipping and providing them with financial and technical support to undertake water related activities in the basin.

- (iv) Facilitate water related gender mainstreaming activities in the SMM catchment.

Phase 1 of the Gender Mainstreaming Plan will be implemented over a three year period (2009 – 2011) with an estimated budget of 0.9 million US dollars.

1.0 INTRODUCTION

1.1 *Background*

In the last twenty years, the two East African neighbours, Kenya and Uganda have made tremendous strides towards the protection of their water resources. Emerging threats and novel management trends challenged the policies, institutional frameworks, and laws they had inherited from the colonial era. Their efforts have been directed mainly towards two directions. The first direction has been towards strengthening their national policies, institutional frameworks, and laws to meet the challenge. The second has been to intensify interstate cooperation to meet transboundary threats and challenges. It is within this context that this study examines the state of these institutions, policy, and legal arrangements to cope with the management of the water resources of the Sio River and The Malaba-Malakisi River, two transboundary rivers shared by the two states.

Within the national frameworks, the two states have adopted policy documents which encompass novel and up-to-date techniques of managing water resources, water use rights, integrated management of basin systems, decentralisation of water management, delinking resource management from service provision, and involvement of civil society in the management of resources.

These management concepts have been translated into law in both countries. While in Uganda there has been an effort to make regulations to implement the law, in Kenya the improvement of the regulatory system is in its infancy given that the law in the latter is only recent.

In both countries, in addition to the law governing water resources, there has been a spirited effort to improve laws governing complementary sectors such as the environment, forests, wetlands, local government, land use and land tenure, wildlife and protected areas. These improvements have added value to the framework as the sectors impact seriously on water resources management.

The institutional frameworks in the two countries have evolved in response to emerging needs in the management of water resources. New institutional frameworks have also emerged in the complementing sectors. The issue is whether these institutions will have the requisite cohesion and coordination to deliver in the area of transboundary management of water resources.

At the inter-state level, the Sio and the Malaba-Malakisi Rivers form part of the Nile Basin and therefore are subject to the legal arrangements of the Nile. What arrangements affect the two states remain in contention as the lowermost riparian states Egypt and Sudan assert the validity of colonial agreements, while Kenya and Uganda with equal vehemence deny any value to the agreements. However, the post-independence agreements and arrangements remain above question. Agreements such as that which establishes the Nile Basin Initiative (NBI) have impact on the management of these rivers and so will future arrangements affecting the Nile.

The two states belong to the East African Community. The EAC is in the process of developing a comprehensive system of regional integration. It has already developed an agreement for a customs union and various cooperation arrangements of an economic, social and political nature. It is expected to climax into a political federation. Under the auspices of the EAC, The Protocol for The Sustainable Development of The Lake Victoria Basin was signed on 29th November 2003 and was ratified in December 2004. The Protocol promotes the integrated management of the resources of the Lake Victoria Basin and is therefore, a veritable vehicle for cooperation between the two states on one of these rivers the Sio which forms part of the Lake Victoria Basin. This framework is not directly applicable to the Malaba-Malakisi River which forms part of the Kyoga Basin.

One of the key challenges to sustainable integrated water resources management in the SMM catchment is the lack of a comprehensive cooperative framework for the joint planning and implementation of development activities in the basin by communities in the two countries. Activities in the catchment are often planned with a local or national focus without looking at the catchment as a whole. Such a situation is a recipe for water use conflicts in the catchment and if not addressed soon could see the SMM catchment engulfed in dangerous water use conflicts.

It is against this background that Uganda and Kenya initiated the current project on the development of a compressive cooperative framework for sustainable integrated water resources management in the SMM catchment. The project, which was undertaken by WREM International Inc, is aimed at addressing the above issues and challenges so as to ensure that future development initiatives in the catchment are sustainable in the long-term.

The SMM Project

The main objective of the project is *“To review and harmonization of the Legal, Policy and Institutional frameworks for the implementation of the Sio-Malaba-Malakisi transboundary integrated water resources management and development project”*.

The project specific objectives include:

- i) To assess the legal, policy and institutional frameworks for implementation of the Sio-Malaba-Malakisi transboundary integrated water resources management and development Project;
- ii) To review the legal, policy and institutional frameworks for integrated water resources management and development in the catchment;
- iii) To provide recommendations on areas for harmonization of the legal, policy and institutional frameworks for implementation of the Sio-Malaba-Malakisi River Basin Project;
- iv) To develop and recommend a joint cooperative framework for the management and common strategy for the development of the Sio-Malaba-Malakisi catchments.

Specific project outputs include:

- i) Comparison of the effectiveness of the existing policy, legal and institutional frameworks specifically highlighting their impact on the performance of the water sectors in the two countries as far as implementation of water resources management and development initiatives is concerned.
- ii) Specific recommendations on the appropriate policy, legal and institutional frameworks for the sustainable management and utilization of the shared water resources of the basin at local, catchment, national and regional level with particular emphasis on catchment planning and management. The recommended action plan will emphasize aspects of gender mainstreaming and a strategy for stakeholder participation and involvement.
- iii) A comprehensive action plan for the implementation of the proposed recommendations by the two countries regarding the harmonization and streamlining of their policy, legal and institutional frameworks.
- iv) A Comprehensive capacity building plan for the development of effective planning and management institutions and well trained and skilled human resources for the sustainable utilization, management and development of shared water resources at local, catchment, national and regional levels.

In order to support the development of the transboundary cooperative framework, a Sio-Malaba-Malakisi River Monograph has been developed under a separate project consolidating all existing water resources related information in the SMM catchment. The Monograph is intended to provide a comprehensive information and knowledge base on the existing conditions in the SMM catchment that will guide future planning and implementation of development initiatives in the catchment. The Monograph contains, among other things, information on the natural resources of the catchments, land use activities, social and economic conditions, environment, and socio-economic development opportunities.

1.2 The Approach and Methodology

A detailed discussion of the approach and methodology used in undertaking this project is contained in the SMM Policy Final Inception Report.

The general approach adopted in the implementation of the project was one based on active and sustained stakeholder engagement through out the duration of the project. This approach coupled with the significant local expertise in the Consultant's team (>50%) enabled the Consultant to leverage the knowledge and understanding of local issues, challenges and opportunities in the catchment by the riparians themselves. This helped ensure relevance and ownership of the Consultant's final recommendations and proposals.

Upon commencement of the assignment, the Consultant undertook a detailed review of the available relevant documents and reports to have a thorough understanding of the key issues in the basin and ongoing and planned efforts to address them. The review mainly focussed on understanding the existing regional and national water related policies, legislation, and institutional frameworks relevant to the SMM river basin with special emphasis on the transboundary related aspects of the frameworks. Most of the documents reviewed were acquired from the SMM PMU, national and local government agencies, NBI Secretariat, EAC Secretariat, and from the public domain. A list of the documents reviewed is contained in the bibliography to this report.

Besides literature review, the Consultant's team spent a significant amount of time physically consulting with local government officials, NGOs, CBOs, and local communities in all the districts in the catchment. This helped demystify the project among the local communities through clarification of the project objectives and expected outcomes. Additional consultative meetings and discussions were held with officials from national and regional agencies including EAC, LVBC, NBI, NELSAP, and LVFO, among others. A list of some of the officials met including a summary of the discussions held is contained in **Annex 8**.

Several national and regional stakeholder workshops were also conducted to solicit inputs from different stakeholders and seek guidance on some of the issues identified and proposed intervention measures and recommended actions. Stakeholders were particularly instrumental in the identification of the SMM framework options and capacity building needs.

This report addresses all tasks outlined in the ToRs but also includes several useful suggestions and inputs that were made by different stakeholders during the course of the project. Specific attention was given to addressing

the comments of the RPSC members, the NEL-CU officials, and the SMM Project Management Unit (PMU), and the comments raised during all national and regional stakeholder workshops.

1.3 Outline of the Report

Chapter 1 of the report gives an introduction and background to the project and outlines the general approach followed during implementation of the project.

Chapter 2 presents an overview of the SMM catchment and discusses the main water resources related issues and challenges in the catchment. This chapter sets the stage for subsequent discussions in the report and provides the basis and justification for the Consultant's recommendations.

Chapter 3 gives a detailed discussion of the existing Policy, Legal, and Institutional frameworks for water resources management in Kenya and Uganda. The chapter discusses the water sector reform process in both countries and how their national policies, laws, and institutional frameworks have evolved in response to emerging water resources management and development challenges at local and national level.

Chapter 4 identifies and discusses potential areas of harmonization in the existing national frameworks and provides specific recommendations on the scope and level of harmonization to be done. The main goal of the proposed harmonization is not to make the two frameworks similar but rather to ensure that the two national frameworks meet the broader, and largely similar, water resources management and development principles embraced by both countries.

Chapter 5 gives a detailed review of relevant existing international and regional policy, legal and institutional frameworks with specific emphasis on River Nile and Lake Victoria basins from which very useful lessons were drawn that informed the process of developing the SMM Cooperative Framework.

Chapter 6 discusses the proposed Policy, Legal and Institutional Framework for the sustainable management of the SMM transboundary water resources. The chapter discusses the fundamental principles underlying the proposed framework and makes specific proposals regarding the nature and roles of the different organs of the framework.

Chapter 7 highlights the Capacity Building Plan for sustainable management of the SMM water resources. The Plan contains a detailed discussion of the SMM capacity building needs and proposes specific intervention measures to address these needs.

Chapter 8 presents the SMM Stakeholder Participation Plan which analyses issues related to stakeholder participation in water resources planning and management in the SMM catchment and makes specific recommendations on how to enhance effective participation in the management and development of the SMM water resources.

Chapter 9 outlines the SMM Gender Mainstreaming Plan which analyses issues related to gender imbalance and inequity in the implementation of water resources management and development activities in the SMM catchment and proposes specific intervention measures aimed at mainstreaming gender in water related planning and decision making processes in the catchment.

2.0 OVERVIEW OF THE SMM CATCHMENT

2.1 Introduction

The Sio-Malaba-Malakisi catchment lies on the border between Kenya and Uganda and is part of the Nile River Basin. The main rivers originate from the slopes of Mt Elgon, traversing both Kenya and Uganda, and often forming the boundary between the two countries in several sections. River Sio discharges into Lake Victoria while the Malakisi River joins the Malaba River which flows westwards into Lake Kyoga. The geographical area drained by the two river systems extends from latitude 1.133° North to 0.193° South and Longitude 33.673° to 34.571° East and occupies an area of about 1790 Km² in the Malaba-Malakisi catchment and 1450 Km² in the Sio catchment. Figure 1 depicts the geographic subsidiarity of the Nile River Basin, the Lake Victoria Basin, and the Sio-Malaba-Malakisi River Basin.

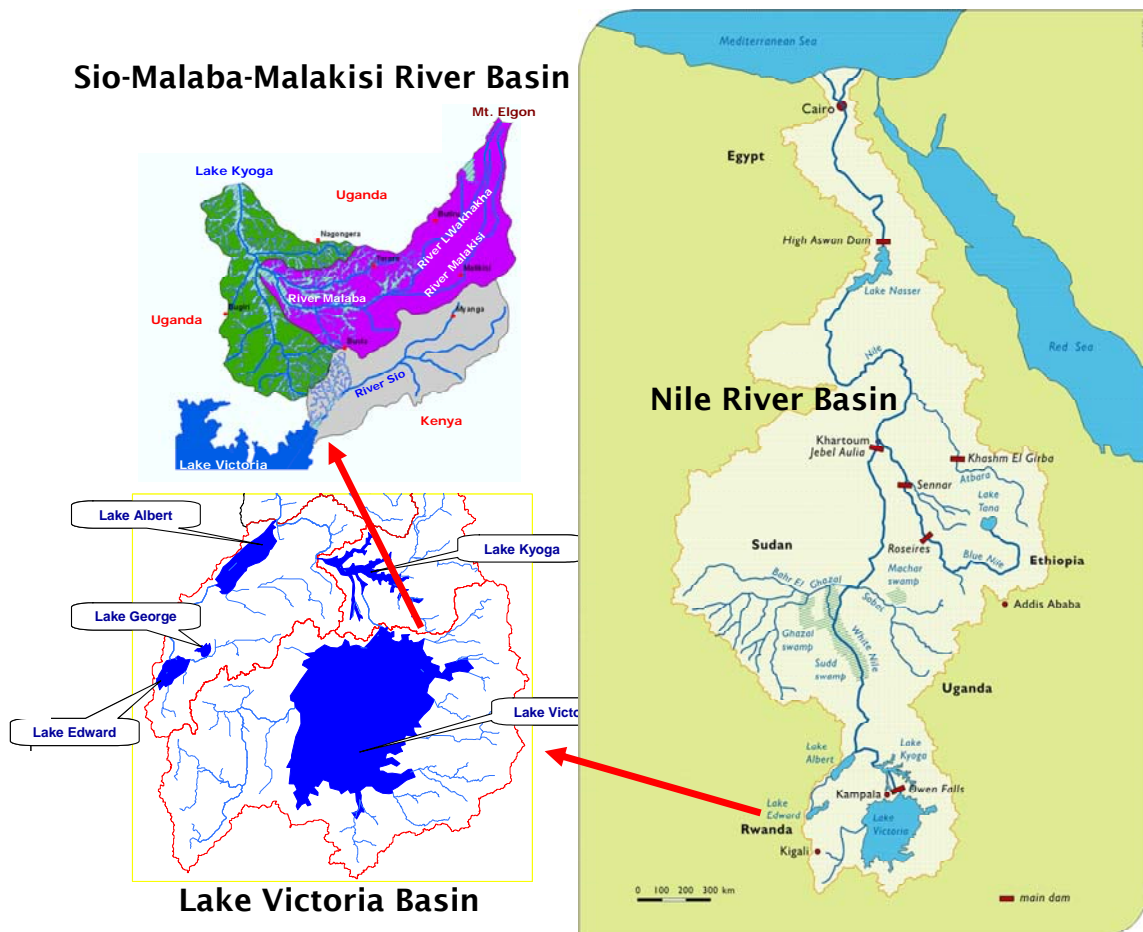


Figure 1: The Sio-Malaba-Malakisi Basin as Part of the Nile Basin

2.2 Socio-economic Conditions in the SMM Catchment

Approximately 4 million people live within the SMM catchment in Kenya and Uganda. The catchment is shared by 15 districts, namely, seven districts in Kenya (i.e., Mt. Elgon, Teso, Busia, Bungoma North, Bungoma South, Bungoma West, and Bungoma East) and eight Districts in Uganda (i.e., Bududa, Manafwa, Butaleja, Namutumba, Iganga, Busia, Tororo, and Bugiri).

(1) **Poverty** - The poverty levels in the catchment are high ranging from 30% to 66%, with many of the rural population struggling to meet their basic needs (shelter, food, water, health and education). Poverty is adversely impacting the active participation of most people in socio-economic development activities including the planning, management, and implementation of water resources management and development activities.

(2) **High Population Density and Growth Rates** - Most parts of the catchment have high population densities ranging from 150 to 500 persons per km² with corresponding high population growth rates ranging from 2% to 5%. This has resulted in heavy and increasing pressure on the catchment natural resources rendering their current rate of exploitation unsustainable. There are already reported cases of increasing water and land use conflicts and unprecedented encroachment on gazetted forests and wetlands in pursuit of additional agricultural land. Because the population growth rates in the catchment are much higher than the rate of expansion of infrastructure and social services, it is becoming increasingly difficult for the authorities to meet their development targets in terms of service delivery (e.g., water supply and sanitation coverage) under current investment levels. It is therefore clear that any progress in achieving the national targets and MDGs in the catchment will require a significantly higher investments in service delivery to cope with the high population growth rates.

(3) **High Disease Prevalence and Morbidity Rates** - Water-related diseases are the most common causes of illness and death among the rural poor communities in the SMM catchment. Diarrhoeal diseases (cholera & dysentery) are among the major killer diseases of young children, accounting for about 20% of all infant deaths in the SMM catchment. For example, data from a health survey conducted in Uganda in 2006 (UDHS, 2006) showed that 26% of the children under the age of five, reported severe diarrhoea. Similarly, in Kenya, water borne and water related diseases are among the top ten causes of outpatient morbidity (MoH, 2006).

Besides water borne diseases, HIV/AIDS continues to pose a very serious public health challenge in the catchment contributing significantly to morbidity and mortality and straining the public health budgets of both countries. About 75% of all AIDS cases occur among people in the most economically productive age group, 20 to 45 years (Ministry of Health, 2001).

This has an adverse impact on productivity and further aggravates the poverty situation. According to the Ministry of Health, Annual Health Sector Performance Report (2004/2005), HIV prevalence rates were reported to be between 6-7% in the Uganda SMM districts. Some of the measures that have been put in place to help curb the spread of HIV/AIDs and eliminate the stigma include creation of awareness on the preventive measures, causes, and effects of HIV, promotion of safe sex, promotion of Voluntary Counselling and Testing, and provision of Anti-Retroviral drugs at subsidized prices.

(4) **Low Water and Sanitation Coverage** - Though water supply and sanitation is one of the priority sectors in both Kenya and Uganda, a large percentage of the population in the SMM catchment still has no access to safe water and improved sanitation facilities. In Uganda, access to safe water facilities is estimated to be 57% and 80% in rural and urban areas respectively, while access to improved sanitation services is 56% for both rural and urban areas. Similarly, in Kenya, 46% of the rural population and about 70% of the urban population have access to safe water.

Provision of safe drinking water and basic sanitation is crucial to the preservation of human health, especially among children. Households with improved access to safe water and sanitation services suffer less morbidity and mortality from water-related diseases, spend less money on health related issues, and are more productive. More specifically, access of girls and women to improved safe water and sanitation services would improve their educational and development opportunities, as this would safeguard their privacy, prolong their school enrolment, and relieve the burden of having to walk long distances to fetch water.

A summary of some of the socio-economic conditions of the SMM catchment districts is given in **Table 1** below.

District	Area (Km²)	Population (Year 2002)	Population Density (Persons/Km²)	Literacy rate (%)	IMR (per 1000 live births)	Poverty (%)
<i>Kenya</i>						
Bungoma	2,068	997,175	482	89.5	78	56
Busia	1261	405,388	321	66	75	66
Mt. Elgon	937	144,679	154	57	64	56
Teso	558	197,395	354	67.4	75	56
<i>Uganda</i>						
Bududa	274	123,102	450	63%	N/A	35
Manafwa	451	262,566	493	67%	59	35
Tororo	1,600	381,259	313	57%	N/A	45
Busia	743	225,008	325	63%	N/A	55
Butaleja	644	157,489	245	78%	N/A	45
Bugiri	5,701	412,395	284	59%	104	55
Namutumba	802	167,691	242	34%	N/A	45
Pallisa	2,051	384,118	328	54%	N/A	55

2.3 Water related Challenges and Issues

2.3.1 Challenges

(1) **Inadequate technical and financial capacity** - One of the most difficult challenges to sustainable water resources management and development in the SMM catchment is lack of adequate technical and financial capacity to plan, implement, and monitor water resources management and development activities. Though both countries had made significant efforts to establish fairly elaborate policy, legal, and institutional mechanisms to address water sector challenges, the lack of capacity to implement these policies and enforce the corresponding laws has grossly undermined their effectiveness. It is therefore common practice to find water users polluting water sources, draining wetlands, cutting down trees, and cultivating up to riverbanks with impunity regardless of the laws and regulations prohibiting such activities. It is thus clear that enacting good policies and laws alone cannot lead to sustainable water resources management and development. For this to occur, commensurate investment in the development of human and institutional capacity is necessary to oversee effective implementation of the policies and enforcement of the enacted laws

(2) **Lack of a Clear Transboundary Cooperative Framework** – Another major challenge to sustainable and integrated water resources management and development in the SMM catchment is the lack of a comprehensive transboundary cooperative framework for the joint planning and implementation of development activities by the governments and communities in the two countries. Current planning activities have a local or a national focus without considering the catchment as a whole. Though development activities in the upstream part of the catchment have significant impacts on downstream water users, current planning and management processes do not recognize such crucial dependencies. As a result, downstream water users are experiencing water quantity and quality degradation due to unsustainable water and land use practices. This ominous trend must be reversed before it sets off destructive social conflicts.

(3) **Gender Inequality in Decision-making** – Decision-making based on gender equity is a pre-requisite for good water governance and a key factor in achieving sustainable water resources management and development. However, although women are responsible for household water, sanitation and hygiene issues, they continue to be marginalized in the water resources management and development processes. According to the findings of the Uganda Participatory Poverty Assessment Process/Second Participatory Poverty Assessment (UPPAP/PPA2), gender

inequality is one of the main reasons for persistent poverty in Uganda. Women's lack of access to and control over resources adversely impacts their productivity and remains one of the root causes of poverty.

There is, therefore, an urgent need to address gender imbalance in the catchment. This can be achieved through the design and implementation of measures that are specifically targeted to alleviate the burden of women to walk long distances to collect water for domestic use, and also measures aimed at empowering women to actively participate in the decision-making processes in their communities.

2.3.2 Issues

The key water related issues in the SMM catchment include low safe water and sanitation coverage, inadequate awareness of water resources related issues, water pollution (surface water and groundwater), deforestation, flooding, drainage of wetlands, excessive soil erosion, cultivation of riverbanks, lack of access to adequate and reliable water resources data and information, and over-exploitation of groundwater resources. A detailed description and discussion of these issues is contained in the SMM Monograph document. A summary of the issues together with their causes and associated impacts is given in **Annex 1** for ease of reference.

2.4 Regional Context of the SMM River Basin Project

2.4.1 NBI Setting

The Sio-Malaba-Malakisi (SMM) River Basin Project is one of the three transboundary integrated water resources management and development (TIWRMD) projects being implemented within the framework of the Nile Equatorial Lakes Subsidiary Action Programs (NELSAP) of the Nile Basin Initiative. The others include the Kagera and Mara TIWRMD Projects. The overall objective of the SMM project is to establish a sustainable framework for the joint management of the water resources of the SMM catchments in order to prepare for sustainable development oriented investments to improve the living conditions of the people in the SMM catchment and to protect the environment. The SMM project components include: (i) Development of a cooperative framework and common strategy for the joint management of the water resources of the SMM catchments; (ii) Development of an investment strategy and conducting pre-feasibility studies for the investment projects; (iii) Building capacity at national, catchment and local levels for the sustainable management and development of the SMM catchments; and (iv) Implementation of small-scale investment projects to build early confidence in the SMM river basin community. A Project Management Unit (PMU) based in

Kakamega, Kenya, coordinates implementation of the project. A Regional Project Steering Committee (RPSC) comprising of senior government officials from Kenya and Uganda oversees the work of the PMU and reports progress to the Nile Equatorial Lakes Technical Advisory Committee (NEL-TAC), which reports to the Nile Equatorial Lakes Council of Ministers (NEL-COM).

The NELSAP

NELSAP is one of the two NBI Subsidiary Action Programs (SAPs) covering Burundi, Democratic Republic of Congo, Kenya, Rwanda, Tanzania, and Uganda—as well as the downstream riparians Egypt and Sudan. NELSAP's mission is to contribute to the eradication of poverty, promote economic growth, and reverse environmental degradation in the NELSAP region. NELSAP is expected to be a long-term program, with multiplier effects resulting in broader economic integration as the program realizes results on the ground.

NELSAP countries are implementing a number of projects to promote poverty alleviation, stimulate economic growth, and reverse environmental degradation in the region. The projects are grouped into two major areas, i.e., Natural Resources Management and the Environment, and Hydropower Development and Trade. Specific projects have been developed targeting investments in agricultural development, fisheries development, water resources management, water hyacinth control, and hydropower development and transmission interconnection.

The NELSAP Coordination Unit (NELSAP-CU) based in Kigali, Rwanda, coordinates and facilitates implementation of the activities of the program. The NEL Council of Ministers responsible for water affairs (NEL-COM) is the top policy organ of NELSAP assisted by a Technical Advisory Committee (NEL-TAC).

The NBI

The Nile Basin Initiative (NBI) is a partnership of the riparian states of the Nile¹ set up in 1999 to foster cooperation among the riparian states with the overall goal to reduce poverty and promote sustainable economic development in the region. The NBI is a transitional

¹ *Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda. Eritrea is participating as an observer.*

cooperation mechanism, guided by a Shared Vision² (SV) and a set of policy guidelines, that was set up to oversee implementation of the Nile River Basin Strategic Action Plan (NRBSAP) pending establishment of a permanent legal and institutional framework for the Nile Basin. The NRBSAP comprises of two complementary programs: the basin wide *Shared Vision Program* to build confidence and capacity across the basin, and *Subsidiary Action Programs* to initiate concrete investments and action on the ground in the *Eastern Nile and Nile Equatorial Lakes sub-basins*. The organs of the NBI consist of a Nile Basin Council of Ministers responsible for water affairs (Nile COM) as the top policy organ; a Technical Advisory Committee (Nile TAC) comprising of senior government technical officials to advise the Ministers; and a Nile Secretariat which provides administrative support to the Nile COM and Nile TAC.

2.4.2 EAC Setting

Both Kenya and Uganda are members of the East African Community (EAC). The EAC countries jointly prepared the East African Co-operation Development Strategy (1997 – 2000) in which the Lake Victoria basin was designated as a regional economic growth zone to be developed through a coordinated implementation process by the Partner States (EAC, 1997a). Subsequently, the EAC countries signed a Protocol for the Sustainable Development of the Lake Victoria Basin (2003) and established a Lake Victoria Basin Commission, headquartered in Kisumu, Kenya, as the permanent organization responsible for the coordination of all development initiatives in the Lake Victoria basin.

Since the Sio River flows into Lake Victoria, it is governed by the legal framework developed for the Lake Victoria basin and falls under the jurisdiction of the Lake Victoria Basin Commission. The Malaba–Malakisi River, on the other hand, flows into Lake Kyoga and is currently not under the jurisdiction of the Commission. However, arrangements are already underway for the EAC to extend the mandate of the LVBC to cover other transboundary water bodies within the EAC countries but outside the Lake Victoria basin.

To ensure synergy between the EAC and NBI/NELSAP development activities in the Lake Victoria basin, a Memorandum of Understanding (MoU) was signed on 12th July 2006 between EAC and NBI. The MoU obliges the two parties to cooperate on several issues pertaining to the sustainable development of the Lake Victoria basin in particular and the Nile Basin in general. Under the MoU, the parties agreed to:

² *To achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources.*

- (ii) Establish effective linkages between the EAC (in particular the Lake Victoria Basin Commission) on one hand and the corresponding NBI institutions (in particular the NELSAP);
- (iii) Undertake joint preparations and execution of studies and promote development of projects and programmes relating to conservation and sustainable development of Lake Victoria;
- (iv) Engage in dialogue with a view to assist in defining and implementing policies and strategies aimed at the conservation of Lake Victoria basin and its ecosystems;
- (v) Undertake joint measures to arrest environmental degradation by preventing invasive weeds such as the water hyacinth; and
- (vi) Conduct joint research and training and exchange data on the conservation of the Lake Victoria Basin.

3.0 REVIEW OF THE EXISTING POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

3.1 National Frameworks

3.1.1 Uganda Water related Policies

Over the last twenty years, Uganda has been going through a process of policy, legal and institutional reforms in all sectors of the economy, including the water sector, to promote socio-economic development and improve on service delivery. This effort has pervaded the entire legal system right from the Constitution to the various statutes and leading to the creation of a local governments system, which is sensitive to issues of sustainable natural resource management. The legal framework relating to water resources management has been one of the key areas of reform. A summary of the existing policy framework for the water sector is given below.

The Constitution of the Republic of Uganda, 1995

The Constitution of the Republic of Uganda, in its national objectives and directive principles of state policy³, provides that "... the state shall promote sustainable development and public awareness of the need to manage land, air and water resources in a balanced and sustainable manner for the present and future generations." In particular, the state is required to take all possible measures to prevent or minimize damage and destruction to land, air, and water resources due to pollution or other causes. Specifically, Article 39 of the Constitution provides for an individual right to a clean and healthy environment. This provision is complemented by Article 50 which gives any person the right to seek judicial action to redress the breach of a fundamental right, irrespective of whether the breach affects him or another person. These provisions are important for broadening the *locus standi* of citizens to redress environmental wrongs.

Article 237 while basically addressing land tenure issues, is also relevant to water issues. It provides that "natural lakes, rivers, wetlands, national parks, game reserves, forest reserves and any land to be reserved for

³ principle XXVII

ecological and touristic purposes" are to be held, by the government or a local government, in trust for the people as determined by Parliament by law. This provision introduces the concept of management of water resources and other named natural resources, as a public trust. As a trustee, the law of trusts limits the powers of the state, in dealing with these resources. The state cannot manage these resources wastefully inconsistent with its obligations to safeguard the long-run interests of the people who are the beneficiaries named by the constitution.

In its article 245, the constitution provides that parliament shall, by law, provide for measures intended: to protect and preserve the environment from abuse, pollution and degradation; to manage the environment for sustainable development; and to promote environmental awareness. This has already been done through the National Environment Act, the Water Act, and the Wildlife Act, in addition to other laws that existed before 1995.

National Water Policy, 1999

The National Water Policy provides the overall policy framework for the water sector and promotes the principles of integrated water resources management as a means to ensuring sustainable management and utilization of Uganda's water resources.

The policy also emphasizes the recognition of water as being both a social and economic good, whose allocation should give first priority to domestic use. The Policy is based on the principle of **"some for all, rather than all for some"** adopted from the 1990 "New Delhi Statement". It anchors operation and maintenance as an important and integral part of all water and sanitation programs to ensure their sustainability. The policy also highlights the key role played by women in all water management and development activities.

The National Water Policy adopts the guiding principles for water resources management emanating from the United Nations Conference on the Environment and Development (UNCED, Agenda 21, Chapter 18) as detailed below:

- (i) Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment.
- (ii) Management of water resources should be done at the lowest appropriate level.
- (iii) Government plays an enabling role in a participatory, demand-driven approach to development.

- (iv) Recognize water as a social and economic good with a value reflecting its most valuable potential use.
- (v) Integration of water and land use management.
- (vi) Recognition of the central role played by women in the provision, management and safe - guarding of water.
- (vii) Recognition of the important role the private sector plays in water resources management.

The overall policy objectives of Government for the water and sanitation sector, are enshrined in the National Water Policy as, to:

- (i) Manage and develop the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations with full participation of all stakeholders”(MWLE,1999) and,
- (ii) Ensure sustainable provision of safe water within easy reach and hygienic sanitation facilities, based on management responsibility and ownership by the users, to 77% of the population in rural areas and 100% of the urban population by the year 2015 with an 80-90% effective use and functionality of facilities” (MWLE, 1999 revised 2004, from 2000 to the 2015 target year) and lastly,
- (iii) Promote development of water supply for agricultural production in order to modernise agriculture and mitigate effects of climatic variations on rain fed agriculture” (MWLE, 1999)

Besides the above objectives, the water policy also acknowledges the need for cooperation on transboundary water resources management issues and promotes decentralization of water management functions.

National Environment Management Policy, 1994

The National Environment Management Policy was adopted in 1994 as the overall government policy framework for the protection and conservation of the environment. The overall goal of the National Environment Policy is “Sustainable social and economic development which maintains or enhances environmental quality and resource productivity on a long term basis that meets the needs of the present generations without compromising the ability of future generations to meet their own needs.” The Policy provides for the establishment of an effective monitoring and

evaluation system to assess the impact of different sectoral policies and actions on the environment, the population and economy.

The Policy also allows for the formulation and revision of relevant sectoral policies concerning environment and natural resources management. Some of the policies that have been formulated in conformity with the National Environment Management Policy include: the National Water Policy (1999), the National Wetlands Management Policy (1996), the Wildlife Policy (1996), the draft National Soils Policy, Fisheries Policy (2000), Forestry Policy (2001) and several District Environment Management Policies.

The policy seeks, among others, to:

- (i) Set the overall goal, objectives and key principles for environment management, and
- (ii) Provide a broad policy framework for harmonization of sectoral and cross-sectoral policy objectives, principles and strategies.

Under Chapter III, Cross-Sectoral Policy Objectives, Principles and Strategies, the Policy, under section 3.5, recognises water as a major factor in the social-economic development of Uganda, and sets the policy objective as, "To sustainably manage and develop the water resources in a coordinated and integrated manner so as to provide water of acceptable quality for all social and economic needs". The Environment policy goes on to provide Guiding Principles and Strategies to implement the Policy, the first being the Development of a National Water Action Plan.

National Wetlands Policy, 1996

The National Wetlands Policy was adopted in 1996 with the aim of promoting the conservation of Uganda's wetlands in order to sustain their ecological, social and economic functions for the present and future generations. Some of the key provisions of the Policy are highlighted below:

- (i) No drainage of wetlands unless more important environmental management requirements supersede.
- (ii) Sustainable use to ensure that the benefits of wetlands are maintained for the foreseeable future.
- (iii) Environmentally sound management of wetlands to ensure that other aspects of the environment are not adversely affected.

- (iv) Equitable distribution of wetland benefits to all people in Uganda.
- (v) Implementation of Environment Impact Assessment (EIA) procedure on all development activities sited in wetlands.

The Policy identifies key ecological functions of wetlands, in relation to water as: maintenance of the water table, reduction of extreme flows, sediment trap, prevention of erosion downstream of wetlands, source of water supply, and prevention of pollution (nutrient and toxin retention).

National Forestry Policy, 2000

Policy statement 8 on watershed management and soil conservation states that; "...watershed protection forests will be established, rehabilitated and conserved". The Government will promote the rehabilitation and conservation of forests that protect the soil and water in the Country's key watersheds and river systems. The policy provides for, among other things, the following measures:

- (i) Develop and promote guidelines on the management of riverside forests,
- (ii) Develop accompanying regulations to the provisions of the National Environment statute (1995), the Water statute (1995) and others relating to watershed management, soil conservation and the protection of riverbanks and lakeshores,
- (iii) Develop and promote awareness, educational and community mobilization programmes to promote good integrated land use practices in hilly areas and protect watersheds from degradation.

National Fisheries Policy, 2000

Uganda enacted a National Fisheries Policy in 2000 to guide the sustainable management and exploitation of Uganda's fisheries resources. Among its objectives was to give both the local government and local communities responsibility in respect to sustainable fisheries resources management, development, and utilization. The Policy also called for the legal recognition of fisheries communities and their rights of management of the fish resources in their locality.

The Policy, among other issues, emphasizes aquaculture as one of the strategies for increasing fish production so as to reduce the gap between fish supply and demand. This has a significant implication on water resources especially with respect to water quality issues.

National Health Policy, 1999

The health Policy reiterates that sanitation lies within the mandate of the health ministry, and notes that the war against poor sanitation has to be intensified and maintained in order to consolidate and improve on the gains made in this area. Key priorities include support to local governments and authorities to improve sanitation and general hygiene. The Policy recommends a review of the Public Health Act in order to enhance enforcement of public health regulations in the country.

National Gender Policy, 1997

The National Gender Policy recognizes women and children as the main carriers and users of water. It anchors the importance of gender responsiveness in terms of planning, implementation and management of water and sanitation initiatives.

The overall policy objective is to mainstream gender concerns in the national development process in order to improve the social, legal/civic, political, economic and cultural conditions of the people in Uganda in particular WOMEN”. Among the policy objectives, are:

- (i) To ensure the participation of both women and men in all stages of the development and planning process, and
- (ii) To promote equal access to and control over economically significant resources and benefits.

The Ministry of Water, Lands and Environment, Directorate of Water development, based on the National Gender Policy, developed the Water Sector Gender strategy, January 2003, with the stated purpose of providing stakeholders with operational guidelines on how gender principles will be mainstreamed within the water sector. The Strategy Goal is, “To develop empowering approaches that will enhance gender equity, participation and access and control to resources in the water sector leading to poverty alleviation”.

Other Policy initiatives relevant to the Water Sector

The Government put in place a Poverty Eradication Action Plan (PEAP), in 1997 and revised in 2000 and 2004, as a national framework for poverty eradication. Recognising the multi-dimensional nature of poverty, PEAP adopted a multi-sectoral approach and the Water sector is recognised as a priority sector instrumental in fighting poverty. As a result initiatives have been undertaken to enhance productivity, competitiveness and incomes leading to the studies on *Water for Production* and for *Strengthening Water Resources Management* and for promoting human development (*The Water Supply And Sanitation Interventions*).

The Government adopted a *Sector-wide Approach to Planning (SWAP) for the Water and Sanitation Sector*, in 2002. SWAP is a mechanism whereby the Government and development partners support a single policy and expenditure programme under Government leadership and follow a common approach.

3.1.2 Uganda Water related Legislation

The Constitution of the Republic of Uganda, 1995

The Constitution of the Republic of Uganda makes provision for natural resources of which water forms an integral part. It clarifies that water resources management is the duty of the state unless otherwise decreed by parliament. It reiterates the fact that government (local or central) holds natural resources in trust for the people of Uganda in accordance with the provisions of the Constitution. As trustee, government only has powers to grant concessions, licenses or permits in respect of the natural resources listed.

The Water Statute, 1995

The Water Act is the principal law for the management of the water resources of Uganda. It provides for protection and management of water resources, water supply and water use and related matters.

The basic foundation of most of its provisions is the reconciliation between protecting the environment and ensuring the availability to the population of water of sufficient quality and quantity. The key and substantive provisions of the Act are as follows:

(A) Rights In Water Are Vested In Government:

All rights to investigate, control, protect and manage water are vested in the government of Uganda⁴. This provision, however, should be read within the constitutional limitations under Article 237, whereby natural water resources are held by the state as a public trust. The government, therefore, is only a manager and not the owner of the resource.

(B) Planning for Water Use:

The Act establishes the Water Policy Committee, an inter-sectoral body, whose function among others is to coordinate the preparation, revision and keeping up to date the comprehensive water action plan for the investigation, control, protection, management and administration of

⁴ See section 5.

water for the nation. Such planning may specify types of activities, development of works, which may not be done without the prior approval of the policy committee⁵. The water action plan is envisaged as a dynamic planning instrument, which changes with the state of the resource and the state of knowledge.

(C) Control on the Use of Water Resources:

The Act provides for the use of permits to use and supply water. A person who has to construct or operate any works or takes and use water needs permission⁶. Also to discharge waste into water bodies, a person has to acquire a permit⁷. The permit system ensures that use of water resources is environmentally friendly and promotes sustainable development. These controls also ensure that water is not treated as a free good but as a good with a value to be paid for. This economic valuation of water is an important incentive for its conservation.

The Water Statute is a modern water law, in that it is flexible, deferring details to regulations that can more easily be changed as conditions change and provides for delegation of powers and broad exemptions from regulation.

The basic foundation of most of the Statute's provisions is the reconciliation between protecting the environment and ensuring the availability to the population of water of sufficient quality and quantity.

The main objectives of the statute are:

- (1) To promote the rational management and use of the waters of Uganda through:
 - (i) Progressive introduction and application of appropriate standards and techniques for the investigation, use, control, protection, management and administration of water resources,
 - (ii) Co-ordination of all public and private activities which may influence the quality, quantity, distribution, use or management of water resources, and
 - (iii) Co-ordination, allocation and delegation of responsibilities among Ministers and public authorities for the investigation, use, control, protection, management or administration of water resources;

⁵ See section 16 and 17

⁶ See section 18

⁷ See section 28.

- (2) To promote the provision of a clean, safe and sufficient supply of water for domestic purposes to all persons;
- (3) To allow for the orderly development and use of water resources for animals, irrigation, industrial, commercial and mining uses, energy, navigation, fisheries, preservation of flora and fauna and recreation in ways which minimise harmful effects to the environment; and
- (4) To control pollution and to promote the safe storage treatment, discharge and disposal of waste which may pollute water or otherwise harm the environment and human health.
- (5) The Water Resources Regulations (1998), Waste Discharge Regulations (1998), Water Supply Regulations (1999) and the Sewerage Regulations (1999) give effect to the provisions of the Water Statute.

The National Environmental Act⁸, 1995

This National Environmental Act (1995) establishes the National Environment Management Authority as the over all body, charged with the management of environmental issues. In brief, the Authority in consultation with the lead agencies is empowered to issue guidelines and prescribe measures and standards for the management and conservation of natural resources and the environment.

The Act provides for the following principles of environmental management:

- (i) Use and conserve the environment and natural resources of Uganda for the benefit of both present and future generations, taking into account the rate of population growth and the productivity of the available resources;
- (ii) Respect the principle of optimum sustainable yield in the use of natural resources;
- (iii) To reclaim lost ecosystem where possible and reverse the degradation of natural resources;
- (iv) To establish adequate environmental protection standards and to monitor changes in environmental quality;
- (v) To publish relevant data on environmental quality and resource use;
- (vi) Ensure that the polluter pays;

⁸ Cap153.

- (vii) Ensure that environmental awareness is treated as an integral part of educational all levels; and
- (viii) To promote international co-operation between Uganda and the states in the field of environment.

The National Environment Act is contemplated as a co-ordinating Act. Its provisions are to be carried out through cooperation between NEMA and other government agencies (lead agencies) through a system of consultation. Local authorities are considered lead agencies.

The Act enables local administrations to be involved in the management of the environment. The Act creates District Environment Committees charged with the management of environmental issues at the district level. Environment Committees are created at the lowest levels of local government structures to enable public participation in environmental decision-making at those levels.⁹ This kind of institutional framework ensures that natural resources are controlled and managed by communities for their own benefit on a sustainable basis.

Management Measures:

One of the key management tools provided by the Act is the requirement of Environmental Impact Assessment for projects likely to have a negative effect on the environment¹⁰. Regulations have been adopted detailing the measures to be taken in conducting an EIA and environmental audits¹¹.

Management measures are required to be taken taking into account measures including incentives, fees and disincentives, which may be prescribed by the minister of finance from time to time¹².

The Act requires that NEMA collaborate with the lead agencies including local governments in the management of lakes and rivers; lake shores and river banks; wetlands; hilltops, hillsides, and mountainous areas; forests, woodlots, rangelands; and in the conservation of biological diversity and land use planning.¹³

⁹ (see sections 14, 15 and 16).

¹⁰ Sections 19 - 21 of the Act.

¹¹ See Environmental Impact Assessment Regulations, No.13 of 1998

¹² See section 33 and section 93.

¹³ See part VII of the Act.

These issues are specifically selected because of their immediate relevance to planning issues. The key emphasis is to promote the use of natural resources within their capacity to regenerate.

Control of pollution

In addition to these provisions relating to management of natural resources, the Act contains important provisions on the control of pollution. Since pollution is a relative state of affairs, the Act provides for mechanisms to establish environmental standards and criteria for what is considered environmentally acceptable behaviour and phenomena¹⁴. Where a person wishes to exceed the standards that have been set, such a person must apply for a pollution license under part VIII of the Act¹⁵.

Enforcement of the law

One of the key prerequisites of ensuring environmental quality is the ability to enforce the law. The Act provides for a variety of mechanisms to ensure that the law will be enforced that go beyond the traditional command and sanction approach of criminal law. The following are some of the mechanisms:

(a) *Environmental easements*: Under the Act, a person may apply for an easement to protect the environment. In view of the constitutional provision relating to the right to a clean and healthy environment and the capacity of any person to enforce that right notwithstanding that his specific rights have been affected, this easement differs from the common law easement.

It may be enforced by anybody who finds it necessary to protect a segment of the environment although he may not own property in the proximity of the property subject to the easement¹⁶.

(b) *Environment restoration orders*: Where the person's activities affect the environment, the Authority or a court may issue a restoration order requiring the person to cease the activities or to restore the environment as much as possible to its original state. The order may be given pursuant to an action brought by an individual or upon the initiative of the Authority¹⁷.

¹⁴ See sections 24 - 32.

¹⁵ See sections 57 - 66.

¹⁶ See sections 72 -76.

¹⁷ See sections 67 - 71.

(c) *Awareness rising*: The need for popular awareness is a key requirement for enforcement of legislation. NEMA is given the mandate to carry out education and awareness campaigns to ensure that the public participates in environmental decision-making and enforcement¹⁸.

(d) *Licensing and registration of activities and substances*: The licensing of pollution has already been discussed above. There are other activities that require specific permits. These include the import, manufacture, and disposal of hazardous chemicals, wastes and substances. In order to control the environmental effects of these substances the law requires their classification and labelling¹⁹.

(e) *The use of economic and social incentives*: The Act clearly provides that management measures should be carried out in conjunction with the application of social and economic incentives including taxation measures²⁰.

(f) *The use of criminal law*: Criminal law remains a veritable instrument for the control of behaviour because of the natural tendency of man to fear the infliction of pain, isolation or economic loss. Therefore, the Act provides for serious penalties for infraction of its provisions. It is, however, recognized that criminal law cannot be the mainstay for the enforcement of law but is a necessary supplementary measure to the approaches outlined above²¹.

Some of these enforcement mechanisms are worthy of study as possible approaches to augment the system for the enforcement of a future law on physical planning.

Wetlands Management under the Environment Act

Wetlands although looked at as part of the environment in general, were given specific treatment in Part VII of the Act. The operative provisions are sections 34, 35, 36 and 37, which relate to matters that fall within the definitions of wetlands under the Ramsar Convention. These provisions attempt to incorporate the wise use approach rather than the position of the Wetlands Policy.

Section 34 deals with the management of rivers and lakes while Section 35 provides for the management of riverbanks and lakeshores. It requires

¹⁸ See sections 85 - 87.

¹⁹ See sections 58 - 65, and sections 77 - 84.

²⁰ See part VII.

²¹ See part XIII.

a collaborative approach between the central government, the districts and lower local governments to collaborate in determining and implementing the measures necessary for the management of lakeshores and riverbanks. The size of the river and lake and existing interests in land in such banks or shores must be taken into account in making guidelines and regulations for their management.

Sections 36 & 37 provide for the sustainable management of wetlands. Under these sections, NEMA is empowered, in consultation with lead agencies, District Environment Committees and local environment committees to establish guidelines for the sustainable management of wetlands, to identify wetlands of local, national, and international importance and to declare wetlands to be protected wetlands. Human activities may be prohibited or limited in protected wetlands.

Sections 34 - 37 stress the need for environmental impact assessment for activities and developments in wetlands. At the same time the law governing wetlands must be seen within the total context of the Environment Act in general and especially the provisions relating to pollution, environmental restoration orders, environmental easements, public awareness, and enforcement of the law.

The provisions of the Act have been elaborated in the *National Environment (Wetlands, River Banks and Lake Shores Management) Regulations, 2000*.

The above legal provisions, as distinct from the policy, do not completely prohibit the drainage or other use of wetlands. They only require that a permit be sought, and certain pre-requisite procedures be followed. In practice, however, the popular but mistaken view has been that no use of wetlands is permissible.

The National Water and Sewerage Corporation Statute

The Statute establishes the NWSC as a Water and Sewerage Authority and gives it the mandate to operate and provide water and sewerage services in areas entrusted to it on a sound commercial and viable basis.

The Land Act, 1998

The Land Act (1998) provides for the tenure, ownership and management of land. The Act vests all rights to water resources in the Government and empowers the Minister responsible for water to regulate the management and utilization of such water. The Act allows for reasonable use by the occupier or owner of a piece of land, of water for domestic and small-scale agricultural purposes. The Act provides that the government

or local government holds land in trust for the people and protects environmentally sensitive areas such as natural lakes, rivers, groundwater, natural ponds, natural streams, wetlands, forest reserves, national parks and any other land reserved for ecological and tourist purposes for a common good of the citizens of Uganda.

Subject to Article 237 of the constitution, all land in Uganda is vested in the citizens of Uganda and is owned in accordance with customary, freehold, mailo and leasehold land tenure systems²².

Under the Land Act, a person who acquires land is required to manage and utilize it in accordance with the existing environmental laws²³(including the Water Act) and any use of land must conform to the law relating to town and country planning²⁴.

Like the Constitution, the Act, provides that the government or local government holds in trust for the people and protects environmentally sensitive areas such as natural lakes, rivers, ground water, natural ponds, natural streams, wetlands, forests reserves, national parks and any other land reserved for ecological and tourist purposes for a common good of the citizens of Uganda²⁵. Government has no powers to lease or otherwise alienate any natural resource mentioned above but may only grant concessions or licenses or permits in respect of that natural resource.

The Local Governments Act, 1995

The Local Government Act (1995) defines roles for different levels of government in provision and management of water and sanitation related activities. The Act stipulates that provision of water and maintenance of facilities is a role of Local Governments in liaison with the Ministry responsible for Water Affairs. The Act empowers the different levels of government to plan and implement development interventions according to identified local priorities.

Part 2 of the Second Schedule to the Act prescribes the functions of Government that the District council is responsible for. The following are the functions relevant to water resource management:

- (i) Forests and wetlands
- (ii) Environment and Sanitation
- (iii) Protection of streams, lakeshores, wetlands and forests.

²² Section 2.

²³ See section 43.

²⁴ See section 45.

²⁵ Section 44

Part 3 of the Second Schedule to the Local Governments Act, prescribes the functions for which the Urban Councils are responsible. Some of the functions relevant to water resource management are:

- (i) Providing sanitary services,
- (ii) Providing water supplies outside the jurisdiction of National Water and Sewerage Corporation.

Under Part 4 of the Schedule, the District councils may devolve services and functions to the Lower Local governments including the protection of wetlands, the protection and maintenance of local water resources, and any other functions the District may delegate. It is not clear how many districts have formally devolved these functions.

The Uganda Wildlife Act²⁶, 1996

The Statute provides for sustainable management of wildlife, to consolidate the law relating to wildlife management, establish a co-ordinating, monitoring and supervisory body for that purpose. It fundamentally changed the way wildlife is managed. It repeals the National Parks Act and the Game (Preservation and Control) Act²⁷. The Act provided for the establishment of the Uganda Wildlife Authority as a body corporate²⁸ whose principal function is to ensure the sustainable management of wildlife conservation areas and wild life in general.

The Statute changes the philosophy of wildlife conservation in Uganda. It moves away from a state-centred management system to a system that encourages public participation and private sector involvement. It establishes local government wildlife committees, so as to involve local communities in wildlife management issues. It further updates and modernizes the law and goes a long way to implement the conservation philosophy of the Convention on Biological Diversity. The statute upholds wildlife as a sustainable resource and provides for the means of management and sustainable use of the resource.

Fisheries Act, 1964

In Uganda the Fish Act of 1964 governs the utilization and management of fisheries resources. Following the enactment of the National Fisheries Policy in 2000, government embarked on the process of drafting a new Fisheries Bill based on the principles enshrined in the policy. The new

²⁶ Cap 200

²⁷ See section 94

²⁸ See section 5(2)

Bill provides for the legal recognition of fisheries communities and their rights of management of the fish resources in their locality. Pending the enactment of the Bill a subsidiary statutory instrument - The Fish (Beach Management Rules) 2003 – was promulgated to provide the legal basis for the creation of BMUs in Uganda. The fisheries resources management arrangements currently operating in Uganda comprise, at national level the Department of Fisheries, at district level, the district officers from the District Fisheries Department and BMUs at community level, including in the SMM basin.

National Forestry and Tree Planting Act, 2003

The National Forestry and Tree Planting Act (2003) provides for the conservation, sustainable management and development, and use of forests for the benefit of the people of Uganda.

Under part I, the Act sets out purposes of the Act, which inter alia, include: to ensure that forests and trees are conserved and managed in a manner that meets the needs of the present generation without compromising the rights of future generations by safeguarding forest biological diversity and the environmental benefits that accrue from forests and trees

Under the Act, forests are classified into: central forest reserves, local forest reserves, community forest reserves, and private forest reserves and forests forming part of wildlife conservation areas²⁹.

The responsibility for forest reserves is vested in the government. The Act stipulates that;

“The government or a local government shall hold in trust for the people and protect forest reserves for ecological, forestry and tourism purposes for the common good of the citizens of Uganda”.

Further, the Act provides for the management of forest reserves by stating that forests shall be developed and managed so as to conserve inter alia, biological diversity, ecosystems and habitats, conserve natural resources, especially soil, air, and water quality and also conserve natural heritage and promote aesthetic, cultural and spiritual values³⁰

The minister may declare a reserve for the purpose of protecting streams, rivers, lakes, lakeshores, riverbanks or wetlands.³¹ The minister is also

²⁹ Section 4

³⁰ Section 13

³¹ Section 6 & 9

empowered to formulate policies and plans for ensuring the implementation of functions connecting with the implementation of the Forestry Policy, the National Forestry Plan and the Act³²

Under Part VIII of the Act the National Forestry Authority is established and its functions set out.³³ The Authority is mandated, in consultation with the respective local governments, to set up Forestry Committees.

Public Health Act

The Public Health Act provides for the drainage of buildings and the maintenance of good sanitation in buildings and homes. It provides for the powers of the local authorities to administer the Act.

3.1.3 Uganda Water Sector Institutional Framework

The National Water Policy provides for a dynamic framework for the management and development of the country's water resources by providing for both short term and long term strategies for the development of management capacity for the sector, based on an analysis of evolving sector priorities and management capacity levels.

1. Water Sector Coordination

Coordination of water sector activities at national level is undertaken through two important committees whose responsibility is to provide policy and technical guidance for all sector development activities. The two committees include:

- (i) **The Water Policy Committee (WPC):** The Water Statute, Article 9, provides for the establishment of an eleven-member multi-sectoral Water Policy Committee (WPC) as the principal advisory organ to the Minister responsible for water affairs. WPC has both advisory roles to the Minister and executive functions. Its executive functions include setting national policies, standards and priorities, revising and updating the water action plan, coordinating revisions to relevant sector legislation and regulations, and coordinating sector ministries' plans and projects which affect water resources. Functions of the WPC include, among others, settlement of disputes between government agencies and coordinating the formulation of an international water resources policy.
- (ii) **The Water and Sanitation Sector Working Group (WSWG):** The WSWG, chaired by the Permanent Secretary of the Ministry of Water and

³² Section 46

³³ Sections 52-62

Environment, provides policy and technical guidance for water sector activities in the country. The group, which meets at least four times a year, comprises representatives from MWE, DWD, DWRM, NWSC, MoH, MES, MFPED, development partners and NGOs represented by UWASNET. Two sub-sector working groups, responsible for Water for Production and Sanitation report to the WSWG.

In order to complement the role of the above two committees at a lower level, District Water and Sanitation Coordination Committees (DWSCs) have been established in each district to oversee the implementation of WSS programmes, strengthen collaboration and coordination with other sectors (health, education, social development and agriculture) and other players (private sector, NGO and CBOs and civil society). Their membership consists of district administrative and political leaders, technocrats and NGO/CBO representatives.

2. Water Sector Operational Framework

In order to ensure efficient delivery of services, the water and sanitation sector is divided into four sub-sectors i.e.

(i) **The Water Resources Management (WRM) sub-sector** is concerned with the integrated and sustainable management of the water resources of Uganda so as to secure and provide water of adequate quantity and quality for all social and economic needs for the present and future generations. It does this through monitoring and assessing the quality and quantity of water resources, storing, processing and disseminating water resources data and information to users, providing advice and guidance to water development programmes, providing advice on management of trans-boundary water resources, regulating water use (issuing of water permits) and providing water quality analytical services. WRM functions are generally centralized and are implemented by the Directorate of Water Resources Management in collaboration with other stakeholders. As part of the ongoing reform process, government is considering to decentralize some water resources management functions to the lowest appropriate levels.

(ii) **The Rural Water Supply and Sanitation (RWSS) sub-sector** addresses the provision and maintenance of adequate supply of water for human consumption and domestic chores. Sanitation aspects include sanitation promotion and hygiene education in rural communities and schools. Rural water supply is decentralized to District local Governments. Sanitation is the mandate of Ministry of Health (MoH), Ministry of Water and Environment (MWE) and Ministry of Education and Sports (MoES) according to a memorandum of understanding signed in 2001.

(iii) **The Urban Water Supply and Sanitation (UWSS) sub-sector** comprises services for domestic water supply, industrial and other uses to gazetted towns and centres with population of more than 5,000 people. Urban WSS is sub-divided into 19 large towns³⁴ and 180 small towns³⁵. Large towns are managed by NWSC under a performance contract arrangement with Government. Small town schemes are managed by private operators accountable to Water Authorities gazetted by the Minister of Water and Environment.

(iv) **The Water for Production (WFP) sub-sector** addresses provision of water for agricultural production in collaboration with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). This includes provision of water for irrigation, livestock, fish farming and rural based industry. Water for production is considered to be an area of increasing importance for Uganda's future development of the agricultural sector in line with the Plan for Modernization of Agriculture (PMA).

3. Institutional Roles and Responsibilities

Central Level:

At central level, several ministries, line departments and non-governmental organizations are involved in the water and sanitation sector as follows:

(i) **The Ministry of Finance, Planning and Economic Development (MFPED)**, mobilizes funds, allocates them to sectors and coordinates donor inputs. MFPED reviews sector plans as a basis for releasing allocated funds, and reports on compliance with sector objectives.

(ii) **The Ministry of Water and Environment (MWE)** has overall responsibility for setting national policies and standards, and priorities for water development and management.

(iii) **The Directorate of Water Development (DWD)**, under MWE is the lead agency responsible for coordinating and regulating all water supply and sanitation activities and providing support services to local Governments and other service providers. DWD supports districts in implementing decentralized WSS programmes and implements schemes (new construction and rehabilitation) in small towns and rural growth centres. DWD has established eight Technical Support Units (TSUs) to support Districts to build their capacity to implement their sector

³⁴ *Large towns are classified as those with populations of 15,000 or more. NWSC provides water and sewerage services in 18 large towns.*

³⁵ *Small towns are those with populations of 5,000 to 15,000, and also include District Headquarters and towns with populations greater than 15,000, which are not yet gazetted as NWSC towns.*

mandates. DWD is also responsible for the development of water supplies for water for production.

(iv) **The Directorate of Water Resources Management (DWRM)**, under MWE is the lead agency responsible for water resources management. The key functions of DWRM include: provision of water resources related advisory services to the government, private sector and NGOs at the national and local levels; Regulation of water use which involves issuing of permits for water abstraction, wastewater discharge, hydraulic works construction, borehole drilling and easement certificates; water resources monitoring and assessment which involves data collection, management, analysis and dissemination and strengthening of the national water resources knowledge base; and coordination of trans-boundary water resources related initiatives most notably relating to the River Nile and Lake Victoria and other international initiatives like the African Ministers' Council on Water (AMCOW).

(v) **The Policy and Planning Department of MWE** monitors and evaluates "*sector development programmes to keep track of their performance, efficiency and effectiveness in service delivery*" (MWLE, 2004b). This function is executed by undertaking field trips on a quarterly (or six-monthly) basis in Districts and preparation of PAF Monitoring Reports on Programmes and Activities.

(vi) **The National Water and Sewerage Corporation (NWSC)** operates and provides water and sewerage services 18 large urban centres assigned to it. NWSC's activities are aimed at expanding service coverage, improving efficiency in service delivery and increasing labor productivity. Key among its objectives is to plough back generated surpluses towards infrastructure improvements and new investments. The implementation of urban reform aims to create an independent regulatory framework and an Asset Holding Authority (AHA), which will affect the future management of urban water and sanitation systems.

(vii) **The Ministry of Health (MoH)** is responsible for hygiene promotion and household sanitation. The Public Health Act (1964) provides the legal foundation for the promotion of good sanitation in Uganda and has been augmented by the issue of further guidance. The Health Sector Strategic Plan (HSSP) includes the output: "personal, household, institutional and community health promoted". The Environmental Health Division (EHD) is the main part of the MoH responsible for the development / initiation of good strategies and approaches and for the provision of support to the decentralized structures.

(viii) **The Ministry of Education and Sports (MES)** is responsible for hygiene promotion and sanitation in primary schools. It works to ensure that schools have the required sanitation facilities and provide hygiene education to the pupils. It also promotes harvesting of rainwater for hand washing after latrine use.

(ix) **The Ministry of Gender, Labor and Social Development (MGLSD)** is responsible for gender responsiveness and community development/mobilization. It assists the sector in gender responsive policy development, and supports Districts to build staff capacity to implement sector programmes.

(x) **The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)** spearheads agricultural development, including the use and management water for water for production (irrigation, animal production and aquaculture). It interfaces with MWE in the implementation of water for production programmes.

Local Level:

(i) **Local Governments** (Districts, towns, Sub-Counties) are empowered by the Local Governments Act (1997) to take responsibility for the provision of water supply and sanitation services. They receive grant funding from the central government and also mobilize local resources for implementing rural WSS programmes and to support small town WSS. Local Governments, in consultation with DWD/MWE also appoint and manage private operators for urban schemes outside the jurisdiction of NWSC. District Governments are being encouraged to set up District Water and Sanitation technical Committees (DWSC) to oversee and provide effective coordination of water sector activities in the respective Local Governments. A detailed discussion of the Local Government institutional set-up is given in **Annex 2**.

(ii) **Private Sector firms** undertake design and construction in the sector under contract to local and central government. Private hand pump mechanics and scheme attendants provide maintenance services to water users in rural and peri-urban areas. Private operators manage piped water services in the majority of small towns with piped water and vendors often bring water from the point of collection to the user.

(iii) **Non-Government Organizations (NGOs) and Community Based Organizations (CBOs)** are active in the provision of water and sanitation services (construction of facilities, community mobilization, training of communities and local Governments, hygiene promotion as well as advocacy and lobbying. NGOs involved in water sector activities have formed a network called Uganda Water and Sanitation Network (UWASNET) for improved coordination of their activities in the water sector. The network also provides a platform for constructive engagement with government and donors in the water sector and serves to promote sharing of experience between the members. There are currently (2006) over 180 NGOs and Community Based Organizations (CBOs) involved in water supply and sanitation activities in different parts of the country. The government and development partners provide financial support towards the operations of the UWASNET secretariat.

(iv) **Local Communities** are responsible for demanding for, planning, making cash and in-kind contributions (Land, labor, materials, etc), participating in the implementation, operation and maintenance of most rural WSS facilities. Upon construction of a water source, a Water Users Committee (WUC) is usually established to take responsibility for its operation and maintenance. The water statute provides for the formation of Water and Sanitation Committees, Water User Groups, and Water User Associations, as local community level organizations, to ensure the sustainability of the water supply and sanitation facilities through proper management, operation and maintenance by the user communities.

4. Gender Mainstreaming in the Water Sector

The Water Sector Gender Strategy (2003) provides the framework and operational guidelines on how gender principles should be mainstreamed within the water sector activities. The Strategy Goal is, “To develop empowering approaches that will enhance gender equity, participation and access and control to resources in the water sector leading to poverty alleviation”.

The Water Sector Gender Strategy encompasses the mainstreaming of gender, addressing women specific issues in all aspects related to water and sanitation and stipulating the way forward to mainstreaming gender in all water sector activities.

The Strategy specifically addresses the plight of women who are faced, by, among other constraints, walking long distances to fetch water; inadequate participation in the decision making process, e.g., low representation on Water User Committees; lack of access to relevant information, e.g., regarding the possible technology options, rationale for levying of water user fees, etc.; inadequate security at and to the water points for children and women.

Regarding sanitation, the strategy addresses specific issues related to household sanitation, particularly household pit latrines, which have a cultural and traditional dimension and affect men and women differently.

5. Water Sector Reform Process

The Reform Process commenced in 1998, with the key objective “to ensure that water supply and sanitation services were provided with increased performance and cost effectiveness; and to reduce the government’s financial burden without compromising the provision of equitable and sustainable services.” The reform studies were conducted in the following sub-sectors: Rural Water Supply and Sanitation; Urban

Water Supply and Sanitation; Water for Production; and Water Resources Management

During these studies, detailed situation analysis of the four sub-sectors was carried out leading to the preparation of comprehensive investment plans and time bound national targets for the sector up to 2015. In demonstrating its commitment to the reform process, government has already embarked on the process of implementing some of the strategic recommendations from these studies.

The reform studies were undertaken through a highly participatory process, bringing on board civil society, NGOs, external support agencies and government together, leading to real partnerships and mutual understanding among sector stakeholders.

The study outcomes are summarized in **Annex 3**.

3.1.4 Kenya Water related Policies

The overall Government policy for the water sector Kenya is geared towards devolving policy implementation to relevant stakeholders, especially local communities and the private sector. This approach is detailed in the government Strategy for Performance Improvement in the Public Service and the policy on reforms and privatisation of public enterprises. Under this new policy dispensation, the role of the Ministry will be refocused towards policy formulation, co-ordination, support in resource mobilization and sector regulation. A summary of the existing policy framework for the water sector is given below.

The Constitution of the Republic of Kenya, 1998

The Constitution is the supreme law of the land that lays the fundamental principles for the governance of the country. However, the current constitutional does not have explicit provisions dealing directly with environmental and natural resources management and conservation. All the provisions dealing with the conservation of natural resources are to be found in the laws enacted under the Constitution.

The need to include provisions in the country's supreme law dealing with natural resources conservation was recognized by the proposed new Constitution, 2005, which included extensive provisions dealing with natural resources management. This proposed Constitution was not approved at the referendum held in November 2005 and is pending review.

National Water Policy, 1999

The Kenya Government developed the *Sessional Paper No. 1 of 1999 on National Water Policy on Water Resources Management and Development*, which sets out the policy direction in the management and development of the water resources in the country. The policy paper adopted the following four specific principles to guide the activities in the water sector in addressing the challenges facing the sector:

- (i) Preserve, conserve and protect available water resources and allocate it in a sustainable, rational and economical way.
- (ii) Supply water of good quality and in sufficient quantities to meet the various water needs, including poverty alleviation, while ensuring safe disposal of wastewater and environmental protection
- (iii) Establish an efficient and effective institutional framework to achieve a systematic development and management of the water sector.
- (iv) Develop a sound and sustainable financing system for water supply and sanitation development.

Based on the above principles, the sessional paper sets out the framework that is intended to promote comprehensive water resources management and development with the private sector and community participation as the prime movers in the process to guarantee sustainability.

Despite its comprehensiveness, the Water Policy does not have specific provisions for transboundary water resources management and therefore does not give any policy direction on the management of shared water resources. In order to address this policy gap, government, in 2002, embarked on the process of preparing a specific policy on the utilization of shared water resources (specifically, Lake Victoria water resources). A draft policy has been prepared and is still going through the review process by the relevant government organs. The draft Policy is consistent with the *Protocol for the Sustainable Development of the Lake Victoria Basin* and the yet to be concluded *Nile River Basin Cooperative Framework*.

National Environment Management Policy

Kenya's efforts to develop a policy paper on environmental and natural resources management have not yet reached fruition. In 1999, the then Kenyan Ministry in charge of environmental management developed a Sessional Paper on Environment and Sustainable Development. The Sessional Paper was not presented to Cabinet for approval, neither was it presented to Parliament for debate and approval. Therefore, it was not

published, and remains unofficial to this day. Despite the lack of an explicit environment management policy, government still emphasises sustainable and environmentally friendly development and as a deliberate and conscious policy, promotes sound environmental management for sustainable development. This is achieved through the principle of prudent use, which requires that the present day usage of environmental resources should not “compromise the needs of future generations”.

Proper environmental management has been a top priority for the Government since independence, the National development plan of 1979 states ‘Environmental considerations must pervade development decisions at every level’. In an effort to conserve the environment the Government established the National Environmental Management Authority (NEMA) through the Environmental Management and Co-ordination Act (EMCA) of 1999, to exercise general supervision and co-ordination over all matters relating to the environment. EMCA entitles each and everyone to a clean environment but also requires us to safeguard environmental quality.

The sessional paper envisages the use of the “polluter pays principle”, where one is expected to make good any damage made to the environment.

The paper emphasises the fact that prospects for Kenya’s long-term growth are dependent on effective management of its resources and the conservation of the environment. The paper, therefore, defines the following strategic objectives for sustainable environmental management:

- (i) To create an enabling environment through policy, legal and regulatory reforms for environmental and natural resources management.
- (ii) To protect, conserve, and sustainably manage the environment and natural resources.
- (iii) To generate knowledge and technologies towards sustainable management of the environment and natural resources.
- (iv) To strengthen capacity in the environment and natural resources management.
- (v) To mainstream environmental concerns into overall planning and implementation of programmes and projects.

National Wetlands Policy

Kenya has not yet developed a Wetlands Management Policy. The process for developing a wetlands management policy has been initiated, though

it is still in the early stages. The Kenya Wildlife Service presently manages wetlands protected under the RAMSAR Convention. NEMA and the WRMA both have jurisdiction over specific wetlands, each arising from its respective statute. The WRMA is currently in the process of gazetting rules dealing with the management of wetlands.

Kenya Forest Development Policy

The policy framework for forest development and management in Kenya is provided for under the Kenya Forest Development Policy Sessional Paper No.9 of May 2005 whose objectives include the following:

- (i) Contribute to poverty reduction, employment creation and improvement of livelihoods through sustainable use, conservation and management of forests and trees.
- (ii) Contribute to sustainable land use through soil, water and biodiversity conservation and tree planting through the sustainable management of forests and trees.
- (iii) Promote the participation of the private sector, communities and other stakeholders in forest management to conserve water catchment areas, create employment, reduce poverty and ensure sustainability of forest sector.
- (iv) Promote farm forestry to produce timber, wood fuel and other forest products.
- (v) Promote dry land forestry to produce wood fuel and to supply wood and non-wood products.
- (vi) Promote forest extension to enable farmers and other stakeholders to benefit from forest management approaches and technologies.
- (vii) Promote forest research, training and education to ensure a vibrant forest sector.

The above policy objectives affect conservation of water catchment in one way or another.

National Irrigation Policy

Preparation of the National Irrigation Policy and other related legislations is an exercise that is ongoing currently in the Ministry of Water and Irrigation. The policy direction is for the government to move from implementation of the policy and let communities, the private sector and other sector stakeholders to play a bigger role. This policy aims at achieving sustainable development and management of the irrigation and drainage sector by addressing the following objectives:

- (i) To fully develop the irrigation and drainage potential in the country for economic development.

- (ii) To effectively regulate, coordinate and manage all activities within the irrigation sub-sector.
- (iii) To create an appropriate financing system that will attract investment into the sector.
- (iv) To create an enabling environment for effective participation of the farmers' organizations and other stakeholders in the provision of quality and cost-effective support services, and
- (v) To enhance a multi-sectoral approach to irrigation research and development involving government, private, civil society and communities.

It is anticipated that, with the development of this policy, recognition that communities and the private sector offer invaluable potential to attainment of accelerated development within this sub-sector will be achieved.

In the absence of an irrigation policy, the Ministry of Agriculture has developed guidelines for the development, operation and management of smallholder farmer-managed schemes. The Irrigation Development Board has developed guidelines and manuals to direct the development of smallholder irrigation and the process of community participation for sustainable development.

Irrigation, drainage and water use for agriculture is hampered by the lack of a national irrigation policy and plan, which leads to haphazard irrigation development with limited coordination among the various institutions. This is further exacerbated by the evidently inequitable spatial and temporal water distribution within the country.

National Agricultural Extension Policy, 2001

The National Agricultural Extension Policy (NAEP) of December 2001 proposed to improve the management of extension services both in the public and private sector by promoting decentralization of decision making, inter-sectoral planning, monitoring and evaluation and increased community involvement in extension programmes and projects.

National Land Policy

Government is in the process of formulating strategies and policies to provide security of tenure and access to land for the poor. Insecure land tenure systems have led to low investments in land improvement and productivity. Therefore, the draft Land policy has recommended that the Government should provide secure tenure to ensure access to land by rural poor for production purposes.

National Gender Policy

Kenya does not have a national gender policy, and gender issues are addressed using a variety of legal and policy provisions. The existing laws provide for equal rights and privileges to both men and women. However, their interpretation through common laws and social conventions often leads to difficulties and their being compromised.

3.1.5 Kenya Water related Legislation

The Constitution of the Republic of Kenya, 1998

The Constitution is the supreme law of the land that lays the fundamental principles for the governance of the country. However, the current constitution does not have explicit provisions dealing directly with environmental and natural resources management and conservation. All the provisions dealing with the conservation of natural resources are to be found in the laws enacted under the Constitution.

The Water Act, 2002

Following the adoption of the National Water Policy in 1999, the Government embarked on a legal and institutional process, which culminated in the enactment in July 2002 of the Water Act, 2002. This Act replaced the Water Act, Chapter 372. The Act was enacted with the following objectives.

- (i) To separate the institutional framework for managing water resources from that dealing the provision of water supply in order to accord due attention to the management of water resources;
- (ii) To create autonomous regulatory institutions to regulate the management of water resources and another similarly autonomous institution to regulate the provision of water services;
- (iii) To decentralize water resources management to catchment areas;
- (iv) To provide for local and user groups involvement in water resources management and for conflict resolution; and
- (v) To introduce fees for the abstraction and use of water resources.

The Water Act 2002 came into effect in 2003, when the establishment of the institutions provided for in the Act commenced. The Act provides for regulations to supplement its provisions. Most of the regulations have not yet been gazetted, although work of draft regulations is at an advanced stage. It is therefore likely that the legal framework will evolve further with the gazettelement of the regulations.

Section 3 of the Water Act vests “every water resource” in the State. Section 2 defines “Water resource” to mean “*any lake, pond, swamp, marsh, stream, watercourse, estuary, aquifer, artesian basin or other body of flowing or standing water, whether above or below ground.*” Section 4 makes it the duty of the Minister to have and exercise control over every water resource, specifically, to the promote the investigation, conservation and proper use of water resources throughout Kenya

Water Resources Management

Section 7 of the Act creates the Water Resources Management Authority (WRMA). WRMA is responsible for the regulation of the use and management of water resources. A key aspect of this mandate is the allocation of water resources through a permit system. The framework for the exercise of the water resources allocation function comprises the development of national and regional water resource management strategies, which are intended to outline the principles, objectives and procedures for the management of water resources.

Management of water resources is to be undertaken on a catchment basis. Section 14 of the Act provides that WRMA may designate catchment areas, defined as areas from which rainwater flows into a watercourse. Section 10 states that WRMA shall establish regional offices in or near each catchment area. Section 16 provides that WRMA shall appoint a committee of up to fifteen persons in respect of each catchment area to advise its officers at the appropriate regional office on matters concerning water resources management, including the grant and revocation of permits. The WRMA has designated six catchment areas. Lake Victoria North covers the SMM area.

The Act provides a role for user groups, organized as water resources users associations, in the management of water resources. Section 15(5) states that these associations will act as fora for conflict resolution and cooperative management of water resources.

Management of protected areas is provided for in section 17. This stipulates that where the WRMA is satisfied that special measures are necessary for the protection of a catchment area it may, with the approval of the Minister, declare such an area to be a protected area. The WRMA may then impose requirements and regulate or prohibit conduct and activities in the area.

Water Resources Strategic Planning

The Act provides for the formulation of water resources management strategies at national level and at catchment area level. Under section 11

the Minister shall formulate a national water resources management strategy, and shall periodically review it. Under section 15 the WRMA shall formulate for each catchment area, a catchment area management strategy, which shall be in line with the national water resources management strategy. Whereas as draft national water resources management strategy has been formulated, no catchment area management strategy has been formulated as yet, although it is understood that work on this has started within the WRMA.

The Act defines the reserve to mean the quantity and quality of water required (a) to satisfy basic human needs for all people who are or who may be supplied from the water resource; and (b) to protect aquatic ecosystems in order to secure ecologically sustainable development and use of the water resource.

Classification of water resources is dealt with in section 12. This states that the Minister shall prescribe a system for classifying water resources for the purpose of determining resource quality objectives for each class of water resource. Under the prescribed classification system, water resources may be classified according to type, location, and geographical or other factors.

Regulation of Water Use

Another important regulatory instrument is the water permit, which is required for the use of water. Section 6 states that:

“No conveyance, lease or other instrument shall be effectual to convey, assure, demise, transfer, or vest in any person any property or right or any interest or privilege in respect of any water resource, and no such property, right, interest or privilege shall be acquired otherwise than under this Act.”

In order to use water, a permit is required. Indeed the Act states that it is an offence to use water from a water resource without a permit. There are however three exceptions to the permit requirement. These relate to:

- (i) Minor uses of water resources for domestic purposes;
- (ii) Uses of underground water in areas not considered to face groundwater stress and therefore not declared to be groundwater conservation areas; and
- (iii) Uses of water drawn from artificial dams or channels, which – being artificial rather than natural - are not considered to be water resources of the country.

The application for the permit is made to the WRMA. Section 32 stipulates the factors to be taken into account in considering an application for a permit.

Applications for permits are required to be subjected to public consultation. Accordingly the application shall be advertised in the print and electronic media and an opportunity given to those who wish to make comments or lodge objections to do so.

Permits are given for a specified period of time. Additionally, the Authority is given power to impose a charge for the use of water. The charge may comprise both an element of the cost of processing the permit application as well as a premium for the economic value of the water resources being used. Charging a premium for the use of water resources represents the use of charging as a mechanism for regulating the use of water. It is made possible by the fact that ownership of water has been vested in the State, which is entitled to grant and administer the right to use water resources.

Permits run with the land. Section 34 requires that a permit specify the particular portion of any land to which the permit is to be appurtenant. The permit passes with the land on transfer or other disposition. Where the land on which the water is to be used does not abut on the watercourse the permit holder must acquire an easement over the lands on which the works are to be situated. It is thus not possible, under the law, to obtain a permit in gross (i.e., which is not linked to particular land).

Environmental Management and Coordination Act, 1999

The institutional and management framework set up by the Environmental Management and Coordination Act, (EMCA) enacted in 1999, also has implications for the integrated management of trans-boundary water resources. The focus of the Act is primarily directed at environmental and natural resources management. Section 2 defines “the environment” to include water. Consequently the provisions of the Act apply directly to the integrated management of water resources.

Substantively, EMCA provides for the management of the environment with a view to achieving sustainable land use, an objective shared also by the other laws affecting water resources management.

Part V of EMCA deals with the protection and conservation of the environment. Section 42 provides for the protection of rivers, lakes and wetlands. Section 44 deals with the protection of hilltops, hillsides,

mountain areas and forests so as to protect water catchments areas, prevent soil erosion and regulate human settlement. Section 45 provides that every District Environment Committee shall identify the hilly and mountainous areas under their jurisdiction that are at risk from environmental degradation because:

- (i) It is prone to soil erosion;
- (ii) Landslides have occurred in such an area;
- (iii) Vegetation cover has been removed or is likely to be removed from the area at a rate faster than is being replaced; or
- (iv) Any other land use activity in such an area is likely to lead to environmental degradation.

Section 47 provides that the Authority shall, in consultation with relevant lead agencies, issue guidelines and prescribe measures for the sustainable use of hilltops, hillsides and mountainous areas to be implemented by the District Environment Committee. These may include measures relating to:

- (i) Appropriate farming methods;
- (ii) Carrying capacity in relation to animal husbandry;
- (iii) Measures to curb soil erosion;
- (iv) Disaster preparedness;
- (v) The protection of these areas from human settlements;
- (vi) The protection of water catchment areas;
- (vii) Any other measures the Authority considers necessary.

The centrepiece of EMCA is the requirement for Environmental Impact Assessment (EIA) and environment audit, which are introduced in Parts V and VI respectively of the Act. Among the projects included in the Schedule for projects to be subjected to EIA are dams, rivers and water resources. The procedural requirements for EIA are set out in the Environmental (Impact Assessment and Audit) Regulations of 2003.

EIA and auditing is an important regulatory tool, enabling pre-emptive action to be taken to avoid and mitigate the potentially adverse impacts on the environment of proposed or ongoing projects. Its inclusion as a legal requirement is an important step towards realizing the objectives of sound environmental management. That having been said, it is worth pointing out that as contained in EMCA, the EIA and audit requirement suffers from a number of limitations in its capacity to ensure that trans-boundary water resources are managed in an integrated and environmentally sustainable manner.

The Agriculture Act

The Agriculture Act³⁶, has significant provisions on the management of water resources generally and catchments in particular.

The aim of the Agriculture Act is to promote and maintain a stable agriculture sector, to provide for the conservation of the soil and its fertility and to stimulate the development of agricultural land in accordance with the accepted practices of good land management and good husbandry. In light of the fact that the predominant form of land use in the SMM area is agriculture, agricultural laws are an integral and quite important component of the policy, legal and institutional framework for the integrated management of water resources of the area.

Part IV of the Agriculture Act deals with the preservation of the soil and its fertility and gives the Minister powers to take action designed to preserve the fertility of the soil. Section 48 provides that whenever the Minister considers it necessary or expedient to do so for the purposes of the conservation of the soil of, or the prevention of the adverse effects of soil erosion on, any land, he may, with the concurrence of the Central Agricultural Board, make rules for prohibiting, regulating or controlling:

- (i) The breaking or clearing of land for the purposes of cultivation;
- (ii) The grazing or watering of livestock
- (iii) The firing, clearing or destruction of vegetation including stubble.

The Act provides further empowers the Minister where necessary to make rules for:

- (i) The protection of land against storms, winds, rolling stones, floods or landslips
- (ii) The preservation of soil on ridges, or slopes or in valleys
- (iii) Preventing the formation of gullies
- (iv) The protection of the land against erosion or the deposit thereon of sand, stones or gravel
- (v) The maintenance of water in a body of water.
- (vi) The protection of roads, bridges, railways or other lines of communication
- (vii) The preservation of the soil and its fertility.

The minister is also empowered to require, regulate or control:

- (i) The afforestation or re-afforestation of land
- (ii) The protection of slopes, and catchment areas

³⁶ Chapter 318 Laws of Kenya

- (iii) The drainage of land, including the construction, maintenance or repair of artificial or natural drains, gullies, contour banks, terraces and diversion ditches.

The minister may require the uprooting or destruction, without payment of any compensation, of any vegetation, which has been planted in contravention of a land preservation order. The minister may also make rules requiring the supervision of unoccupied land. He/she may also make rules prohibiting, restricting or controlling the use of land for any agricultural purpose including the de-pasturing of stock.

Part V of the Act deals with the development of land. Section 64 stipulates that the Minister may make orders (referred to as “land development orders”) requiring the execution in respect of any agricultural land by owners or occupiers of development programmes. “Development programmes” mean the adoption of such a system of management or farming practice or other system as the Central Agricultural Board may consider necessary for the proper development of the land for agricultural purposes.

Part XII provides that the Minister may make rules for the preservation, utilization and development of agricultural land. Such rules may-

- (i) Require owners to manage land in accordance with rules of good estate management
- (ii) Require occupiers to farm land in accordance with the rules of good husbandry
- (iii) Regulate, control or prohibit the cultivation of land or the keeping of stock
- (iv) Regulate the kinds of crops which may be grown on land
- (v) Empower local authorities to make rules.

Part XIII deals with the Minister’s powers to dispossess owners or occupiers of agricultural land in cases of persistent contravention of rules. Section 185 gives the Minister power, where the occupier is not the owner of the land, to terminate his interest in the land and require that the owner farm it himself or let it to another tenant. Where the occupier is the owner of the land the Minister shall have the power to direct that he give up his occupation of the land and let it to a tenant approved by the Central Agricultural Board; or to agree with the owner or the purchaser of the land; or to acquire the land compulsorily.

Section 187 gives the Minister powers with respect to inadequately managed land to make a “management order” directing that the holding be occupied and managed by the Minister to the exclusion of the owner. The Minister may also lease, or sell the land.

The Agriculture (Basic Land Usage) Rules have been made in line with the provisions of Part XII of the Act. Rule 3 seeks to protect land with a slope exceeding 35%. It provides that any person who cultivates, cuts down or destroys any vegetation or de-pastures any livestock on any land of which the slope exceeds 35% shall be guilty of an offence. However, an authorized officer may authorize an owner to cultivate, de-pasture, cut down or destroy vegetation on the land subject to conditions as he may decide.

Rule 4 provides that an authorized officer may prohibit cultivation or cutting down or destruction of vegetation on any land of which the slope exceeds 20%. Rule 5 provides that any person who cultivates any land of which the slope exceeds 12% but does not exceed 35% when the soil is not protected against erosion by conservation works shall be guilty of an offence.

Rule 6 provides that any person who, except with the written permission of an authorized officer, cultivates or destroys the soil, or cuts down any vegetation or de-pastures any livestock on any land lying within 2 metres of a watercourse, or in the case of a watercourse more than 2 metres wide, within a distance equal to the width of that watercourse to a maximum of 30 metres shall be guilty of an offence.

The Fisheries Act

The Fisheries Act, Chapter 378 governs the management and exploitation of fisheries resources in Kenya. The Act vests ownership of fisheries resources in the central government. The overall objective of the Act is “providing for the development, management, exploitation, utilization and conservation of fisheries.” To manage fisheries it provides for closed seasons; prohibited fishing areas; limitations on the methods of gear; limitations on the amount, size, age and other characteristics and species of fish that may be caught; management of fish landing areas; the control of aquatic plants in fishery waters and registration and licensing of fishing vessels.

Accordingly, rights to harvest fisheries resources are defined in the law and granted to individual fishermen through a licensing system on an annual basis. Fishing without a licence was criminalized as an activity, with the result that many local community members find themselves on the wrong side of the law, for carrying out a normal subsistence activity. For management and administration, the statutes establish a central fisheries management body, the Fisheries Department, which works through district offices.

More recently, there has been a re-examination of alternative management approaches, particularly approaches based on “co-management incorporating the participation of resources users, in the management system.

The Physical Planning Act

This Act replaced statutes that earlier dealt with land use planning. It provides for the preparation and implementation of physical development plans, which are critical in setting out the nature and extent of use, which may be carried out in particular areas.

Section 16 provides that a Regional Physical Development Plan may be prepared by the Director of Physical Planning with reference to any Government land, private land or trust land within the area of authority of a county council. Under section 23 the Director may declare an area with unique development potential or problems as a special planning area. The Director may also suspend for a period of not more than two years any development he deems necessary in a special planning area for a period of not more than two years.

The Director may prepare with reference to any Government land, trust land or private land a local physical development plan. Section 29 of the Act places development control in the hands of local authorities who consider applications for development permission.

Whereas the Physical Planning Act could provide a basis for the management of catchments, on the whole, it has not been the practice in Kenya to carry out land use planning with respect to rural areas, and with respect to agricultural activities, which have the heaviest impact on catchments and on water resources. Nevertheless the potential exists to use physical planning as a mechanism for water resources management.

Lake Basin Development Authority Act³⁷

The Act provides for the establishment of Regional Development Authorities (RDAs) and empowers them to undertake planning for the proper use, conservation and development of natural resources at catchment level and to coordinate development in their respective catchment areas. The main functions of the RDAs are primarily to plan for and coordinate the development of the respective areas in the country and to initiate development activities identified through such planning. These functions are standard for all the regional development authorities, and most are to be found in section 8 of the LBDA Act. With

³⁷ Chapter 442 of the Laws of Kenya

regard to the SMM area, the relevant RGA is the Lake Basin Development Authority.

Wildlife (Conservation and Management) Act³⁸, Cap 376

The Wildlife (Conservation and Management) Act deals with the management of wildlife. It provides for the establishment of game parks and reserves and prohibits activities that might hamper the proper management of wild animals. These include activities such as deforestation, cultivation of land within a national park and so on. These provisions have relevance to water resources management to the extent that protected wildlife areas are often significant water catchments.

The Act was amended in 1989 to provide for the establishment of Kenya Wildlife Service (KWS) to be the national body responsible for the management of wild life in Kenya. At the local level, management of wildlife is carried out by county councils, which are responsible for game reserves.

Although the Wildlife (Conservation and Management) Act is not, strictly speaking, a water resources management statute, KWS has the mandate to deal with wetlands, particularly wetlands under the Ramsar Convention. Presently, these are only Lakes Nakuru, Naivasha, Baringo and Bogoria. There is a plan to include also the Tana Delta as a Ramsar site.

However, there are also a few instances, like those of Mt. Kenya National Park and Mt. Elgon where the Kenya Wildlife Service has been given responsibility to manage park areas, which cover gazetted forests. As these are of great significance as catchment areas, the Wildlife Act can therefore have implications for the management of water resources.

The Forest Act³⁹

The Forest Act (2005) provides for the establishment of forest conservancy areas and committees to regulate the management of forests in their respective areas. This provision is a major departure from the previous administrative arrangements for the management of forests in Kenya, under which forests were managed on the basis of administrative provinces and districts. In this respect the new Forests Act is more closely aligned to the Water Act 2002, in so far as it provides for management of the natural resources on an ecological basis.

³⁸ Cap 376 Laws of Kenya

³⁹ Chapter 385 Laws of Kenya

Forest management is an important aspect of integrated water resources management due to the fact that many gazetted forest areas coincide with water catchments. The Middle reaches of the Mt. Elgon, which form part of the study area are forested and have benefited from protection under forest laws.

Section 23 of the Act provides for the creation of forests. It states that the Minister may, from time to time, by notice in the Gazette declare:

- (i) Any unalienated Government land to be a forest area; and
- (ii) Any land purchased or otherwise acquired by the Government

The Forest Service, created under the Act may recommend variation of the boundaries of a forest or declaration that a forest ceases to be forest if it is satisfied, *inter alia*, that the variation or cessation does not adversely affect the value of the forest as a water catchment area.

Under section 24 the Minister may declare any land under the jurisdiction of a local authority to be a local authority forest where:

- (i) The land is an important catchment area, a source of water springs, or is a fragile environment;
- (ii) The land is rich in biodiversity or contains rare, threatened or endangered species;
- (iii) The forest is of cultural or scientific significance;
- (iv) The forest supports an important industry or is a major source of livelihood for the local community.

The Act provides for the preparation of forest management plans in accordance with which forests shall be managed. The plans shall be prepared by the Forest Service and the local authority, each with respect to the forest over which it has jurisdiction.

Section 52 prohibits various activities in a forest area unless permitted by the Forest Service in accordance with a management agreement entered into with the Forest Service. These include:

- (i) Felling, cutting, burning, injuring or removing forest produce;
- (ii) Setting fire to any grass or undergrowth;
- (iii) De-pasturing cattle;
- (iv) Clearing, cultivating or breaking up any land for cultivation, capturing or killing any animal.

3.1.6 Kenya Water Sector Institutional Framework

The Water Act 2002 provides for the establishment of a comprehensive framework for effective management, conservation, use and control of

water resources in the country. The Act emphasizes decentralized responsibility for water resources management to grassroots institutions; and stipulates appropriate mechanisms for the management and regulation of the water sector. Specifically, the Act recognises the important role of the private sector and local communities and provides an enabling framework for their effective participation in sector activities. This is in line with government policy of involving stakeholders in the management and development of natural resources.

The Act provides for separation of functions with the Ministry being responsible for policy formulation, sector regulation, coordination and facilitation of other stakeholders in the sector. Policy implementation and sector development is the primary responsibility of other stakeholders, especially the private sector and community based organizations.

The Ministry is currently in the process of developing a comprehensive policy on irrigation, drainage and land reclamation. When completed, this policy will empower local communities and the private sector to take responsibility in the irrigation sub-sector too.

Figure 2 shows the institutional framework established under the Act.

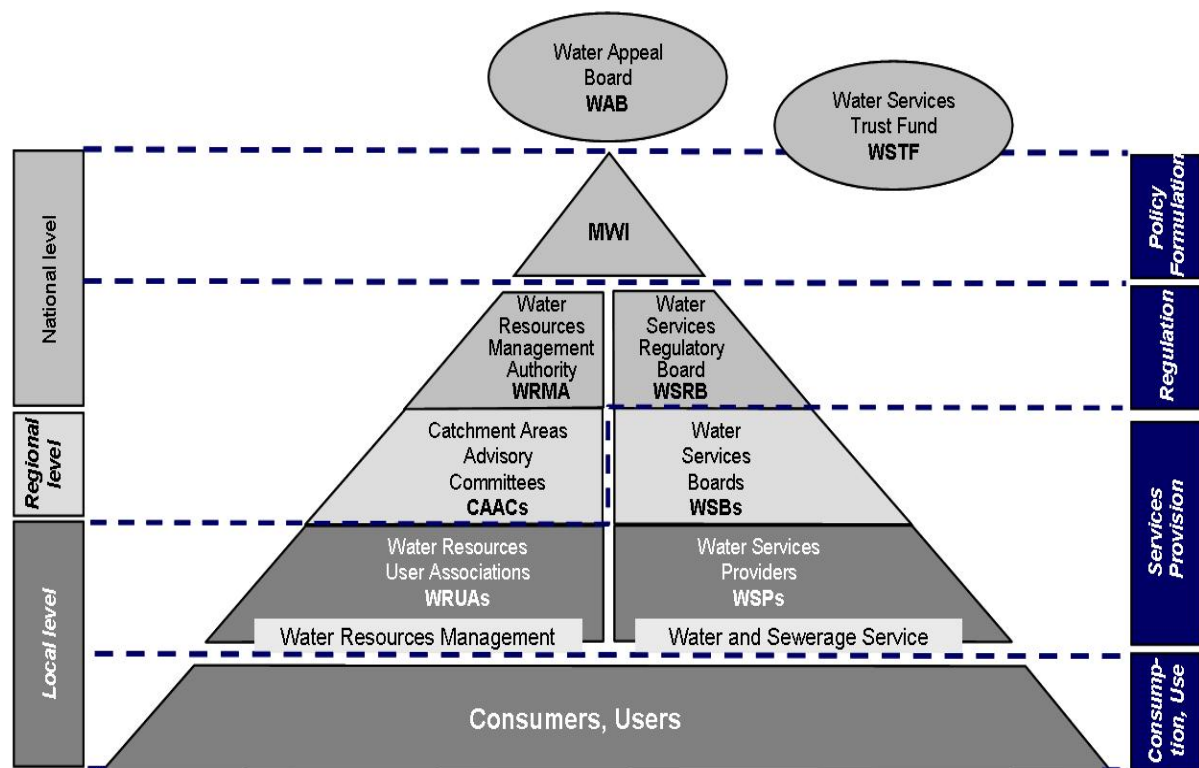


Figure 2: Institutional Set-up of the Water Sector in Kenya

The core functions of the institutions shown in the figure above are discussed below.

Ministry of Water and Irrigation (MWI)

The Ministry devolves from regulation and direct provision of services to focus on its core functions of policy formulation, overall coordination of the water sector, supervision of public institutions under the Ministry, resources mobilization and guidance.

The Ministry has also established a Water Sector Reform Secretariat, whose role is to manage the implementation of the water sector reform programme in the Ministry. This programme will come to an end when the planned reforms in the sector are fully implemented.

The Water resources Management Authority

The WRMA is responsible for the sustainable management of the country's water resources. Key Functions of Water Resource Management Authority under the water Act 2002 include:

- (i) Developing principles, guidelines and procedures for the allocation of water resources;
- (ii) Monitoring and periodically re-assessing the national water strategy;
- (iii) Issuing, verifying, transferring and cancelling water permits;
- (iv) Monitoring and enforcing the conditions attached to the water permits;
- (v) Regulating and protecting water resources quality from adverse impacts;
- (vi) Managing and protecting water catchments;
- (vii) Determining charges and levying water use fees;
- (viii) Gathering and maintaining water information and publishing the same periodically;
- (ix) Liaising with other actors for better regulation and management of water resources;
- (x) Advising the minister on any matter concerning water resources.

The Catchment Area Advisory Committees

The CAACs are established at catchment level to advise the WRMA on conservation, use and allocation of water resources in their respective catchment areas. The role of CAAC is advising the Water Resource Authority at the catchments level on the following:

- (i) Water resource conservation, use and apportionment;

- (ii) Issuance, cancellation and variation of water permits at catchments level;
- (iii) Any other matter pertinent to the proper management of water resources.

The country has been delineated into six water resources management catchment areas including; Lake Victoria North Catchment Area (LVNCA), Lake Victoria South Catchment Area (LVSCA), Rift Valley Catchment Area (RVCA), Athi River Catchment Area (Athi CA), Tana River Catchment Area (Tana CA) and Ewaso Ng'iro North Catchment area (ENNCA).

The Water Act provides that, among the organizations to be represented on the CAACs are officers of the relevant Ministries and public bodies responsible for matters relating to water resources in the catchment.

The SMM catchment is partly within the Lake Victoria North catchment area. The CAAC for the Lake Victoria North Catchment Area has already been formed and is currently operational. A discussion with CAAC members revealed that most of them have limited background in water resources management and will need capacity building to be able to play a more effective advisory role.

Water Resources Users Association

To support in the management of the resource at the local levels, Water Resources Users Associations (WRUAs) are formed on demand-driven basis, with facilitation from the WRMA, to sustainably manage and utilize the water resources within their localities. Under this process, the public and communities are enabled to participate in managing water resources within each catchment. The WRUA formation process is recognized under Section 15(5) of the Water Act 2002, which states, inter alia; the catchment management strategy shall encourage and facilitate the establishment and operation of water resources users associations as fora for conflict resolution and co-operative management of water resources in sub-catchment areas.

The Water Services Regulatory Board

The WSRB is responsible for the regulation of water and sanitation services. Section 47 of the Water Act 2002 spells out the functions of the board as follows:

- (i) Issuing licenses for provision of water services;
- (ii) Determining standards for the provision of water to consumers;

- (iii) Establishing procedures for handling complaints made by consumers against licenses;
- (iv) Monitoring compliances with established standards for the design, construction, operation and maintenance of facilities for water services;
- (v) Monitoring and regulating licenses and to enforce license conditions;
- (vi) Advising licenses on procedures for dealing with complaints from consumers and to monitor the operations of these procedures;
- (vii) Developing guidelines for fixing of tariffs for the provision of water services;
- (viii) Developing guidelines for and providing advice on cost-effective and efficient management and operation of water services;
- (ix) Developing model performance agreements for use between licensees and water service providers;
- (x) Monitoring the operation of agreements between water service boards and water service providers and taking appropriate action to improve their effectiveness;
- (xi) Developing guidelines on regulations of water services to be adopted by licensees, publish forecasts, projections and information on water services;
- (xii) Disseminating information on water services;
- (xiii) Promoting water conservation and demand management measures;
- (xiv) (n) Monitoring and from time to time re-assess, the national water services strategy;
- (xv) Determining fees, levies, premiums and other charges to be imposed on water services in accordance with the national water services strategy;
- (xvi) Gathering and maintaining information on water services and from time to time publish forecasts, projections and information on water services;
- (xvii) Liasing with other bodies for the better regulation and management of water services;
- (xviii) Advising the Minister on matter related to water services.

The Water Services Boards

The Water Service Boards will have delineated areas of supply. This will ensure the provision of water services to all parts of the country. The water service providers shall be autonomous bodies such as water companies formed by the Local Authorities as Public or Private companies. In cases where competent Water Service Providers are not available or the production of bulk water supply through state schemes is limited, the National Water Conservation and Pipeline Corporation will act as a fall back.

Functions of the board, as outlined in Section 53 of the Water Act 2002, are:

- (i) Efficient and economical provision of water services as authorized by licence;
- (ii) Custodianship of Water Services Provision Assets;
- (iii) Contracting, monitoring and enforcing agreements between WSBs and WSPs, in accordance with the regulations set by WSRBs in the licences;
- (iv) Maintaining and acquiring assets, planning development and management;
- (v) Ensuring efficient and economical provision of water services authorized by the licence.

The Water Services Providers

The WSPs are contracted by WSBs to provide water and sanitation services to specific areas.

Water Services Trust Fund

Section 83 of the Water Act 2002 mandates the Water Services Trust Fund (WSTF) to assist in financing the provision of water and sanitation services to areas without adequate services. The functions of WSTF include:

- (i) Mobilizing resources for community water and sanitation services;
- (ii) Ensuring compliance with the rules of funding water services;
- (iii) Ensuring disbursement of funds;
- (iv) Monitoring implementation of projects and impact;
- (v) Carrying out technical and financial audits of projects;
- (vi) Appraising applications and proposals for financing of projects;
- (vii) Establishing links with Water Service Boards in all parts of Kenya and other stakeholders in the water sector;
- (viii) Facilitating the efficient administration, management of activities and operations of the Trust Fund.
- (ix) The WSTF is mandated to provide financing and support towards:
- (x) Capital investment for community water services;
- (xi) Water services activities outlined in the Water Services Strategic Plan and as prioritised by Government;
- (xii) Capacity building activities and initiatives among the communities;
- (xiii) Awareness creation and information dissemination regarding community management of water;
- (xiv) Active community participation in the implementation and management of water services.

The Water Appeal Board (WAB)

The Water Appeal Board (WAB) has been established to provide a mechanism for dispute resolution in the water sector. The functions of the WAP, as outlined in section 85 and 87 of the Water Act 2002, include:

- (i) Hearing and determining appeals from decisions or orders of the Authority, the Minister or Regulatory Board;
- (ii) Hearing and determining disputes in the water sector;
- (iii) Performing other judicial functions that pertain to the use and development of water resources;
- (iv) Making and varying rules of their procedures from time to time.

The National Water Conservation and Pipeline Corporation

The National Water Conservation and Pipeline Corporation (NWCPC) has the following functions:

- (i) Management of Water Supplies in an efficient, effective and sustainable manner both for bulk and direct distribution;
- (ii) Rehabilitation and augmentation of existing water supplies;
- (iii) Development of water facilities for the corporation and other stakeholders.

National Irrigation Board

The National Irrigation Board is responsible for the following:

- (i) Co-ordination of construction and rehabilitation of major irrigation and drainage infrastructure;
- (ii) Operation and maintenance of major irrigation and drainage infrastructure;
- (iii) Administering land in the public schemes and provide technical advice on maintaining a cropping calendar in consultation with the schemes;
- (iv) Expansion and development of public irrigation schemes Irrigation expansion;
- (v) Provision of local water supply to designated irrigation schemes.

Kenya Water Institute

The Kenya Water Institute is operating under its own Act of Parliament and is responsible for the following functions within the water sector;

- (i) Conducting training to the middle level personnel in the water sector;
- (ii) Carrying out relevant research and producing publications for the water sector;
- (iii) Providing consultancy and production related services for the water sector;
- (iv) Providing commercial related training to the water sector.

The Drainage Basic Office

The functions and responsibilities of Drainage Basin Offices are to ensure that Government policies are implemented, rules are followed and work programmes are coordinated, monitored and evaluated. Furthermore, Drainage Basin Offices provide ministerial representation at the regional level, including coordinating with other ministries through inter-ministerial coordination committees, of which the Permanent Secretary is a member. The country is divided into seven drainage basin offices namely: Rift Valley region, Northern region, Lake Victoria North region, Lake Victoria South region, Central region, Nairobi region and Coast region.

Regional Development Authorities

The *Lake Basin Development Authority Act*⁴⁰ provides for the establishment of Lake Basin Development Authorities (LBDA) and empowers them to undertake planning for the proper use, conservation and development of natural resources at catchment level and to coordinate development in catchment areas.

The functions of the LBDA are primarily to plan for and coordinate the development of their respective catchment areas and to initiate development activities. These functions are standard for all the regional development authorities, and most are to be found in section 8 of the LBDA Act. Specifically, the LBDA are mandated to:

- (i) Plan for the development of the area and initiate project activities identified through such planning;
- (ii) Develop an up to date long range development plan
- (iii) Initiate such studies and carry out such surveys as may be necessary to assess alternative demands within the area on the natural resources thereof and to initiate, operate or implement such projects as may be necessary to exploit those natural resources including agriculture, forestry, wildlife, and tourism

⁴⁰ Chapter 442 of the Laws of Kenya

- industries, electric power generation, mining, and fishing and to recommend economic priorities.
- (iv) Coordinate the various studies of schemes within the area such that human, water, animal, land and other resources are utilized to the best advantage and to monitor the design and execution of planned projects within the area.
 - (v) Effect a programme of both monitoring and evaluating the performance of projects within the area
 - (vi) Co-ordinate the present abstraction and use of natural resources, especially water, within the area and set up effective monitoring of abstraction and usage
 - (vii) Cause and effect the construction of any works deemed necessary for the protection and utilization of water and the soils of the area
 - (viii) Ensure that landowners undertake all measures specified to protect water and soils of the Area
 - (ix) Identify, collect, collate and correlate all such data related to the use of the water and other resources and also economic and related activities within the area
 - (x) Maintain liaison between the Government, the private sector and other interested agencies in the matter of the development of the area with a view to limiting duplication of effort and ensuring the best use of technical resources
 - (xi) Examine the hydrological and ecological effects of the development programmes and evaluate how they affect the economic activities of the persons dependent on the river environment
 - (xii) Consider all aspects of the development of the area and its effects on the rivers inflow and outflow.

The LBDA has the main advantage that it is uniquely structured around a catchment. It, therefore, can complement the functions of the Catchment Advisory Committees very well. However, the LBDA has suffered a decline in resources. Further, its planning functions are largely performed by District Development Committees, which, being district based, are not suited to ecological management and planning. The planning role of LBDA is more complementary to the catchment strategy development function of the Water Resources Management Authority. If coordination can be facilitated, it can play a useful supportive role in respect to water resources management.

With regard to the SMM catchment area, the relevant regional development authority is the Lake Basin Development Authority (LBDA).

Environmental Management

EMCA establishes the National Environment Council responsible for policy formulation and the National Environmental Management

Authority (NEMA) to exercise general supervision and coordination over all matters relating to the environment. A National Environmental Action Plan Committee is provided for to carry out environmental action planning. Regionally, it establishes Provincial and District Environment Committees to be responsible for the management of the environment within the province or district in respect of which they are appointed.

Administratively, there is a close link between the institutions established under EMCA and the institutions of the Water Act, albeit rather tenuous. EMCA also includes among the members of its Provincial and District Environment Committees representatives from the Water Resources Management Agency.

Stakeholder Participation

The success of the ongoing water sector reforms is dependent on the effective collaboration between all players in the sector. The Ministry is in the process of developing a comprehensive stakeholder mobilization and participation strategy that will seek to enhance the effective participation of all key stakeholders in water sector activities and generate consensus on the sector reform agenda and the implementation approach. The strategy is aimed at building a strong partnership with all stakeholders in transforming the water sector. The National Water Strategies, now under development, will be the rallying point around which stakeholder mobilization will take place. The ownership of these strategies is key to the success of the sector reform programme.

As part of the new policy dispensation, an integrated sectoral approach to water resources management at catchment level is being promoted and implemented. In particular, the Ministry is collaborating with, among other stakeholders, the Ministries of Environment and Natural Resources; Agriculture; and Livestock and Fisheries Development, to create an effective mechanism for the management of the water catchment areas. In addition, the communities and other stakeholders are being empowered to play a more active role in the management of water resources.

Decentralization of water resource management institutions is slowly entrusting the management of water resources to communities and the private sector. Water Catchment Advisory Committees are being formed in each water catchment area to oversee the management of water resources at catchment level.

At local levels, the WRMA is facilitating the formation of Water Resources Users Associations (WRUAs) to ensure that local communities are enabled to participate in managing water resources within their localities.

Under this new management framework, the Ministry has a critical role to play in coordinating the inputs of all stakeholders in the water sector. The Ministry is also facilitating and supporting all categories of stakeholders as they discharge their different roles in implementation of the sector activities. Specifically, the Ministry is promoting gender balance in the implementation of the sector activities and is particularly encouraging and empowering women to play a more active role in water resources management and development.

Gender Mainstreaming in Water Resources Management

The Kenya Water Resources Management Strategy recognises that men and women do not have the same access and control over water resources. It also stipulates that both men and women should be active participants in the development and planning process, and that women should not be viewed as passive recipients or as a vulnerable group along with children and the handicapped.

The strategy requires that women issues should not be dealt with as separate issues but as part and parcel of the integrated water management issues. The approach has two main focuses, i.e., integration and agenda setting. Integration involves widening the gender concerns across many sectors, while agenda setting aims at transforming the existing development agenda with a gender perspective. The involvement of women in decision-making is therefore a key strategic approach being promoted by the Ministry in implementation of the water sector activities.

Key approaches to ensuring effective gender mainstreaming in the water sector activities include:

- (i) Ensuring that all units and all personnel within the system have the responsibility for ensuring involvement of both men and women in all aspects of programmes and policies.
- (ii) Incorporating gender concerns into the planning and decision making process.

Gender sensitisation is being promoted at all levels in the sector but above all at the decision-making levels. To remove the stereotyping and the regressive notions on women's involvement in the water sector, stakeholders are being sensitised on the different needs, opportunities and constraints of men and women participation in the water sector.

3.2 Regional Cooperative Frameworks Relevant to SMM

The SMM catchment forms part of the broader River Nile basin. The Sio catchment also forms part of the Lake Victoria basin. Therefore it is essential to study the existing international and regional policy, legal and institutional frameworks governing the larger basins and see what lessons can be learned and synergies leveraged in trying to develop a similar framework for the smaller SMM catchment.

3.2.1 The Nile River Basin

River Nile is the longest river in the world with a total length of about 6700Km and a basin area of about 3 Million Km². The Nile basin is shared by 10 countries (Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda) with a total population of about 300 million people, 160 million of whom live within the basin and rely on the Nile Waters for their basic socio-economic needs. **Figure 3** shows the geographical extent of the Nile Basin.

Uganda occupies a unique position in the Nile Basin as she is a downstream country with respect to Kenya, Burundi, Rwanda, Tanzania, and Democratic Republic of Congo, and is also upstream with respect to Egypt and Sudan. On the contrary, Kenya is upstream with respect to the other Nile basin countries.

Both Uganda and Kenya are interested in ensuring that the shared Nile waters are managed and developed optimally and equitably to derive mutual benefits for all riparian countries while safeguarding their national interests. Both countries are keen on ensuring the unimpeded utilization of an equitable share of the Nile waters to support their national economic and social development objectives. It is against this background that both countries are actively involved in the implementation of the different programs under the Nile Basin Initiative including the ongoing negotiations on a new Nile Basin Cooperative Framework.

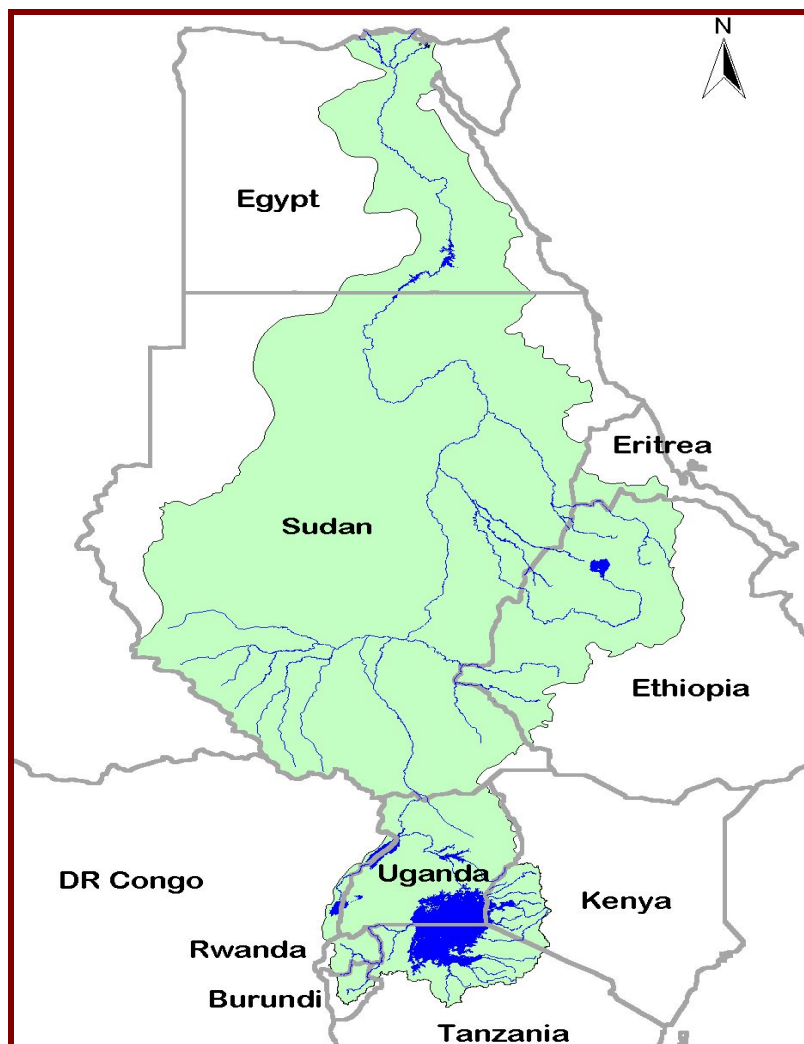


Figure 3: The Nile Basin

Legal Framework for Management of the Nile River Basin

Treaties regarding the management of the waters of the Nile Basin date back to 1929 when Great Britain and Egypt signed an agreement under which no irrigation, power works or other measures were to be constructed or taken on the Nile and its branches or on lakes from which it flows in the Sudan or in countries under British administration except with the previous agreement of the Egyptian government. Several other agreements were signed following the 1929 agreement the most notable ones being: (i) *The Owen Falls Agreements*: of 30 May 1949, 5 December 1949 and 5 January 1953: between United Kingdom and Egypt which provided for the participation of Egypt in the construction of the Owen Falls Dam, and the use of Lake Victoria as a storage reservoir of water for Egypt; (ii) *The 1959 Agreement on the Full Utilization of the Nile Waters*, which was signed between Egypt and Sudan. The 1959 Agreement apportions the waters of the Nile between the two signatory states.

Given the new political dispensation in the Nile basin, following the end of the colonial era, the independent Nile Basin states engaged themselves in several cooperation initiatives in the Nile basin and entered into specific agreements to provide a legal basis for their cooperation. The most notable of these agreements included the following:

- (i) The HYDROMET project Agreement of 1967;
- (ii) Kagera Basin Agreement of 1977;
- (iii) The Tripartite Agreement relating to the establishment of the Lake Victoria Environment Management Project (LVEMP) of 1994;
- (iv) The Convention Establishing the Lake Victoria Fisheries Organisation of 1994;
- (v) The Treaty Establishing The East African Community, 1999;
- (vi) The Protocol For the Sustainable Management of the Lake Victoria Basin, 2003.

Emerging Nile Basin Legal and Institutional Framework

Following a long period of technical cooperation under HYDROMET and TECCONILE the Nile basin countries, developed and adopted a basin-wide Nile Basin Strategic Action Plan. In order to ensure successful implementation of the Plan, the Nile basin countries, in 1995, embarked on the process of negotiating and developing a comprehensive Nile Basin Cooperative Framework Agreement for the sustainable management and development of the shared Nile water resources. This process is nearing conclusion and it is envisaged that once these negotiations are successfully concluded, the resulting agreement will form the basis for a permanent Legal and Institutional Framework for the management and development of the shared Nile basin water resources. The draft Cooperative Framework provides for the equitable and reasonable utilization of the Nile River system by the riparian States without causing significant harm to other riparian States as provided in articles 4 and 5. In addition it provides for the Establishment of the Nile River Basin Commission that will coordinate water resources related development activities in the basin.

Given the protracted nature of the negotiations, the Nile basin countries, in 1999, agreed to put in place a transitional cooperative arrangement called the Nile Basin Initiative (NBI), to initiate the implementation of the Nile Basin Strategic Action Plan pending conclusion of the negotiations on a permanent cooperative framework.

The Nile Basin Initiative is based on “a shared vision” which is to;

“Achieve sustainable socio-economic development through the equitable utilization of and benefit from, the common Nile Basin water resources”

NBI’s primary objectives include:

- (i) To develop the water resources of the Nile Basin in a sustainable and equitable manner to ensure prosperity, security and peace for all its peoples,
- (ii) To ensure efficient water management and the optimal use of the resources,
- (iii) To ensure cooperation and joint action between the riparian countries, seeking win-win gains,
- (iv) To target poverty eradication and promote economic integration, and
- (v) To ensure that the program results in a move from planning to action.

The Nile Basin Strategic Action Plan comprises of two broad development programs i.e.

- (i) A basin-wide Shared Vision Program (SVP) comprising of seven sectoral and facilitative projects, to build confidence, trust and capacity and create an enabling environment for sustainable development of major investments on the ground; and
- (ii) A Subsidiary Action Program (SAP) to achieve action on the ground through joint investments in the basin. The SAP has two major components i.e.
 - a) The Nile Equatorial Lakes Program (NELSAP), covering the Countries of Burundi, Rwanda, Tanzania, Kenya, Uganda and DRC and includes Sudan and Egypt, in accordance with the NBI Policies and Guidelines, with its coordination unit, called NELSAP-CU, in Kigali, Rwanda and,
 - b) The Eastern Nile Subsidiary Action Program (ENSAP) comprising of Egypt, Ethiopia and Sudan with Eritrea as potential member, with its coordination unit, called the Eastern Nile Technical regional Office (ENTRO), in Addis, Ethiopia.

The Nile Basin Initiative is a riparian owned and managed process, with the Nile Council of Ministers responsible for Water Affairs in the Nile Basin (Nile-COM) as the supreme policy making body, supported by a Technical Advisory Committee (Nile-TAC) composed, mainly, of senior water sector Government officials and a Secretariat, headed by an Executive Director, at Entebbe, Uganda.

The governance of the SAPs is modelled on the overall NBI governance structure and framework, composed of the Council of Ministers, a Technical Advisory Committee and a Coordination Unit or sub-regional office.

A partnership arrangement has been put in place for strong collaboration with the donors supporting NBI projects for both SVP and SAP projects, including the establishment and operation of a Nile Basin Trust Fund (NBTF) managed by the World Bank.

The NBI process and partnership includes a strong participation of the Civil Society through an umbrella basin wide forum, the Nile Basin Discourse (NBD), with chapters in all participating Countries, bringing the voices of various categories of the Civil Society in the NBI process. The participation of other interest groups, including the Private Sector, is promoted through the various SVP and SAP projects and is expected to evolve as the NBI process itself evolves, more projects get identified and implemented and overall transboundary cooperation strengthens.

The Nile Equatorial Lakes Subsidiary Action Program

The SMM catchment falls under the jurisdiction of NELSAP whose overall objective is: "...to contribute to the eradication of poverty, promote economic growth and reverse environmental degradation".

To achieve the above objective, twelve transboundary and multi-country projects were identified targeting investments in the fields of Agriculture, fisheries development, hydropower development and interconnections, transboundary water resources management and water hyacinth control. Implementation of the projects is ongoing with overall coordination by the NEL-CU and operational support from specific Project Management Units (PMUs).

The Governance of NELSAP includes a Council of Ministers responsible for water affairs in the NELSAP countries (NELCOM), a Technical Advisory Committee (NELTAC) of senior officials from the water Ministries and a Coordination unit (NELSAP-CU) or as commonly called NEL-CU) based in Kigali, Rwanda. NELSAP-CU is not an organization but a project. It has no separate legal status but works under the NBI Secretariat. Paradoxically, however, these structures, though dealing with a sub-basin, are not considered sub-committees of the overall NBI organization. They operate independently but voluntarily share information with the Secretariat and among the SAPs themselves, when necessary.

There are several regional cooperation and integration initiatives among the NELSAP countries, especially those spearheaded by the East African Community (EAC).

3.2.2 The Lake Victoria Basin

Article 112(2)(b) of the Treaty establishing the East African Community provides for the obligation of the partner states to conserve the environment and natural resources of East Africa. Among the obligations accepted by the states is in regard to the conservation of water resources and the prevention of pollution.

In particular, Article 112(2)(b)(vi) provides for the need to protect specifically Lake Victoria and its water resources. Lake Victoria is identified for the development of a specific body for its management.

As part of their strategy to promote equitable economic growth, poverty eradication and sustainable utilization of natural resources and protection of environment, the EAC states agreed on a “Shared Vision” i.e.:

“To ensure a prosperous riparian population living in a healthy and sustainably managed environment providing equitable development opportunities and benefits.”

On the basis of this vision, the countries jointly prepared the East African Co-operation Development Strategy (1997 – 2000) in which the Lake Victoria basin was designated as a regional economic growth zone to be developed through a coordinated implementation process by the Partner States (EAC, 1997a). Recognizing that a healthy environment is a prerequisite for sustainable development, the EAC Partner States also agreed to take concerted measures to foster cooperation in the joint and efficient management of and the sustainable utilization of the natural resources within the basin for their mutual benefit.

Recognizing the huge development potential of the basin and the need for its joint management and development, member States signed a Protocol for the Sustainable Development of the Lake Victoria Basin in November 2003 and later ratified it in December 2004. The Protocol provided for the establishment of the Lake Victoria Basin Commission, which has a Secretariat and which is an integral part of the East African Community Secretariat. The Commission has already been established as the permanent organisation for the management of the basin and has its headquarters in Kisumu, Kenya.

Consequently, the EAC countries have embarked on a number of joint development initiatives in the basin including Safety in Navigation on the Lake, 2004 and Guidelines for Transboundary EIA (2004), Lake Victoria Basin Planning Tool, and the Lake Communication Strategy. These together with other ongoing initiatives like the Lake Victoria Environment Management Programme created in 1994 and the Lake Victoria Fisheries Organisation also created in 1994 are now under the umbrella of the Lake Victoria Basin Commission.

The Protocol basically follows the standard set by the United Nations Convention on Navigational watercourses of 1997. The management of the resources of the Basin is guided by the generally accepted principles of international water law i.e.

- (i) The principle of equitable and reasonable utilisation of water resources;
- (ii) The principle of sustainable development;
- (iii) The principle of prevention to cause harm to members whereby Partner States shall individually and jointly take all appropriate measures to prevent environmental harm rather than attempting to repair it after it has occurred;
- (iv) The principle of prior notification concerning planned measures whereby each of the Partner States shall notify other Partner States of planned activities within its territory that may have adverse effects upon those other States;
- (v) The principle of Environmental Impact Assessment and Audit;
- (vi) The precautionary principle whereby each Partner State shall take the necessary measures to prevent environmental degradation from threats of serious or irreversible harm to the environment, despite lack of full scientific certainty regarding the nature and extent of the threat;
- (vii) The 'Polluter Pays' principle whereby the person that causes the pollution shall as far as possible bear any costs associated with it;
- (viii) The principle of public participation whereby decisions about a project or policy take into account the views of the stakeholders;
- (ix) The principle of prevention, minimization and control of pollution of watercourses so as to minimise adverse effects on fresh water

resources and their ecosystems including fish and other aquatic species and on human health;

- (x) The principle of the protection and preservation of the ecosystems of international watercourses whereby ecosystems are treated as units, all of whose components are necessary to their proper functioning and that they be protected and preserved to the extent possible;
- (xi) The principle of community of interests in an international water course whereby all States sharing an international watercourse system have an interest in the unitary whole of the system;
- (xii) The principle of gender equality in development and decision-making; The principle that water is a social and economic good and a finite resource; and
- (xiii) The principle of subsidiarity.

It is essential to note that the Protocol and the general framework of the EAC Treaty oblige Partner States to notify their neighbours of any of their activities, which may have adverse impacts on other partner states⁴¹. This obligation to notify must be read together with the provisions on Environmental Impact Assessment, which require partner states to exchange impact statements and to comment on projects with likely transboundary effects⁴².

However, one of the most important provisions for the SMM framework is the one, which relates to the obligation to prevent significant harm to neighbours. It provides that a Partner State when utilizing the resources of the Basin in its jurisdiction, shall take all appropriate measures to prevent significant environmental harm to other Partner States. Partner States are required, when utilizing the resources of the Basin in their jurisdiction, to take all appropriate measures to prevent significant

⁴¹ See **Article 13**, which provides for “**Prior Notification Concerning Planned Measures**” and requires that:

(i) A Partner State shall notify other Partner States and the Secretariat of planned activities within its territory that may have adverse effects upon those other Partner States.

(ii) The notifying Partner State shall provide technical data and information concerning the planned project to enable the notified Partner States to evaluate the effects of the planned measures.

(iii) The notification shall be followed by consultation among the Partner States in respect of the planned measures. The notifying Partner State shall take into account the interest of the other Partner States in developing the planned measures”.

⁴² See Article 12

environmental harm to other Partner States and to take into account the vital economic, social and cultural interest of other Partner States⁴³.

Memorandum of Understanding between EAC and NBI

In order to ensure synergy between the EAC and NBI/NELSAP development activities in the Lake Victoria basin, a Memorandum of Understanding (MoU) was signed on the 12th July 2006 between the EAC and NBI. The MoU obliges the two parties to cooperate on several issues pertaining to the sustainable development of the Lake Victoria basin in particular and the Nile Basin in general. The parties agreed to establish effective linkages between the EAC (in particular the Lake Victoria Basin Commission) on one hand and the corresponding NBI institutions (in particular the NELSAP).

The parties also agreed to joint preparations and execution of studies and to promote development of projects and programmes relating to conservation and sustainable development of Lake Victoria.

The parties were also to engage in dialogue with a view to assist in defining and implementing policies and strategies aimed at the conservation of Lake Victoria basin and its ecosystems. It was agreed to take joint measures to arrest environmental degradation by preventing invasive weeds such as the water hyacinth.

The parties also obligated themselves to conduct joint research and training and to exchange data on the conservation of the Lake Victoria Basin.

3.3 SWOT Analysis of existing Policy, Legal and Institutional Frameworks

3.3.1 Strengths

- (i) National institutional frameworks with specific mandates exist.
- (ii) Institutions have expertise and knowledge on national and regional programs planning and implementation.
- (iii) Experience in transboundary cooperation frameworks under NBI and EAC/LVBC.

⁴³ See Article 15

- (iv) Willingness by both countries to participate in the NBI and EAC framework negotiations is a clear demonstration of their belief in regional cooperation and good neighbourliness. .
- (v) Most sectoral policies exist with fairly well developed laws and regulations.
- (vi) Both countries have got IWRM Strategies in place.
- (vii) The decentralization process in both countries facilitates local level planning and action and promotes effective local community participation in development activities.
- (viii) Umbrella frameworks for key stakeholders like NGOs and Local authorities in L. Victoria basin under LVRLAC, and LAKIMO in the Kyoga basin provide good practice, which can be replicated.
- (ix) Existing EAC, NBI legal and institutional frameworks.
- (x) Existing Inter-sectoral coordination frameworks such as the two NEMAs and SWAP experience and operations.

3.3.2 Weaknesses

- (i) Low recognition by both governments of the important role sustainable water resources management plays in the socio-economic development of the countries. This is clear from the inadequate funding of water resources management activities in both countries, especially Uganda.
- (ii) Multiple agencies with sometimes overlapping policy and institutional frameworks creating conflicts and coordination challenges,
- (iii) Transboundary Water resources management policy, legal and institutional frameworks not developed, other than for L. Victoria and policy statements,
- (iv) Weak or inadequate institutional capacities at centre, districts and lower levels,
- (v) Weak or inadequate policy implementation capacity and resources,
- (vi) Lack of important policies like for irrigation and sanitation,
- (vii) No water resources and meteorological data exchange protocols,

- (viii) Predominantly national focus,
- (ix) Water resources management centralized with no role of local authorities, and therefore, no catchment focus,
- (x) Differing levels of decentralisation in the two countries
- (xi) Weak enforcement of laws
- (xii) Weak civil society organisations to compel enforcement of laws

3.3.3 Opportunities

- (i) EAC and Lake Victoria legal and institutional framework with its back protocols, visions, policies provide a platform for achieving cooperation and coordination,
- (ii) Donor interest,
- (iii) Existing inter-state projects in the project area such as MERECP on Mt. Elgon provide the necessary experiences and lessons to inform the present project,
- (iv) International Community interest in attainment of MDGs and WSSD targets on IWRM,
- (v) Possible mutual socio-economic benefits accruing from potential joint win-win development initiatives in the basin.
- (vi) Common legal history, evidenced in similar laws and the common law background and therefore ease of harmonisation,
- (vii) Similar institutional set-up as a result of a shared history under British colonialism and therefore ease of harmonisation of policies and institutions,
- (viii) Experiences of civil society organisations across borders in the region such as LVRLAC provide a basis for building a multi-layered conservation effort involving central governments, local governments and civil society.

3.3.4 Threats

- (i) Inadequate prioritisation of transboundary water resources management cooperation among riparian Countries,
- (ii) Inadequate frameworks to promote transboundary collaborative programs,
- (iii) Institutional reviews and downsizing of governments have reduced their capacity (technical and financial) to seriously engage in transboundary programs,
- (iv) Delays in finalizing an agreement on the Nile Basin to address transboundary Nile Water resources policy and institutional framework, holistically, creating risks of desegregated and disjointed actions,

Gaps in laws exist and adequate regulations to implement existing laws have not been put in place and therefore large parts of existing laws are redundant. Secondly, weak enforcement mechanisms in both countries have to a significant extent undermined the effectiveness of the existing laws.

4.0 HARMONIZATION OF EXISTING POLICY, LEGAL & INSTITUTIONAL FRAMEWORKS

4.1 Introduction

This chapter discusses the framework for harmonization of policies, laws and institutional frameworks governing the management of trans-boundary water resources of the SMM catchment based on the overview presented in **Chapter 3**. The discussion is structured in three main parts i.e.:

- (i) The identification of policy and legal aspects of the existing systems of Kenya and Uganda related to water sector development and management that need to be harmonized.
- (ii) The development and evaluation of recommendations for achieving harmonization in areas identified as needing harmonization. This task involves the development of a harmonization strategy for existing policy and legal systems that will enable and support the development and implementation of a trans-boundary cooperative framework.
- (iii) The development and evaluation of trans-boundary policy and legal framework options specific to the SMM catchment.

4.2 Aspects that need to be harmonized

NELSAP's objective is to contribute to the eradication of poverty, promote economic growth and reverse environmental degradation. In order to achieve this objective a harmonized effort to tackle the key causes of environmental and natural resources degradation in the SMM catchment is necessary.

The key water resources management issues facing the SMM catchment were discussed in detail in **Chapter 2** and include among others: Deforestation; Wetland degradation; cultivation of ecologically fragile areas like hill slopes, swamps and river banks; Land fragmentation; failure to apply soil conservation measures such as fallow periods and crop rotation; increased reliance on agro-chemicals which leaches into the rivers, causing water pollution; and loss of bio-diversity.

In order to address the above issues and realise sustainable development of the catchment, cross-sectoral harmonization of policies, laws and institutional frameworks governing the following strategic areas should be a key priority:

- (i) Water resources management;
- (ii) Environmental management;
- (iii) Wetlands management;
- (iv) Agriculture;
- (v) Fisheries resources;
- (vi) Biological diversity, including forests and wildlife conservation; and
- (vii) Information and data management.

4.3 Harmonization Strategy

Harmonization of laws, policies and institutional frameworks is a process under which the frameworks of two or more countries are compared and contrasted for differences and similarities and the differences eliminated or minimized. Harmonization does not require that the frameworks should be the same. Rather it requires that the frameworks sought to be harmonized should be:

- (i) Based on comparable principles;
- (ii) Geared towards achieving the same objectives;
- (iii) Cover the same subject matter; and
- (iv) Be capable of achieving their stated objectives.

The aim of harmonization is to ensure that those differences in principles, objectives, coverage and ability to achieve objectives are minimized, and where possible, eliminated.

Harmonization recognizes the differences in legal culture and traditions between various countries, and the specific, and at times, unique, circumstances of countries. It is not the aim of harmonization that the frameworks overlook these differences and specific circumstances. Each country's laws, policies and institutional frameworks must take account of, and give effect to, that country's particular circumstances. It is for this reason that it is not necessarily an aim of harmonization of frameworks that laws, policies and institutional frameworks should be made the same. What harmonization seeks to eliminate are gaps and differences in the principles, objectives, coverage and capacities of institutions which, over time, can lead to differences in management of the same river basin on different sides of the border.

The process of harmonization requires that the principles, objectives, coverage (scope) and standards to be achieved by the laws, policies and institutional frameworks is stipulated and then each country is required to implement these in its own country, and using its own processes. Harmonization therefore focuses on the *outcome* or results and not the literal sameness of the laws, policies and institutional frameworks. Given the unique circumstances of countries, frameworks may look different but be capable of achieving the same outcomes.

Effective harmonization depends on the existence of a cooperative framework governing the relationship between the countries seeking to harmonize their laws, policies and institutions. The co-operative framework would:

- (i) Stipulate the requirement for harmonization;
- (ii) Set out the principles on the basis of which the respective frameworks are to be harmonized;
- (iii) Set out the objectives to be achieved by the respective frameworks;
- (iv) Set out the scope and extent of the harmonization exercise; and
- (v) Provide mechanisms for securing effective implementation and functioning of the harmonized legal frameworks, including systems for benchmarking, monitoring, and facilitation of action towards progressive improvement in effectiveness, which may include sanctions and incentive measures.

Harmonization differs from the process of approximation of laws, policies and institutional frameworks. The process of approximation of laws involves a detailed case-by-case comparison of each law by representatives of the respective member States of the countries concerned, with the aim of identifying differences in the legal, policy and institutional frameworks. The outcome of the comparison is a checklist of differences in frameworks, which the countries are then expected to eliminate. The idea is that this process should eventually lead to laws, policies and institutional frameworks which are substantially the same.

There are drawbacks in this process of approximation of frameworks:

- (i) It is slow, time consuming and protracted. This is because it involves a case by case comparison of each and every law, policy and institutional framework;
- (ii) It is undertaken without prior consensus on the desired principles, objectives and coverage of the laws. Therefore each time a different law is being compared and contrasted, there is likely to be differences of opinion on the desirable principles, objectives and scope of the particular law. These differences go beyond merely

- differences in the interpretation of the meaning, scope and coverage of the laws themselves to a difference regarding the desirability and appropriateness of the principles, objectives and intentions sought to be advanced by the laws. Often these differences cannot be resolved at the technical level, as they go to policy issues, and this further adds to the protracted nature of the approximation process.
- (iii) Given that laws, policies and institutional frameworks are dynamic and therefore constantly evolving, by the time the approximation process regarding a particular law, policy or institutional framework is completed, the law, policy or institution in question may well have evolved, and changed, and this may vitiate the conclusions and recommendations of the exercise of comparison that has been undertaken.

With regard to the SMM catchment, the East African Community Treaty already provides a comprehensive Cooperative Framework within which harmonization can be implemented. Together with the Protocol on the Sustainable Development of Lake Victoria, there is a basis for pursuing a process of harmonization through the issuance of directives by the Council of Ministers which would set the basis and outline the principles on which harmonization is to be implemented. Additionally, the East Africa Legislative Assembly has power to pass laws binding on member states.

Therefore within the SMM catchment, the recommendation is to carry out a harmonization process based on the framework and the principles of the East African Community Treaty. Presently, the East African Community Treaty framework has opted for the process of approximation of laws, and whereas this may resolve some of the issues sought to be dealt with through harmonization, the approximation process is not considered viable for harmonization of all the laws pertinent to the management of the SMM Basin. The reason is that the laws dealing with water resources management are diverse and wide ranging, and a process of approximation would be much too protracted and cumbersome to provide an effective mechanism for achieving the desired objective.

4.4 Harmonization Principles

The principles upon which the laws, policies and institutional frameworks *should be* based (and the objectives which should be pursued by the frameworks) are drawn from the international and regional agreements to

which the two countries are parties and whose tenets they have committed themselves to.

The principles governing the utilization of shared water resources under international law are encapsulated in The Convention on the Law of Non-Navigational Uses of International Water Courses of 1997, which even though not yet in force, represent general consensus among nation states about the status of international law on this subject. This Convention has elaborated upon several principles including the principles of:

- (i) Sustainable utilization.
- (ii) Equitable utilization as between the states sharing the watercourse.
- (iii) The prevention of significant harm to other watercourse states.
- (iv) Prior notification, exchange of information and consultation regarding planned measures.
- (v) The assessment of the potential impacts of planned measures.
- (vi) The preservation of environmental integrity of the watercourse including prevention of pollution.
- (vii) Integrated management of water resources.
- (viii) Basin management and the community of interest of all states that share the watercourse in the river as a whole.

The above principles are also enshrined in the proposed Nile Basin Cooperative Framework and the Lake Victoria Protocol as discussed in the previous chapter. Since the SMM catchment is part of the River Nile and Lake Victoria basins (for the case of R.Sio), therefore the principles of the cooperative framework of the Nile Basin and the Lake Victoria Basin Protocol form an integral part of the principles upon which the management of the SMM Basin must be founded.

Geographically, the Sio belongs to Lake Victoria Basin while Malaba-Malakisi belongs to Lake Kyoga Basin. In the Lake Victoria Basin the legal and institutional framework is already highly developed. There is no comparable legal framework governing the Lake Kyoga basin, therefore the principles drawn from the Lake Victoria Basin cannot be used to govern both Basins, whereas the principles of the wider East African Community treaty can be used for both Basins.

Article 112(2)(b) of the Treaty establishing the East African Community provides for the obligation of the partner states to conserve the environment and natural resources of East Africa. Among the obligations accepted by the states is in regard to the conservation of water resources and the prevention of pollution. In particular, Article 112(2)(b)(vi)

provides for the need to protect specifically Lake Victoria and its water resources.

On the basis of this understanding of harmonization, the laws of the two SMM Basin countries – Kenya and Uganda – are compared and contrasted in order to identify aspects that need to be harmonized and to recommend a harmonization strategy. The frameworks are compared on the basis of the following characteristics:

- (i) The principles upon which they are based;
- (ii) The objectives they seek to achieve;
- (iii) The scope of the respective laws, policies and institutional frameworks; and
- (iv) The effectiveness of the frameworks.

The laws, policies and institutional frameworks of the two countries are analysed to ascertain the extent to which they provide for the inclusion of the above principles. The exercise of harmonization should be geared towards those aspects of the frameworks that fall short of implementing the above principles.

4.5 Recommendations for Harmonization at Strategic Level

In presenting recommendations for harmonization that are specific to the SMM basin, the approach is to make recommendations with regard to the key water resources related issues whose sustainable management are seen as being critical to the achievement of the objectives of NELSAP. These recommendations are not exhaustive of all the harmonization issues but are illustrative of the framework for harmonization that needs to be adopted.

Recommendations for strategic level harmonisation in this regard refer to harmonization of broader national level policies, laws and institutions. It is understood that this level of harmonisation may not be achieved immediately but could potentially be achieved as part of the two governments medium to long-term reform process of the relevant sectors. These recommendations are intended to highlight some of the critical issues that need to be addressed in order to achieve a common objective of sustainable integrated transboundary water resources management in the two countries inclusive of the SMM basin water resources. These recommendations, hopefully, will inform the reform process regarding transboundary water resources management in the two countries.

4.5.1 Harmonization of Policy and Legal Frameworks

Both Kenya and Uganda have built into their policy and legal frameworks mechanisms, which endeavour to ensure that their national water resources are utilized in a sustainable way.

Harmonization of Constitutional Provisions

In Uganda the management of water and other natural resources are provided for in the Constitution, which is the supreme law of the land. The Constitution provides that the state shall promote sustainable development and public awareness of the need to manage land, air and water resources in a balanced and sustainable manner for the present and future generations. It further provides that the utilization of the natural resources of Uganda are to be managed in such a way as to meet the development and environmental needs of present and future generations of Ugandans. In particular, the state is required to take all possible measures to prevent or minimize damage and destruction to land, air, and water resources due to pollution or other causes.

The state, including local governments, is required to create and develop parks, reserves and recreation areas and ensures conservation of natural resources and to promote the rational use of natural resources so as to safeguard and protect the bio-diversity of Uganda.

Article 237 provides that "natural lakes, rivers, wetlands, national parks, game reserves, forest reserves and any land to be reserved for ecological and tourism purposes" are to be held, by the government or a local government, in trust for the people as determined by Parliament by law. This provision introduces the concept of management of water resources and other named natural resources, as a public trust. As a trustee, the law of trusts limits the powers of the state, in dealing with these resources. The state cannot manage these resources wastefully inconsistent with its obligations to safeguard the long-run interests of the people who are the beneficiaries named by the constitution. The Constitution also imposes a duty on the state to protect important natural resources, including water, on behalf of the people of Uganda.

In its Article 245, the constitution provides that parliament shall, by law, provide for measures intended: to protect and preserve the environment from abuse, pollution and degradation; to manage the environment for sustainable development; and to promote environmental awareness. This has already been done through the enactment of the National Environment Act, the Water Act, and the Wildlife Act, in addition to other laws that existed before 1995.

Kenya does not have constitutional provisions, which deal directly with environmental and natural resources management and conservation. All the provisions dealing with the conservation of natural resources are found in the laws enacted under the Constitution.

To the extent that the Constitution is the supreme law of the land, and that certain fundamental principles for the governance of the country should be provided for in the Constitution, the laws of Kenya and Uganda should be harmonized in this respect. This would require that Kenya also make provisions in its Constitution for natural resources management.

Fortunately, the need to explicitly include in Kenya's supreme law provisions dealing with natural resources conservation has already been embraced by the government and was implemented in the proposed new Constitution, 2005. Unfortunately, the proposed new constitution, which includes extensive provisions dealing with natural resources management, was not approved at the national referendum held in November 2005 and is still pending further review. Therefore, *currently this remains an aspect of legal frameworks on which there is a divergence between the framework prevailing in Uganda and that prevailing in Kenya. Harmonization of this aspect of the respective legal frameworks is recommended.*

Harmonization of Water Policies and Legislation

Water Policy:

The overall policy objectives of the Government of **Uganda** for the water and sanitation sector, are enshrined in the National Water Policy, 1999 as being to:

- (i) Manage and develop the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations with full participation of all stakeholders (MWLE, 1999);
- (ii) Ensure sustainable provision of safe water within easy reach and hygienic sanitation facilities, based on management responsibility and ownership by the users, to 77% of the population in rural areas and 100% of the urban population by the year 2015 with an 80-90% effective use and functionality of facilities (MWLE, 1999 revised 2004, from 2000 to the 2015 target year); and

- (iii) Promote development of water supply for agricultural production in order to modernise agriculture and mitigate effects of climatic variations on rain fed agriculture (MWLE, 1999)

Besides the above objectives, the water policy also acknowledges the need for cooperation on transboundary water resources management issues and promotes decentralization of water management functions.

Similarly, the **Kenya** National water Policy sets out the policy direction in the management and development of water resources in the country. The policy provides for the following specific principles to guide the activities in the water sector:

- (i) Preserve, conserve and protect available water resources and allocate it in a sustainable, rational and economical way.
- (ii) Supply water of good quality and in sufficient quantities to meet the various water needs, including poverty alleviation, while ensuring safe disposal of wastewater and environmental protection
- (iii) Establish an efficient and effective institutional framework to achieve a systematic development and management of the water sector.
- (iv) Develop a sound and sustainable financing system for water supply and sanitation development.

The policy also highlights the important role played by the private sector and local communities in ensuring sustainability of sector activities.

Based on the above discussion it is clear that there is significant synergy between the water policies in Kenya and Uganda, and harmony has already substantially been achieved.

The key gap with regard to the management of water resources is that the trans-boundary dimension is not comprehensively dealt with in both water policies. Although mentioned in both policies, no specific strategies and measures are outlined regarding how issues relating to the management of shared water resources are intended to be addressed in a policy and legal framework with a predominantly national focus. Recognizing this shortcoming Kenya has embarked on a process to revise its National Water Policy in order specifically to address the trans-boundary dimension.

It is recommended that Uganda similarly should incorporate provisions specific to trans-boundary waters management in its National Water Policy. These provisions could be specific to the SMM Basin, or more appropriately, they could be generic to all shared water resources.

Water Legislation:

The two countries national water policies are underpinned by a legal framework which is found, in the case of Uganda, in the Water Act, Chapter 152, which was enacted in 1997, and, in the case of Kenya, in the Water Act, 2002. The two pieces of law are largely in line with their respective policy principles outlined above for the sustainable management of water resources. There are, however, a few differences, which would require harmonization in order to facilitate sustainable utilization of the shared resource and minimize the risk of cross border conflict.

(i) Allocation of Water Rights

The key issue with regard to water utilization is allocation, which in both countries, is carried out under a well-defined statutory framework.

Allocation of water resources in **Uganda** is administered under the Water Act, Chapter 152, which is the principal law for the management of the water resources of Uganda. It provides for protection and management of water resources, water supply and water use and related matters.

All rights to investigate, control, protect and manage water are vested in the Government of Uganda. The Act imposes a requirement for permits to use water. A person who has to construct or operate any works or takes and uses water needs permission. Also to discharge waste into water bodies, a person has to acquire a permit. Regulations provide for very extensive requirements for advertising applications and hearing of, and dealing with, complaints against a permit application and for the procedures to be observed in granting these permits.

The Act and the Regulations also make links between resource management and the conservation of environmental resources. Section 20 stipulates the following conditions for permits: prevention and avoidance of pollution; prevention of damage to water sources; and maintenance of the quality of water.

The Regulations contain also two key requirements i.e.

- (i) The power to determine the amount of water that may be taken out of the stream and in which season. This determines the in-stream environmental requirements.
- (ii) The requirement that an applicant for a permit shall attach an approved EIA in accordance with the Water Act.

Permits for allocating resources establish property rights. As property right allocations, the holder of the permit is granted the right to use the resource in a specified way while the granter, in this case the state, sets the applicable conditions associated with the permit granted e.g. permit duration, permit fees, water withdrawal rates, etc. These aspects have all been set out in the current Ugandan legislation.

Section 7 provides an exception to the need for water permits. It allows individuals to use water for subsistence purposes and fire fighting without the need to seek a permit.

The Ugandan legislation on water resources allocation is largely in harmony with the **Kenyan** law on water resources allocation as provided for by the Water Act, 2002. The Act vests ownership of water resources in the state, and the right of use and management of water resources in the Minister in charge of water resources.

The Kenyan Water Act recognizes permits as an important regulatory instrument for sustainable use of the country's limited water resources. Section 6 of the Act states that:

“No conveyance, lease or other instrument shall be effectual to convey, assure, demise, transfer, or vest in any person any property or right or any interest or privilege in respect of any water resource, and no such property, right, interest or privilege shall be acquired otherwise than under this Act.”

In order to use water, a permit is required. Indeed the Act states that it is an offence to use water from a water resource without a permit. There are however three exceptions to the permit requirement. These relate to:

- (i) Minor uses of water resources for domestic purposes;
- (ii) Uses of underground water in areas not considered to face groundwater stress and therefore not declared to be groundwater conservation areas; and
- (iii) Uses of water drawn from artificial dams or channels, which – being artificial rather than natural - are not considered to be water resources of the country.

The application for the permit is made to the Water Resources Management Authority. Section 32 stipulates the factors to be taken into account in considering an application for a permit. Applications for permits are required to be subjected to public consultation. Accordingly the application shall be advertised in the print and electronic media and

an opportunity given to those who wish to make comments or lodge objections to do so.

Permits are given for a specified period of time. Additionally, the Authority is given power to impose a charge for the use of water. The charge may comprise both an element of the cost of processing the permit application as well as a premium for the economic value of the water resources being used. Charging a premium for the use of water resources represents the use of charging as a mechanism for regulating the use of water.

Section 34 requires that a permit specify the particular portion of any land to which the permit is to be appurtenant. The permit passes with the land on transfer or other disposition. Where the land on which the water is to be used does not abut on the watercourse the permit holder must acquire an easement over the lands on which the works are to be situated. It is thus not possible, under the law, to obtain a permit in gross (i.e., which is not linked to particular land).

The provisions in Kenya and in Uganda dealing with the allocation of water resources by way of permits are to a large extent harmonized. Therefore with respect to this aspect of water resources management, the legal and policy frameworks are substantially in agreement. However the implementation of the permit system for allocating water rights is dependent on a clear definition of water quality and quantity standards, including the definition of in-stream flow requirements and the determination of the reserve for ecological purposes and for meeting basic human needs. In both countries, there is a gap in the legal framework with regard to these critical aspects. Whereas Kenya has put in place a process for classifying its water resources and defining the reserve, this has not yet commenced in Uganda.

There is need to harmonize the respective legal frameworks in the SMM Basin by determining water quality and quantity standards, classifying the water resources and defining the reserve.

(iii) Strategic Planning for Water use

Regarding planning for water resources management, both the Kenya and the Uganda legal frameworks make provision for planning for water use, and therefore this is an issue on which harmony has substantially been realized, except in respect to decentralization of strategic planning.

In **Uganda**, the Act establishes the Water Policy Committee, an inter-sectoral body, whose function among others is to coordinate the preparation, revision, and keeping up to date the comprehensive water

action plan for the investigation, control, protection, management and administration of water for the nation. Such planning may specify types of activities, development of works, which may not be done without the prior approval of the Policy Committee.

The Water Policy Committee has both advisory roles to the Minister. Its functions include setting national policies, standards and priorities, revising and updating the water action plan, coordinating revisions to relevant legislation, and co-ordinating sector ministries' plans and projects which affect water resources. Important functions of the WPC are the settlement of disputes between government agencies and co-ordinating the formulation of an international water resources policy.

The provisions regarding strategic planning in the **Kenya** legal framework are equally elaborate. The Act provides for the formulation of water resources management strategies at national level and at catchment area level. Under section 11 the Minister shall formulate a national water resources management strategy, and shall periodically review it. The national water resources management strategy is required to:

- (i) Determine the requirements of the reserve for each water resource;
- (ii) Classify water resources; and
- (iii) Identify areas, which should be designated protected areas and groundwater conservation areas.

Under section 15 the Water Resources Management Authority shall formulate for each catchment area, a catchment area management strategy, which shall be in line with the national water resources management strategy. Whereas a national water resources management strategy has been formulated, no catchment area management strategy has been formulated as yet, although work on this has started within the Water Resources Management Authority.

With the decentralization of water resources planning and management to catchment level, Kenya has dully embraced the concept of water resources management at the lowest appropriate level. Although water resources management at catchment level is one of the management issues that was discussed and recommended during the recently concluded water resources management sub-sector reform study, it is yet to be reflected in Uganda's national legislation. However, Uganda has demonstrated its willingness to adopt the new management approach by trying it out in one pilot catchment (Ruizi). It is envisaged that the lessons learned from the pilot catchment will guide the decision making process in Uganda on this particular issue.

The above situation notwithstanding, it would be necessary to harmonize the strategic planning for the SMM Basin by conducting out a catchment specific strategic plan for the SMM Basin for both the Kenya and Uganda parts of the Basin.

Harmonization of Environmental Policies and Legislation

The **Uganda** National Environment Management Policy provides the overall policy framework for environmental management in Uganda.

The Environment Policy and legislation are framework and overarching in nature, including water sector policy- related issues. The Policy, under section 3.5, recognises water as a major factor in the social-economic development of Uganda.

Unlike Uganda, Kenya has no gazetted National Environment Management Policy. This is also an issue with regard to which harmonization of frameworks between Kenya and Uganda will be necessary. Sustainable environmental management is key to the shared water resources. *Kenya needs to hasten the process of the development and adoption of a National Environment Management policy to underpin the country's laws on the sustainable management of the environment and natural resources. Among the key issues that would need to be addressed in such a policy with relevance to the SMM Basin is institutional coordination in natural resources management, which presently is problematic.*

The key issue with respect to environmental management is the assessment of planned measures. This is carried out under the procedure of Environmental Impact Assessment (EIA). On this there is synergy between the Kenyan and the Ugandan positions. Both countries have enacted legislation dealing with environmental impact assessment of planned projects. Regulations have been adopted detailing the measures to be taken in conducting an EIA and environmental audits.

That having been said, it is worth pointing out that as contained in EMCA, the EIA and audit requirement in both countries suffers from a number of limitations. Key among these is that the provisions are geared towards the assessment of the impacts of projects, and are deficient when one is dealing with the cumulative impacts of diffuse (non-point) activities, such as subsistence agricultural activities. *Such activities, which are the main cause of environmental degradation in the SMM Basin, would best be addressed through strategic EIA, for which the methodology in both countries is still deficient. This is an issue that requires to be addressed in both countries.*

It is also the case that the EIA provisions in both countries are lacking in their capacity to ensure that trans-boundary water resources are managed in an integrated and environmentally sustainable manner since the law and regulations do not make specific provision for the assessment of trans-boundary impacts. Thus the law of both countries do not make specific provision – and lacks the mechanisms – for potentially affected persons across the border to be consulted on the potential impacts. Significantly, environmental rights in the Ugandan Constitution are reserved for “**every Ugandan.**” *With regard to the SMM Basin, this is a deficiency that needs to be addressed urgently by implementing the recommendations of the Guidelines on Trans-boundary Impact Assessment, approved by the East African Community Council of Ministers in 2005.*

Harmonization of Wetlands Management Policies and Legislation

Besides the National Environment Management Policy, Uganda also an elaborate National Wetlands Management policy as discussed in **Chapter 3**. The National Policy for the Conservation and Management of Wetland Resources was adopted in 1996 and highlights the importance and functions of wetlands as a vital resource covering almost 10% of the country’s surface area. It sets out five goals: to ensure optimal use of wetlands, stop degradation of wetland productivity, maintain biological diversity of natural and semi-natural wetlands, maintain wetland functions and values and integrate wetland concerns into the planning and decision making of other sectors.

Uganda has gone further and developed legislation dedicated specifically to the sustainable management of wetlands and the National Environment (Wetlands, River Banks And Lake Shores Management) Regulations, 2000. The regulations require that a permit be sought, and certain pre-requisite procedures be followed before wetlands can be drained. Whereas as the law is flexible in providing a mechanism for permitting uses of wetlands, the Uganda policy is much more restrictive and calls for “*no drainage of wetlands unless more important environmental management requirements supersede.*” The strict implementation of this “no drainage policy” would perhaps prove impracticable in the circumstances of the SMM Basin, where wetlands are viewed as a resource for drainage for rice cultivation purposes. The regulations also provide for riverbank and lakeshore protection by prohibiting cultivation or indeed any development within a distance of 100 metres from the riverbanks and lake shores.

On the contrary, Kenya has no National Wetlands Management Policy and is just in the process of developing one. The impact of this gap on wetlands in Kenya has been devastating. There is indiscriminate

drainage of wetlands for agricultural production with impunity. Apart from the protected wetlands, ordinary wetlands are private property whose ownership goes hand-in-hand with the property rights of the adjoining land. This makes it very difficult to regulate drainage of such wetlands as they are considered to be private property whose use is at the discretion of the owner! The WRMA is currently in the process of gazetting rules dealing with the management of wetlands.

Thus, with regard to wetlands, there is a variance with regard to the policy position in Kenya and in Uganda. The respective policy positions in Kenya and in Uganda would need to be harmonized since wetlands policy and wetlands management is a key aspect of the sustainable management of the shared water resources between the two countries, and in particular, the SMM basins. *Harmonization requires that Kenya hasten the development and adoption of a wetlands policy and that Uganda adopt a policy based on sustainable use rather than no drainage.*

Harmonization of Agricultural and Land use Policies and Legislation

The management of land and agricultural activities is another area with regard to which the laws of the two countries need to be aligned. In both countries, rain fed subsistence agriculture is the mainstay of the livelihoods of the rural population in the SMM Basin. Sustainable agriculture therefore is critical to the eradication of poverty in the region.

In **Kenya** land is owned under a series of statutes but critically, agricultural land must be managed under the provision of the Agriculture Act, Chapter 318 of the Laws of Kenya. These provisions give power to the Minister, which is exercised through the Agriculture officer at district level. The Physical Planning Act, Chapter 286 and the Land Control Act, Chapter 302 require that physical development plans be formulated and any land which is used for agricultural purposes may not be converted to other use without the consent of the Land Control Board.

Kenya's Agriculture Act aims to promote and maintain a stable agriculture, to provide for the conservation of the soil and its fertility and to stimulate the development of agricultural land in accordance with the accepted practices of good land management and good husbandry. It deals with the preservation of the soil and its fertility, the development of land, general schemes for land preservation and land development. It also provides for the enactment of rules for the preservation, utilization and development of agricultural land. These powers enable the Minister to control the use of land, and encourage sustainable management of agricultural land.

In **Uganda**, the Land Act provides for the tenure, ownership and management of land. Under the Land Act, a person who acquires land is required to manage and utilize it in accordance with the existing environmental laws and any use of land must conform to the law relating to town and country planning. Uganda does not however, have a statute that is comparable to the Agriculture Act of Kenya, and therefore the power to control land degradation is not anchored in law.

Given the importance of agriculture in the SMM Basin, it is recommended that agriculture laws patterned on the rules to be found in the Agriculture (Basic land Use) Rules, which control degrading land use, made under the Agriculture Act of Kenya, be introduced on both sides of the border in the SMM basin. In Uganda these rules can be introduced as by-laws of the district councils within the Uganda side of the SMM Basin.

Regarding irrigation, both Kenya and Uganda promote irrigation as a means to enhancing agricultural production and food security. Irrigation tends to target wetland areas and additionally is a major user of water resources. *There is a need therefore that a policy on irrigation, and how it interfaces with wetlands policy and sustainable water resources management, is developed specifically for the SMM Basin, as currently this is an area where there is a gap in the policy framework.*

Harmonization of Fisheries Management Policies and Legislation

In **Uganda** the Fish Act of 1964 governs the utilization and management of fisheries resources. Kenya operates under the Fisheries Act, Chapter 378. These statutes vest ownership of fisheries resources in the central government. For example, the Fisheries Act, Chapter 378 of **Kenya** had the objective of “providing for the development, management, exploitation, utilization and conservation of fisheries.” To manage fisheries it provides for closed seasons; prohibited fishing areas; limitations on the methods of gear; limitations on the amount, size, age and other characteristics and species of fish that may be caught; management of fish landing areas; the control of aquatic plants in fishery waters and registration and licensing of fishing vessels.

Accordingly, rights to harvest fisheries resources are defined in the law and granted to individual fishermen through a licensing system on an annual basis. Fishing without a licence was criminalized as an activity, with the result that many local community members find themselves on the wrong side of the law, for carrying out a normal subsistence activity. For management and administration, the statute establishes a central fisheries management body, the Fisheries Department, which works through district offices.

More recently, there has been a re-examination of alternative management approaches, particularly approaches based on “co-management incorporating the participation of resources users, in the management system. In Uganda co-management efforts can be traced back to the mid 1990s when the policy of decentralization was promoted. Landing Site Management Committees were established with government support. Fish Rehabilitation Committees were also set up to reduce illegal fishing activities. Both committees involved the input of the local communities on the ground. Eventually Beach Management Units (BMUs) were set up as a result of these efforts. The District Fisheries Officers assisted in the setting up of the BMUs. The functions that BMUs began to perform included resolving conflicts among fishermen, setting sanitation rules, and controlling illegal fishing gears.

In the year 2000 the Government of **Uganda** implemented a National Fisheries Policy. Among its objectives was to give both the local government and local communities responsibility in respect to sustainable resource management, development, and utilization. The Policy also called for the legal recognition of fisheries communities and their rights of management of the fish resources in their locality.

In line with the National Fisheries Policy a new bill – the Fisheries Bill - was drafted in 2004. Pending the enactment of the Bill a subsidiary statutory instrument - The Fish (Beach Management Rules) 2003 – was promulgated to provide the legal basis for the creation of BMUs in Uganda. The fisheries resources management arrangements currently operating in Uganda comprise, at national level the Department of Fisheries, at district level, the district officers from the District Fisheries Department and BMUs at community level, including in the SMM basin.

Kenya has largely followed the same path that has been followed by Uganda. Kenya’s efforts are being formalized through the development of legal instruments. The Fisheries (Beach Management Unit) Regulations, 2005 have been drafted, and await promulgation but presently Kenya does not have a legal basis for the operation of BMUs. To put the legalization of BMUs on an even firmer footing legislatively, it will be necessary at some stage in the near future to entrench the role of BMUs in the management of fisheries in the Fisheries Act, through an amendment of the Act. Pending the promulgation of the Regulations, the BMUs in Kenya are presently registered as self-help groups with the Department of Social Services under the Ministry of Culture and Social Services. The BMUs have a Constitution and rules or regulations that they develop with the assistance of the Fisheries Department.

BMUs are user groups and largely mirror WRUAs in the water resources sector. It is recommended that Kenya should also introduce legal and

policy measures enabling BMUs to be established in the SMM Basin. Consideration should also be given to the possibility of legalizing the establishment of a network of BMUs across the border.

Harmonization of Forest Management and Wildlife Conservation Policies and Legislation

The upper reaches of the SMM catchment has a number of areas with protected status area on account of their rich biological diversity, based on forest and wildlife resources. Both countries have well developed legal frameworks for the management of protected areas, such as wildlife reserves and forest areas. These frameworks are substantially aligned. The forest law in Uganda is the *National Forestry and Tree Planting Act, 2003*, which provides for the conservation, sustainable management and development, and use of forests for the benefit of the people of Uganda, while the forest law in Kenya is the Forest Act, 2005.

In both Kenya and Uganda, the law provides for the involvement of user groups and local communities in the management of forests. The law in Kenya which recognizes community forests is much more recent than the law in Uganda, having been enacted only in 2005. Neither law recognizes the role of cross-border communities in forest management. *Given the importance of forests as catchments for the watersheds, it is recommended that consideration be given by both Governments to providing mechanisms for cross border collaboration by forest dependent communities in the management and utilization of forest resources.*

The Uganda Wildlife Statute, which repealed earlier laws, was enacted in 1996 to provide for sustainable management of wildlife, to consolidate the law relating to wildlife management, establish a co-ordinating, monitoring and supervisory body for that purpose. It created the Uganda Wildlife Authority.

In Kenya similarly forests are managed under the Wildlife (Conservation and Management) Act, which provides for the establishment of game parks and reserves and prohibits activities that might hamper the proper management of wild animals. The Act was amended in 1989 to provide for the establishment of Kenya Wildlife Service (KWS) to be the national body responsible for the management of wild life in Kenya. *Wildlife protected areas double up as forest catchments and, as is the case with forests a role for cross-border communities would contribute to reducing conflicts arising from unsustainable practices.*

Harmonization of Information Access Policies and Legislation

Both Kenya and Uganda regard public access to information as an integral part of sustainable water resources management development. In both countries several legislation provide for the right for the public to be able to access information that is held by public authorities. However in Kenya, under the Water Act and the EMCA, this right is limited to information which is required to be placed on a public register, whereas in Uganda, the Constitution gives a more wide ranging right to information, including information which may not necessarily be required to be on the register.

It is recommended that with regard to the SMM Basin, the two countries harmonize their legal frameworks regarding access to information. Ideally information should be made available with little restriction, subject only to the need to protect information which is confidential or the release of which would have national security implications. The charges for the information provided should also be harmonized.

4.5.2 Harmonization of WRM Institutional Frameworks

The water sector institutional frameworks in both Kenya and Uganda are quite elaborate as discussed in **Chapter 3**.

In **Kenya**, section 7 of the Water Act creates the Water Resources Management Authority (WRMA). WRMA is responsible for the regulation of the use and management of water resources.

Section 14 of the Act provides that WRMA may designate catchment areas, defined as areas from which rainwater flows into a watercourse. Section 10 states that WRMA shall establish regional offices in or near each catchment area. Section 16 provides that WRMA shall appoint a committee of up to fifteen persons in respect of each catchment area to advise its officers at the appropriate regional office on matters concerning water resources management, including the issuance and revocation of permits.

The Act provides a role for user groups, organized as water resources users associations, in the management of water resources. User groups provide a mechanism for local level participation in water resources management. In this respect the Kenyan institutional framework has devolved water resources management not just to the catchment, but literally to the level of the local community.

In Kenya the law vests other catchment level institutions – particularly, Regional Development Authorities - with other water resources management functions to compliment the work of the WRMA as discussed in **Chapter 3**.

In Kenya the management of Government affairs is undertaken also on the basis of the “provincial administration”, comprising provinces, districts, divisions and locations, which is at the community level. The boundaries of these administrative units are drawn on administrative considerations, and bear no relationship to the catchment. Within the SMM Basin there are several districts falling within the Lake Victoria North Catchment. These administrative structures also play a role in development activities, and must be taken into account since, apart from in the area of water resources management, they remain the key administrative units for Government administration. Ministerial functions are decentralized to these units, for instance in the field of agriculture, health and economic planning, among others. However water resources, forests and wildlife management have been organized and are administered on the basis of different considerations.

The water sector institutional framework in **Uganda** is equally elaborate although the devolution of water resources management to catchment level is yet to take root. Despite this difference at catchment level, national level water sector institutions in Uganda to a large extent find parallels in the Kenyan water sector institutional framework.

Article 189 of the Uganda Constitution provides that the central government has responsibility for matters specified in the Sixth Schedule. Matters not specified in the Schedule are within the competence of the Districts and lower local governments.

Item 7 of the Sixth Schedule specifies that: "Land, mines, mineral and water resources and the environment" are the responsibility of the central government. But Article 189(2) provides that district councils and councils of lower local governments may at their own request be allowed to exercise functions reserved to the central government, or such functions may be delegated to them by the government or by Parliament by law.

The Local Government Act implements the Government policy of decentralization and management of resources at the lowest levels, and the provisions of the constitution relating to local government. It provides for the system of local governments, which is based on the district. Under the District there are lower local governments. This system provides for elected councils as key components in their decision-making mechanisms.

The district and lower local councils effectively control and manage their natural resources and environment. The District council is responsible for the following functions, which are relevant to water resource management: (i) forests and wetlands; (ii) environment and sanitation; and (iii) protection of streams, lakeshores, wetlands and forests. The District councils may devolve services and functions to the Lower Local governments including the protection of wetlands, the protection and maintenance of local water resources.

Whereas an institutional framework exists in Ugandan law for the devolution of the management of water resources to lower level institutions, it is noteworthy that these institutions are not ecosystem-based institutions, unlike in Kenya. *These are major areas of variance with the Kenyan institutional framework, which need to be harmonized. It is recommended that, with respect to the SMM Basin, a catchment-based institution should be mandated to be responsible for managing water resources, to match the catchment based approach on the Kenyan side.*

Additionally, Kenyan water resources management law provides for the establishment of water resources users associations as the institutional organ for community based user group participation in water resources management. WRUAS are intended to be demand driven institutions, and the role of the Government agencies is purely to facilitate their establishment and operation.

Whereas in Uganda there exist “water user associations” these associations are organisations dealing with the management of local community water supply systems, such as boreholes and protected springs. They have hardly any role with regard to water resources management. This is a key difference between the Kenyan and the Ugandan institutional frameworks for the management of water resources at local community level. Given the critical role played by user groups in the management of water resources, the absence of a clear institutional mechanism for local community participation in water resources management on the Uganda side of the SMM Basin is a gap, which needs to be addressed.

It is, therefore, recommended that Uganda considers facilitating the establishment of water resources user associations within their side of the border in the SMM Basin. This would contribute to harmonising the institutional frameworks for local community participation on both sides of the border.

4.6 Recommendations for Harmonization at Operational Level

Besides strategic level harmonisation discussed above, it is possible that the two countries embark on harmonization of specific procedures, standards, guidelines, enforcement mechanisms, monitoring, reporting and evaluation procedures and field practices that can easily be addressed in the short term under the existing management frameworks in the two countries. This level of harmonisation could be undertaken at a local level through specific by-laws and memorandum of understanding in which case the local governments and local communities will have a bigger role to play in this regard. This level of harmonisation is likely to be realised sooner rather than later and could help in informing and catalysing faster harmonisation at the strategic level. It is therefore important that the relevant authorities mandated to facilitate the harmonisation process fast track harmonisation at this level by providing the necessary technical and logistical support to the relevant local government and other stakeholders to be involved in the harmonisation process.

The following areas of possible harmonisation have been identified based on a detailed analysis of the existing policy, legal and institutional framework in the two countries and on the current field procedures and local community practices in the basin on either side of the boarder. These areas of harmonisation also take into account issues usually covered by other basin organisations. Most of these areas require regional approaches and cross-sectoral integration.

Water resources development and management

- (i) Long-term planning for integrated water resources management
- (ii) Development of strategies for conserving and monitoring water quantity from water catchment areas; promoting water user associations and water harvesting techniques.
- (iii) Prevention of water pollution and monitoring water quality.
- (iv) Determination of water rights allocation and monitoring water use in irrigation farming and other sectors.
- (v) Development of common standards to monitor, assess and allocate water for different uses in the basin.
- (vi) Promotion of regular exchange of water quality and quantity data between the basin states.

Sustainable Agriculture and Land use practices

- (i) Development of common approaches and/or exchange of information on agricultural technologies.
- (ii) Adoption of basin-wide strategies for food security.
- (iii) Improvement of systems to promote water harvesting for crop and livestock uses.
- (iv) Adoption of approaches to improve livestock breeds, and pasture for increased productivity.
- (v) Establishment of standards to control and monitor disease and pests of crops and livestock.
- (vi) Development of strategies to improve agricultural markets and the exchange of market information.
- (vii) Development of strategies and models for improved access to credit and inputs for agricultural production and marketing.

Forestry management and development

- (i) Promotion of approaches for sustainable management of forest resources.
- (ii) Promotion of community forestry management practices and cross boarder collaboration in the management of shared forest resources.

Environmental Management

- (i) Control of pollution from land-based point and non-point sources i.e. Industrial affluent and waste; urban sewage and solid waste management, Agricultural activities; Mining activities, etc.
- (ii) Development of strategies and plans for the sustainable conservation of fauna and flora in the Basin.
- (iii) Development of approaches to increase local community involvement in biodiversity conservation.
- (iv) Promotion of sustainable approaches for management and conservation of wetlands including development of joint wetlands management plans.
- (v) Development of strategies for preventing the introduction of alien fauna and flora species in the Basin.

Harmonised policies, laws, regulations and standards

- (i) Creation of a framework for in-put into policy formulation by stakeholders.
- (ii) Promotion of the adoption of harmonised or common standards and regulations governing the activities for the sustainable development of the basin.
- (iii) Promotion of self-compliance with agreed policies, laws, regulations and standards by stakeholders.
- (iv) Promotion of capacity building and training in enforcement of rules and legislation.

Stakeholder participation in planning and implementation

- (i) Promotion of public participation in the preparation of sustainable development plans for the Basin.
- (ii) Promotion and facilitation of public participation in the harmonization of sectoral plans with the basin plans.
- (iii) Promotion of stakeholder participation in projects/programme implementation, monitoring and evaluation.

Capacity building and institutional development

- (i) Promotion and encouragement of harmonised education and training standards and develop exchange programmes on sustainable development.
- (ii) Promotion of the establishment of regional centres of excellence in research and specialized training.
- (iii) Promotion of networking between actors such as local authorities, private sector actors and NGOs in order to enhance collaboration and sharing of information.
- (iv) Development of strategies to optimise research and research networking through the use of existing information infrastructure and manpower.
- (v) Development of awareness raising strategies to raise public awareness, increase participation and build confidence.

Exchange of Information

- (i) Establishment of regional databases to facilitate the exchange of data and information.
- (ii) Promotion of information sharing among the stakeholders in areas of interest.
- (iii) Facilitation and promotion of the use of modern information technology.

Sustainable fisheries management and development

- (i) Preparation and coordination of implementation of a basin-wide fisheries management plan.
- (ii) Development of strategies for the management of harvesting of fish species in the basin.
- (iii) Development of approaches and methodologies for sharing research findings and monitoring of fish stocks and yields.
- (iv) Enforcement of regulations and procedures to curtail illegal and unsustainable fishing practices.
- (v) Adoption of standards and regulations on fishing methods, landing sites, fish processing and marketing.

Establishing sustainable funding mechanisms

- (i) Development of a sustainable funding mechanism for raising and managing funds to support development programmes and projects in the basin.
- (ii) Developing a mechanism for accountability in resource utilisation.

Monitoring, evaluation and compliance

- (i) Development of procedures for monitoring progress in formulating the agreed upon policy and legal framework.
- (ii) Development of procedures for monitoring the degree of compliance with the policies and legal framework.
- (iii) Development of procedures for monitoring progress in implementation of sectoral plans and projects.

- (iv) Development of procedures for monitoring and assessing impacts of policies, laws, regulations, standards and interventions on sustainable development.

4.7 Harmonization of Enforcement and Implementation Mechanisms

As this review and analysis has demonstrated, the respective laws of both Kenya and Uganda on the management of water resources are largely aligned in several respects, although several key areas, which have been highlighted, do need to be harmonized. This a positive factor in the drive to harmonize the respective laws.

There are however two major shortcomings in the effort to achieve harmony in the legal frameworks of the two countries: in both countries the laws have not made provision for the management of trans-boundary issues and secondly, the implementation and enforcement of the laws is poor and largely detracts from the existence of the provisions themselves.

Implementation and enforcement in both countries is weak. The reasons for this are diverse. Among the reasons for weak implementation and enforcement are:

- (i) Both countries have multiple agencies with sometimes overlapping policy and institutional frameworks creating conflicts and coordination challenges;
- (ii) Both countries suffer from weak and inadequate institutional capacities at the centre, districts and lower levels, which undermines the capacity to implement and enforce the various laws;
- (iii) Both countries suffer from insufficient water resources and meteorological data, which is necessary for appropriate decision making;
- (iv) The legal frameworks of both countries have a predominantly national focus, and do not address trans-boundary issues adequately, which undermines cross-border collaboration;
- (v) The management of water resources has been centralized and operates without a catchment focus (although in the last two years Kenya has begun to introduce catchment based management);
- (vi) Decentralization in management has occurred mainly to lower level Government institutions, with limited involvement of water resources users;
- (vii) Even when a role has been given to water resources users and other non-governmental entities, the civil society organizations

themselves are weak, and unable effectively to make full use of opportunities to participate in decision-making.

Based on this analysis it is clear that the harmonization effort should also be directed at facilitating implementation and enforcement of the law alongside the development of laws and by-laws specific to the SMM basin. This dual pronged approach will facilitate a faster realization of harmonized policies, laws and institutional frameworks for management of transboundary water resources in the two countries. In order to realize this objective, the following critical issues should be urgently addressed:

- (i) There is a need to resolve the existing institutional conflicts among the various entities mandated to engage in different water related activities.
- (ii) The management agencies need to be adequately resourced with financial and technical resources to enable them effectively implement the laws;
- (iii) The law of both countries should base management on ecological boundaries rather than political boundaries;
- (iv) Mechanisms based on incentives, involving for instance, extension services and technical support to deal with soil erosion and other land degradation, (rather than pure sanctions) for resolving water resource use shortcomings need to be developed;
- (v) There is need to empower and facilitate civil society and local communities to play a more active role in water resources management.
- (vi) Improving enforcement and implementation requires major inputs into capacity building for both Government agencies and community user groups. It is recommended that capacity building efforts should go hand in hand with the development of the legal, policy and institutional frameworks.

5.0 CONCEPTUAL FRAMEWORK FOR COOPERATION IN THE SIO-MALABA-MALAKISI CATCHMENT

5.1 Introduction

This chapter discusses the proposed SMM Policy, Legal and Institutional framework. The discussion builds on the extensive review of existing national, regional and international policy, legal, and institutional frameworks for national and transboundary water resources management presented in the previous chapters. Specifically, the consultant has found tremendous value in studying the process of the evolution of the Lake Victoria Protocol and Commission and the draft Nile Basin Cooperative Framework and the genesis of the NBI process itself. It has helped this study to avoid re-inventing the wheel. The evolving practice of the East African Community (EAC) has been useful. In an attempt to build upon those existing EAC institutions and to locate the future framework of the SMM catchment, considerable reliance was put on that experience as well as that of other shared basins elsewhere in the world.

5.2 Legal Principles of Transboundary Water Resources Management

Contemporary international law recognizes certain key principles some of which have now been included in the United Nations Convention on the Non- Navigational Uses of International Water Courses of 1997, and have been included in various international instruments including the Protocol for the Sustainable Development of the Lake Victoria Basin, 2003. They are regarded as comprising a body of law applicable to all watercourses. They would inform any attempt to develop a transboundary water regime for the SMM catchment and indeed any other basin elsewhere in the world. These include the following:

- (i) **The principle of international Cooperation:** This is the basic principle of international intercourse, which must be observed in any undertaking involving more than one state. As such it buttresses the law governing international water resources⁴⁴.

⁴⁴ See UN Watercourses Convention Article 8; in particular Art. 8(1) which provides “1. Watercourse States shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of an international watercourse”.

- (ii) ***The concept of an international watercourse:*** A watercourse means a system of surface waters and ground waters constituting by virtue of their physical relationship, a unitary whole, parts of which are situated in different states and normally flowing into a common terminus⁴⁵.
- (iii) ***The principle of equitable utilisation*** of the water resources in shared watercourses.
- (iv) ***The obligation not to cause significant harm to co-riparians:*** In utilizing the resources, states are required not to cause significant harm to the interest of other states by pollution or other conduct⁴⁶.
- (v) ***The protection of present reasonable and beneficial uses of the water***⁴⁷: International law favours the protection of present beneficial uses of shared waters and discourages wasteful uses.
- (vi) ***Notification and information sharing:*** The 1997 Convention and general international law require states to cooperate and share information regarding the development of shared water resources. The principle of prior notification requires that each of the riparian States should notify other basin States of planned measures or planned activities within its territory that may have adverse effects upon those other States⁴⁸: This was re-affirmed by the Arbitral Tribunal in Lake Lannoux case when it noted that the potentially affected state has a right to demand notification in order to safeguard its interests.

See also: SADC Protocol, 1995, Article 2(4); Convention for the Establishment of the Lake Victoria Fisheries Organization, Articles 2(2).

⁴⁵ See the Stockholm Declaration, 1972, Principle 21, the Convention on Non Navigational Uses of International Watercourses, Article 2; Kagera Basin Agreement, Article 3(1); and Commentary to Article II of the Helsinki Rules;

⁴⁶ UN Convention on Non Navigational Uses of International Watercourses, Article 7; Mekong Agreement, 1995, Article 7; Indus Waters Treaty, 1960, Article IV (2) & (3); US/Canada Boundary Waters Treaty, 1909, Article II.

⁴⁷ Helsinki Rules 1966; Articles VII and VIII. But compare with the UN Watercourse Convention Articles 3,4,5, and 6 and

“Article 10: Relationship between different kinds of uses

1. In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.
2. In the event of a conflict between uses of an international watercourse, it shall be resolved with reference to articles 5 to 7, with special regard being given to the requirements of vital human needs”.

⁴⁸ See also UN Watercourses Convention Article 12; Mekong Agreement 1995, Article 5; Senegal River Convention 1972, Article 4(1); Lake Chad Basin Convention, Articles 5 & 6;

- (vii) **The principle of regular exchange of data and information:** This principle is provided for in most watercourse agreements⁴⁹. It is the basis of confidence building. It is also the basis upon which states can build a reliable and comprehensive knowledge base of the watercourse as a basis for planning and sharing of beneficial uses.
- (viii) **The principle of the prevention, minimisation and control of pollution** of watercourses so as to minimize adverse effects on freshwater resources and their ecosystems, including fish and other aquatic species, and on human health⁵⁰.
- (ix) **The principle of the protection and preservation of the ecosystems of international watercourses:** whereby ecosystems are treated as units, all of whose components are necessary to their proper functioning, and that they be protected and preserved to the extent possible⁵¹: This principle has been reiterated by the ICJ in the Gabcikovo- Nagymoros Case quoting the decision of the court in the Legality of the Threat or use of Nuclear Weapons Advisory Opinion⁵² thus:
- “.... The environment is not a mere abstraction, but represents living space, the quality of life and the very health of human beings including generations unborn. The existence of the general obligation of states to ensure that activities within their jurisdiction and control respect the environment of other states or areas beyond national jurisdiction is now part of the corpus of international law relating to the environment”⁵³
- (x) **The principle of community of interest in an international watercourse:** whereby all States sharing an international watercourse system have an interest in the unitary whole of the system: This principle was first stated by the PCIJ in The Case Concerning the River Oder⁵⁴ and has since been recited with approval by the ICJ in the Gabcikovo-Nagymoros Project Case⁵⁵.

⁴⁹ See also UN Watercourses Convention Article 9; SADC Protocol, 1995, Article 2(5) Mekong Agreement Article 24(c), ECE Helsinki Convention Article 6; Indus Waters Treaty, 1960, Article 6. Helsinki Rules, 1966, Article XXIX (1).

⁵⁰ See UN Watercourses Convention Article 21; SADC Protocol, 1995, Article 2(12) ECE Helsinki Convention Article 2(1) & (2)(a); Helsinki Rules, 1966, Article X.

⁵¹ See UN Watercourses Convention Articles 20&22; SADC Protocol, 1995, Article 2(11); Mekong Agreement Article 3&7; Convention for the Establishment of the Lake Victoria Fisheries Organization, Articles 2(3)(d) & (f).

⁵² *ICJ Reports 1996*, pp 241-2, para. 29.

⁵³ *Gabcikovo-Nagymoros Project Case*, Para 53, reciting its earlier Opinion in the *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, *ICJ Reports*, 1996, pp 241-242 para 29

⁵⁴ *Territorial Jurisdiction of the International Commission of the River Oder, Judgment No. 16, 1929, PCIJ, Series A No 23 page 27*

⁵⁵ see Para 85 of the Judgment of the Court of 25 September 1997

(xi) ***The principle that water is a social and economic good***⁵⁶.

In addition to the above principles, there are a number of other principles, which have emerged from the development of international law in general, and which are relevant to the management of water and other natural resources including:

- (i) ***The principle of environmental impact assessment*** of any planned activity⁵⁷;
- (ii) ***The principle of environmental audits*** of existing projects and economic activities in a given Basin⁵⁸;
- (iii) ***The precautionary principle***⁵⁹ whereby, each riparian State is required to take the necessary measures to prevent environmental degradation from threats of serious or irreversible harm to the environment, despite a lack of full scientific certainty regarding the nature and extent of the threat;
- (iv) ***The “polluter pays” principle***⁶⁰ whereby the person that causes the pollution, shall as far as possible bear any costs associated with it;
- (v) ***The principle of pollution prevention at source***⁶¹ whereby pollution is prevented at source, rather than cleaned up after being emitted;

⁵⁶ See The Dublin and Copenhagen Principles 1991

⁵⁷ See the Protocol on Lake Victoria to the East African Community Treaty, the proposed FAO promoted Convention on Lake Malawi/Niassa/Nyasa, the Draft Cooperative Framework for the Nile Basin, the 1992 ECE Helsinki Convention Article 3(1)(h) and the 1987 UNEP Guidelines on Environmental Impact Assessments.

⁵⁸ See the Protocol on Lake Victoria to the East African Community Treaty, the proposed FAO promoted Convention on Lake Malawi/Niassa/Nyasa, the Draft Cooperative Framework for the Nile Basin, UNEP/ Industry and Environment: Guidelines on Environmental Audits.

⁵⁹ See the Rio Declaration Principle 15; the Montreal Protocol on Substances that Deplete the Ozone Layer, 1987, The United Nations Convention on Climate Change, Article 3 (3); the Protocol on Lake Victoria to the East African Community Treaty, the proposed FAO promoted Convention on Lake Malawi/Niassa/Nyasa, the Draft Cooperative Framework for the Nile Basin, The 1992 ECE Helsinki Convention Article 3(1)(h).

⁶⁰ The Protocol on Lake Victoria to the East African Community Treaty, the proposed FAO promoted Convention on Lake Malawi/Niassa/Nyasa, the Draft Cooperative Framework for the Nile Basin, the 1992 ECE Helsinki Convention Article 3(5)(b).

⁶¹ The 1994 Meuse and Scheldt Agreements Article 3(2); whereby the parties undertook to observe “the principle of preventive action according to which, in particular, clean technologies shall be used under economically acceptable conditions”;

See also the Protocol on Lake Victoria to the East African Community Treaty, the proposed FAO promoted Convention on Lake Malawi/Niassa/Nyasa, the Draft Cooperative Framework for the Nile Basin, the 1992 ECE Helsinki Convention Article 3(1)(h).

- (vi) **The principle of public participation**⁶², whereby decisions about a project or policy take into account the views of the stakeholders;
- (vii) **The principle of sustainable development**⁶³; this principle is regarded as one of the cardinal principles of the emerging international law of natural resources management. It requires that present uses of resources must take into account satisfying the needs of this generation without denying the rights of future generations to use the same resources. In recent years, it has been included in a number of watercourse agreements⁶⁴. It lies at the centre of the principle of equitable utilization, whereby equity is seen in two dimensions: the inter-generational dimension and the intra generational dimension. The ICJ in the *Gabcikovo-Nagymoros Project Case* cited this principle with approval as follows:

“.... Mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration to the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind – for present and future generations – of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when states contemplate new activities, but when continuing with activities begun in the past. The need to reconcile development with protection of the environment is aptly expressed in the concept of sustainable development.”⁶⁵

- (viii) **Permanent sovereignty over natural resources**: Beyond the 1997 Convention, international law recognises the principle of the permanent sovereignty of each people over their natural resources as enshrined in Article 2 of the *United Nations Covenant on Civil and Political Rights of 1966*. This view flows from a state’s attribute of sovereignty and has been reiterated by a tremendous number of international legal instruments.

⁶² See The Rio Declaration, 1992, and the Protocol on Lake Victoria to the East African Community Treaty, the proposed FAO promoted Convention on Lake Malawi/Niassa/Nyasa, the Draft Cooperative Framework for the Nile Basin,

⁶³ See WCED: *Our Common Future: Report of the World Commission on Environment and Development*, OUP, London, 1987, Chapter 2, Rio Declaration on Environment and Development, 1992 Principle 4, The United Nations Convention on Climate Change, Article 3 (4); The African Convention on the Conservation of Nature and Natural Resources, Article II.

⁶⁴ See Article 1, Mekong Agreement; the Preamble of the Convention for the Establishment of the Lake Victoria Fisheries Organization; SADC Protocol, 1995, Article 2(3); ECE Helsinki Convention, Article 2.

⁶⁵ Para 140 of the Court’s Judgment in the *Gabcikovo-Nagymoros Project Case*

The policy choices among these principles need to be weighed carefully to suit the water resources management and development needs specific to the SMM catchment.

5.3 Experiences from other Transboundary Water Resources Management Institutions

In the last two centuries, there have been a number of valuable experiences in the development of institutions for the management of shared water bodies in Africa and other parts of the world. The experiences of these organisations are very instructive to any new effort to create an international arrangement for managing a shared basin. Following an extensive review of existing regional and international transboundary water resources management institutions, a few relevant examples were selected whose experience has helped inform the process of developing the SMM framework. The selected institutions are divided into two broad categories, i.e., General purpose organizations and Specific purpose organizations and are discussed in the following sections. The more relevant existing regional frameworks under NBI, EAC and LVBC have already been exhaustively discussed in **Chapter 3** and will only be referred to in passing and will not be discussed in details again in this chapter.

5.3.1 General Purpose Organizations

These are organisations characterised by large mandates sprawling over diverse concerns affecting the entire basin, provided for in their constitutive documents. Relevant examples of such organizations include: The Mekong River Commission, The Niger Basin Authority, The Organisation for the development of the Senegal River Basin, The Lake Chad Basin Commission, and The Kagera Basin Organization. These are discussed below.

Mekong River Commission

Cooperation in the Mekong Valley can be traced to the establishment of the Committee for the Coordination of Investigations of the Lower Mekong Basin, established in 1957. In 1978 an Interim Committee of the same name replaced this committee. In 1995, Cambodia, Laos, Thailand and Vietnam under the Mekong Agreement established The Mekong River Commission. China and Myanmar, the two upper riparian states, are not parties to the Mekong Agreement.

However, Article 39 of the 1995 Agreement provides that:

“Any other riparian State, accepting the rights and obligations under this Agreement, may become a party with the consent of the parties”.

The two countries have been encouraged to participate as observers in meetings of Mekong River Commission and its subsidiary bodies.

The Mekong River Commission, in its activities, has emphasised projects of a basin-wide character prioritising self-sufficiency in food production, hydropower development and improvement of navigation, environmental enhancement and human resources development. The Mekong River Commission as of the year 2000 had a portfolio of forty projects worth about US\$ 100 million. These projects include a joint fisheries project, water sharing programme, an irrigation project, and a joint ferry project. Member states make in-kind contributions to projects.

The Mekong Spirit prevailed in the region over the period of wars and other conflicts of the 1950s to 1980's and cooperation in the Mekong Basin continued. The recognition of common survival needs over ideological disagreements explains the survival of the Mekong institutions in the lower basin.

The Mekong Committee, encouraged by the support provided by the United Nations and other countries, prepared grandiose plans for the Lower Basin during its first and second plans. Even the riparian countries were sceptical as to whether the grand schemes and gigantic projects of the Indicative Basin Plan would be financed and implemented. The projects were too extensive and too inconsistent with the current and foreseeable needs of the countries. In its review of the Indicative Basin Plan, the World Bank was highly critical of the Secretariat's approach and called for realistic projects to improve agricultural productivity through small-scale irrigation projects, rural development and related hydropower development.

The 1980s Indicative Basin Plan and the 1990s Work Plan clearly point to a shift in priorities in the direction indicated by the World Bank.

Although, support of the Mekong Commission by the international donor community has been substantial, the manner in which it has been funded has been criticized on several grounds. In most cases, assistance from donor countries has often been earmarked for their own experts and consulting firms, and United Nations funds have gone largely to support the Secretariat, which is managed by foreign personnel.

The absence from membership of the two upper riparian states China and Myanmar may, however, create future problems. China has completed a large dam storage project. China's other extensive dam construction plans at the upper reaches of the Mekong, when completed may deprive the lower basin states of large amounts of the Mekong flow. The water level of the river during the dry season may become insufficient for navigation and/or irrigation. Myanmar, led by a military junta still has its governance problems. Its Mekong policy remains unclear.

It has been said that the MRC was a classic example of external effort, external management and external planning, with little involvement of the beneficiaries⁶⁶. Despite this foreign involvement, the positive achievement of the organization in bringing together states that were ideologically different and mobilizing resources for their development cannot be ignored.

Niger Basin Authority (NBA)

International river basin management in the Niger began when the Niger River Commission was established in 1964. It is one of the oldest river basin organisations in post-colonial Africa. On 21 November 1980, the Commission was replaced by the Niger Basin Authority under the Convention creating the Niger Basin Authority. The parties to the Convention are Guinea, Benin, Cameroon, Chad, Ivory Coast, Mali, Niger, Nigeria and Burkina Faso. The NBA's mandate covers an area of 2,200,000 sq. km., having a population of about 100 million, or about 20 percent of the total population of Sub-Saharan Africa.

The Convention originally had very wide and ambitious mandate covering the entire scope of development needs in the basin. After various amendments to its mandate, its main objectives are to raise funds and promote the study and implementation of works. The most important achievement of the NBA, so far, has been implementation of *Hydro Niger*, a project involving sixty-five data collection platforms for the measurement and retrieval of real time hydro-meteorological data in the basin.

At the 1980 meeting of the heads of states, it was widely acknowledged that the NBA's predecessor (the Commission) had failed due to institutional weaknesses. It lacked effective decision-making powers and emphasized national sovereignty by member states. As a result the

⁶⁶ Nurit Kliot, Deborah Shmueli & Uri Shamir, "Institutional Frameworks for Management of Transboundary Water Resources", vol. I, *Institutional Frameworks as Reflected in Thirteen River Basins*. Water Research Institute, Haifa, 1997.

organization's powers and competence to exercise them had been extirpated.

Some assessments of the NBA have concluded that⁶⁷:

- (i) The NBA has been beset with difficulties almost since its creation. As a result, it has little to show for the considerable sums of money that have been invested in it (about US\$30 million, in 1993).
- (ii) There are too many member states (nine).
- (iii) Its objectives were too diffuse with no clear identification of real beneficial targets.

In addition to the factors mentioned above, the following considerations appear to have contributed to the difficulties of the NBA:

- (i) Lack of adequate support from Member States most of whom have conflicting visions and water resource development interests in the basin.
- (ii) Some Member States have little or no interest in the Niger Basin making it extremely difficult to implement any joint action or decisions.
- (iii) Inadequate management and leadership.
- (iv) Lack of support of the donor community commensurate to the needs of the NBA.

Based on the above observations, it's clear that most Member States do not consider the organization as responding to a clearly defined common interest.

The NBA's Council of Ministers concluded in 1984 that the organization was bankrupt and donors soon decided to reconsider, and later to cancel their assistance to the NBA. In the 1990s measures were taken to restructure the organisation into a more responsive and efficient organization.

Organisation for the development of the Senegal River Basin (OMVS)

The Convention Relating to the Regime of the River Senegal and the Convention Establishing the OMVS were concluded in March, 1972 and amended in November, 1975. The parties to those Conventions are Mali, Mauritania and Senegal. Guinea, the uppermost riparian of the Senegal River and which contributes the most water, is not a member of OMVS.

⁶⁷ Rangeley, et al.: *International River Basin Organizations in Sub-Saharan Africa*, World Bank Technical Paper No. 250, (1994). *Supra* note 8, at pp. 9-10.

The OMVS was created by the Conventions as an organization to superintend the management of the river Senegal. The Convention provides for four organs: the Conference of Heads of State, the Council of Ministers, the High Commission and the Secretary General.

In 1978, the Convention Relating to the Status of Common Works was signed. It has enabled the member states to construct two dams. The Diama dam at the boarder between Senegal and Mauritania controls seawater intrusion and has improved irrigation in Senegal and Mauritania. The Manantali dam in Mali has enabled the generation of hydropower and increased irrigation in the three states of Mali, Senegal and Mauritania. The member states have also improved the navigation of the river from the coast to the town of Kayes in Senegal. Under this agreement, the common works are shared by the parties who also enjoy benefits from these works irrespective of the territory on which they are located. In recent years the OMVS has drawn up plans for divesting the day-to-day management of these dams to separate entities.

Success of OMVS is attributed to support of political leadership at high level; a focussed mandate; and a commitment to joint development and management of the common river by the Member States.

As a result, the OMVS has been cited as one of the most successful river basin Organizations in the world. The lessons of this organization especially its successes have been instructive in the current endeavours to develop the SMM Framework.

Lake Chad Basin Commission (LCBC)

The Lake Chad Basin Commission (LCBC) was established by the four riparian States of Cameroon, Chad, Niger and Nigeria in 1964. The Central African Republic, which contributes over 40 percent of the total inflow to Lake Chad, is not a member of the LCBC. The hydrographical basin of Lake Chad itself encompasses a larger area, approximately 2,235,000 sq. km, and includes portions of the Central African Republic, Algeria and Sudan. The part of the basin over which the LCBC has jurisdiction (the conventional basin) comprises only 427,000 sq. km.

The LCBC's functions are very broad. They include the management and development of the natural resources of the conventional Lake Chad Basin in a sustainable manner and the settlement of disputes. The Commission's strategy and work program have, since 1992, been changed with the aim of concentrating more on water-related projects and on projects of a regional character. However, its subsequent 1992

Master Plan contained projects ranging from pest control and animal husbandry to agriculture.

Most commentators have rated the performance of the LCBC as being below expectation. A 1994 World Bank study⁶⁸ of the LCBC observed that:

“Although it could be said that the achievements of the Commission in twenty-nine years of its existence are somewhat disappointing, it has shown commendable resolve in that it has survived despite situations of war and economic depression within its member states”.

The principal constraint of the LCBC has been lack of finances. The contributions of the member states on which the organization should depend, have not been forthcoming. The LCBC has mainly been dependent upon external support for the few achievements it has scored, in particular for the enhancement of its planning capabilities in water resources.

On a positive note, response from the member states with respect to the exchange of data on natural resources and national projects (on-going and proposed) can be rated as fair. It has been emphasized by the LCBC that successful planning and implementation of joint projects is highly dependent on the regular and timely availability of adequate and reliable data and information from the Member States.

Generally the LCBC is one of the less successful river basin organizations in Africa. Two factors have played a crucial role in its failure. The first factor is the lack of funding discussed above. The second is legal. The Agreement setting up the LCBC gave the organization very broad objectives encompassing several sectors, which are very difficult to achieve.

The only principal success of the organization, as noted above, is that it has survived for almost thirty years as an organization for international co-operation despite the serious problems of war and economic depression experienced by some of its member states.

Kagera Basin Organisation

The Kagera Basin Organization (KBO) was established in August 1977 through the Rusumo Agreement signed by Rwanda, Burundi and

⁶⁸ Rangeley, et al., *supra* note 8, p. 10.

Tanzania. Uganda became a member by accession in May 1981 in Bujumbura.

Under the Agreement, the KBO was established to deal with all matters related to development activities in the Kagera River Basin. These include the following:

- (i) Water and hydropower resources development;
- (ii) The provision of water and water-related services for mining and industrial operations, and portable water supplies for other needs;
- (iii) Agricultural and livestock development, forestry and land reclamation;
- (iv) Mineral exploration and exploitation;
- (v) Diseases and pest control;
- (vi) Trade and Industrial Development;
- (vii) Tourism and Wildlife conservation;
- (viii) Transport and Communication;
- (ix) Environmental protection.

The Rusumo Agreement was very ambitious. The KBO made initial plans to achieve its mandate based on the agreement. The response by development partners in implementing those development initiatives was never enthusiastic.

According to Okidi⁶⁹, the KBO Agreement did not establish an elaborate arrangement for fundraising to finance common works as is in the case of other bodies. Each member was to contribute on equal proportion of the administrative budget. Those contributions were never forthcoming.

There was also an underlying wrong assumption that the KBO would depend, in the main, on donor grants to implement its projects. Lack of prioritisation of intervention areas by the KBO also contributed to the poor response from donors. KBO's international donor conferences never yielded any concrete outcome. Another problem that KBO was faced with was the lack of internal political stability among some of the member states as a result of which identified viable joint initiatives and actions, notably the Rusumo falls project stalled.

The Rusumo Agreement itself had some serious omissions. It did not provide for an obligation on states regarding the protection of the

⁶⁹ Okidi, C.O., 1986. Development and the Environment in the Kagera Basin under the Rusumo Treaty: Institute of Development Studies, University of Nairobi. Discussion paper No.284. September 1986.

environment. This omission is glaring in view of KBO's mandate to promote industrial and agricultural development, which would inevitably lead to negative environmental impacts.

5.3.2 Specific Purpose Organizations

This category of transboundary organizations includes Basin Organisations targeted to specific objectives and with limited mandates. Generally, it has been observed that such organizations have tended to succeed in various parts of the World. Relevant examples of such organizations include: The International Joint Commission, The Permanent Indus Commission, The Lake Victoria Fisheries Organisation, and The Baltic Sea Cooperation. These are discussed below.

International Joint Commission (IJC)

The International Joint Commission (IJC) was created under the 1909 Boundary Waters Treaty, between Canada and the United States. Its field of application is the Great Lakes of North America. The IJC's chief responsibilities are to approve applications for projects involving boundary waters and to respond to specific requests made under references by the two governments. Experience has shown that the IJC operates best within a fairly narrow range of issues, including boundary water project supervision, fact finding, and evaluation. However, the two governments have made a variety of references to the Commission, including not only water-related issues, but also those concerning air pollution.

The IJC has been held up as a model of cooperation on trans-boundary water resource issues. One commentator once observed that:

“The governments have given the IJC new responsibilities mainly on the basis of the legitimacy it has acquired in the performance of its duties and on its impartiality. Its reputation for impartiality arises because the six commissioners seek consensus in making decisions and rarely split along national lines. Unlike most boundary commissions, the IJC commissioners do not act under instruction of or as representatives of their governments”⁷⁰.

The IJC's effectiveness could be attributable, *inter alia* to:

- (ii) The political will of governments to carry through its decisions at the national level;

⁷⁰ David LeMarquand, “The International Joint Commission and Changing Canada-United States Boundary Relations”, 33 Nat. Res. J. 59, at p. 61 (1993).

- (iii) A narrowly focussed mission, which may be expanded through specific references by the parties;
- (iv) Responsibility of each government for its own national section and; close working relationships between the two sections; and
- (v) Involvement of the public in the Commission's decision-making processes.

Over the many years of its existence, the IJC has earned respect for its impartiality and its effective decision-making on the basis of consensus.

Permanent Indus Commission (PIC)

Permanent Indus Commission (PIC) was established in 1960 by the Indus Water Treaty to promote co-operation between India and Pakistan in the development of the waters by the Indus River. The treaty provides for the apportionment of the waters of the Indus between India and Pakistan.

Despite the several wars that have been fought between India and Pakistan, the PIC has been the single feature of cooperation between the two States, which has always remained operational. The institution has successfully implemented its mandate. Member countries have successfully implemented their obligations under the treaty. This is due to a focussed and limited mandate; high level commitment to the mandate of the institute by leadership in the two countries; and a funding mechanism that allows national governments to meet their expenses. A simple institutional arrangement (two commissioners only) has been effective for the limited institutional mandate.

Lake Victoria Fisheries Organization (LVFO)

The Convention to establish the LVFO was adopted and signed in June 1994 by Kenya, Tanzania, and Uganda. The principal mission of the organisation is to foster cooperation among the Contracting Parties, harmonize national measures for the sustainable utilization of the living resources of the Lake Victoria and to develop and adopt conservation and management measures.

To achieve their aims through the organisation, the contracting parties established a Council of Ministers as its apex body supported by an Executive Committee composed of Heads of Department responsible for fisheries and Heads of Department responsible for fisheries research in

the three countries. The Executive Committee is also in turn advised by committees and sub- committees of technical experts. A highly professional secretariat has also been established. Through this institutional structure, what has emerged is a highly focussed body.

Although the Lake Victoria Fisheries Organization is still a young institution, whose operations commenced in July 1997, its operations so far inspire confidence. This positive image of the institution is attributed to its ability to focus on one key area: Fisheries management. It has already developed a Strategic Vision⁷¹, and an Action Plan, which will form the basis of its activities in the years ahead.

There is still a need to solve the problem of funding. Occasional delays of contributions from some of the Member States affect the operations of the organization. Recent studies have been undertaken to address this issue including the possibility of levying a direct tax on all fish catches or on exporters alone to finance organisational costs. This is a matter which requires intensive negotiations between the three partner states and within those states – between the departments of fisheries and the respective treasuries.

Baltic Sea Cooperation

The Baltic Sea Cooperation is yet another highly successful example of transboundary cooperation that involves the following levels of cooperation:

- (i) Interstate cooperation;
- (ii) Cooperation between local authorities and municipalities;
- (iii) Cooperation between NGO's;
- (iv) Cooperation within institutions-the science and educational sectors;
- (v) Cooperation within the business sector.

Interstate Cooperation:

This programme consists of several frameworks such as the Helsinki Commission (Helcom) and the Baltic 21. Membership varies but includes the Baltic Sea States (i.e. Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden and the European Union). All the countries, as well as IFI's and NGO's in the entire catchment are active participants in the framework. In the Helcom, for example, there are 10 inter-governmental organisations, which participate as observers.

⁷¹ Lake Victoria Fisheries Organisation: The LVFO Strategic Vision (1999-2015). LVFO Secretariat June 1999. Jinja, Uganda.

Each framework has a specific mandate. For example, the Helsinki Commission (Helcom) is mandated to deal with environmental management in the Basin, while the International Baltic Sea Fishery Commission specialises on fish resources utilisation and monitoring. On the other hand, the mandate for the Baltic 21 is sustainable development, while The Summit for Baltic Sea States is responsible for policy guidance and overseeing the general direction and performance of the frameworks.

Cooperation between Local Authorities and Municipalities:

There has been active cooperation among various local authorities. Various local authorities have been cooperating under the umbrella of various voluntary organisations. The most important of these is known as the **Union of Baltic Cities**, which were founded by thirty two cities but whose membership is now over fifty cities. The Union fosters cooperation among the cities to exchange experience and to work together to protect the environment and other goals.

The Baltic Sea States Sub-regional Cooperation is another organisation bringing together local authorities. It was founded in 1993. Its membership is open for regional authorities within the Baltic Sea catchment area. It promotes cooperation between regional authorities including the management of the environment.

The Baltic Environmental Forum brings together decision makers at the middle and lower management levels. It ensures that decisions and policies made at international and national levels are disseminated to as many stake holders as possible. It was originally founded on the initiative of the Ministers of the Environment of the Baltic States.

Cooperation between NGO's

The main NGO coalition on the Baltic is known as **Coalition Clean Baltic**. It was founded in 1990, by NGOs from the Baltic Sea catchment area. It is an NGO which is politically independent and whose goal is to protect and improve the Baltic Sea environment.

Its main activities are; awareness raising, gathering and distribution of data concerning the environmental policy of the Baltic Sea as well as networking between organisations. It supports less developed organisations.

Ballerina is another organization that promotes the availability and accessibility of environmental information for decision making at all

levels. This is done through a website. It hopes to develop a personal and institutional network of partners working together.

Cooperation between Science and Educational Institutions

This is comprised of networking between Baltic universities and research institutions

Cooperation within the Business Sector

This is made up of two important organisations: **The Baltic Sea Chambers of Commerce Association**, which brings together chambers of commerce along the Baltic course and provides a voice for the business community; and **The Baltic Tourism Commission**, founded in 1983 as an NGO, which brings together organisations and companies for the purpose of promoting the tourist potential for the region.

The inter-state aspects of Baltic Sea co-operation have been recognised internationally as a successful framework for environmental management and sustainable development. This is attributed to:

- (i) Political commitment at high levels (Baltic Sea States Summit);
- (ii) Building on existing institutions with developed networks with ample funding mechanisms;
- (iii) Involvement of stakeholders and funding institutions;
- (iv) Openness and transparency;
- (v) Flexibility in frameworks, tasks and approaches and
- (vi) Awareness rising.

There were weaknesses in earlier phases of the HELCOM process. Some of the state parties did not implement decisions and standards made under the organs of HELCOM. It was initially difficult for national organs to address the changes. However, these weaknesses have been addressed over time.

The Baltic Sea experience is a good example of how coordinated multi layered institutions can achieve the management of a basin. It also proves that it is not just governmental action that achieves results, but rather that effective results can be obtained if all levels and interests are involved. The new public participation approaches that were devised have also imposed their own challenges. The co-ordination of numerous and multi-interest organisations and stakeholder groups towards common objectives is a challenging task. Nevertheless, the approach has provided new avenues for addressing the issues of the Baltic Sea Basin through involving and building on a wide array of actors.

5.4 Lessons learned from other Transboundary Water Resources Management Institutions

The following lessons are taken from experiences from shared water institutions in Africa and other parts of the world, which have been discussed above. The lessons have been instrumental in the design of the proposed institutional framework for the management of the shared transboundary water resources of the SMM catchment.

- (i) A focussed mission and clear achievable goals** - Where the organisation has a focussed mission and clear goals, it is likely to succeed (LVFO). Where the objectives of the organisation are so broad that it is impossible to achieve them, the organisation has to fail (Lake Chad, KBO, and Niger).
- (ii) Autonomy and impartiality** - Institutional autonomy in implementing decisions and impartiality in assessing critical issues is an important element for success of river basin organizations. However this must be balanced with the national sensitivities of the member states in each basin. There are no hard and fast rules on this one.
- (iii) High level of political Visibility** - For a river basin organisation to succeed, it is essential that its organs involve the highest levels of political decision-making in each partner state. In African Countries, it is essential that a Summit of Heads of State be provided for because that is where serious decisions are made. Decisions made by lower officials tend to achieve less impact. In addition to the Summit, provision has to be made for technical organs. If an existing institution is chosen, care must be taken that such an organ exists in that institution.
- (iv) Focus on Common crosscutting issues of immediate challenge and avoid entering areas of possible conflict with governments** - Policy questions of an immediate crosscutting nature will be easily undertaken by shared watercourse organisations. Matters that require on the ground implementation invite conflict with local and national governments. While there have been notable exceptions to this observation demonstrated by OMVS, post-dam construction developments have illustrated that such organisations cannot manage the day to day world of commerce. Such matters have to be devolved to commercial entities.
- (v) Participation of Stakeholders** - Stakeholder participation in decision-making, especially the private sector and the civil society, is an important success factor in shared water resources organisations. In European and North American organisations

such as the Baltic Sea Cooperation and the Great Lakes organisations public participation has been the key parameter of success. In Africa, public participation in the management of RBOs has not gained wide adherence. It has to be designed taking into account the social and economic realities of the continent and the specific basins.

- (vi) **Flexible Institutional Framework** - There is need to create a structure capable of evolving and adjusting to new challenges and opportunities. Not only should the institution allow flexibility in addressing new issues, but also it should build on the existing institutions and projects. This will be achieved if an institution is developed which has a broad but flexible mandate. Start with fewer more focussed interventions, as part of the broader mandates, and progressively build on the scored successes. The initial focus should be on areas where consensus has been attained.
- (vii) **Transparent system of sharing information, costs and benefits** - A transparent system of sharing information, costs and benefits avoids future conflicts and helps build confidence and trust among the partner states.
- (viii) **Co-ordinated structures and mechanisms** - Effective co-ordination of the activities of the RBO and other regional structures is essential. It avoids conflict and duplication and the resulting inertia
- (ix) **Reliable Funding Mechanism** - Lack of funding has been the biggest problem of African RBOs. It is therefore necessary to design an institution that has the capacity to mobilize funds from different sources especially the development partners and the private sector in addition to the normal budgetary allocation from the Partner States. One way to do this is by giving an automatic share of revenues from resource taxes imposed by governments to the RBO.
- (x) **Building on Existing Institutions** - A new institution should as much as possible build upon the experiences of existing national and regional organisations. Do not re-invent the wheel.

6.0 PROPOSED POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK FOR THE SIO-MALABA-MALAKISI CATCHMENT

6.1 Introduction

Both Kenya and Uganda, which are the riparian states of the Malaba–Malakisi River and the Sio River, are members of the East African Community and the Nile Basin Initiative. To avoid duplication, management schemes of these rivers would be considered within the context of existing international legal and institutional frameworks.

While both rivers originate from Mount Elgon and eventually become part of the Nile basin, they belong to two different international legal and institutional frameworks. The Sio flows into Lake Victoria and is therefore governed by the legal framework elaborated for the Lake Victoria basin under the *Protocol for the Sustainable Development of the Lake Victoria Basin*. The management of the Sio must, therefore, be conceived within that legal and institutional framework.

The Malaba – Malakisi River, on the other hand flows into Lake Kyoga where no specific framework has been elaborated except the general legal framework of the Nile.

6.2 Options for developing the SMM Legal and Institutional framework

Within the context discussed above, the potential options for development of the SMM framework include the following:

- (i) Maintain the status quo;
- (ii) Create a bilateral framework between Kenya and Uganda;
- (iii) Create a framework under the NBI; or
- (iv) Create a framework under EAC that provides for a collaborative scheme that brings all actors together.

These options are discussed below:

6.2.1 Maintain the status quo

In this case the two riparian states would maintain the existing water resources management arrangements in the catchments. This means that there will be no new formal institutional arrangement between the two states. Each state would take its own administrative and legal measures to manage the basin and when necessary, on *ad hoc* basis, the two states can meet to resolve any outstanding and emergent transboundary issues. This option does not provide any new solutions to the current issues in the catchment but only serves to undermine the very fundamental principles of sustainable integrated water resources management.

6.2.2 A bilateral arrangement between Kenya and Uganda

In this case the two States would enter into a specific agreement for setting standards, enforcing the standards, and co-operation in the integrated management of the SMM waters. Such an agreement would face two problems. The first problem is that the two countries have already agreed under the East African Treaty to co-operate on issues of a transboundary character concerning water resources and with respect to the Sio River, it falls within the Lake Victoria Basin which is already covered by the Lake Victoria Protocol which puts it under the jurisdiction of the Lake Victoria Basin Commission. The creation of an alternative bilateral arrangement would be a duplication of effort.

The second problem is that such a bilateral arrangement would flout the shared vision of the Nile Basin states envisioned under the Nile Basin Initiative. The shared Vision considers the Nile Basin as an integral whole. Such a move may lead other basin states to suspect that their interests may not be necessarily taken into account which may lead to discord in the Basin.

A purely bilateral arrangement outside existing legal and institutional frameworks is therefore not recommended.

6.2.3 An Arrangement Under NBI

It is indisputable that the SMM is part of the Nile Basin. It is, therefore, possible to make an arrangement for the management of the SMM under the Nile Basin Initiative. This arrangement may be achieved in two ways. It may be organised under the present transitional arrangement or it may also be conceived under the proposed Nile Basin Cooperative Framework.

(1) Under the present transitional arrangement

A management mechanism can be put in place in the same way other arrangements under the NBI have come into existence. The Council of Ministers of the NBI, at its meeting, would establish the mechanism by resolution of the Council upon a proposal made by the Technical Advisory Committee (TAC). Like all the organs of the NBI, this would be a transitional arrangement. A draft legal instrument under this model is set out in **Annex 4a**. This institutional set up would differ from the one proposed under the auspices of the East African Community by not having a separate financial mechanism. The Nile Trust Fund already exists. Duplication would not serve any useful purpose. The institutional set-up thus adopted would remain in place to be inherited by the permanent cooperative framework, when established.

This option would indisputably bring with it the following disadvantages:

(a) The NBI framework is only a transitional framework. The basin states are yet to adopt a permanent framework. Any proposal made under this arrangement must therefore anticipate future changes depending on the content of the eventual framework. Basing a proposal on an existing permanent framework seems to be preferable.

(b) Conflict with existing legal obligations of Kenya and Uganda: Kenya and Uganda have immediate jurisdiction over the territories in which the rivers flow and over the local activities that impact on the rivers. The SMM basin is in the first place the concern of the two riparian states despite the interest of other Nile Basin states in their waters. A management scheme for such a tributary (of the Nile River) must necessarily take into account the national arrangements that states have put in place among themselves and with third parties. It cannot also ignore other complementing institutional and legal arrangements such as sub-regional arrangements under the EAC. These agreements involve other states. Under international law a state must perform its obligations under treaties in good faith. If this principle is to be followed, Uganda and Kenya would be obliged to follow the existing treaty establishing the East African Community and operate accordingly under that treaty.

(c) Conflicts and duplication: With respect to the Sio River, which already falls within the Lake Victoria Basin and is governed by The Protocol for the Sustainable Development of the Lake Victoria Basin, a legal and institutional mechanism that subjects it to a different legal regime, would create duplication and sometimes conflict. Both the existing Lake Victoria Protocol system and the new arrangement would be exposed to the possibility of failure due to such conflicts.

(2) Under the Proposed Nile Basin Cooperative Framework

The proposed Nile Basin Cooperative Framework provides for the principle of subsidiarity. It specifically envisions the adoption of sub-basin agreements and other subsidiary legal instruments provided they are not in conflict with the framework. Under these principles, it is possible to create legal frameworks that will embrace situations like those of the SMM in the form of protocols. The draft resolution proposed under the transitional arrangement set out in **Annex 4a** would easily be redrafted as a protocol. This proposal, however, has the following drawbacks and opportunities:

(a) The cooperative Framework is not yet in place: The proposed Nile Basin Cooperative Framework has been the subject of negotiation for more than ten years. The riparian states are yet to agree on its provisions. For states ready to move on with the business of national development it may not be fair to tie them up with facts yet to be and with concepts not actualised.

Even when the Co-operative framework is adopted by the states, it must necessarily go through various processes before it comes into operation. It must be ratified by each of the states according to its ratification procedures and the right number of ratifications must be deposited {under the proposed framework there must be 6 ratifications} with the depositary before the agreement enters into force. This may further delay any concrete actions even where the two most concerned states wish to proceed.

(b) The proposed Nile Basin Cooperative Framework accepts the notion of sub-basin arrangements. This provision will make sense only when arrangements for small transboundary sub-basins can be housed under already existing larger sub-basin frameworks of which they are part or from which they can be conveniently managed. The arrangements in the Lake Victoria Basin under the East African Community system relating to water resources are such an arrangement. When the proposed Nile Basin Cooperative Framework comes into place, the East African Community members will be obliged to harmonise any sub-basin arrangements with the framework thus leaving no opportunity for conflict.

(c) If there are opportunities which can only be harnessed by bringing the arrangement directly under the proposed Nile Basin Cooperative Framework, when it comes into place, Kenya and Uganda, the riparian states would enter into a new treaty bringing the SMM institutional arrangement under the Nile Cooperative Framework.

Although a framework under the NBI is not the primary recommendation of this Study, if it was to be established under this arrangement, **Annex 4a** provides a prototype resolution that may guide such a development.

Potential SMM organs under the NBI Framework Option

The SMM Executive Committee (SMM-COM)

This Committee would be composed of the Ministers responsible for water affairs in Kenya and Uganda. Subject to the constitutional arrangements in their respective countries and the operational arrangements of the NBI and NELSAP, the committee would be the apex body of the SMM Framework. The committee would report to the NELCOM (See Section 11 of **Annex 4a**)

The Sio Malaba-Malakisi Technical Advisory Committee (SMM-TAC)

The SMM-TAC would be established by a resolution of the SMM-COM to play a technical advisory role to the SMM-COM. The functions of the SMM-TAC would include:

- (i) Coordinate regional activities and those of national focal points within the Basin;
- (ii) Provision of oversight and guidance for the setting of priorities, planning, preparation, and implementation of programmes for the SMM basin;
- (iii) Monitor and keep under constant review the implementation of the programmes undertaken in the Basin;
- (iv) Review and approve reports and recommendations of working groups and Focal Points in the basin; and
- (v) Perform such other functions as may be conferred on it by SMM-COM.

To ensure that all relevant sectors are taken into account, the composition of the SMM-TAC would change depending on the issue to be addressed in the basin. This would ensure the widest possible ownership by the various relevant sectors involved in water resources-related activities in the basin. The following are some of the main sectors that would from time to time compose the committee: Water Resources Management; Agriculture; Forestry; Wildlife; Tourism, Water Supply and Sanitation; Fisheries; Environment; Wetlands; Meteorology; Land Management; Health; Energy; etc. (see Section 12 of **Annex 4a** for establishment and procedures)

Following the usual structure of the NBI, the SMM-TAC would report to the SMM-COM and through it to the NEL-COM and Nile-COM. (See section 12 of **Annex 4a**)

The Sio Malaba-Malakisi Operational Committee

The SMM Operational Committee would be composed of technical officials of Local Governments in the basin with backstopping from Central Governments as and when needed. This would ensure that the local issues which impact so seriously on the rivers and their catchments are addressed by the people who deal with them on a day to day basis without losing the wider national interests.

The composition of the operational committee would change depending on the issue to be handled. The main sectors identified above to compose the SMM-TAC would also be represented in this committee. This would ensure width of ownership among sectors at local level. The Committee would report to the Technical Advisory Committee. (See Section 13 of **Annex 4a**)

The Sio Malaba-Malakisi Consultative Forum

In order to ensure the effective involvement of local water users, service providers, local communities and the general public in the decision making process and in setting development and management priorities in the basin, it would be necessary to create a forum that enables them to regularly interact with the SMM policy makers. Policy makers at the highest level would have an annual meeting with local government officials, water users, service providers, and the public represented by civil society organizations and special interest groups. The Forum would also draw in the participation of centres of higher learning, research institutions, and Chambers of commerce. The Operational Committee (and its Secretariat) would convene the first meeting of the Forum after which the Forum would appoint its officers to run its affairs. The Operational Committee would provide technical backstopping to the Forum as and when required. In general the Forum would act as the parliament of the SMM basin that would be especially important in monitoring and evaluation of activities in the basin. (See Section 17 of **Annex 4a**)

Civil Society Networks and Water Users Associations

These would be voluntary networks of civil society and water users' associations whose objectives intersect with the water resource management objectives in the basin. In particular, they would emphasize community-based organisations such as beach management units and self-help groups. Other important networks are those of research centres

and universities. These organisations would feed into the Consultative Forum and also work closely with the formal governmental arrangements in the framework.

The Sio Malaba-Malakisi Secretariat

The previous arrangements described above can only achieve their objectives if they are backed by day-to-day management support in the form of a lean Secretariat. In a formal sense the Secretariat would be a part of the NELSAP Coordination Unit (NELSAP - CU). In a functional sense, it would be a special part dedicated only to the SMM basin. (See Section 14 of **Annex 4a**)

To keep the Secretariat alive to the realities of the basin and easily accessible by the basin communities, it would, ideally, be physically located in the SMM basin. In keeping with the principle of economy, it would be lean. It could replicate the current project management unit of the SMM Project may be except in location.

The current SMM PMU would serve as a transition secretariat to initiate the implementation of the proposed SMM Framework pending the establishment of the substantive SMM Secretariat. The Secretariat would be the principal organ coordinating all activities in the basin and facilitating the regular exchange of data and information and also the transmission of information concerning planned measures between the riparian states in accordance with the procedure contained in **Annex 5**.

The NELSAP - CU would appoint an SMM Desk Officer, resident at the NELSAP - CU, who will serve as a linkage between the NELSAP - CU and the SMM organs including the Secretariat. This responsibility could also be assigned to one of the existing officers of the NEL-CU having other duties but providing the key and continuous linkage to the SMM.

Funding Mechanism

The success of an organisation as observed elsewhere in this report mostly depends on the ability to raise and manage the necessary funds for implementation of its activities. It would be essential that to achieve the conservation objectives in the SMM basin, a reliable funding mechanism be put in place. Fortunately the Nile Basin Trust Fund has already been established under the auspices of the NBI. This would be a preferred funding mechanism for the needs of the SMM basin.

SMM Local Government Cooperation

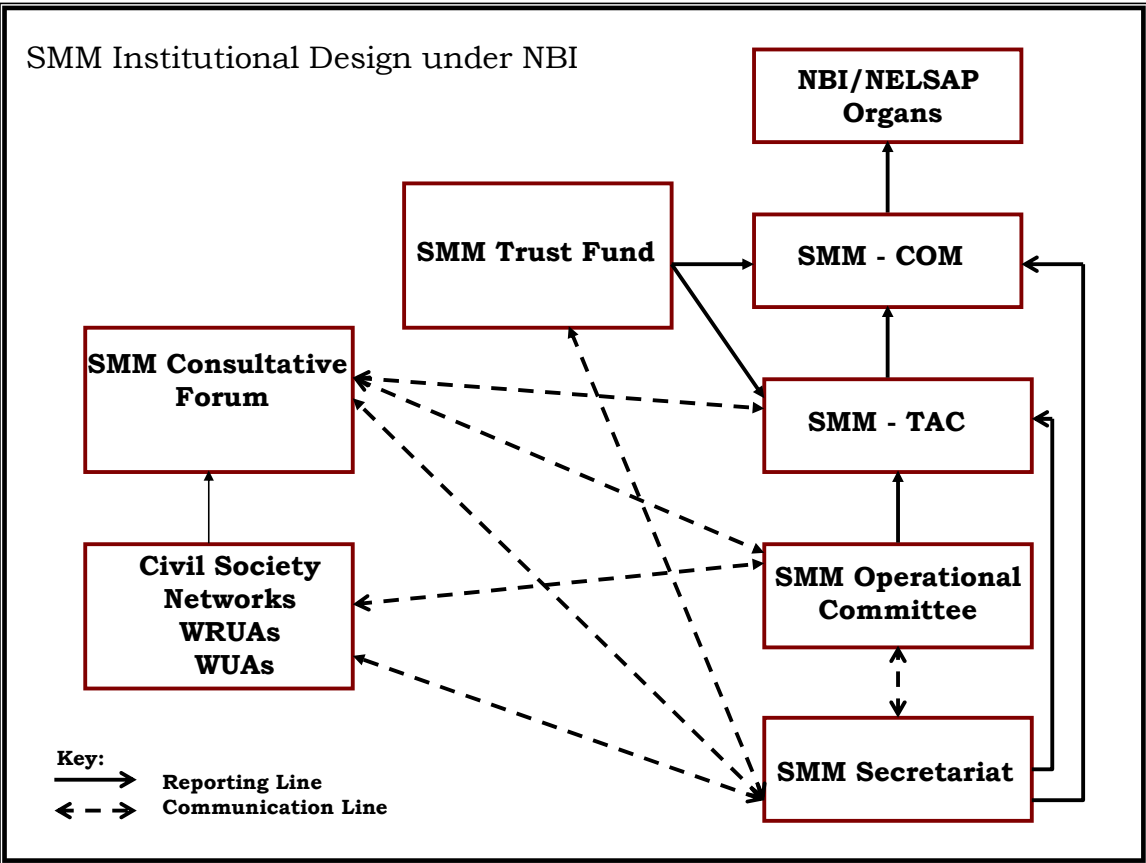
In addition to the above organs of the SMM Institutional Framework, there would be need for establishment of a special collaborative mechanism for the local governments in the basin.

The important role of local authorities in planning and managing the many day-to-day water resources related activities that depend and also impact upon the quality and quantity of the basin's water resources can not be over emphasized. However in many cases their voices are muted by exclusion, as management roles are concentrated in the capitals at central government level.

In recent years local governments have become more visible with the drive towards decentralisation. In the Lake Victoria Basin, the LVRLAC has become a very important voice in articulating local concerns and ensuring the inclusion of local issues in the basin management agenda under the Lake Victoria Basin Commission. Similarly, in the Kyoga Basin, the Lake Kyoga Integrated Management Organisation (LAKIMO), which was formed in March 2004, has made a contribution to managing the fishery of the lake. LAKIMO demonstrated that local governments in the region can work together to achieve conservation objectives.

An organisation based on the model of LVRLAC and LAKIMO would be created for the SMM basin to promote local government cooperation in the basin and ensure ownership and sustainability of the process. It would help the local governments come together and jointly find solutions to their common challenges. Recommendations and memoranda from such an organisation would be forwarded to the relevant organs of the SMM Framework for action.

The Figure below shows the possible institutional design and linkages:



5.2.4 An arrangement under the East African Community

Articles 111, 112 and 114 of the Treaty establishing the EAC empowers it to develop joint and efficient measures for the management of natural resources including water, wetlands, lakes and rivers and to develop common standards and strategies in that regard. Kenya and Uganda can take advantage of these existing arrangements to address the SMM issues.

In putting an arrangement in place under the EAC, care must be taken to observe the fundamental rule that the member states are under an obligation to honour agreements which they may have with other states.

This approach is favoured as it avoids unnecessary duplication and ensures synergy and use of existing capacities and cooperation mechanisms.

The EAC brings together five countries of the Nile Basin, namely Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania. The five countries are part of the NELSAP and are all riparian states of the Lake Victoria Basin. Only one upper Equatorial Nile Basin state is not part of the EAC and that is Democratic Republic of Congo. In bringing the SMM basin under the EAC framework, various options and approaches could be explored to develop an appropriate legal and institutional framework. Given that these are two river systems involved in this study and which form part of two differently regulated basins, thought must be given to how a legal regime may be developed to manage them either together or separately under the EAC system. Potential approaches include the following:

(1) An Area Approach

The two rivers originate from the Mt. Elgon area. A regime for the management of the water resources of the Elgon area is conceivable. Such a regime would have the advantage of established conservation initiatives in the Mt. Elgon area including a Trust Fund. However, it brings with it the disadvantage of including other rivers, which drain into Lake Turkana, outside the Lake Victoria Basin and the Nile Basin. It would also take us outside the terms of reference of this study.

(2) Two separate Frameworks based on a Drainage Basin Approach

The reality of the two legal regimes may also lead to conceiving the development of two separate institutional frameworks. In this regard the Protocol for the Sustainable Development of the Lake Victoria Basin would govern the Sio River since it falls within that Basin.

On the other hand, the Malaba-Malakisi system, which falls outside the Lake Victoria Basin, would have to be governed under a separate legal and institutional framework, most preferably a framework developed for the entire Lake Kyoga Basin. Unlike the Lake Victoria basin, the Lake Kyoga Basin lacks a commensurate legal and institutional framework for the management of its water resources. The need for such a framework has been reiterated on several occasions but is yet to be actualised.

The present study is only limited to the Malaba-Malakisi and Sio Rivers, the recommendation for a more comprehensive regime for the Lake Kyoga basin is beyond the realm of this study. This study is not the right vehicle to design such a framework as it has been limited to the SMM basin. Further investigations would be required to study the condition of the other parts of the Lake Kyoga basin, in order to design an appropriate framework.

(3) *Extension of the mandate of the Lake Victoria Basin Commission*

The EAC treaty has given the EAC extensive powers in the harmonisation of policies and laws for the management of natural resources. Pursuant to those powers, the EAC has put in place the *Protocol for the Sustainable Development of the Lake Victoria Basin*. The Protocol lays down the legal framework for the basin and establishes the Lake Victoria Basin Commission as the entity entrusted to manage the basin. The territorial scope of the Protocol is the Lake Victoria Basin. While the Sio is well covered by this legal and institutional framework, an extension of the mandate of the LVBC would be necessary for the Malaba-Malakisi to be brought under this management framework.

This study favors this option because the two river systems present so many commonalities that it would only make sense to bring them together under the same management framework and create a specific entity for the two basins, subsidiary to the LVBC. It would enable the exploitation of already established capacity in the LVBC and create the necessary synergies. More so, the two basins are small in size and very geographically close to the extent that the creation of two management frameworks would tantamount to proliferation of organisations.

In our discussions with officials of the Lake Victoria Basin Commission, we were informed that there is advanced thinking in the EAC to expand the mandate of the Lake Victoria Basin Commission (LVBC) to cover all East African inland transboundary waters in order to avoid a multiplicity of institutions. The proposal tendered here is therefore consistent with the direction of thinking within the EAC.

These considerations form the basis for the proposed SMM Legal and Institutional Framework which is discussed in detail in the next sections. (The methodology for extending the mandate of LVBC is demonstrated in **Annex 4b** in sections 3 and 4)

6.3 Recommended Framework Option: The EAC Framework as a basis for the SMM Cooperative Framework

6.3.1 Background

Both Kenya and Uganda are members of the East African Community. Under the East African Community, elaborate arrangements have been made for the joint management and sustainable development of water resources among other natural resources. Article 112(2)(b) of the Treaty establishing the East African Community provides for the obligation of the partner states to conserve the environment and natural resources of East Africa. Among the obligations accepted by the states is the conservation of water resources and the prevention of pollution.

In addition to the commitments made by the partner states regarding joint management, institutional arrangements have been put in place to implement these commitments. These include: The Executive Arm comprising of the Summit of heads of state and governments; a Council of Ministers; and an Executive Committee of Permanent Secretaries.

The Council of Ministers is empowered to make regulations, issue directives and take decisions in accordance with the provisions of the Treaty. The directives, regulations and decisions of the Council are binding on the partner states and all organs of the community except the Summit, the Legislative Assembly and the Court of Justice.

The East African Legislative Assembly has also been created to make laws to implement the treaty (see Articles 49, 59 and 62). The East African Court of Justice has been created to settle disputes arising out of the implementation of the Treaty and community law.

The Lake Victoria Basin Protocol

Article 112(2)(b)(vi) of the Treaty establishing the East African Community provides specifically for the need to protect Lake Victoria and its water resources. Consequently, Lake Victoria basin has been designated as a regional economic growth zone to be developed through a coordinated implementation process by the Partner States.

The member states having recognized the huge development potential of the basin and the need for its joint management and development, signed the Protocol for the Sustainable Development of the Lake Victoria Basin in November 2003 and ratified it in December 2004. The Protocol provided for the establishment of the Lake Victoria Basin Commission, which has a Secretariat and which is an integral part of the East African Community Secretariat. The Commission, as the permanent organisation for the management of the basin has its headquarters at Kisumu, Kenya.

The Protocol basically follows the standard set by the United Nations Convention on Non-Navigational Uses of International Watercourses of 1997⁷² as discussed in **Chapter 3**. Care was taken to ensure that it is consistent with the principles proposed in the Draft Nile Cooperative Framework, which remains subject to negotiation.

In order to create synergy between the activities of the EAC and NBI in the Lake Victoria Basin, a Memorandum of Understanding (MoU) was signed on 12th July 2006 between EAC and NBI. The MoU provides for cooperation between EAC and NBI on several issues pertaining to the sustainable management and development of the Lake Victoria Basin including:

“Preparation and execution of studies and promotion and development of projects and programmes, particularly in the fields of conservation and sustainable development of the Lake Victoria Basin”⁷².

The MOU calls for the establishment of synergy and common positions with regard to participation in international programmes and initiatives⁷³ regarding Lake Victoria. The MOU also commits the parties to international cooperation⁷⁴, consultation⁷⁵, and collaboration and to a regime of exchange of information and documents⁷⁶ as well as a right to attend each other’s meetings as observers⁷⁷. The MOU also contains a provision that expenses from its implementation may upon appropriate consultations be borne by both or one of the parties. These provisions are proof that the two institutions have put in place a framework for intensive cooperation which should not be duplicated but whose potential should be fully exploited.

⁷² See Article II (ii)

⁷³ see Article II (vi)

⁷⁴ See Article I

⁷⁵ See Article III

⁷⁶ See Article IV

⁷⁷ See Article V

6.3.2 Means of delivering the SMM Cooperation Framework

In creating a framework for the management of the resources of the SMM, a policy maker has a choice of either of two modalities provided for under the EAC Treaty making binding decisions upon its member-states namely through the Council of Ministers or through the East African Legislative Assembly.

The Council of Ministers: The first avenue is under article 14(d) of the Treaty. The Council of Ministers is empowered to make regulations, issue directives, take decisions and deliver opinions in accordance with the provisions of the Treaty. Under Article 16, the directives, regulations and decisions of the Council are binding on the partner states and all organs of the Community except the Summit, the Assembly and the Court.

The East African Legislative Assembly (EALA): The second avenue is under Articles 49, 59 and 62 of the Treaty that empower the East African Legislative Assembly (EALA) to make community laws within the scope of the Treaty. Article 8 provides clearly that the Treaty and the laws of the Community including those made by the EALA have precedence over national laws. It also provides that the partner states have an obligation to bring all their existing laws into conformity with the laws of the community.

Either of the above two avenues can be used to bring to bear the proposed SMM framework. However, considering that the EALA is an elected and representative forum, with modalities of debate, consultation and stakeholder involvement, a law made by it would have greater moral authority than a Directive or Decision of the Council of Ministers. This is the modality recommended.

The Protocol is comprehensive in terms of the general legal norms. If the legal framework of the Protocol is extended to the Malaba-Malakisi, it would be sufficient to cover most of the management concerns raised above. However, that is not to say that a simple extension would do in a few words. The legal instrument required here is to create an enabling law that creates a specific institutional framework to implement general platitudes of the Protocol into detailed workable propositions in a specific geographical and social context.

The enabling law would:

- (i) Extend the mandate of the Lake Victoria Protocol and the Commission to cover the Malaba-Malakisi Basin.
- (ii) Address the specific issues of the SMM basin discussed elsewhere in this report.

- (iii) Establish an institutional framework specific to the needs of the SMM basin.

These have been provided for in **Annex 4b**.

5.3.3 Proposed SMM Institutional Framework

Fundamental Principles

The proposed SMM Institutional Framework would be based on the following principles:

- (i) *The principle of Economy:* Existing institutions and capacities would be optimally used. The SMM Institutional Framework will be housed within the Lake Victoria Basin Commission. It will take advantage of the experience, procedures and facilities already developed for the Commission. Article 37 of the Protocol enables the establishment of specific Sectoral Committees. A committee on SMM affairs would be established under that provision.
- (ii) *Appropriateness:* As a subsidiary body of the Commission, what is required for the SMM is a lean structure that will not impose an undue financial burden on the states concerned.
- (iii) *Flexibility:* Given its cross-cutting nature, there are multiple needs and functions that go with integrated water resources management. The proposed framework must respond to these needs if it is to stand the test of time. It must not just be seen as a purely water resources management institution but rather as a framework that brings together all the key players in the SMM basin with a role and stake in the sustainable management and development of the basin's water resources. The design must accommodate other institutional actors that constitute the entire spectrum of water resource management. The constitution of committees should change to reflect the need of the moment to ensure that all needs are given sufficient attention. This approach has already been perfected in the institutions of the EAC.
- (iv) *Involvement of local level institutions:* The SMM is a long way from both Nairobi and Kampala. In terms of size, both rivers are small and mainly of interest to the populations who live in the two basins. The basic challenges of managing the basins in the SMM revolve around the management of local issues such as land use and pollution from non-point sources. These are usually matters of local government concern. The institution designed must give a

role to local governments and provide for effective participation of the local communities.

- (v) *Optimising public participation:* The institution must be designed to ensure that the public participates in determining priorities and directions for investment and action. It must ensure that policy makers and policy consumers as well as those who carry out the desired actions interact. Stakeholder forums such as the Consultative Forum proposed below implement this principle.

Organs of the proposed SMM Institutional Framework

(1) The SMM Sectoral Committee

Article 37 of the Lake Victoria Protocol provides for the establishment and composition of Sectoral committees as follows:

- (i) The Co-ordination Committee shall recommend to the Council to establish such Sectoral Committees as are outlined in the Scope of Cooperation stated in Article 3 of this Protocol.
- (ii) In so doing the Co-ordination Committee shall take cognisance of the existing sectoral bodies and seek to have operational linkages.
- (iii) The Sectoral Committees shall be composed of Senior Officials of Partner States, Heads of Public Institutions, representatives of Regional Institutions, representatives from sectors covered under Article 3 of this Protocol, business and industry and Civil Society.
- (iv) The Partner States shall establish National Focal Points, which shall be responsible for coordinating national initiatives of the Lake Victoria Basin and share information with the Commission and other Stakeholders.

Despite these provisions, the SMM Committee cannot be established under the Protocol because it includes the Malaba-Malakisi which is outside the Basin hence the need for a law extending the mandate of the LVBC.

The functions of the sectoral committees are set out in Article 38. It provides that:

“Subject to any directions that the Sectoral Council gives, the Sectoral Committee shall:

- (i) Coordinate regional activities and those of national focal points within the Basin;

- (ii) Be responsible for the preparation of comprehensive implementation of programmes and the setting out of priorities for the Basin;
- (iii) Monitor and keep under constant review the implementation of the programmes undertaken in the Basin;
- (iv) Submit from time to time, reports and recommendations of working groups and Focal Points in the Basin; and
- (v) Perform such other functions as may be conferred on it by or under this Protocol.”

Once the mandate of LVBC, is extended, these functions will bind the SMM Framework.

The Protocol has basically set out the modalities of sectoral committees established under it. However it needs to be observed that owing to the nature of managing water resources of a basin, some innovations are necessary especially in its operation. To ensure that all relevant sectors are taken into account, the composition of the SMM Sectoral Committee would change depending on the issue to be addressed. This would ensure the widest possible ownership by the various relevant sectors involved in water resources-related activities in the basin. The following are some of the main sectors that will from time to time compose the committee: Water Resources Management; Agriculture; Forestry; Wildlife; Tourism, Water Supply and Sanitation; Fisheries; Environment; Wetlands; Meteorology; Land Management; Health; Energy; etc. (see Section 11 of **Annex 4b** for establishment and procedures)

Following the usual structure of the EAC, the Sectoral Committee would report to the Sectoral Council and through it to the Council of Ministers and ultimately to the Summit of Heads of State or Government.

(2) The SMM Technical Committee

The SMM Technical Committee would be composed of technical officials of Local Governments in the basin with backstopping from Central Governments as and when needed. This is to ensure that the local issues which impact so seriously on the rivers and their catchments are addressed by the people who deal with them on a day to day basis and yet the wider national interests are not lost.

The composition of the committee would change depending on the issue to be handled. The main sectors identified above to compose the Sectoral Committee would also be represented in this committee. This would ensure width of ownership among sectors and at local level. The Committee would report to the Sectoral Committee. (See Section 12 of **Annex 4b**)

(3) The SMM Consultative Forum

In order to ensure the effective involvement of local water users, service providers, local communities and the general public in the decision making process and in setting development and management priorities in the basin, it is necessary to create a forum that enables them to interact with policy makers. Policy makers at the highest level would have an annual meeting with local government officials, water users, service providers, and the public represented by civil society organizations and special interest groups. The Forum would also draw in the participation of centres of higher learning, research institutions, and Chambers of commerce. The Technical Committee (and its Secretariat) would convene the first meeting of the Forum after which the Forum would appoint its officers to run its affairs. The Technical Committee would provide technical backstopping to the Forum as and when required. In general the Forum would act as the parliament of the basins that would be especially important in monitoring and evaluation of activities in the basin. (See Section 15 of **Annex 4b**)

(4) Civil Society Networks and Water Users Associations

These would be voluntary networks of civil society and water users' associations whose objectives intersect with the water resource management objectives in the basin. In particular, they would emphasize community-based organisations such as beach management units and self-help groups. Other important networks are those of research centres and universities. These organisations would feed into the Consultative Forum and also work closely with the formal governmental arrangements in the framework.

(5) The SMM Secretariat

The previous arrangements described above can only achieve their objectives if they are backed by day-to-day management support in the form of a lean Secretariat. In a formal sense the Secretariat would be a part of the Lake Victoria Basin Commission Secretariat. In a functional sense, it would be a special part dedicated only to the SMM basin. (See Section 12 of **Annex 4b**)

To keep the Secretariat alive to the realities of the basin and easily accessible by the basin communities, it would, ideally, be physically located in the SMM basin. In keeping with the principle of economy, it would be lean. It could replicate the current project management unit of the SMM Project may be except in location.

In view of the current realities of the LVBC, and its financial and human resource base, it is actually envisaged the current SMM PMU serves as a transition secretariat to initiate the implementation of the proposed SMM

Framework pending the establishment of the substantive SMM Secretariat. The Secretariat would be the principal organ responsible for coordination of all activities in the basin and facilitating the regular exchange of data and information and also the transmission of information concerning planned measures between the riparian states in accordance with the procedure contained in **Annex 5**.

It is also proposed that the Commission appoints an SMM Program Officer, resident at the Commission Secretariat, who will serve as a linkage between the Commission and the SMM organs including the Secretariat. This office can be an existing office at the commission having other duties but providing the key and continuous linkage to the SMM.

(6) The SMM Trust Fund

The success of an organisation as observed elsewhere in this report mostly depends on the ability to raise and manage the necessary funds for implementation of its activities. It will be essential that to achieve the conservation objectives in the SMM basin, a reliable funding mechanism be put in place. The fund may initially raise seed money from donors and support from governments. When such money is well invested it may support conservation initiatives for a long time. If the institutional framework achieves its objectives, donors may be willing to commit more resources. Local examples of successful trust funds include the Bwindi-Mghahinga Trust Fund and the Nile Basin Trust Fund. The East African Development Bank, a financial institution of the EAC with considerable and reputable experience, would manage the SMM Trust Fund. The Sectoral Council for Lake Victoria after advice from the proposed SMM institutions would prioritise expenditure decisions. Funding for conservation purposes would flow to the SMM intergovernmental institutions, the Consultative Forum, and civil society. The detailed powers, structure, management and functions of the Fund are laid down in **Annex 4b** Sections 17-20.

The LVBC is itself in the process of establishing two Funds; the Lake Victoria Basin Development Fund and the Lake Victoria Basin Trust Fund. The former supports development activities while the latter supports the recurrent expenditures of the Commission. It is possible that the SMM issues may be incorporated into this general scheme or a specific mechanism can be put in place as suggested above.

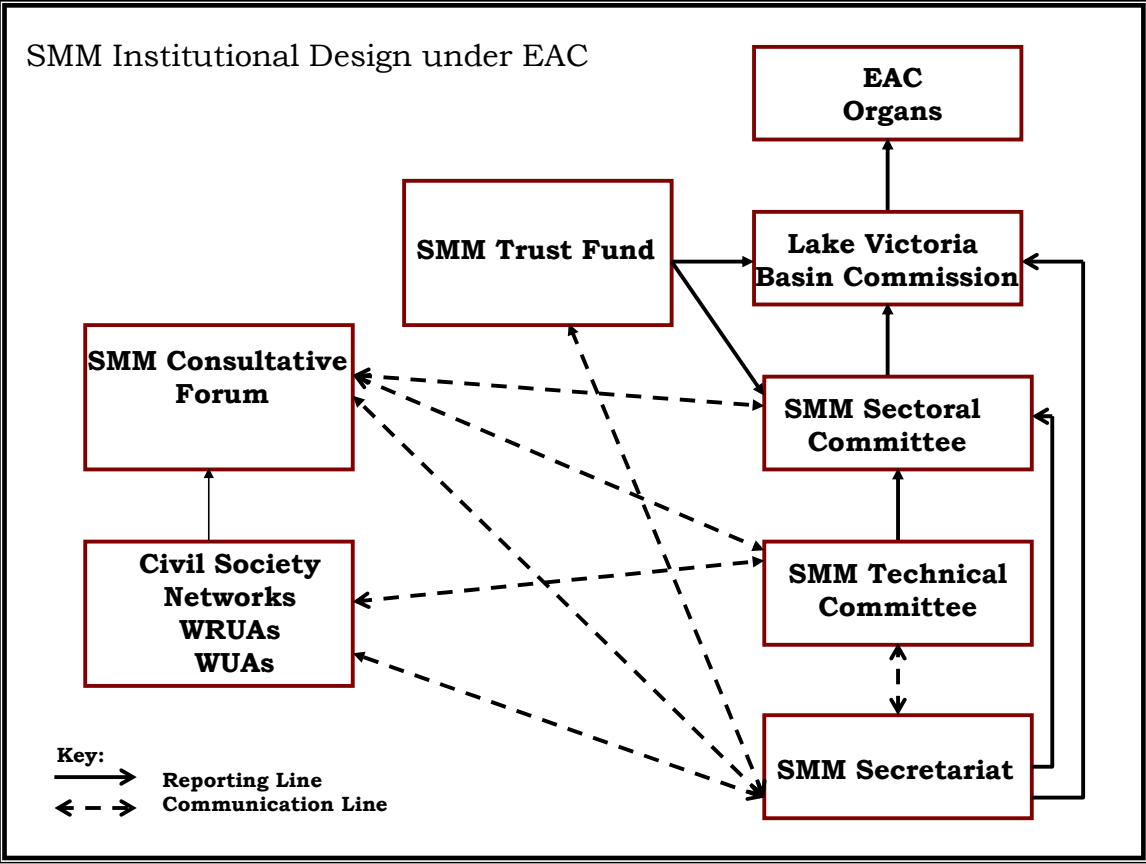
(7) SMM Local Government Cooperation

In addition to the above organs of the SMM Institutional Framework, there would be need for establishment of a special collaborative mechanism for the local governments in the basin.

The important role of local authorities in planning and managing the many day-to-day water resources related activities that depend and also impact upon the quality and quantity of the basin's water resources can not be over emphasized. However in many cases their voices are muted by exclusion, as management roles are concentrated in the capitals at central government level.

In recent years local governments have become more visible with the drive towards decentralisation. In the Lake Victoria Basin, the LVRLAC has become a very important voice in articulating local concerns and ensuring the inclusion of local issues in the basin management agenda under the Lake Victoria Basin Commission. Similarly, in the Kyoga Basin, the Lake Kyoga Integrated Management Organisation (LAKIMO), which was formed in March 2004, has made a contribution to managing the fishery of the lake. LAKIMO demonstrated that local governments in the region can work together to achieve conservation objectives.

An organisation based on the model of LVRLAC and LAKIMO can be created for the Sio and Malaba-Malakisi basins to promote local government cooperation in the basin and ensure ownership and sustainability of the process. It would help the local governments come together and jointly find solutions to their common challenges. Recommendations and memoranda from such an organisation would be forwarded to the relevant organs of the SMM Framework for action.



7.0 CAPACITY BUILDING PLAN FOR SUSTAINABLE MANAGEMENT OF SIO-MALABA-MALAKISI BASIN

7.1 *Justification*

One of the key challenges to sustainable water resources management and development in the SMM catchment is lack of adequate technical and financial capacity to plan, implement and monitor water resources management and development activities in the catchment. Following a comprehensive situation analysis conducted as part of the study, it was discovered that though both countries had made significant efforts to put in place fairly elaborate policy, legal and institutional mechanisms to address water sector challenges, the lack of capacity to implement these policies and enforce the corresponding laws had grossly undermined their effectiveness. It is therefore common practice, in the catchment, to find water users polluting water sources, dredging wetlands, cutting down trees and cultivating up to river banks and lake shores with impunity and without being held accountable for their actions.

As discussed elsewhere in this report, reforming the policies, laws and institutions in the water sector is a step in the right direction but cannot alone achieve the water sector goals and objectives unless appropriate technical and financial resources are made available to facilitate implementation of the policies and enforcement of the enacted laws.

It is against this background that the current project considered, as one of the study priorities, to develop a comprehensive Capacity Building Plan as an integral part of the proposed Policy, Legal and Institutional Framework for the management of the SMM water resources. It is hoped that once implemented, this plan will go a long way not only in strengthening the capacity of the relevant institutions responsible for water resources management related issues in the SMM catchment but will also enhance effective stakeholder participation in the management and development of the water resources of the SMM catchment.

7.2 *Objectives*

The main objective of the Capacity Building Plan is to identify and prioritise water resources related capacity building needs of the relevant institutions and stakeholders involved in the SMM catchment and

recommend appropriate intervention measures required to address these needs in order to ensure sustainable management and development of the SMM transboundary water resources.

Specific objectives of the Capacity Building Plan include the following:

- (i) To carry out a Capacity Needs Assessment to identify and prioritise the water resources related capacity building needs of relevant central and local government institutions and stakeholders involved in the SMM catchment;
- (ii) Identify appropriate capacity building activities whose implementation will address the identified capacity needs of the SMM catchment in the short- and long-term;
- (iii) Recommend a comprehensive strategy for implementation of the identified capacity building activities including an appropriate monitoring and evaluation mechanism for the plan.
- (iv) Outline a tentative work plan and budget for implementation of the (phase 1) capacity building activities.

7.3 Target Beneficiary Groups

The target beneficiary institutions and stakeholders include the following:

- (i) National Level Agencies: These include:
 - a. Relevant government departments (Water, Agriculture, Hydropower, Transportation/Navigation, Environment, Meteorology, Finance, Justice, Foreign Affairs, Tourism, Trade and Industry, Health, Education, etc).
 - b. Semi-autonomous government Agencies (NEMA, NARO, UFA, WRMA, NWSC, UWA, etc).
- (ii) Educational and Research Institutions: i.e. Universities, Research Institutes, and Colleges.
- (iii) Non-Government Organizations;
- (iv) Local Governments: i.e. Districts, Divisions, Counties, sub-counties, Locations, Parishes.
- (v) Community Based Organizations: e.g. MAHEMO, KWEDO, Safe Uganda, Farmers' Associations, Religious Organizations, Cultural Organizations, CAACs, WRUAs, and WUAs.
- (vi) Private Sector: e.g. Media, Investors, Private Operators, Pump mechanics and technicians, etc
- (vii) Special Interest Groups: e.g. Women groups, Youth groups, Farmers groups, People with Disabilities, Veterans, etc.
- (viii) Local Communities.

7.4 Situation Analysis

7.4.1 Existing Capacity Building Policies and Mechanisms

In Uganda, the Ministry of Public Service is responsible for providing the policy guidelines for Human Resources Development in general and training in particular in public service institutions. It is also supposed to coordinate staff development and training in the public service. On the basis of the training policy, each ministry develops its own training program based on their mandate, specific training needs and budget. All central government civil servants are recruited through the Public Service Commission.

The Ministry of Local Government has a specific capacity building policy that guides training in Local Governments (LGs). Capacity building in LGs is usually undertaken with support through line ministries or as part of specific projects implemented in the LGs. In addition, the Local Government Development Program (LGDP) also provides funding for capacity building activities in LGs through a Capacity Building Grant to the LGs. As part of the LGDP capacity building plan for LGs, thirty generic training modules have been developed in a standardized framework to be conducted in all LGs throughout the country. Unfortunately, there is no specific training module on water resources management.

LGs are responsible for recruitment of their personnel through their respective District Service Commissions. However, terms and conditions of service for LG employees are determined nationally and similar to those for central government employees. All LGs in Uganda largely depend on central government transfers for their staff salaries except for a few financially stronger LGs. The basic institutional structure in the LGs is uniform and is designed by the central government in collaboration with the LGs. The District Councils, however, reserve the authority to approve filling of vacant positions in their respective LGs.

Kenya used to have a well functioning capacity building program for Local Administrations (LAs) in the mid 1980s, which has since become ineffective due to various reasons, including financial constraints. Training institutes that used to provide tailor made training for LAs no longer provide these courses on regular basis. Currently, LAs fund their own training programs on small scale, due to financial constraints. The Ministry of Local Government has recently instructed LAs to spend 2% of their recurrent expenditure on training and staff development. Currently, the Ministry of Local Government is working on the development of a “Training and Capacity Building Framework” which will include

comprehensive training needs assessment and capacity building strategy for LAs.

In Kenya, central government employees are recruited through the Public Service Commission while the LAs have been delegated the responsibility for hiring lower cadre staff in their respective districts. Terms and conditions of LG staff differ from central government employees and are negotiated between LGs and Labour Unions. LGs rely on their local revenue for salaries and can exercise more autonomy in decision regarding the size of their lower cadre staff.

7.4.2 Coordination of Water Sector Training Programs

National Level

In both countries, the Ministry responsible for water has a department for human resources development, which is responsible for staff training needs assessment and capacity building. However, in both cases, the training budgets are inadequate and cannot meet all the capacity building needs of the ministries.

In Kenya, there is a human resource section in the WRMA, which is responsible for staff performance appraisal and training.

District Level

In Kenya, district level staff training activities are coordinated by respective line ministries, which are responsible for deploying, appraising performance and training of their staff operating at district level.

In Uganda, each local government has a human resources management division under the Management Department, which coordinates all personnel and capacity building activities. As a requirement to access funds under the LGDP Capacity Building Grant from the Central Government, each LG has to prepare a Capacity Assessment Report and a Capacity Building Plan annually.

7.4.3 Existing Capacity Building Initiatives

WRM Training in Uganda

Water resources related training is currently offered at the following institutions:

- (i) Makerere University - The Civil Engineering Department under the Faculty of Technology is the main major institution in Uganda providing undergraduate and graduate level training in Civil Engineering, Water Resources Engineering and Environmental Engineering. The department currently offers, among others, BSc Civil Engineering, MSc Water Resources Engineering, MSc

- Environmental Engineering and PhD Civil Engineering. The Faculty of Science offers graduate level training in hydrology, hydrogeology and Meteorology and awards MSc degrees in these areas of specialisation.
- (ii) Makerere Institute of Environment and Natural Resources – The Institute offers graduate level training courses in Environmental Management and Wetlands Conservation.
 - (iii) Kyambogo University – This was formerly a technical training institute, which was recently upgraded to a University and currently offers, among others, undergraduate level training in Civil Engineering.
 - (iv) National Meteorological Training Centre – Offers certificate and diploma level technical and practical training to meteorology observers, technicians and officers.
 - (v) Water Resources Institute - The Faculty of Technology of Makerere University is currently undergoing restructuring at the end of which it will transform into a College of Engineering and Technology. Under the proposed college, an Institute of Water Resources Research and Management will be created to provide specialised undergraduate and graduate level training in the following areas; Water Resources Engineering, Water Resources Planning and Management, Water Resources Assessment, Hydrology, Groundwater Hydraulics, Water Supply and Sanitation, Wastewater Management, River Engineering, Hydraulic Engineering, The major challenge to the successful launch of the proposed Water Institute is financial, physical infrastructure and human resources constraints.

WRM Training in Kenya

There are various institutions providing water related training in Kenya, the major ones being:

- (i) University of Nairobi, Moi University, Jomo Kenyatta University, and Egerton University, which run undergraduate and graduate level training in Civil Engineering and specifically Water Resources and Environmental Management.
- (ii) The Kenya Water Institute, which is specifically mandated to train water sector personnel and undertake research in water related issues in collaboration with water sector agencies.

Other WRM Training Opportunities

Besides the national level institutions discussed above, a significant number of scientists and engineers from the two countries continue to receive high level water related training from regional and international training institutions like IHE Delft in Netherlands, Georgia Institute of

Technology in USA, University of Pretoria in South Africa, University of Dar Es Salaam in Tanzania, and several other universities in Africa, Europe, Asia, and America.

7.4.4 Africa Water Resources Institute for Education and Applied Research (AWARE)

AWARE is a new capacity building initiative that promises to transform the approach to water resources education and research in Africa from the traditional subject specific narrow focus to a more integrated multi-sectoral focus. AWARE programs have been carefully designed to respond to the emerging water resources management and development challenges in Africa that transcend sectors and countries.

AWARE is a collaborative initiative between Georgia Institute of Technology (GT) in USA and University of Pretoria (UP) in South Africa, through their respective Water Resources Institutes, whose goal is to establish a world class, interdisciplinary graduate education, applied research, and technology transfer institute in the area of water, energy, and environmental resources planning and management. The joint institute is based at the UP campus in Pretoria, South Africa. The first AWARE programs will be a Dual Degree Masters Program and a Professional Education Program, which are scheduled to commence in February 2009.

The initiative, which was officially launched on 18th June 2008, is envisioned to bring about a lasting mechanism for the education and continuous development of technical professionals and policy makers needed in government agencies, regional and national water resources centres, industries, and academia in Africa.

The proposed Dual Masters Degree Program will include courses in water-related disciplines and Masters Thesis research. The first set of courses will include:

- (i) Statistical Methods for Environmental Data Analysis and Prediction;
- (ii) Physical Hydrology (Climatology, Meteorology, Surface and Groundwater Hydrology);
- (iii) River Hydraulics (Open Channel Flow; Sediment Transport; Design of Spillways, Weirs, Culverts);
- (iv) Water Supply (Urban, Rural, Agricultural, and Industrial) and Sanitation;
- (v) Natural Resources and Environmental Economics;

- (vi) Water Resources Systems Analysis (Simulation and Optimisation Methods and Models);
- (vii) Water Quality and Ecology in Lakes and Rivers (Processes and Modelling Tools); and
- (viii) Legal, Institutional, and Policy Frameworks for Water Resources Planning and Management.

In addition to the above courses, which will be co-taught by both GT and UP professors, students will be required to do a research project and also attend two short courses offered as part of the Professional development program, unless they have enough prior educational or working experience to warrant an exemption. The short courses will include: Hydro-informatics (Databases, Programming Languages, Spreadsheets, GIS) and Environmental Planning and Impact Assessments.

In the subsequent years more study tracks (areas of specialisation) will be introduced, as the program expands and consequently more elective courses will be offered.

Upon completion of the program requirements, the graduating students will receive a Joint Masters Degree by GT and UP. The duration of the Masters Degree will be 18 months at a total estimated cost of US\$ 30,000 per student, inclusive of tuition, accommodation and student upkeep.

AWARE funding will be secured from student tuition, sponsorships from international funding organizations, support from the Republic of South Africa (RSA), and limited start-up contributions from GT and UP. A number of fellowships (15 ~ 25) will be awarded annually to students who show promise in water resources science and engineering. Funding for these fellowships will be raised from a cadre of international organizations. It is estimated that AWARE will be financially self-sustained with approximately 20 new student enrolments per year.

7.5 Capacity Needs Assessment

The capacity needs presented in this section were arrived at through a consultative process which involved officials from water resources related central government agencies (e.g. WRMA, MWI, MWE, DWRM, MAAIF), local governments in SMM catchment, Education and Research institutions, Regional Agencies (NBI, LVBC, LVFO, LVEMP, NBWR Project, SMM PMU), NGOs, CBOs, representatives from private sector, women groups, youth groups, farmers groups, CAACs, WRUAs, WUAs, and selected local community members. In addition to the direct consultations, a training needs assessment questionnaire was administered to staff in some of these agencies and organisations.

7.5.1 Challenges

Following discussions with responsible officials from different institutions involved in water resources related activities at all levels (national, regional/catchment, district and community level) the same message was being echoed by these officials regarding the inadequate staffing levels in their respective institutions. The lack of adequate qualified and skilled personnel has significantly undermined the performance of both national and local level institutions in both countries. This, coupled with inadequate facilities and equipment like computers, vehicles, monitoring equipment, etc, and the persistent financial constraints, has rendered most of the institutions incompetent to implement their mandates leading to poor service delivery. It is hoped that the ongoing reforms in the water sectors in both countries will find a lasting solution to this problem and improve on service delivery.

Insufficient Funds

Besides inadequate technical capacity, almost all central and local government institutions visited cited inadequate funding as one of the biggest challenge in the implementation of their activities. Most of them confessed that if they had adequate funds, inadequate technical capacity would not be a very big issue, as they would resort to using the private sector to implement some of their activities. However, they can't do this because they don't have the funds to pay for the private sector services. Because of insufficient funds, most institutions lack basic infrastructure (e.g. adequate office space, stores, etc), equipment (e.g. computers, vehicles, etc), which makes it very difficult for them to plan and implement their activities. The situation is worst in some new districts where several senior officers share one office, one vehicle and one computer!

Most of the central and local government institutions in both countries depend on government appropriations to fund their activities. Government appropriations are usually inadequate due to limited revenues and several competing needs in other sectors.

In Kenya, WRMA is expected to raise most of its revenue from charging water user fees. Currently, due to the small number of registered water users, the revenue generated from water user fees is not sufficient to fund all WRMA activities. This also affects the operations of the catchment and sub-catchment offices. In Uganda, though the Directorate of Water Resources Management charges water user fees, these funds are supposed to be remitted to the treasury and cannot be used directly to finance water resources management activities.

The LGs/LAs have a very low local revenue base whose collection is inefficient and is mainly done in the second half of the financial year hence activities planned for implementation in the first half of the year are hardly executed. The major cause of this problem is the general poverty in the community, negative attitudes of taxpayers, and political interference. In addition the central government transfers are inadequate, pegged to specific activities and are not released on time thus impacting negatively on planning and implementation of activities in the LGs/LAs.

7.5.2 National Level Capacity Needs

Inadequate technical capacity is a common problem in most central government agencies in both Kenya and Uganda.

In Kenya for example, the WRMA is currently faced with an acute shortage of technical staff despite the presence of an approved elaborate structure. The shortage is mainly attributed to inadequate funds to recruit the required staff to fill the approved structure. The problem is even worse at the catchment level (Lake Victoria North Catchment Area), which is devoid of university graduates in most cases.

In Uganda, the Directorate of Water Resources Management, which became operational this financial year (2007/2008), currently has less than 50% of the technical staff as per the approved new structure. The Transboundary Water Resources Division, which is more relevant to the SMM catchment is grossly under staffed with less than 30% of the approved staff. This situation is attributed to delays in the staff recruitment process, which is the responsibility of the public service commission. The Directorate is also faced with the challenge of high staff turn over as several of the senior staff have left for greener pastures due to the low government salaries.

In both countries, officers responsible for transboundary water resources management issues specifically singled out lack of skills in areas of water law, negotiation and conflict management.

As part of the water sector reform process, both governments are now encouraging outsourcing of some technical activities to the private sector in order to improve on service delivery.

7.5.3 Local Government Level Capacity Needs

In Uganda, the staffing level in the 8 districts in the SMM catchment is very low. This situation is attributed to the frequent creation of new districts without adequate resources to attract and retain qualified and

skilled personnel. Despite the existence of an approved staffing structure, most LGs have not been able to recruit new staff due to lack of funds. The MoLG has advised LGs to recruit 65% of their approved staffing levels. Low staffing levels were also attributed to the creation of new districts. Creation of new districts has also reduced staffing levels of older districts because whenever a new district is created, the available staff have to be shared between the old and new districts. The new districts are more affected than the old one because staff are usually hesitant to move to new districts due to lack of physical facilities and office space. The most affected districts are Bududa, Manafa, Namutumba, and Butaleja., which lack qualified and experienced staff to head the new technical departments. In most of these districts, it was established that most Heads of Department are in acting positions. As noted earlier, all the staff at LG level lack skills in water resources management due to the fact that WRM is a centralized function. In the new districts, some technical officers possess basic qualifications but lack specialized skills to perform their duties. During discussions with technical officers from LGs, it was observed that no specific induction programs were organized for newly recruited staff, making it very difficult for most of them to adjust to their new responsibilities.

In Kenya, the staffing levels in 4 out of 7 districts in the SMM catchment were found to be fairly sufficient. The four include; Busia, Teso, Mount Elgon and Bungoma South. The staffing levels were observed to be very low in the new districts of Bungoma East, Bungoma West and Bungoma North due to reasons similar to those discussed above. Most of the departments in these districts are being “overseen” by staff from the mother district (Bungoma South).

Discussions with various LG/LA technical and political officials revealed a limited knowledge and appreciation of water resources management issues at district and lower levels of local governments including local communities. Most of them attributed the low priority given to water resources management issues in the LGs/LAs to this fact.

Most of the NGOs and CBOs visited were mostly involved in water supply and sanitation/hygiene activities and had very little knowledge about water resources management. Indeed most of them could not even see the linkage between their activities and water resources management. Surprisingly, even the few NGOs which are involved in catchment afforestation and riverbank protection only seem to be doing it because their financiers told them to do so but seem not to see any linkage between their activities and water resources management!

7.6 Proposed Strategic Intervention Measures

The proposed Capacity Building Plan entails five strategic intervention measures to be implemented over a period of time but whose implementation will go a long way in addressing the most critical existing capacity needs in the SMM stakeholder agencies to ensure sustainable management and development of the transboundary water resources of the SMM catchment.

The proposed strategic intervention measures include the following:

- (vi) Promote public awareness and sensitisation campaigns on IWRM to enhance stakeholder awareness and appreciation of Integrated Transboundary Water Resources Management and its contribution to socio-economic development and regional cooperation.
- (vii) Strengthen capacity of relevant stakeholder institutions at central and local government levels to sustainably plan, manage and develop the shared water resources of the SMM catchment.
- (viii) Support and promote collaboration with Educational, Research, and other Training institutions relevant to the SMM Catchment to leverage their expertise and resources in the provision of continuous training and technical support required for sustainable management and development of the SMM water resources.
- (ix) Strengthen capacity and promote collaboration with relevant NGOs, CBOs, and the private sector as key partners in the mobilisation and delivery of water related services to the local communities.
- (x) Promote and support the collection, management and sharing of water resources management data and information to support the planning and decision-making processes in the SMM catchment.

Detailed specific activities under each of the proposed intervention measures are discussed in the next section.

Given the extensive nature of the proposed intervention measures and significant financial and technical resources required for their implementation and coordination, their implementation will inevitably span over a fairly long period of time in order to create a critical mass of capacity required to meet the water resources related challenges in the SMM catchment. Effective implementation of the measures will also call for active stakeholder participation and involvement of several donors and implementation agencies. The biggest challenge will be mobilisation

of the required financial resources to implement the proposed capacity building activities.

Recognising that all the required funds cannot be got at ago, the activities will be prioritised to begin with the most critical ones that are likely to make a quick impact in the catchment. The plan will therefore be implemented in phases, with the scope of activities in each phase depending on the amount of financial resources available.

7.7 Proposed Capacity Building Tasks and Activities

TASK 1: *Promote public awareness and sensitization campaigns on IWRM to enhance stakeholder awareness and appreciation of Integrated Transboundary Water Resources Management.*

Activity 1.1: Study Tour – Conduct Study tours to relevant regional and international transboundary water resources management institutions (e.g. IJC & Delaware River Commission in USA, OMVS in Senegal, Mekong, etc). The objective of the study tour will be to learn from good management practices elsewhere in the world and explore opportunities for future collaboration with the SMM Catchment Management Agency. The Study Tour team would comprise of representatives from DWRM, WRMA, MWI, SMM Districts, SMM PMU, NELSAP-CU, and One NGO representative. Depending on availability of funds, the team could range from 10 to 20 participants.

Activity 1.2: Public Awareness Campaigns - Carry out targeted awareness campaigns using seminars, workshops, messages and media appropriate to specific target audience e.g. Politicians, Policy and Decision-makers, Managers, Technical staff, NGOs and CBOs, Media, Women and Youth Groups, and Local Communities.

Activity 1.3: IWRM Awareness in Schools - Introduce and support inclusion of IWRM related topics in primary and secondary schools in the SMM Catchment. The SMM Secretariat/PMU could also promote essay, music, drama, and poem competition in primary and secondary schools in the catchment on water related topics as a means of raising awareness on water and general environmental issues in schools. Best performing individual students could be awarded scholarships while best performing schools could be rewarded with computers, funds for construction of improved water storage and sanitation facilities, etc.

Activity 1.4: Exchange Visits – Promote and facilitate exchange visits between farmers groups, youth groups, environmental groups, women groups, technical exchange visits, politicians and managers, to share experience and learn from best practices.

Activity 1.5: Water Fairs/Open days – Sponsor annual “Water Fairs/Open days” to show case different activities in the catchment, introduce/market new ideas, products, technologies and services, information dissemination, networking, accountability (show progress), etc. The Secretariat could consider establishing prizes/rewards for catchment-wide competitions in good farming practices, water conservation techniques, good sanitation and hygiene practices, good fishing practices, wetland management practices, etc. These could be awarded annually during the Water Fairs/Open Days.

Activity 1.6: Media Campaigns – Sponsor Radio and TV programs and Newspaper supplements to raise awareness and sensitise local communities on specific water resources related topical issues and practices like household sanitation and hygiene, water purification, control of soil erosion, water permit application, etc

Activity 1.7: Local Community “Barazas” – Promote and facilitate Local community barazas to disseminate information, mobilize communities for planning and implementation of community activities, training in basic skills e.g. protection against HIV/AIDS, family planning, tree planting, sustainable harvesting of wetland products, sand mining, fishing and harvesting of forest products. Barazas could also be good for conflict resolution and mobilization of community contributions for development activities.

Activity 1.8 – Sponsor the preparation of an SMM website and monthly magazine to promote information dissemination and accountability.

TASK 2: *Build Capacity of relevant Central and Local Government Agencies in IWRM*

Activity 2.1: Formal Graduate Training – Sponsor training of relevant central and local government technical officers in IWRM through formal training and short professional training courses. SMM Secretariat/PMU could provide fellowships to Water and Environment officers from the most needy districts and central government agencies (based on a comprehensive needs assessment) to pursue Graduate training in Integrated Water Resources and Environmental Management at MSc level. One option could be for the SMM Secretariat/PMU to have a memorandum of understanding with the AWARE program in Pretoria to provide graduate training of scientists and Engineers from specific SMM

agencies over a period of time. In this case the SMM Secretariat/PMU would solicit for funding from donors to provide say six fellowships every year to train six officers from the SMM agencies under the AWARE program.

Activity 2.2: Short Professional Training Courses – Sponsor officers from relevant central and local government institutions, NGOs and CBOs, and the private sector to undertake short professional training courses to enhance their skills in IWRM and other transboundary water resources management related fields. SMM Secretariat/PMU could provide collaborate with education and research institutions to design and regularly deliver specific customised short professional courses training courses through either special technical workshops organised by the SMM Secretariat/PMU or on the premises of the education institution or beneficiary central/local government agency. Examples of such courses include: Project planning and management, Financial Management, IWRM, EIA, Negotiation and Conflict Resolution, International Water Law, Database Management, Project Planning and Management, etc. A comprehensive list of professional courses identified during the stakeholder consultations is given in **Section 6.8.7** at the end of this chapter. One viable option of delivering these short courses could be to include some of the technical courses under the MoU between SMM and AWARE so that in addition to the Graduate training, AWARE also designs and delivers some of the short professional courses possibly with the participation of the graduate students.

Activity 2.3: Establish DST/IT Support Unit – Establish a technical unit at SMM Secretariat, to operate and continue updating the SMM DST, offer technical training and backstopping to district and central government technical officers in Database management, DST operations, Data Analysis and Quality Control, IT, etc. The unit will be responsible for coordinating DST/IT related professional training for technical officers from SMM stakeholder agencies. In addition, the unit will also coordinate joint technical water resources assessment working sessions and other technical discussions between officials from SMM stakeholder agencies.

Activity 2.4: Refresher Courses for Technicians – Sponsor short practical refresher courses (1 – 3 weeks) for technicians, NGOs, CBOs, Youth and Women groups and other interested local community members. Such courses could include:

- (i) Operation and maintenance of simple irrigation field equipment;

- (ii) Operation and maintenance of hydrological, hydrogeological, water quality and meteorological monitoring equipment and instrumentation,
- (iii) Basic financial management and record keeping procedures;
- (iv) Project identification and proposal writing;
- (v) Operation and maintenance of boreholes and other water supply facilities; and
- (vi) Training of Environmental Inspectors;
- (vii) Training in enforcement of water and environmental regulations and standards;
- (viii) Training of hydrological and meteorological observers;
- (ix) Training of hydrological and meteorological technicians in data collection, quality control and analysis.

The approach of delivering this kind of training would either be through hiring local experts to conduct the training or through sponsoring a training of trainers program (say for NGOs or CBOs) who would then be deployed to train other stakeholder groups in the catchment.

Activity 2.5: Support to Extension Services – Collaborate with local/central governments to strengthen extension services in the SMM catchment through training, equipping and facilitation of the operations of extension workers to deliver field practical training to farmers, offer planting, harvesting and post-harvesting storage advise, offer advise on efficient irrigation water use, on-farm water harvesting for supplementary irrigation, soil and water conservation techniques, proper application of fertilizers, planting dates and high yielding plant cultivars/varieties.

TASK 3: Support and facilitate Educational, Research and other Training institutions relevant to the SMM Catchment

Activity 3.1: Support Curriculum Development – Universities, research institutions and other institutions of higher learning to improve their curriculum for undergraduate and graduate training to make it more responsive to the IWRM challenges in the basin. To motivate students to take water resources related courses at these institutions, SMM Secretariat/PMU could support final year research projects on water resources related research and also make available scholarships to best performing students in water related programs to pursue Graduate studies.

Activity 3.2: Support Staff Development Programs – The SMM Secretariat/PMU could contribute towards the staff development programs in collaborating Universities and Research Institutions to

improve on the quality of teaching. The support could be targeted towards further training and professional development of professors teaching water related courses. This would also include supporting specific research projects, participation in international conferences and preparation of publications in international journals.

Activity 3.3: Provide Equipment and Teaching Aids – The SMM Secretariat/PMU provide collaborating education and research institutions with financial support for establishment, equipping, operation and maintenance of water related Research Laboratories and resource centres. Such centres could serve as training centres for technical officers from SMM stakeholder agencies. SMM could also sign a Memorandum of Understanding with such institutions to provide regular professional training to basin stakeholders in return for the support.

Activity 3.4: Support Technical/Scientific Conferences – The SMM Secretariat/PMU in partnership with the collaborating education and research institutions could Sponsor a scientific/technical conference/workshop in the catchment each year during which young researchers will be encouraged to showcase their research findings and possibly the best presenter(s) be rewarded with prizes and scholarships.

TASK 4: *Build Capacity and contribute towards the operations of NGOs and CBOs relevant to the SMM Catchment*

Activity 4.1 Support Training of NGO/CBO Personnel - Train and equip specific NGOs/CBOs to deliver local community training and information dissemination/translation, sensitisation and conflict resolution.

Activity 4.2 Support Training of Women and Youth Groups - Train and facilitate women and youth groups to carry out community sensitisation on sanitation and hygiene, riverbank protection, catchment afforestation, income generating activities, conduct and facilitate at barazas etc.

Activity 4.3: Support Field Demonstrations of Good Practices – Facilitate and equip NGOs and CBOs to carry out on-site demonstrations of good farming and water conservation practices in different water resources management related activities. Demonstrations would be conducted for organised farmers groups, youth groups, women groups, and environment groups, WRUAs, WUAs, in the following areas:

- (i) Soil and water conservation techniques;
- (ii) Terracing and contour ploughing;
- (iii) River-bank protection;

- (iv) Set-up and maintenance of tree seedling nurseries
- (v) Sustainable harvesting of wetland products;
- (vi) Agro-forestry;
- (vii) Soil erosion control practices;
- (viii) Efficient irrigation water use practices;
- (ix) Spring protection; and
- (x) Aquaculture and fisheries hatcheries.

This activity could be implemented in collaboration with field extension workers, NGOs, and CBOs who would be facilitated by the SMM Secretariat/PMU. Another approach would be to promote exchange visits between farmers groups, youth groups, environmental groups, women groups, to share experience and learn from each other's best practices and successful and bad experiences.

Activity 4.4: Support Operation and Maintenance Services –

Supplement local community efforts toward operation and maintenance of water supply facilities through training, equipping and facilitating local community pump mechanics and technicians to help in minor repairs of boreholes, water pumps, farm machinery, etc. Provide revolving loans to mechanics/technicians to stock consumables/spare parts to facilitate efficient delivery of services.

TASK 5: Promote and support the collection, management and sharing of water resources management data and information.

Activity 5.1: Rehabilitation and Expansion of Monitoring Network

Support the establishment of a fully functional hydrometeorological monitoring network in the SMM catchment through rehabilitation and expansion of the existing stations and equipping them with modern gadgets. The SMM Secretariat/PMU will collaborate with the relevant national agencies in both Kenya and Uganda to review the existing monitoring network and design and implement a comprehensive water resources monitoring network for the SMM catchment. This will cover hydrological, hydrogeological, meteorological, and water quality monitoring. This activity will also include:

- (i) Training of technicians and field observers in the operation and maintenance of monitoring equipment;
- (ii) Facilitation of joint monitoring programs; and
- (iii) Support to water quality laboratories in basin with equipment, chemicals, training, and mobile labs.

Activity 5.2: Adoption of uniform data procedures and standards

Support the development and adoption of compatible/uniform data collection, quality control, storage, and dissemination procedures, guidelines, standards, and formats for the SMM catchment. The SMM Secretariat/PMU will facilitate this process and also coordinate training in the use and adoption of the procedures and standards.

Activity 5.3: Development of Databases and Decision support Tools -

Support the development and maintenance of compatible databases for storage of both temporal and spatial data for the SMM catchment. This will also include development and use of Decision Support Tools to facilitate analysis of data and generation of technical information required by decision makers and managers. The SMM Secretariat/PMU will facilitate this process and also coordinate training in the use and upgrade of the databases and Decision Support Tools and joint data analysis and assessments.

Activity 5.4: Data sharing and Information Exchange Protocol –

Support the development, negotiation and adoption of a data sharing and information exchange protocol for the SMM catchment to ensure regular exchange of water related data and information between SMM stakeholder agencies as part of their planning and decision making processes.

7.8 Implementation Strategy

7.8.1 Phased Implementation Approach

Given the broad scope of the proposed intervention measures and significant financial resources required for their implementation, activities under the proposed capacity building plan are likely to span over a long period of time in order to create a critical mass of capacity required to meet the water resources related challenges in the SMM catchment. It is important to point out here that this plan does not give an exhaustive list of all the possible capacity building needs and intervention measures in the SMM catchment but rather tries to focus on the most critical areas. It is envisioned that the plan will be dynamic in nature and will be reviewed regularly to incorporate more intervention measures to address other emerging capacity needs in the catchment.

Recognising that all the required funds may not be initially available, the activities will be prioritised to begin with the most critical ones that are likely to make a quick impact in the catchment. The plan will therefore be implemented in phases, with the scope of activities in each phase depending on the amount of financial resources available.

The first phase of the Plan (say for the period 2008 – 2010) could be embarked on immediately, under the auspices of the current SMM project to establish the basic capacity in the catchment that is required to kick-start the proposed cooperative framework and preliminary planning process in the catchment. At the end of this phase, a comprehensive review of the Capacity Building Plan will be carried out and a Phase 2 (say 2011-2015) schedule of activities prepared. It is envisioned that by the beginning of phase 2, implementation of the proposed cooperative framework will have taken root and the relevant SMM administrative, technical and policy organs will have been established or will be in the process of being established at which point coordination of the Capacity Building Plan will be transferred from the SMM PMU to the SMM Secretariat.

7.8.2 Mobilization of Financial Resources

The biggest challenge will be mobilization of the required financial resources to implement the proposed capacity building activities.

Since most of the activities will be implemented within the existing capacity building mechanisms of the SMM stakeholder agencies, it is expected that these agencies will contribute part of the resources required for implementation of the proposed capacity building activities.

The SMM PMU will coordinate with the governments of Kenya and Uganda in mobilizing additional financial resources for implementation of phase 1 activities. The PMU will approach current development partners under the NBI/NELSAP framework to solicit for additional financial support to supplement government inputs.

Soliciting of funding for phase 2 activities will be coordinated by the relevant SMM Institution (SMM PMU or Secretariat) depending on the progress of implementation of the proposed cooperative framework. If the SMM Secretariat is operational by that time then these resources will be requested from the proposed SMM Trust Fund.

Scholarships for formal graduate training and short professional courses will also be sought from existing potential sources, which include, among others, the following:

- (i) NBI Applied Training Project and Water Resources Planning and Management projects have provisions for scholarships for water related graduate level (MSc and PhD) training for students from Nile Basin Countries.
- (ii) The Netherlands Fellowship Program offers a limited number of scholarships for students from developing countries to pursue graduate level training in Universities in Netherlands.
- (iii) The British Council offers a limited number of scholarships for students from developing countries to pursue graduate level training in Universities in the United Kingdom.
- (iv) Government water sector HRD programs offer some opportunities for central and local government civil servants to pursue graduate level (MSc) training and short-term professional and in-house training.
- (v) Training components under specific water resources related projects also offer financial support for different types of training e.g. LVEMP (funding for MSc, PhD, Short courses), NBWR project (funding for short professional training and in-house courses), etc
- (vi) AWARE fellowship program – The AWARE program will mobilise funding from international, regional, and national agencies to provide scholarships for qualified Engineers and Scientists from African countries to pursue MSc studies at the University of Pretoria in South Africa under the AWARE program.

7.8.3 Coordination Mechanism

SMM stakeholder agencies will be responsible for implementation of the proposed capacity building activities as an integral part of their existing capacity building programs. The role of the SMM PMU/Secretariat will be

to coordinate and facilitate the different stakeholder agencies in implementation of the activities.

A Capacity Building Committee comprising of officials from relevant agencies (central and local government agencies, educational and research institutions, NGOs, etc) from Uganda and Kenya will be established to review and prioritise capacity building activities and prepare a catchment-wide work plan and budget for implementation of the planned activities. The work plan and budget will be submitted to the SMM PMU/Secretariat for onward submission to the SMM Policy organs (RPSC, TAC, COM, etc) for review and approval. Upon approval of the work plan and budget, the SMM Secretariat/PMU will mobilize the required financial resources and coordinate with the SMM stakeholder agencies in the implementation of the activities. Reporting on the progress of implementation of the capacity building activities will be undertaken as part of the routine reporting that the SMM Secretariat/PMU does to the relevant SMM Policy organs.

7.8.4 Monitoring and Evaluation

The Capacity Building Committee discussed above will periodically monitor and evaluate the progress of implementation of the Capacity Building Plan and provide strategic advise to the two governments and the SMM Secretariat on the way forward. Monitoring will be done on an annual basis whereas comprehensive evaluation will be done at the end of each phase. The committee's monitoring and evaluation report and recommendations will be submitted to the relevant SMM Policy organs (SMM Technical Advisory Committee and Council of Ministers) for consideration.

The committee, in collaboration with the SMM Secretariat, will establish appropriate evaluation criteria and monitoring indicators to objectively assess progress of implementation of the Plan. The Secretariat shall facilitate the operations of the committee during the monitoring and evaluation process. An example of potential monitoring indicators is given in the table below:

Activity	Indicator	Means of verification
Formal Training	<ul style="list-style-type: none"> • Number of MSc students enrolled/completed under SMM funding; • Number of short courses conducted (and number of participants) with SMM funding • Number of Refresher courses conducted (and number of participants) with SMM funding 	<ul style="list-style-type: none"> • Review reports on scholarships awarded, students enrolled/ trained and courses conducted.
Study Tour	<ul style="list-style-type: none"> • Study Tour conducted and report prepared 	<ul style="list-style-type: none"> • Review Study Tour Report
Training workshops and Seminars	<ul style="list-style-type: none"> • Number of workshops conducted (and number of participants including gender representation). 	<ul style="list-style-type: none"> • Review workshop/ seminar reports

7.8.5 Capacity Building Delivery Mechanisms

Different methods will be employed to deliver the planned capacity building activities depending on the target group, nature and scope of training, availability of training facilities, cost of training, duration of training, number of trainees, and facilities at collaborating agencies. The most commonly used methods include the following.

- (i) Tailored, on-the job, hands-on training;
- (ii) In-house workshops;
- (iii) Training of Trainers;
- (iv) Exchange visits, secondment and attachments;
- (v) Formal Graduate Training;
- (vi) Short professional training;
- (vii) Study Tours;
- (viii) Field Demonstrations;

Specific application of the above methods is discussed under the planned activities.

7.8.6 Tentative Work plan and Budget for Phase 1 Activities

Phase 1 capacity building activities will be implemented during the period 2009 to 2011. As mentioned earlier, the final list of phase 1 activities and the corresponding budget will be determined and prioritised by the SMM Capacity Building Committee. Some of the activities that could be implemented during the first phase of the Plan, including their tentative timing, are shown in the chart below.

Work plan for Phase 1 Activities

ACTIVITY	2009			2010			2011		
Study Tour									
MSc Training under the AWARE Program									
Short Professional Training Courses									
Training of NGOs CBOs, youth and women groups									
Sensitisation of Politicians and Decision-makers									
Training of Mechanics and Technicians									
Catchment competitions in good practices									
School drama, essay and music competitions									
Radio and TV Programs and documentaries									

Tentative Budget Estimates for Phase 1 Activities

ACTIVITY	Inputs	Quantity	Rate (US\$)	Amount US\$)
Study Tour	Air tickets	10 Officers	3,000	30,000
	Per diem (15 days)	10 Officers	150 per day	22,500
	Visa fees	10 Officers	150	1,500
	Consultant	1 man-month	25,000	25,000
	Local expenses	Lump sum	15,000	15,000
	Incidentals	Lump sum	6,000	6,000
	Sub-total			100,000
Comprehensive Training Needs Assessment	Consultant	3 man-month	15,000	45,000
MSc Training	Scholarships	18 Students	30,000	540,000
Short Professional Training Courses	Professional Training Fees	5 Courses	30,000	150,000
	Venue, meals, accommodation	5 Courses x 30 participants	150 per day	22,500
Training of NGOs CBOs, youth and women groups	Professional Training Fees	3 Courses	30,000	90,000
	Venue, meals, accommodation	3 Courses x 30 participants	100 per day	9,000
Sensitisation of Politicians and Decision-makers	Facilitation Fees	3 Workshops	15,000	45,000
	Venue, meals, accommodation	3 workshops x 30 participants	150 per day	13,500
Training of Mechanics and	Professional Training Fees	2 Courses	30,000	60,000

Technicians	Venue, meals, accommodation	2 Courses x 50 participants	100 per day	10,000
Catchment competitions in good practices	Facilitation	Lump sum	30,000	30,000
	Prizes	Lump sum	20,000	20,000
School drama, essay and music competitions	Facilitation	Lump sum	30,000	30,000
	Prizes	Lump sum	20,000	20,000
Radio and TV Programs and documentaries	Professional Fees	6 programs x 1 man-month each	15,000	90,000
	Radio/TV Airtime	6 programs	5,000	30,000
Sub-total				1,305,000
Contingency				195,000
TOTAL				1,500,000

7.8.7 Specific Training Courses Requested

As part of the capacity needs assessment, consultations were held with relevant officials from the SMM stakeholder agencies and training needs assessment questionnaires were administered to solicit the relevant information necessary for preparation of the Capacity Building Plan. During the consultative process, specific training needs were raised by different stakeholder agencies and these are summarised in the Table below.

Stakeholder Group	Training Need
Water Policy Committee	Negotiation Skills
WSRB	Mediation and Conflict Resolution
Transboundary Divisions	<ul style="list-style-type: none"> • Communication and Negotiation skills • Short courses in IWRM • EIA and Compliance Monitoring
WRMA/DWRM	
Regulation	<ul style="list-style-type: none"> • Water and Environment law • Regulation of Hydraulic works • Conflict resolution • Customer care and public relations

Monitoring and Assessment	<ul style="list-style-type: none"> • Water resources data processing and analysis. • Use of GIS and remote sensing in water resources mapping and modelling • Database development and management • Integrated water resources management • Water resources Assessment Tools and Techniques • Environment Impact Assessment
Catchment Authority (Lake Victoria North)	<ul style="list-style-type: none"> • Participatory methods and tools • Integrated water resources management • Public prosecution/law for Water Rights Officers • Finance management and Procurement • Human resource management • Transboundary WRM planning and management
CAACs	<ul style="list-style-type: none"> • Aspects of the law i.e. Water Act 2002 • Introduction to IWRM issues • Environment management and Conflict Resolution • Transboundary issues
WRUAs	<ul style="list-style-type: none"> • Finance management and Project Planning skills • Training of Trainers (ToT) for management committee members • Technology transfer and good farming practices • Leadership training • Orientation on the objectives of WRMA and WRUAs • Introduction to IWRM and Planning issues
Water Services Providers	<ul style="list-style-type: none"> • Financial management and Records keeping • Operations and maintenance • Customer care
Local Governments	
Water Office	<ul style="list-style-type: none"> • Project Planning and Management training • Short courses in IWRM • EIA and Compliance Monitoring • Water Resources Modelling and Decision Support Tools • Database Management • Computer training
Community Based Services	<ul style="list-style-type: none"> • Social Mobilization and Group dynamics • Project identification, planning and management • Financial management and Record keeping • Communication skills and Participatory methods
Agriculture	<ul style="list-style-type: none"> • Soil fertility management and agroforestry practices • Pests and disease control • Business planning and records management

	<ul style="list-style-type: none"> • Efficient irrigation water use practices and skills • Water harvesting for supplementary irrigation • Terracing and contour banding • Soil conservation and Water conservation • Post harvest handling and storage • Small scale agro-processing techniques • Refresher training courses for extension officers
Fisheries	<ul style="list-style-type: none"> • Good Aquaculture practices • Hatcheries development and management • Management training for BMUs leaders • Good fishing methods and practices • Monitoring, control and surveillance (MCS)
Environment	<ul style="list-style-type: none"> • Use of GIS in Environmental Management • EIA and Environmental Audit Regulations, Procedures, Standards and Compliance monitoring • Ecological management tool • Enforcement of Environmental laws & regulations • Sustainable wetlands utilization and management • Integrated water resources management
Forestry	<ul style="list-style-type: none"> • Sustainable Forestry resources management • Participatory planning, monitoring and evaluation • Economic evaluation of natural resources • Environment Impact Assessment • Catchment Afforestation and Agro-forestry • Management training
WRM	<ul style="list-style-type: none"> • IWRM Principles and good practices • Use of GIS and Decision Support Systems in sustainable Water resources and planning • Water Resources Assessment and Mapping • Database development and management • Water quality monitoring, testing and analysis
Cross Cutting	<ul style="list-style-type: none"> • Communication and Social Mobilization skills • Project Planning, design and management • Conflict resolution, Negotiation and mediation • Computer skills • PRA training

8.0 STAKEHOLDER PARTICIPATION PLAN FOR THE SIO-MALABA-MALAKISI CATCHMENT

8.1 *Justification*

Effective stakeholder participation is crucial for sustainable integrated water resources management in the SMM basin. Acceptability and sustainability of the SMM development activities will highly depend on the level and extent of stakeholder participation in the implementation of these activities. It is against this background that the Consultant considers effective stakeholder participation as one of the key components of any successful institutional framework for transboundary water resources management.

Stakeholder participation is a complex process requiring adequate capacity to plan, implement and manage it. Stakeholder participation is a continuous process and not a once off exercise. This means a step-by-step process of building capacity that includes understanding and appreciating the importance and role of stakeholders and their participation in the different development activities in the SMM catchment.

Therefore, in order to keep track of the complex stakeholder participation process and ensure effective stakeholder participation in the different planning and decision-making processes in the SMM catchment, it is important to develop a comprehensive Stakeholder Participation Plan for the catchment.

8.2 *Objectives*

The main objective of the SMM Stakeholder Participation Plan is to enhance the effective participation of all the major stakeholders involved in SMM water related activities through design and implementation of appropriate participation measures.

Specific objectives of the Stakeholder Participation Plan include the following:

- (i) To carry out comprehensive Stakeholder identification, characterization and mapping in the SMM Catchment;

- (ii) To carry out a detailed assessment of stakeholder interests, importance, and influence;
- (iii) To analyse the current roles and levels of involvement of different stakeholders;
- (iv) To assess the existing stakeholder participation mechanisms, and the inherent constraints and challenges to effective participation;
- (v) To recommend a comprehensive strategy for enhancing effective stakeholder participation and the corresponding participation mechanisms under the proposed SMM cooperative framework.

8.3 Situation Analysis

8.3.1 Stakeholder Identification and Characterization

The key stakeholders in the SMM basin have been identified to include direct beneficiaries and intermediaries, those positively affected and those involved or those who are generally excluded from the water related decision-making processes. The Stakeholders have been divided into two broad categories:

- (i) **Primary Stakeholders** – these include stakeholders that are both directly and indirectly affected by the water resources related activities in the basin especially local communities, farmers, industrialists, etc who derive their livelihoods from the water resources of the basin or whose activities directly rely on or impact the water resources of the catchment.
- (ii) **Secondary Stakeholders** – these include stakeholders who play an intermediary and facilitative role in the catchment e.g. public sector agencies (ministries, regional/provincial or local governments, government mandated agencies, etc), private sector, donors, and NGOs.

The major SMM stakeholders were identified and divided into 10 broad categories as follows:

- (i) **International Agencies:** i.e. Funding Agencies, International Research Institutions, Private Sector (Consulting Companies, Contractors, Suppliers of Goods and Services, etc).
- (ii) **Regional Agencies:** i.e. Regional agencies involved in transboundary water related activities e.g. NBI/NELSAP, EAC/LVBC, LVFO, LVEMP, etc
- (iii) **National Level Agencies:** These include:
 - a. Relevant government departments (Water, Agriculture, Hydropower, Transportation/Navigation, Environment,

- Meteorology, Finance, Justice, Foreign Affairs, Tourism, Trade and Industry, Health, Education, etc).
- b. Semi-autonomous government Agencies (NEMA, NARO, UFA, WRMA, NWSC, UWA, etc).
- (iv) **Educational and Research Institutions:** i.e. Universities, Research Institutes, Colleges.
 - (v) **Non-Government Organizations:** i.e. International, National and Local NGOs e.g. Water AID, World Vision, PLAN International, CARE, UWASNET, NETWAS, CWP, etc
 - (vi) **Local Governments:** i.e. Districts, Divisions, Counties, sub-counties, Locations, Parishes.
 - (vii) **Community Based Organizations:** e.g. MAHEMO, KWEDO, Safe Uganda, Farmers' Associations, Religious Organizations, Cultural Organizations, WRUAs, and WUAs.
 - (viii) **Private Sector:** e.g. Media, Investors, Private Operators, Wholesale and retail companies, etc
 - (ix) **Special Interest Groups:** e.g. Women groups, Youth groups, People with Disabilities, Veterans, etc.
 - (x) **Local Communities.**

A detailed discussion of the key SMM stakeholder agencies and their respective mandates and roles is given in **Chapter 3** and **Annex 7**.

8.3.2 Stakeholder Mapping

In order to guide the process of identifying the interests, roles and level of influence and importance of the different stakeholder groups in the SMM catchment, a detailed functional analysis was conducted to identify the key water resources management functions in the basin and the roles played by the different stakeholder groups in respect to those functions. This analysis helped in identifying the relative importance of the different stakeholder groups, based on their level of involvement, and in assessing the capacity needs and appropriate intervention measures to ensure enhanced participation in the relevant water resources related activities in the catchment.

Functional Analysis

The main water resources management functions undertaken by different SMM stakeholders include:

- (1) **Policy, Advisory and Planning function:**
 - (i) Formulation and review of WRM policies;
 - (ii) Formulation and review of WRM laws, regulations, guidelines and standards;

- (iii) Provision of WR related advisory services;
- (iv) Formulation and review of IWRM plans;
- (v) Formulation and review of catchment management and development plans;

(2) **Regulatory function:**

- (i) Determination and allocation of water abstraction and wastewater discharge rights/permits;
- (ii) Enforcement of WRM regulations;
- (iii) Monitoring compliance with WRM laws and regulations;

(3) **Water Resources Monitoring function:**

- (i) Design, implementation and operation of water resources monitoring networks (quality and quantity);
- (ii) WR data collection, quality control and storage;

(4) **Water Resources Assessment function:**

- (i) Assessment of WR potential, availability, variability (Spatial and temporal), and vulnerability;
- (ii) Assessment of environmental water requirements and optimal allocation between competing water uses.

(5) **Awareness and Information dissemination function:**

- (i) Identification, Mobilization and Sensitisation of stakeholders on WRM issues;
- (ii) Promotion and facilitation of effective stakeholder participation in WRM activities;
- (iii) Preparation, packaging and dissemination of relevant WRM information to different stakeholder groups;
- (iv) Compilation, analysis and synthesis of stakeholder concerns, interests, feed back and contributions to different WRM activities.

(6) **Monitoring and Evaluation function:**

- (i) Monitoring the performance (technical and managerial) and evaluation of the WRM sub-sector;
- (ii) Value-for-money and Technical audits;
- (iii) Assessing the levels of success of WRM initiatives, programs and projects in terms of achieving the intended objectives.

- (7) **Catchment protection and conservation:**
- (i) Implementation of catchment conservation measures (pollution control, soil and water conservation, afforestation, soil erosion control, aquatic weed control, protection of river banks and lake shores, protection of water sources, etc).
 - (ii) Identification and reporting of illegal water users and polluters to relevant authorities.
- (8) **Training and Capacity Building function:**
- (i) Planning, implementation and management of WRM capacity building initiatives;
 - (ii) Delivery and provision of capacity building, technology transfer and training services;
 - (iii) Curriculum development and provision of formal water resources related education, training and research.
- (9) **Transboundary WRM function:**
- (i) Effective participation in regional and international shared water initiatives and programs;
 - (ii) Compliance with state international water related obligations and protection of state water related interests.
- (10) **Conflict Resolution function:**
- (i) Negotiation, mediation and conflict resolution in shared water resources (local, inter-district and inter-state conflicts);
- (11) **Coordination, Resources Mobilization and Facilitation function:**
- (i) Multi-sectoral coordination;
 - (ii) Donor and other stakeholder coordination;
 - (iii) Mobilization of internal and external financial and technical resources to support WRM initiatives;
 - (iv) Mobilization and promotion of private sector participation in WRM initiatives;
 - (v) Facilitation of stakeholders (NGOs, CBOs, private sector, local communities, etc) to ensure their active participation in WRM initiatives.
- (12) **Water supply & sanitation services delivery function:**
- (i) Planning and delivery of water supply and sanitation services (Rural, Urban, Irrigation and Livestock water supply, etc);

- (ii) Operation and maintenance of water supply and sanitation facilities;
- (iii) Mobilization of technical and financial resources for delivery of water supply and sanitation services.

Besides the above functions, stakeholders were also identified based on their level of involvement in both consumptive and non-consumptive uses of water in the basin i.e.

- (i) Water use for Agricultural production;
- (ii) Water use for Industrial production;
- (iii) Water use for Domestic consumption;
- (iv) Water use for Fisheries production;
- (v) Water use for Hydropower generation;
- (vi) Utilization of wetland resources;
- (vii) Wastewater discharge into rivers, lakes and wetland;

Table 1 below summarises the role played by each SMM stakeholder group in the different water resources management functions identified above.

Table 1: Analysis of roles played by different SMM Stakeholder Groups

Stakeholder	International Agencies	Regional Agencies	National Agencies	Educational Institutions	NGOs and CBOs	Private Sector	Local Governments	Special Interest Groups	Local Communities
Function									
Policy, Advisory and Planning	Minimal	Facilitation of high level interactions, meetings and negotiations	Play lead role by mandate	Research into specific policy issues and implications	Public advocacy to influence policy formulation and the planning process.	Consultants -Provision of technical support.	Provision of local inputs into policy formulation and planning process	Advocacy to influence local inputs into policy formulation & planning process.	Input through SIGs.
Regulatory	Minimal	Facilitation and mediation in inter-state water sharing conflicts	Play lead role by mandate	Minimal	Sensitisation of the public on compliance with laws & regulations.	Self monitoring to ensure compliance with laws, regulations & standards	Identification of illegal local water users and polluters & ensuring their compliance with the law.	Advocacy to ensure compliance with the law and prosecution of offenders	Vigilance to safeguard the integrity of local water resources against abuse.
Resource Monitoring	Minimal	Minimal	Play lead role by mandate	Minimal	Minimal	Minimal	Minimal	Minimal	Vigilance to safeguard monitoring installations against vandalism
Resource Assessment	Minimal	Facilitation of joint cross border assessments	Play lead role by mandate	Minimal	Minimal	Minimal	Involvement in local water resources assessments	Minimal	Minimal
Awareness and Information Dissemination	Minimal	Compilation and dissemination of information on shared resources	Play lead role by mandate	Dissemination of research findings	Play key role in local community mobilization and sensitisation	Minimal	Play key role in local community mobilization and sensitisation	Play key role in mobilization and sensitisation of SIG members	Vigilance in demanding for information and participating in sensitisation activities.

Monitoring and Evaluation	Funding agencies play key role in monitoring and evaluation to ensure that external funds provided are put to the intended use	Minimal	Specific govt agencies play this role to avoid mismanagement of public funds.	Minimal	Play active role in demanding accountability of public funds and in pointing out cases of mismanagement and abuse of office by public officials.	Minimal	Play active role especially in ensuring that benefits from national projects accrue to the intended beneficiaries in their areas of jurisdiction	Play active role in ensuring that benefits from district and national projects accrue to the intended beneficiaries in their communities	Vigilance in demanding accountability from local leaders and ensuring that public resources meant to benefit them are not mismanaged by public officials.
Catchment Protection and Conservation	Minimal	Minimal	Facilitation and promotion of conservation initiatives.	Minimal	Mobilization and facilitation of local communities to engage in conservation initiatives.	Minimal	Mobilization and facilitation of local communities to engage in conservation initiatives.	Mobilization of SIG members to engage in conservation activities in their respective areas.	Play active role in the initiation and implementation of catchment protection and conservation initiatives.
Training and Capacity Bldg.	Minimal	Minimal	Play lead role in the preparation and implementation of national training and capacity building plans.	Play lead role in the delivery of training and capacity building services.	Play key role in basic training and capacity building of local communities.	Offer practical on-the-job training opportunities	Play lead role in the preparation and implementation of local govt training and capacity building plans.	Identify and follow up training and capacity building opportunities for their members.	Take advantage of training and capacity building opportunities to improve their livelihoods.

Transboundary WRM	Monitoring and facilitating compliance with international water related obligations	Monitoring and facilitating compliance with regional transboundary water related obligations	Play lead role in coordinating and ensuring effective national participation in regional and international shared water initiatives and programs and protection of state water related interests.	Minimal	Advocate and mobilize stakeholder participation in transboundary WRM activities	Minimal	Initiate and sustain cross-border and inter-district cooperation and collaboration on transboundary WRM activities	Minimal	Vigilance in the Implementation of local transboundary WRM initiatives.
Conflict Resolution	Specific international agencies e.g. ICJ play key role in addressing inter-state water disputes	Play key role in mediation, facilitating negotiations and resolution of inter-state water conflicts	Play key role in mediation, facilitating negotiations and resolution of national and inter-district water conflicts	Minimal	Seldom play role as neutral mediators in local water disputes.	Minimal	Play role in mediation, facilitating negotiations and resolution of local water disputes.	Minimal	Report water complaints and disputes to relevant authorities and comply with the outcomes of the dispute resolution process.
Coordination, Resources Mobilization and Facilitation	Funding agencies play key role in provision of financial support for projects.	Play key role in mobilization and coordination of external support for regional initiatives	Play key role in mobilization and coordination of external and internal support for national initiatives	Minimal	Play some role in lobbying and coordination of external and internal support especially for local initiatives	Minimal	Play some role in mobilization and coordination of government support for local initiatives	Lobbying local leaders to support local initiatives. Also mobilize community contributions	Raise local community contributions for project implementation
Water Supply & Sanitation services delivery	Minimal	Minimal	Technical support, planning, coordination and monitoring and evaluation.	Minimal	Mobilization of communities to participate in the planning and implementation of water supply and sanitation projects.	Provide technical support for planning, implementation, operation and maintenance of facilities.	Play key role in the planning and implementation of water supply and sanitation services.	Mobilization of SIG members to participate in the planning and implementation of water supply and sanitation projects.	Participate in the planning, implementation and operation and maintenance of water supply and sanitation projects.

8.3.3 Stakeholder Interests, Importance, and Influence

The table above, coupled with extensive stakeholder consultations, was used to define the different stakeholder interests and to establish the importance and influence of different stakeholder groups in the SMM catchment. The table above was particularly important because it enabled the consultant to determine the appropriate levels of participation of different stakeholder groups in SMM development activities.

In conducting this assessment, use was made of several existing stakeholder participation models. In particular, the NBI stakeholder participation model, highlighted in **Annex 6**, was found to be very useful.

A summary of the SMM stakeholder interests, importance, and influence is given in the **Table 2** below. The table also shows the constraints and challenges hindering the effective participation of different stakeholder groups in the SMM development activities and proposals on how their participation can be enhanced.

Table 2: Assessment of Stakeholder interests, importance, and influence

	<i>Stakeholder Interests in the SMM Basin</i>	<i>Stakeholder Importance</i>	<i>Stakeholder Influence in the SMM Basin</i>
Stakeholder			
<i>International Agencies</i>	To contribute towards the development and improvement of the socio-economic conditions of the basin riparians as part of their international development programs.	Play a key role in provision of financial and technical support for implementation of development projects e.g. under NBI, NELSAP, EAC, LVBC, LVEMP, etc.	Very powerful in influencing the project planning and implementation process as they often have strict terms under which they provide their financial and technical support to guard against mismanagement of their funds.
<i>Regional Agencies</i>	To provide an enabling environment for regional collaboration to promote regional development and minimize inter-state water related conflicts.	Play key role in facilitating regional collaboration, mobilizing resources for regional development programs and mediating in inter-state water related conflicts.	Powerful as they provide technical and logistical support to the agencies responsible for decision-making, planning, and implementation of projects in the basin.

	<i>Stakeholder Interests in the SMM Basin</i>	<i>Stakeholder Importance</i>	<i>Stakeholder Influence in the SMM Basin</i>
<i>National Agencies</i>	To ensure effective implementation of government policies and programs in the basin to foster socio-economic development of the basin in particular and the country in general.	Play the lead role in coordinating the planning process, supervision, and implementation of all government development activities in the basin by virtue of their sectoral mandates.	Very influential by virtue of their mandates as lead agencies responsible for coordinating the development and ensuring effective implementation of government policies and programs in the basin.
<i>Educational Institutions</i>	To ensure the availability of adequate technical skills and information to support the planning, implementation and decision-making processes in the basin.	Play lead role in the provision of training, research and general technical support services by virtue of their mandates. They train all the technical staff employed by different agencies, engage in water related research, and conduct short professional training courses.	Other than providing the necessary training and disseminating research findings, Educational institutions do not directly participate in the planning and decision-making processes in the basin and are thus not very influential in this regard.
<i>NGOs and CBOs</i>	To provide a platform for public and local community participation in the decision-making processes including planning implementation and monitoring of development activities in the basin.	NGOs are quite active in public advocacy to influence policy formulation and the planning process, monitoring of public projects and demanding accountability, and mobilizing and sensitising communities.	NGOs wield significant power and influence in the basin by virtue of their capacity and ability to mobilise the public and local communities to either participate in beneficial development activities or demonstrate against bad and repressive policies and plans.
<i>Private Sector</i>	The private sector companies are interested in doing profitable business in the basin and getting a good return on their investments.	Private sector companies are currently involved in the provision of consultancy services and other technical services to the public sector e.g. planning, implementation, operation and maintenance of water supply and sewerage projects.	The private sector is not very influential in the decision- making and planning processes in the basin since their main interest is to do business and make a profit. Their most noticeable influence is in lobbying for contracts and for policies and laws that enhance their participation.

	<i>Stakeholder Interests in the SMM Basin</i>	<i>Stakeholder Importance</i>	<i>Stakeholder Influence in the SMM Basin</i>
<i>Local Governments</i>	Ensure efficient delivery of social services to the local communities in line with the overall government policies.	Play lead role in the provision of social services e.g. water supply and sanitation to the local communities; Coordinate the provision of local inputs into the government planning and decision making processes.	Very influential as they have the mandate to coordinate the planning and decision making processes, monitor and supervise implementation of all development activities and provide social services in their areas of jurisdiction.
<i>Special Interest Groups</i>	To ensure that the interests of their members are taken into consideration in all the planning and decision- making processes in their areas of jurisdiction.	Advocacy to influence inclusion of the interests of their members in all development activities in their communities.	Possess appreciable power and influence in their local communities by virtue of their ability to mobilise their members to either participate in beneficial development activities or demonstrate against bad and exclusive plans and projects.
<i>Local Communities</i>	To improve their socio-economic conditions by deriving benefits from development activities implemented in their areas.	Vigilant in demanding for social services, information and accountability from local leaders; Active in safeguarding the integrity of local water resources against abuse.	Individually they may not be very influential, but through associations and special interest groups, they have a lot of influence in the decision-making and planning processes.

8.3.4 Existing Stakeholder Participation Mechanisms

Existing water related policies, laws and institutional frameworks in both Kenya and Uganda provide for stakeholder participation as discussed in **Chapter 3**. However, effective stakeholder participation in water resources management related activities at national and local levels is far from being realised. This is mainly attributed to a number of constraints faced by different stakeholder groups. These include, among others:

- (i) Deliberate exclusion of certain stakeholder groups from participation due to inadequate time, technical and financial resources to facilitate the participation process.
- (ii) Emergency situations (like floods, earthquakes, disease out-break, etc), where life is at stake and time is of essence, during which protracted stakeholder participation and consultation is considered to be unrealistic and counter productive;
- (iii) Lack of access to relevant information to enable different stakeholders to effectively participate in specific activities. In such situations affected stakeholder groups are rendered irrelevant to the process not because they are incompetent but because they don't have adequate information about the proposed activities on which to base their opinions and contributions;
- (iv) Difficulties in accessing certain stakeholder groups due to poor infrastructure, insecurity, long travel distances, and bureaucratic procedures are other constraints to effective stakeholder participation.
- (v) Lack of appropriate forums to solicit participation of certain stakeholders is another constraint to stakeholder participation. Bureaucrats often prefer to deal with organised stakeholder groups like farmers groups, women groups, youth groups, etc. However, absence of such organised groups in a specific project area is often used as an excuse to exclude certain stakeholders from participating in the implementation of project activities.

Of all the above constraints, lack of technical capacity stands out as one of the most critical factors in preventing the effective participation of different stakeholder groups in the planning and decision-making processes. Indeed the stakeholder analysis conducted during the study revealed a serious lack of technical capacity and experience across all stakeholder groups, especially in the local governments and local communities. This situation made it very difficult for different stakeholders to actively participate in the decision-making process and even in the implementation of development activities in their areas. The consequence of this capacity constraint is that communities are left at the mercy of a few competent persons who often take advantage of them and satisfy their own selfish interests. It also makes it difficult for the

stakeholders to monitor the performance of public officials and demand accountability for their actions since they are perceived to be the “elites” in the communities who know everything better than anybody else. The high illiteracy levels in the local communities is also another set-back in effective stakeholder participation and is often used as an excuse by public officials to ignore the ideas of the local communities and even deny them access to information which is in most cases is written in English, a language most local community members can neither read nor write.

At the national and district level, the lack of adequate technical competent officials makes it very difficult for the districts and government agencies to play their oversight and supervisory role in the planning and implementation of development activities. This was observed to be a big challenge in most of the SMM districts and had resulted in poorly coordinated and inconsistent planning processes. The main culprits who take advantage of this situation are the private sector (Consultants, Contractors, and suppliers of goods and services) who exploit local governments, and indeed the central government too, by doing substandard work and get away with it due to poor supervision by the relevant government officials.

A summary of the current SMM stakeholder participation mechanisms and their inherent constraints and challenges is given in Table 3 below.

Table 3: Existing Stakeholder Participation Mechanisms

	Current Participation Mechanism in the SMM Basin	Constraints/Challenges	Strategy for improved participation	Any other remark
Function				
International Agencies	<p>The major funding agencies are supporting water related activities in the SMM basin through the following initiatives:</p> <p>(i) NBI/NELSAP (World Bank, EU, SIDA, NORAD, GEF, GTZ, ADB); through the NBI Trust Fund and through direct support to NELSAP.</p> <p>(ii) MWE/DWRM (DANIDA, SIDA, EU): through bilateral support to the Uganda Government under the Water Sector Budget Support.</p> <p>(iii) NGOs/CBOs: through direct support to NGOs and CBOs involved in water related activities in the basin.</p>	<p>The biggest challenge is coordination of donor support to ensure synergy and minimize duplication and wastage of resources. The other challenge is mobilizing sufficient funding to support all the planned development activities in the basin.</p>	<p>Creation of an SMM Trust Fund through which all funding for SMM development activities will be channelled and managed. This has been recommended as part of the proposed SMM Institutional Framework.</p>	<p>Lessons can be learned from the operation of the NBI Trust Fund.</p>
Regional Agencies	<p>The major regional agencies currently involved in the SMM basin include: NBI/NELSAP, EAC/LVBC, LVEMP, LVFO, ASARECA, FAO/NBWRP. The current participation mechanism for these agencies is through regional secretariats established to coordinate and provide logistical support in the implementation of different water-related regional activities. These agencies are discussed in detail in chapter 3.</p>	<p>The major challenge facing these regional agencies is sustainability of their operations as they mostly depend on donor funding for their activities and to a less extent contributions from member states, which are often not forthcoming.</p>	<p>Should minimise creation of new regional structures and instead work through existing structures to the extent possible. Where the need arises for creation of a new agency, these should be lean and cost effective with very specific mandates.</p>	<p>This principle of cost-effectiveness has been adopted in proposing the SMM institutional Framework which is based on the existing LVBC structure</p>
National Agencies	<p>National agencies like WRMA, MWE/DWRM, NEMA, etc have the overall responsibility for coordinating the planning and implementation of water related development activities in the SMM basin. They do this in collaboration with other stakeholders discussed in this chapter. Regional agencies like NBI/NELSAP, EAC/LVBC facilitate inter-state collaboration on transboundary water related issues in the SMM basin as part of the larger Nile and Lake Victoria Basin Cooperation Frameworks.</p>	<p>Most of the government departments and agencies have inadequate technical and financial capacity to effectively implement their mandates. Shortage of qualified and skilled staff and inadequate funding are the two commonest problems faced by these agencies.</p>	<p>Promotion of the use of the private sector (consultants, NGOs and contractors) to provide some of the highly technical inputs to make up for the inadequate technical capacity. Prioritisation of water issues to attract increased government and donor funding.</p>	<p>As part of the water sector reform process, both countries have reformed their policies and laws and put in place incentives aimed at enhancing private sector participation in the water sector activities</p>

	Current Participation Mechanism in the SMM Basin	Constraints/Challenges	Strategy for improved participation	Any other remark
Educational Institutions	There is no specific mechanism that currently provides for direct participation of educational institutions in the SMM basin.	Most educational institutions in the two countries have inadequate qualified teaching staff, laboratory facilities and other teaching aids and inadequate financial resources to support their training and research programs.	Develop demand-driven educational and research programs that can attract private sector funding; Promote research collaboration with universities from developed countries to benefit from their expertise and financial support; Create incentives to attract and retain highly qualified personnel.	Some universities like Makerere and University of Nairobi are involved in collaborative research with the private sector and have also diversified their educational and research programs in line with industry demand.
NGOs and CBOs	NGOs/CBOs current collaborate with the local governments in the provision of water related services to the local communities in the basin. Though there are national level umbrella organizations like the Nile Discourse Forums, UWASNET, etc, there is no specific umbrella organization bringing together NGOs/CBOs involved in water related activities in the SMM basin.	Most of the NGOs and CBOs have inadequate technical and financial resources to effectively implement their activities; Some NGOs are not transparent in their operations and have thus lost the trust and confidence of the government, local communities and donors, which has seriously undermined their credibility.	Need to facilitate NGOs, involved in water related activities in the SMM basin, to create an umbrella organisation through which they can jointly lobby for funding for their activities; Need to include technical and financial support to the NGOs and CBOs involved in WRM in the SMM basin as an integral part of the project development process.	NGOs in the Nile basin and Uganda have organised themselves under umbrella organizations called NBDF and UWASNET respectively through which they lobby for funding and technical support from the government and donors.
Private Sector	Though there are national chambers of commerce bringing together businesses and the private sector in both countries, there is currently no specific umbrella organization bringing together the private sector operating in the SMM basin.	Some private sector companies don't have adequate capacity and experience to implement some of the activities contracted to them and end up doing shoddy work; The local companies face stiff competition from the more experienced and well-established foreign companies and end up not getting most of the jobs.	Promote joint ventures between international and local companies in the implementation of big projects to help build the capacity of the local companies and keep them in business.	Joint ventures are being promoted in most projects and there is usually extra points scored during the evaluation process by a company that includes local personnel on its proposed project implementation team.

	<i>Current Participation Mechanism in the SMM Basin</i>	<i>Constraints/Challenges</i>	<i>Strategy for improved participation</i>	<i>Any other remark</i>
<i>Local Governments</i>	Local governments have the overall responsibility for coordinating the planning and delivery of social services to the local communities in the SMM basin. They do this in collaboration with other stakeholders discussed in this chapter. Though there are national level mechanisms for inter-district collaboration in the two countries, there is currently no specific mechanism for bringing together local governments in the SMM basin to discuss transboundary water related issues. Except for the LVRLAC, the existing transboundary cooperation frameworks mostly focus on national level agencies.	Most local government departments have inadequate technical and financial capacity to effectively implement their mandates. Due to the small revenue base in most of the districts, most of them rely on funding from the central government, which is inadequate and often not forthcoming.	Promotion of the use of the private sector (consultants, NGOs and contractors) to provide some of the highly technical inputs to make up for the inadequate technical capacity; Provide for comprehensive capacity building for SMM districts as part of the SMM development program.	NBI, NELSAP and the SMM PMU are already undertaking some capacity building activities for the SMM districts.
<i>Local Communities organised through Special Interest Groups</i>	Special interest groups provide avenues for participation of local communities in development activities in the localities. These groups play a key role in lobbying relevant authorities and advocating for the consideration of the interests of their members during the planning and decision making processes. They mainly participate through the established project planning and implementation structures in the local governments. There is however no existing mechanism to foster collaboration between special interest groups in the SMM basin.	Special interest groups are usually limited in their work by inadequate technical and financial resources and lack of information and data on planned development activities; These groups are also easily manipulated by politicians for selfish political interests and therefore tend to divert from their intended objectives.	Provision of targeted basic capacity building skills, sensitisation and access to information, and adequate financial support could improve on their ability and effectiveness to serve their members and not succumb to manipulation.	NTEAP and the SMM PMU are currently supporting some capacity building and sensitisation activities for women and youth groups in the basin.

8.4 Stakeholder Participation Mechanisms under the proposed SMM Institutional Framework

The proposed institutional framework for integrated management of the SMM water resources, including the key players and management organs, is discussed in detail in **Chapter 6**. The proposed framework provides for an elaborate mechanism for participation of different stakeholders ranging from international funding agencies to local communities. It should be emphasized here that the proposed stakeholder participation plan is not aimed at replacing the existing stakeholder participation mechanisms but rather complement them and specifically enhance stakeholder participation in transboundary water resources related management and development activities. It is expected that different stakeholder groups will continue participating in local and national planning and development initiatives in the SMM basin through the existing mechanisms established in their respective countries. The SMM proposed participation mechanisms would be invoked only in as far as addressing transboundary issues. Stakeholders in both countries are free to adapt all or part of the SMM participation mechanisms in addressing local or national issues.

A summary of the stakeholder participation mechanisms under the proposed SMM institutional framework is given in **Table 4** below.

Table 4: Proposed Stakeholder Participation Mechanisms

	<i>Envisioned role and level of involvement in the SMM basin</i>	<i>Participation Mechanism under the proposed Framework</i>
Stakeholder		
<i>International Agencies</i>	Provision of financial and technical support for implementation of development projects in the basin.	Under the proposed SMM Institutional Framework, an SMM Trust Fund will be established through which all interested funding agencies will channel their financial support for SMM development activities. Details of the set-up and management of the fund are discussed in chapter 6
<i>Regional Agencies</i>	Facilitation of regional collaboration, mobilizing resources for SMM development programs and mediating in inter-state water related conflicts.	Input from different regional agencies will be coordinated through the LVBC secretariat with operational support from a small SMM Secretariat.

	<i>Envisioned role and level of involvement in the SMM basin</i>	<i>Participation Mechanism under the proposed Framework</i>
<i>National Agencies</i>	Play the lead role in coordinating the planning process, supervision, and implementation of all government development activities in the basin by virtue of their sectoral mandates.	The proposed SMM Institutional Framework is built on the existing transboundary cooperation frameworks as described in chapter 3 . National agencies will continue playing their current national roles and will nominate officials to the different organs of the proposed SMM framework.
<i>Educational Institutions</i>	Play lead role in training technical staff employed by different agencies, engage in water related research, and conduct short professional training courses.	In the proposed SMM framework, Educational institutions will have representation in the SMM Consultative Forum whose functions are discussed in chapter 6 .
<i>NGOs and CBOs</i>	NGOs are quite active in public advocacy to influence policy formulation and the planning process, monitoring of public projects and demanding accountability, and mobilizing and sensitising communities.	Under the proposed SMM framework, provisions have been made for the establishment of a network of NGOs/CBOs involved in water related activities in the basin, the details of which are discussed in chapter 6 . In addition, NGOs/CBOs will also have representation in the SMM Consultative Forum.
<i>Private Sector</i>	Private sector companies are currently involved in the provision of consultancy services and other technical services to the public sector e.g. planning, implementation, operation and maintenance of water supply and sewerage projects.	Under the proposed SMM framework, provisions have been made for the establishment of an umbrella organisation bringing together the private sector operating in the SMM basin, the details of which are discussed in chapter 6 . In addition, the private sector will also have representation in the SMM Consultative Forum.
<i>Local Governments</i>	Play lead role in the provision of social services e.g. water supply and sanitation to the local communities; Coordinate the provision of local inputs into the government planning and decision making processes.	Under the proposed SMM framework, technical officials from the local governments will constitute the SMM Technical Committee whose functions are discussed in chapter 6 . In addition, provisions have been made for creation of a specific forum to facilitate local government collaboration in the SMM basin, the details of which are discussed in chapter 6 . In addition, local governments will also have representation in the SMM Consultative Forum.
<i>Local Communities organised through Special Interest Groups</i>	Advocacy to influence inclusion of the interests of their members in all development activities in their communities.	Under the proposed SMM framework, provisions have been made for creation of a network of civil society organizations including WRUAs and WUAs to facilitate local community collaboration in the SMM basin, the details of which are discussed in chapter 6 . In addition, special interest groups will also have representation in the SMM Consultative Forum.

8.5 Proposed Strategic Intervention Measures

The proposed Stakeholder Participation Plan comprises of three strategic intervention measures aimed at enhancing effective stakeholder participation in the sustainable management and development of the transboundary water resources of the SMM catchment.

The proposed strategic intervention measures include the following:

- (iv) Facilitate formation of stakeholder groups in the SMM catchment to provide a platform for discussions among stakeholders with similar interests and to provide an entry point for central and local government agencies responsible for coordination of development activities in the catchment.
- (v) Capacity building and sensitisation of SMM stakeholders, especially in districts, lower local governments, NGOs, CBOs, women and youth groups, farmers groups, and local communities, to enhance their capacity to effectively participate in the planning and implementation of development activities in the catchment.
- (vi) Support data sharing and information exchange between different stakeholder groups in the SMM catchment to broaden understanding of water resources related issues in the SMM catchment and build confidence of different stakeholder groups to participate in the development activities in the catchment.

Detailed specific activities under each of the proposed intervention measures are discussed in the next section.

It should be noted here that the above intervention measures should not be implemented in isolation but rather in tandem with those proposed under the SMM Capacity Building Plan presented in **Chapter 7**. More so the capacity building and sensitisation activities to be implemented under this plan should be closely coordinated with those proposed under the Capacity Building Plan. The main difference between the two is the target groups. The main emphasis of the Stakeholder Participation Plan is to strengthen structures that provide platforms for effective stakeholder participation.

8.6 Proposed Tasks and Activities

TASK 1: Facilitate formation of stakeholder groups in the SMM catchment.

Activity 1.1: Support formation of a Network of NGOs and CBOs in the SMM Catchment – This activity will involve the identification and screening of NGOs and CBOs involved in water resources related activities in the SMM catchment, assessment of their current roles and facilitation of formation of an SMM NGO/CBO umbrella organisation. The umbrella organisation will

serve as a forum to bring together the SMM NGOs and CBOs and ensure coordination of their activities in the catchment. The SMM Secretariat/PMU will facilitate the formation and operations of a small secretariat for the NGO/CBO umbrella organisation and will channel any financial and technical support to the NGOs and CBOs through their Secretariat. The SMM NGO/CBO Secretariat will be responsible for coordinating the preparation of consolidated NGO/CBO work plan, budget, training plan, and progress reports on specific water related activities supported directly by the SMM Secretariat/PMU. The NGOs/CBOs will elect their representatives to manage the affairs of their umbrella organisation and their Secretariat. They will also appoint their representative to participate in SMM management and policy meetings as deemed fit. The SMM Secretariat shall sign a memorandum of understanding with the umbrella organisation detailing the specific terms and conditions of their collaboration.

Activity 1.2: Support formation of Water Resources Users' Associations (WRUAs) in the SMM Catchment

– The SMM Secretariat/PMU, in collaboration with WRMA in Kenya and DWRM in Uganda, shall facilitate the formation of WRUAs in the SMM catchment based on the WRMA model. The WRUAs will serve as a platform to bring together and involve water local communities in the management of water resources in their local areas. Formation of WRUAs will be demand driven and input from the SMM Secretariat/PMU will be to sensitise the local communities on the need to establish such associations and the benefits they stand to gain by working together as an association of water resources users sharing the same resource. Support will also be given to facilitate interaction between WRUAs in different parts of the catchment to share experiences and learn from each other. Basic training will be given to WRUAs to enhance their capacity to address local water resources management issues and to resolve water use conflicts between their members. The WRUAs will be sensitised on the importance of water permits and the application process and will serve as “watch dogs” for illegal water users in their jurisdiction and report any non compliance with permit conditions.

Activity 1.3: Facilitate formation of a Local Government Forum in the SMM Catchment

– The SMM Secretariat/PMU, in collaboration with the districts in Kenya and Uganda, will facilitate the formation of a Local Government Forum whose purpose will be to facilitate regular interaction between officials (Political, Administrative, technical) from SMM districts to discuss and resolve any inter district or transboundary (international) water resources management related issues. The Forum will also facilitate information exchange, sharing of experiences and planning joint water resources related activities. Input from the SMM Secretariat/PMU will include facilitation of preparatory inter district meetings, sensitisation of district officials on the need and importance of the forum and provision of information and regular feed back on any decisions and actions taken or planned by the different SMM organs. Under this Forum, districts will elect one representative to participate in SMM management and policy meetings as deemed fit. Formation of this Forum has been recommended under the

proposed SMM Institutional Framework the details of which are contained in **Chapter 6**.

The SMM Secretariat/PMU shall facilitate formation of networks of stakeholder groups in the catchment as and when the need arises. This will be a purely demand driven process and the role of the Secretariat will be limited to advisory and facilitative in nature. Some of the potential networks that could be formed include:

- (i) Network of education and research institutions;
- (ii) Network of Women and Youth groups;
- (iii) Network of Farmers' Associations;
- (iv) Network of Beach Management Units;
- (v) Network of private sector service providers, etc.

TASK 2: Facilitate Capacity building and sensitisation of SMM stakeholders on IWRM

Implementation of the proposed SMM Stakeholder Participation plan will be a daunting task unless comprehensive capacity building activities are implemented as an integral part of the plan. The capacity building activities should be tailored towards achieving the SMM development objectives through active and effective stakeholder participation at all levels. These will range from formal (short and long-term) training of district and national level technical officials to hands-on farm-level practical training in sustainable farming practices (soil and water conservation, efficient irrigation practices, efficient use of agro-chemicals, sustainable use of wetland resources, etc). This Task is adequately discussed under the proposed SMM Capacity Building Plan presented in **Chapter 7** and will not be repeated here.

The only point to note here is that the SMM stakeholder networks discussed above will play a key role in identifying and prioritising capacity building needs of their members and will be responsible for coordination and monitoring of implementation of the capacity building activities by their members.

TASK 3: Facilitate access to water resources related data and information.

As mentioned earlier, lack of access to information is one of the main factors that hinder effective stakeholder participation in planning and decision making processes. In addition to the data sharing and information exchange related activities discussed in the **Chapter 7**, the following specific activities will be implemented to facilitate easy access to data and information to different stakeholders, especially in the local communities.

Activity 3.1: Support Radio and Television Talk show Programs – The SMM Secretariat/PMU, in collaboration with other stakeholders in the

catchment, will facilitate the regular delivery of specific water related programs on Radio and TV as a source of information to the public. Most of the radio programs will be aired on the local FM radio stations in the catchment in English, Swahili, and other local languages depending on the topic of discussion and target audience. Different officials from the SMM stakeholder agencies will be invited to discuss topical issues on radio and TV and engage in question and answer interactive sessions with listeners and viewers. There will also be live panel discussions on TV and Radio in which members of the local communities will engage in a round table discussion with political and technical officials from SMM stakeholder agencies on specific water resources management and development issues in the catchment.

Activity 3.2: Facilitate establishment of information resource centres –

The SMM Secretariat/PMU, in collaboration with local governments, will facilitate establishment and equipping of resource centres in strategic locations in the catchment and ensure easy access by the public to water resources related information. The Secretariat will also facilitate the resource centres to regularly acquire important water resources related documents and reports and have these translated into Swahili or any other convenient local language that is understood by the majority of stakeholders in the local communities.

8.7 Implementation Strategy

Different stakeholder groups in the catchment through their respective umbrella organizations and networks will implement most of the proposed intervention measures. The umbrella organizations will be responsible for coordination of planning and implementation of activities involving their respective member groups. The role of the SMM Secretariat/PMU will be to facilitate implementation of the proposed activities.

8.7.1 Mobilization of Financial Resources

Implementation of the proposed intervention measures could be initiated under the auspices of the current SMM project pending operationalisation of the proposed SMM institutional framework.

The SMM PMU will coordinate with the governments of Kenya and Uganda in mobilizing the required financial resources for implementation of the initial activities. The PMU will approach current development partners under the NBI/NELSAP framework to solicit for the required financial resources to supplement government contribution. The PMU could also contact the NBI CBSI project for potential collaboration and funding of some of the proposed intervention measures.

Following implementation of the proposed SMM institutional framework, subsequent activities will be funded through the proposed SMM Trust Fund.

8.7.2 Coordination Mechanism

SMM stakeholder agencies will be responsible for implementation of the proposed activities with facilitation and coordination from the SMM PMU/Secretariat. For stakeholder groups organised under an umbrella organisation, coordination of activities amongst member stakeholders will be the responsibility of the umbrella organisation. The organisations will be responsible for coordinating the preparation of consolidated work plans, budgets, training plans, and progress reports on specific water related activities supported directly by the SMM Secretariat/PMU.

The consolidated work plans, budgets and progress reports will be submitted by the umbrella organisations to the SMM PMU/Secretariat for onward submission to the SMM Policy organs (RPSC, TAC, COM, etc) for review and approval. Upon approval of the work plans and budgets, the SMM Secretariat/PMU will mobilize the required financial resources and coordinate with the umbrella organisations in the implementation of the activities.

8.7.3 Monitoring and Evaluation

Monitoring and evaluation of the progress of implementation of the planned activities by the stakeholder agencies will be carried out annually by a team of officials from or appointed by the SMM Secretariat.

The SMM Secretariat will establish appropriate evaluation criteria and monitoring indicators to objectively assess progress of implementation of the Stakeholder Participation Plan.

8.7.4 Tentative Work plan and Budget for Phase 1 Activities

Work plan for Phase 1 Activities

TASK	2009				2010				2011			
Facilitate formation of Stakeholder Groups												
Facilitate capacity building and sensitization of stakeholders on IWRM												
Facilitate access to water resources related data and information												

Tentative Budget Estimates for Phase 1 Activities

TASK	Inputs	Quantity	Amount US\$)
Facilitate formation and operation of Stakeholder Groups	Technical Support	Lump-sum	250,000
Facilitate capacity building and sensitization of stakeholders on IWRM	Catered for under Capacity Building Plan		
Facilitate access to water resources related data and information	Technical Support Financial Support	Lump-sum	300,000
Total			550,000
Contingency			50,000
TOTAL			600,000

9.0 GENDER MAINSTREAMING PLAN FOR THE SIO-MALABA-MALAKISI CATCHMENT

9.1 *Justification*

Decision-making based on gender equity is a pre-requisite for good water governance and a key factor in achieving sustainable water resources management and development. Though the complementary role of men and women in effective water governance and in decision-making has been recognised for a long time, its realisation still faces several challenges not only because women's experience, interests and concerns are different from those of men but also because the structural conditions under which decisions are made tend to favour men more than women.

Over the last couple of decades, policy commitments and emphasis has been put on the importance of increasing women's participation in water related initiatives, drawing on women's knowledge and experience and increasing women involvement as managers and decision makers. The key challenge, however, has been how these policy commitments can be put into practice.

Gender mainstreaming in water resources management and development requires a holistic approach involving design and implementation of measures that are specifically targeted towards alleviating the suffering of women for example in having to walk long distances to collect water for domestic use, and also measures aimed at empowering women to actively participate in the decision-making processes in their communities.

This Gender mainstreaming Plan identifies some of the major issues impeding the realisation of gender equity in the planning and implementation of water resources management and development activities in the SMM catchment and proposes potential intervention measures that can go a long way in addressing this gender imbalance and most specifically empowering women and enhancing their participation in the planning and decision-making processes in the SMM catchment.

It should be emphasized here that the Gender mainstreaming Plan is not about increasing numbers of women or men involved in the planning and decision-making processes per se but also involves changing the attitudes, behaviour and practices of both women and men in recognizing and appreciating each others role in the planning and management of the SMM water resources. This realization has the potential to significantly increase the efficiency, effectiveness, equity and affordability in the delivery of water related services in the catchment.

9.2 Objectives

The main objective of the Gender mainstreaming Plan is to establish a comprehensive mechanism within which consideration of women as well as men's concerns, interests, and experiences become an integral part of the planning, design, implementation, monitoring and evaluation of water resources management and development policies and programmes in the SMM catchment so as to ensure that women and men benefit equally from the SMM transboundary water resources.

9.3 Situation Analysis

9.3.1 Challenges to Gender Equity

According to the findings of the Uganda Participatory Poverty Assessment Process/Second Participatory Poverty Assessment (UPPAP/PPA2), gender inequality is one of the main reasons for persistent poverty in Uganda. Lack of control over productive resources by women remains one of the root causes of poverty. Women's lack of decision-making power – over land and other household assets, cash incomes, and when and how often to have children – is a direct cause of welfare problems like poor nutrition and health, excessive fertility, high infant mortality, overwork among women and drunkenness among men. According to the assessment:

“Women explained that they lack control over land, the crops their labour produces from it, livestock, and other productive resources. Yet they are responsible for meeting family needs. They complained bitterly of men wasting time and family resources drinking. Women complained that they are “overburdened” with household chores and this affects their productivity.”

The economic dependence of women, due to their lack of control over productive resources and assets, is at the root of the problems women face. It is a systemic issue, where inequity in property ownership intersects with cultural attitudes and beliefs to create formidable obstacles to women participation in decision-making processes in their households and communities. Payment of bride price has a control imperative, which is interpreted as husbands' "owning" their wives and controlling virtually every aspect of their lives, including, especially, men's "absolute dominion" over sexual relations with their spouses. Challenges also do exist to formal sector employment for women. These include, among others, discrimination in formal labour markets, gender inequalities in education, and difficulties of combining employment with childcare.

Culture is integral to understanding both gender and poverty issues in the SMM catchment, and how they are intertwined. Some practices, which are justified as cultural and customary practices, pose a threat to women's

safety and security, and limit access to justice. Examples include domestic violence, early marriage, widow inheritance, and the practice of property grabbing from widows and orphans. Culture has a pervasive impact on social and economic life that influences the roles and status of men and women in different sectors. The allocation of resources, of decision-making power, status, opportunities, and rewards to men and women are defined by gender, which is itself largely defined by cultural norms, expectations, attitudes, and beliefs.

The practice of paying bride price makes it more attractive to marry girls off at an early age than send them to school. The fact that daughters cannot inherit land or other property results in preference for boys. It is through sons that the name of the clan will pass and the property will stay within the family.

The vast majority of female employment in the SMM catchment is in subsistence agriculture. Women play a pivotal role in agriculture, providing most of the labour force. Men and women have distinct roles within the farming systems, as they are engaged in the production of different crops and livestock. Men tend to concentrate on the production of cash crops (coffee, cotton, tobacco and rice production for the market), while women concentrate on the production of food crops mainly for family consumption (and simultaneously providing for much of the labour in cash crop production). In livestock production women concentrate on poultry and small ruminants (mainly rabbits, pigs, goats and sheep), while men concentrate on large stock (mainly cattle).

Women, especially in rural areas, also face significant barriers regarding access to justice. African customary law, which is most often applied in the rural areas, is disparate and is often interpreted selectively and in favor of men. This law is primarily dispensed by community elders through the informal legal system in which women have no access to the administration of justice, as councils of elders are usually entirely male. The primary productive resources held under African customary practices and laws are land and agricultural produce, the main assets owned by rural households in the SMM catchment. Disposition of property in this system occurs primarily through marriage and inheritance.

At the household level, African gender traditions predominate allowing women to occupy their traditional role. At the local and national level, the new patriarchy tends to dominate the market economy. Men now assign themselves dominance and control of the market economy. The regulatory and legal framework as well as the process of land tenure have affirmed and supported male dominance of the market economy. Gender disparities in knowledge and power, and bias in institutions and implementation reinforce the vulnerability of women vis-à-vis access to and control of land.

Apart from the economic dimension of women's control and access to land and its linkages to reduction of female poverty, survival and productivity,

influences gender relations, especially women's ability to challenge male oppression in society and within the household. Decision-making processes to determine the acreage required for food crops, crop variety and selection of seeds needed for each planting season are male dominated.

One of the basic reasons ownership of land by women is important is because of the association of ownership with security of tenure, which in turn encourages investments. This does not only lead to increased productivity and efficient use of resources but it affects gender-based property rights and control of income.

During stakeholder consultations in the SMM Catchment it was reported by several stakeholders that agricultural extension agents tend to focus on male heads of households as landowners, thereby giving them "preferential information." This approach denies women farmers systematic access to modern agricultural research information and technology. Most extension workers are men and they find it difficult to interact with women who in most cases are wives of other men. Furthermore, the hours during which extension services are provided sometimes conflict with the times when women are attending to other household chores.

9.3.2 Existing Gender Mainstreaming Policy Framework

1. International Policy Framework

Since the late 1970's different initiatives on gender and development have emerged and shaped the development agendas of many international development agencies including the United Nations that has sponsored a series of conferences on women. The key initiatives include, among others the following:

- (1) In the 1980s the Gender and Development (GAD) perspective was developed and put emphasis on the social roles of women and men and forces that perpetuate and change these relationships. It was noted that women have been systematically subordinated and assigned secondary roles or inferior roles and their needs have been considered in isolation from the broader issues of society and its manifestations. The Gender and development perspective (CEDPA, Training Manual Vol. III, 1996) put emphasis on three key issues:
 - (i) Both women and men create and maintain society and shape the division of labour. However, they benefit and suffer unequally. Therefore greater emphasis must be placed on women because they have been more marginalized.
 - (ii) Women and men are socialised differently and often function in different spheres of the community, although there is interdependence. As a result, they have different priorities and perspectives. Because of gender roles men can constrain or expand women's options.

- (iii) Development affects men and women differently. Women and men will experience and have different impacts on projects. Both must be involved in identifying problems and solutions if the interests of the community as a whole are to be furthered.
- (2) In 1992 a Conference on Water and Environment was held in Dublin and recognised the role of women in the management of water resources. Principle 3 of the Dublin Statement states that:

“Women play a central role in the provision, management and safeguarding of water”.

During the same conference, it was also observed that the pivotal role of women as providers and users of water and guardians of the living environment is hardly recognized and reflected in the design and implementation of water resources related policies, laws and institutional frameworks. Recognition and acceptance of this role should be followed by enactment of appropriate policies aimed at addressing women specific interests and needs to equip and empower them to participate at all levels in water resources planning and management.

- (3) At the International Conference on Population and Development in Cairo in 1994, it was resolved that:

“Advancing gender equality and the empowerment of women are cornerstones of population and development related programmes. The full and equal participation in civil, cultural and social life, at the national, regional and international levels and the eradication of all forms of discrimination on grounds of sex are priority objectives of the international community”.

- (4) In 1995 at the Fourth International Conference on Women held in Beijing, gender mainstreaming was established as an internationally agreed strategy by governments and development agencies to promote sensitivity to gender issues in all policies and programmes. This would entail putting in place policies, legislation, programmes and plans that are gender sensitive and that address the inequities in place that impede achieving equality, empowerment of women, and full participation of both men and women in decision making to realise their strategic interests. Thus it was resolved that:

“Equality between women and men is a matter of human rights and a condition for social justice and is also a necessary and fundamental prerequisite for equality, development and peace. A transformed partnership based on equality between women and men is condition for people centred sustainable development”.

Following the Fourth World International Conference on Women, International development agencies, both the multilateral and bilateral, continue to put emphasis on promoting gender mainstreaming in IWRM. The role of funding agencies such as World Bank, DANIDA, DFID, EU, SIDA, GTZ, etc and Multilateral Development Agencies such as FAO, UNDP, UNICEF, which provide significant funding for IWRM, is of critical importance in realising gender equality in IWRM.

2. Uganda National Gender Policy Framework

Uganda has been exceptionally pro-active in addressing many important gender issues, through affirmative action in the political sphere, through the abolition of user fees in the health system and the introduction of Universal Primary Education (UPE), through the impressive work to reduce HIV prevalence rates, and through its determination to focus on gender issues in the economic policy arena, in legal reform, and in the PEAP revision. Nonetheless, this otherwise good progress is undermined by the existence of intricate gender barriers, notably the socio-cultural attitudes and beliefs which continue to prevent many women from having any effective control over productive resources and from participating actively in decision making in their households and communities.

Uganda ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1995, without reservations. Consequently, various efforts have been made to make women's participation in decision-making visible. These include the following:

(1) *Constitution of the Republic of Uganda (1995):*

The Constitution of Uganda domesticates CEDAW in fundamental ways by enshrining gender equality in many of its provisions. It provides for mainstreaming gender in all aspects of policy development, legislation, planning, implementation, and monitoring of development programmes and projects.

In general, it provides for total gender equality in all fields (Articles 21, 30, and 31) and prescribes affirmative action measures for women to redress imbalances created as a result of history or tradition. The Constitution further outlaws cultures, traditions and practices that undermine the welfare, dignity and interests of women (Articles 32 and 33).

The Constitution makes the following specific provisions related to gender mainstreaming:

- (i) Article 21(1) provides that "All persons are equal before and under the law in all spheres of political, economic, social and cultural life and in every other aspect and shall enjoy equal protection of the law.
- (ii) Article 32(1) provides that "... the State shall take affirmative action in favour of groups marginalized on the basis of gender, age, disability or

- any other reason created by history, tradition or custom for the purpose of redressing imbalances which exist against them.
- (iii) Article 32(2) provides that “Parliament shall make relevant laws, including laws for the establishment of an equal opportunities commission”.
 - (iv) Article 33(1) provides that “Women shall be accorded full and equal dignity of the person with men”.
 - (v) Article 33(4) provides that “Women shall have equal treatment with men and that right shall include equal opportunities in political, economic and social activities”.
 - (vi) Article 33(6) provides that “Laws, cultures, customs or traditions which are against the dignity, welfare or interest of women or which undermine their status, are prohibited under this Constitution”.

Despite the good intentions of the above Constitutional provisions, women in Uganda are still marginalized, especially in the rural areas, and are still subject to some oppressive customary laws for example regarding women’s ownership and control over land, assets and transfer of such. In addition, women still lag behind in employment, education and participation in decision-making.

(2) *National Gender Policy*

The National Gender Policy was developed in 1997 to provide the overall policy framework for addressing all gender issues in Uganda. The overall policy goal is to mainstream gender concerns in the national development process in order to improve the social, legal, political, economic and cultural conditions of the people in Uganda in particular women. The policy objectives include:

- (i) To ensure the participation of both women and men in all stages of the development and planning process, and
- (ii) To promote equal access to and control over economically significant resources and benefits.
- (iii) To redress imbalances which arise from existing gender inequalities.
- (iv) To promote recognition and value of women’s roles and contribution as agents of change and beneficiaries of the development process.
- (v) To identify and establish an institutional framework with the mandate to initiate, coordinate, implement, monitor, and evaluate national gender responsive development plans.
- (vi) To provide policy and decision makers with reference guidelines for identifying and addressing gender concerns in the planning and decision making process.

The National Gender Policy recognizes women and children as the main carriers and users of water. It anchors the importance of gender responsiveness in terms of planning, implementation and management of water and sanitation initiatives.

Government is in the process of reviewing and updating the National Gender Policy to take account emerging insights into the gender dimensions of poverty in Uganda, and to build on opportunities afforded by new policy instruments and modalities, notably the PEAP.

(3) Creation of the Ministry of Gender, Labour and Social Development (MGLSD)

The Ministry of Gender, Labour and Social is the government lead agency responsible for implementing the National Gender Policy and ensuring that gender mainstreaming takes root and becomes an integral part in the planning and implementation of development activities in all government sectors. The Ministry plans, coordinates and monitors the delivery of gender mainstreaming programs in Uganda through an elaborate institutional structure that spans all levels of government (i.e. national, district and lower local government levels) to the local communities.

The main gender related functions of the Ministry include the following:

- (i) Plan, coordinate and monitor the delivery of gender mainstreaming programs in Uganda.
- (ii) Appoint a Gender Focal Person in each government Ministry to oversee gender mainstreaming in the policies and plans of their respective Ministries.
- (iii) Appoint a Gender Officer in each district to support districts in ensuring gender mainstreaming in all their planning and development activities.
- (iv) Coordinating the establishment of Women Councils at national and local levels, as provided for under the National Women's Council Act (1993), that are aimed at fostering social and economic development of women at all levels. The women council start at the village level and go up to the district and national levels.
- (v) Advocate for increases in budget allocations for gender mainstreaming activities.

(4) The Uganda Water Sector Gender Strategy

In order to operationalize the provisions of the National Gender Policy, the Ministry of Water, Lands and Environment developed the Water Sector Gender Strategy in 2003. The overall goal of the Strategy is:

“To develop empowering approaches that will enhance gender equity, participation and access and control to resources in the water sector leading to poverty alleviation”.

The Strategy provides stakeholders with operational guidelines on how gender principles should be mainstreamed within the water sector planning and development activities.

The objectives of the strategy include the following:

- (i) Commit adequate resources for gender mainstreaming activities in the water sector;
- (ii) Strengthening the planning, monitoring and evaluation systems to design, develop, and implement projects using gender disaggregated data.
- (iii) Strengthen the capacities of water sector agencies to mainstream and support gender balance of staffing in the sector.

Under the strategy, the following targets or benchmarks were identified as critical for attaining gender mainstreaming in WRM. These include (among others) the following:

- (i) Women and men will be represented in all decision making forums of the sector including the Water Sector Co-ordination Committee, bilateral/multilateral reviews, the Water Policy Committee, the District Water and Sanitation Committee and at community level within all Water User Committee.
- (ii) Commitment will be secured from top management and investors in the sector to work for change towards greater gender equality.
- (iii) Undertake revision of job descriptions for water sector staff, especially for senior staff, to incorporate gender-mainstreaming roles and responsibilities.
- (iv) Conduct capacity building for water sector staff at national and local government levels to enhance their gender mainstreaming knowledge and skills.

(5) Gender Mainstreaming in Local Governments

Section 10(c) of the Local Government Act CAP 243 provides that District council shall consist of “women councillors representing one third of the council. Section 52(2) of the Uganda Water Act 1997 mandated Local authorities to organise the formation of water user groups and associations within their areas of jurisdiction. Under this mandate, Water and Sanitation Committee at district and sub-county levels are formed with the same requirement that at least thirty percent of the members are women.

While it is recognised that women play a central role in water resource management, gender mainstreaming often stops at getting women onto the different committees but without necessarily empowering them and creating an enabling environment for them to effectively contribute in the discussions and decision-making processes. Some of the women on these committees are often intimidated by the male members and cannot freely participate in the discussions and put across their views. This has often left women as passive members on these committees thus undermining the very purpose for which these provisions were made.

In most districts where WUCs have been operating, we were informed that committees headed by women (or with more female members) tend to function better than those headed by men (or with more male members). This is attributed to the fact that participation on the committees is voluntary (without pay) and men are less enthusiastic to do voluntary work than women and that after sometime, the most male members of the committee lose interest and abandon the committees.

Although Local Governments are expected to implement gender-mainstreaming strategies in water resources management, they lack the necessary financial and technical resources to do so. In one of the districts, it was observed that although there is provision for a gender budget and resources are committed to the gender activities, it is only for celebrations of International Women's day on March 8th.

3. Kenya National Gender Policy Framework

Kenya's socio-cultural, institutional and legal framework is patriarchal. Although Kenya has ratified the international *Convention on the Elimination of All Forms of Discrimination Against Women* (the *Women's Convention*) it is yet to incorporate it into its domestic law.

The absence of a national gender policy and mechanisms to eradicate and/or address gender based discrimination such as affirmative action have been key factors in Kenya's entrenched gender disparities. Underlying this systemic institutionalized bias is a lack of understanding of the economic cost of gender-based exclusion.

The past two decades witnessed the emergence of women's rights organizations willing to address the questions of women's access to decision-making, access to resources and legal reform. Some of these organizations include the Federation of Women Lawyers (FIDA (K)) which has undertaken legal advocacy work and provides legal aid and the Kenya Women's Finance Trust (KWFT), which provides micro-finance to women, to mention just two. The League of Kenya Women Voters and the Kenya Women's Political Caucus provide support for women wishing to enter competitive politics. Similar organizations also exist in Uganda and are doing an excellent job championing women emancipation and empowerment in Uganda.

These NGOs have actively engaged the State in advocacy for gender responsive legal and policy reform. This sustained engagement has resulted in the government making firm commitments regarding the revision of national legal and institutional frameworks to ensure gender balance and equity in all sectors of government.

The Constitution of the Republic of Kenya

The current Constitution of the Republic of Kenya tends to discriminate against women in many ways and provides only limited protection from discrimination on the basis of sex.

Section 82(1) of the Constitution prohibits discrimination in law. Section 82(2) defines discrimination to include discrimination on the basis of sex. However sections 82(4(b & c)) of the Constitution, provide an exemption in respect of matters of customary and personal law, particularly marriage, divorce and the devolution of property (inheritance), which areas of law affect women the most. Case law on sections 82(4(b &c)) has consistently been interpreted in favor of men. The Constitution itself also discriminates against women as sections, 90 and 91, which govern citizenship, provide that one is a citizen either by birth or marriage to a Kenyan man. It is on the basis of these sections that women cannot bequeath citizenship. The Constitution therefore sets the stage for a gender biased regulatory and legal framework, buttressed by patriarchal matrimonial, family and succession statutes and customary laws.

This systematic discrimination against women perpetuated by the Constitution have been recognized by government and raised during the Constitutional review process. The new draft Constitution already addresses some of these gender concerns and has explicit provisions on:

- (i) The prohibition of discrimination on the basis of sex;
- (ii) Affirmative action on the basis of gender in access to appointive and elective offices; and
- (iii) Recognition of women as a marginalized group.

National Gender Policy

Although much work has been undertaken in the pursuit of one, Kenya still lacks a National Policy on Gender and Development. Consequently, there is currently no coherent national policy framework to address gender imbalance and inequality.

The draft National Policy on Gender and Development is under review and will become operational upon approval by the relevant organs of government. The overall objective of the draft policy is *“To facilitate the mainstreaming of the needs and concerns of men and women in all areas in the development process in the country.”* To this end, the policy identifies eight critical areas of concern: the economy; poverty and sustainable livelihoods; law; political participation and decision-making; education and training; health and population; the media; and policy implementation framework and resource mobilization.

The draft policy recognizes that traditional development theories have not facilitated the participation of women in strategic areas and positions of

power and influence because they are based on traditional assumptions of the roles and responsibilities of women and men. It also recognizes that without quality gender disaggregated data, gender sensitive planning and programming cannot be efficient and productive.

Whilst the draft policy identifies key forms of discrimination in respect of customary law, the law of succession and citizenship, it stops at the issue of the statutes that cover these areas rather than addressing itself to the root cause – the *Constitution*. It is important to note that it is not sufficient to amend and/or repeal the statutes without addressing the root cause of the problem, as statutes are subsidiary to the *Constitution* and can always therefore be proscribed on the basis of unconstitutionality. The inability to address constitutional discrimination is the primary weakness in the draft National Policy on Gender and Development.

National Gender Commission

An Act of Parliament No.13 of 2003 established the National Commission on Gender and Development (NCGD). The Commission was launched in November 2004 as a parastatal within the Ministry of Gender, Sports, Culture and Social Services, the Ministry responsible for gender affairs in the country.

The object and purpose for which the Commission is established is to coordinate, implement and facilitate gender mainstreaming in national development, and to advise the Government on all aspects thereof.

Functions of the Commission include the following:

- (i) Participation in the formulation of national development policies and programs.
- (ii) In liaison with the Ministry responsible for gender, exercise general supervision over the implementation of the national policy on gender and development.
- (iii) To initiate, lobby for and advocate for legal reforms on issues affecting women, and to formulate laws, practices and policies that eliminate all forms of discrimination against women and all institutions, practices and customs that are detrimental to their dignity.
- (iv) To initiate proposals and advise on the strengthening of institutional mechanisms, which promote gender equity and equality in all spheres of life and in particular, access to and benefits in education and healthcare, nutrition, shelter, employment and control of economic and national resources.
- (v) To determine Strategic priorities in all the socioeconomic, political and development policies of the Government and advise on their implementation.
- (vi) To plan, supervise and coordinate education programmes to create public awareness and support for gender issues.
- (vii) To evaluate aid policies to determine their impact on Women in Kenya.
- (viii) To conduct and coordinate research activities on gender issues.

- (ix) To carry out investigations on gender-based rights and violations and forward them to the relevant authorities.
- (x) To receive and evaluate reports by Government Ministries and other sectors on gender mainstreaming and Women's empowerment.

Gender Mainstreaming in the Water Sector

Though the Kenya Water Act 2002 aims to ensure that all Kenyans have access to clean water and sanitation, it has no specific provisions for gender mainstreaming in the planning and delivery of water related services.

Although the Ministry of Water and Irrigation Strategic Plan (2005) provides for the participation of all stakeholders in the management of water resources, it does not provide guidelines, on how gender mainstreaming is to be integrated in water resources management. In the absence of a policy framework for integrating gender into water resources management and development, the decision is usually left at the discretion of the implementing officers.

Government of Kenya is in the process of finalising the Kenya National Water Services Strategy (NWSS), 2007 – 2015. The draft strategy has noted that:

“Women and children are among the poorest in society and are the most affected where WSS services are inadequate. Women are often not sufficiently involved in the decision making process in comparison to the role they play for WSS in the household. In addition, among the employees in the sector, women are under represented.”

The Strategy recognizes the need for gender mainstreaming in the planning and delivery of water related services makes the following specific recommendations on gender mainstreaming:

- (i) A Water sector Gender Policy be developed as soon as possible to provide the guiding framework for gender mainstreaming in water sector activities. Preparation of this policy has already commenced and policy is expected to be adopted and implementation in 2008.
- (ii) Women should be empowered to play a more active role in the planning and decision-making processes in the water sector at all levels. Specifically, women should occupy at least one third of the posts on all water sector statutory boards.
- (iii) Measures should be taken to ensure gender mainstreaming in all water sector activities at national and local levels.
- (iv) Decision makers, planners and implementers should be sensitised by means of awareness campaigns on the role of gender and its impact in improving water and sanitation services.

The Kenya Water Resources Management Strategy recognises that men and women do not have the same access and control over water resources. It also stipulates that both men and women should be active participants in the development and planning process, and that women should not be viewed as passive recipients or as a vulnerable group along with children and the handicapped.

The strategy requires that women issues should not be dealt with as separate issues but as part and parcel of the integrated water management issues.

The approach has two main focuses, i.e., integration and agenda setting. Integration involves widening the gender concerns across many sectors, while agenda setting aims at transforming the existing development agenda with a gender perspective. The involvement of women in decision-making is therefore a key strategic approach being promoted by the Ministry in implementation of the water sector activities.

Key approaches to ensuring effective gender mainstreaming in the water sector activities include:

- i) Ensuring that all units and all personnel within the system have the responsibility for ensuring involvement of both men and women in all aspects of programmes and policies.
- ii) Incorporating gender concerns into the planning and decision making process.

Gender sensitisation is being promoted at all levels in the sector, especially at the decision-making levels. To remove the stereotyping and the regressive notions on women's involvement in the water sector, stakeholders are being sensitised on the different needs, opportunities and constraints of men and women participation in the water sector.

9.3.3 The Role of NGOs in Gender Mainstreaming

Non-Government Organisations (NGOs), in both Kenya and Uganda, are at the forefront of advocating for gender mainstreaming in water resources management and have put in place guidelines for achieving success and impact. The experience gained from working with participatory planning, monitoring and evaluation of development projects have given invaluable lessons for replicating their experiences in different areas in which they operate.

NGOs working in the SMM catchment such as Plan International, World Vision, and Water Aid recognise the pivotal role women play in water resources management and development. They also recognise the unequal relationships between men and women in control over decision-making regarding water resources management. They recognise that women's

experience and concerns about water resources use and management are different from those of men. Therefore, in designing and implementing their water related activities, NGOs ensure that both men and women are involved at all levels. Specifically, NGOs put a lot of emphasis on training women groups and empower them to participate in the decision-making process.

NGOs play a key role in ensuring that water related policies and projects at national and local levels are gender sensitive. NGOs lobby relevant planning and decision-making agencies and sensitise them on the importance of gender mainstreaming to ensure that their programs are gender sensitive.

NGOs have the experience and expertise in carrying out gender awareness and sensitisation of communities.

9.3.4 Gender mainstreaming in Local Communities

Local communities are key players in the sustainable management and development of water resources in their areas. This role is often played individually in their households and farms and collectively through local community associations like WRUAs, WUAs, environment committees, etc.

Water User Committees (WUC) in Uganda

Section 50(1) of the Uganda Water Act 1997 provides that “a set of individuals or households may form a water user group and collectively plan and manage the water point in their area”

The guidelines for women’s involvement in the water user committees require that 50% of the committee should be composed of women and that the position of the Treasurer for the WUC should be a woman.

Water Resources Users Association in Kenya

Section 15(5) of the Kenya Water Act provides that “the water resources management authority shall encourage and facilitate the establishment and operation of water resource users associations (WRUAs) for conflict resolution and co-operative management of water resources in catchment areas.

Although WRMA guidelines require that women constitute 30% of the water resource users committees, it was noted that of the WRUAs that are operational, there are very few women on the Executive Committee and on the sub-committees. For instance, only one woman is a member of the executive out of fifteen members in Mt. Elgon. Out of the 25 WRUAs, only five had women representatives on the committee. The WRMA was in the process of disbanding the “all male” committees so that they could include women representatives.

Some of the reasons given by WRMA officials interviewed during field- work for male dominance in the committees were that:

“...women lack the confidence to participate in the decision making processes due to socio-cultural issues and do not have the time to engage in frequent meetings since they have to take care of household chores”.

It was also observed that most men tended to perceive their participation and control of WRUAs as potential sources of income, especially if they became licensed as water service providers (WSP). Women, on the other hand, tend to perceive their participation in WRUAs as purposely to ensure access to clean and safe water for domestic use. Thus the incentive for men to join and control a WRUA is more of an economic interest while that of women is primarily social.

Women Groups

Women’s groups represent the main platform for women participation in the decision-making processes in local communities. These organized groups also serve as an avenue for channeling support (financial, technical, training, etc) from government and non-government agencies to the rural women.

Women groups also provide women with an entry point into the local and national level decision-making processes. For example, during elections, Women’s groups become important in determining the success of a candidate. Candidates for civic and parliamentary seats lobby local women groups as a means of capturing a substantial block vote.

The economic and social welfare activities that women engage in within the context of women’s groups also serve to harness women’s economic power at the community level. These activities often allow women access to household decision-making by creating a realm and resources, which they control, although the household as a whole is a beneficiary. These groups offer women protection from local patriarchy by providing a decision-making sphere, which excludes men.

In sectors such as agriculture and at the community level, women are well organized particularly when compared to their male counterparts. However, at national level and in sectors such as the public sector and political arena, the reverse is true. It is men who are organized, and women have never been able to harness their grassroots counterparts in support of national issues or in support of women's candidates for different political positions.

9.4 Proposed Strategic Intervention Measures

The proposed Gender Mainstreaming Plan comprises of four strategic intervention measures aimed at enhancing gender sensitive planning, management and development of the SMM water resources.

The proposed strategic intervention measures include the following:

- (v) Sensitisation of policy makers, managers, and the local communities in the SMM catchment on gender mainstreaming in IWRM and its relevance to the socio-economic development of the basin.
- (vi) Build Capacity of relevant SMM stakeholder agencies to enhance their ability to undertake gender mainstreaming in water related activities planned and implemented by them.
- (vii) Promote the formation of women groups in the SMM catchment and facilitate their operations through training, equipping and providing them with financial and technical support to undertake water related activities in the basin.
- (viii) Facilitate water related gender mainstreaming activities in the SMM catchment.

9.5 Proposed Tasks and Activities

TASK 1: Sensitization of policy makers, managers and local communities in the SMM basin on gender mainstreaming in IWRM.

Activity 1.1: Carry out targeted gender awareness campaigns through seminars, workshops, and meetings targeting Politicians, Policy and Decision-makers, Managers, Technical staff, NGOs and CBOs, Media, Women and Youth Groups, and Local Communities.

Activity 1.2: Sponsor Radio and TV programs and Newspaper supplements to raise awareness and sensitise local communities on gender related issues and the importance of gender equality in achieving sustainable water resources management and development in the SMM catchment.

Activity 1.3: Support drama and music competitions in schools and local communities on gender related themes. Prizes will be awarded to the best performing schools and local community groups. The best performing schools and local community groups will also be facilitated to stage shows and performances through out the entire SMM catchment as a way of raising public awareness on gender related issues in the catchment.

TASK 2: Capacity building of relevant SMM stakeholder agencies to undertake water related gender-mainstreaming activities in line with their mandates.

Activity 2.1: Facilitate Training of district gender officers, gender desk officers in relevant central government departments and agencies, officers from NGOs/CBOs, women and youth groups in gender issues. The training will be aimed at imparting the necessary knowledge and skills to enable the relevant officers to champion the gender cause in their institutions and ensure gender mainstreaming in the water related activities in their institutions.

Activity 2.2: Support the development and implementation of curriculum for gender related courses at SMM partner universities. This will also include training and equipping of the professors responsible for delivering the courses and using them to offer gender related training to other stakeholders in the SMM catchment. Collaborate with these institutions in the development and implementation of short training courses on gender mainstreaming in water resources management and development activities in the SMM catchment.

Activity 2.3: Strengthen the capacity of the district gender units in the SMM catchment through training and provision of necessary equipment and facilities to enable them to effectively coordinate gender related activities in their respective districts.

Activity 2.4: Facilitate and collaborate with the Ministries responsible for Gender and District Gender Units in the development of guidelines for gender mainstreaming in water resources related activities for use by local governments, NGOs/CBOs, women and youth groups, and other relevant SMM stakeholders.

TASK 3: Promote and facilitate the formation of Women Groups in the SMM basin

Activity 3.1: Facilitate formation of Women Groups in the SMM catchment where the need and interest is expressed in the local communities. As part of this activity, local communities will be sensitised on the importance and benefits of forming Women Groups and will also be given some basic training and financial support to facilitate their water related activities.

Activity 3.2: Support water related income-generating activities of Women Groups in the SMM catchment to empower them economically and reduce their reliance on men for financial support.

Activity 3.3: Support specific training for women groups to improve their knowledge and skills to enable them actively participate in planning and decision-making processes in their communities. The training will also be aimed at building confidence of women to clearly articulate their interests and concerns and express themselves with confidence among men.

Activity 3.4: Support networking and exchange visits between women groups in the catchment to enable them share experiences and learn from each other.

Activity 3.5: Support Micro-finance and credit facilities to women in the SMM catchment through their respective Women Groups to finance income generating activities and acquisition of property such as land, equipment, houses, etc which will raise the socio-economic status of women in their communities.

Activity 3.6: Facilitate provision of agricultural extension services to Women Groups to boost their agricultural production and household income. This targeted provision of extension services to women groups is likely to be more effective because women are more involved in agricultural activities than men and they are also more likely to listen to and take the advice of the extension workers more than the men.

TASK 4: Support and facilitate water related gender mainstreaming activities in the SMM basin.

Activity 4.1: Strengthen and facilitate the operations of the District Gender Units through training, equipment and access to relevant information. The district gender units will play a central role in coordinating water related gender mainstreaming activities in their respective districts and local communities.

Activity 4.2: Establish a Gender Unit at the SMM Secretariat to coordinate gender mainstreaming activities in the SMM catchment and provide technical support to the District Gender Units and NGOs/CBOs involved in water related gender advocacy and activities.

Activity 4.3: Support relevant NGOs/CBOs involved in water related gender mainstreaming and advocacy activities through financial and technical support. Support will also be extended to NGOs/CBOs and Women Groups to advocate and lobby for formulation and implementation of gender sensitive water related policies and development programs.

Activity 4.4: Facilitate the development and implementation of a comprehensive SMM Gender Mainstreaming Strategy to guide SMM stakeholders in ensuring gender mainstreaming in all SMM water resources management and development activities.

9.6 Implementation Strategy

9.6.1 Coordination Mechanism

SMM stakeholder agencies will be responsible for implementation of the planned activities as an integral part of their regular activities. The role of the SMM PMU/Secretariat will be to coordinate and facilitate the different stakeholder agencies in implementation of the activities.

The Ministries responsible for Gender will provide technical backstopping support to ensure that implementation of the gender mainstreaming activities are consistent with the national gender policies and strategies. The District Gender Units will play a central role in coordinating implementation of the gender related activities in the district and local communities. The Gender Unit at the SMM Secretariat will provide technical support to the District Gender Unit and also coordinate cross cutting gender related capacity building and sensitisation activities funded by the Secretariat.

An SMM Gender Committee comprising of officials from relevant stakeholder institutions (Ministries responsible for Gender, District Gender Units, SMM Gender Unit, NGO/CBO representative, and representatives from Women Groups) from Uganda and Kenya will be established to review and prioritise gender mainstreaming activities and prepare a catchment-wide work plan and budget for implementation of the planned activities. The work plan and budget will be submitted to the SMM PMU/Secretariat for onward submission to the SMM Policy organs (RPSC, TAC, COM, etc) for review and approval. Upon approval of the work plan and budget, the SMM Secretariat/PMU will mobilize the required financial resources and coordinate with the SMM stakeholder agencies in the implementation of the activities. Reporting on the progress of implementation of the gender mainstreaming activities will be undertaken as part of the routine reporting that the SMM Secretariat/PMU does to the relevant SMM Policy organs.

9.6.2 Monitoring and Evaluation

The SMM Gender Committee discussed above will periodically monitor and evaluate the progress of implementation of the Gender Mainstreaming Plan and provide strategic advice to the two governments and the SMM Secretariat on the way forward. The committee's monitoring and evaluation report and recommendations will be submitted to the relevant SMM Policy organs (SMM Technical Advisory Committee and Council of Ministers) for consideration.

The committee, in collaboration with the SMM Secretariat, will establish appropriate evaluation criteria and monitoring indicators to objectively assess progress of implementation of the Plan. The Secretariat shall facilitate the operations of the committee during the monitoring and evaluation process.

9.6.3 Tentative Work plan and Budget for Phase 1 Activities

Work plan for Phase 1 Activities

TASK	2009				2010				2011			
Sensitization of policy makers, managers and local communities in the SMM basin on gender mainstreaming in IWRM												
Capacity building of relevant SMM stakeholder agencies to undertake water related gender-mainstreaming activities in line with their mandates												
Promote and facilitate the formation of Women Groups in the SMM basin												
Support and facilitate water related gender mainstreaming activities in the SMM basin												

Tentative Budget Estimates for Phase 1 Activities

TASK	Inputs	Quantity	Amount US\$)
Sensitization of policy makers, managers and local communities in the SMM basin on gender mainstreaming in IWRM	Technical Support	Lump-sum	150,000
Capacity building of relevant SMM stakeholder agencies to undertake water related gender-mainstreaming activities in line with their mandates	Technical Support	Lump-sum	100,000

Promote and facilitate the formation of Women Groups in the SMM basin	Technical Support Financial Support	Lump-sum	300,000
Support and facilitate water related gender mainstreaming activities in the SMM basin	Technical Support Financial Support	Lump-sum	200,000
Total			750,000
Contingency			150,000
TOTAL			900,000

ANNEX 1 - KEY WATER RESOURCES RELATED ISSUES IN THE SMM CATCHMENT

Issues	Causes	Impact
Water pollution	<ul style="list-style-type: none"> -Use of agro-chemicals -Watering of livestock in rivers -Bathing, and washing of clothes, utensils, and chemical containers in rivers -Inadequate sanitation facilities especially in public areas (schools, markets, etc) -Poor planning and location of sanitation facilities (e.g. pit latrines near water sources) -Improper discharge of effluent from industries, abattoirs, and toilets into rivers. -Laxity in enforcement of environmental rules and regulations 	<ul style="list-style-type: none"> -Poor water quality for human consumption and ecological functions -Water borne diseases -Loss of Aesthetic value -Ecological damage in rivers and wetlands.
Deforestation	<ul style="list-style-type: none"> -Cutting down of trees to create more agricultural land due to population pressure -Charcoal burning and timber logging as alternative sources of income -Poaching of forest products -Forest excision 	<ul style="list-style-type: none"> - Increased soil erosion and sediment loads in rivers and lakes due to loss of vegetation cover. -Drying up of streams and rivers due to increased flush floods and hence reduction in base flow. -Destruction of ecological biodiversity due to loss of habitat for flora and fauna.
Flooding	<ul style="list-style-type: none"> -Catchment destruction especially cutting down of trees and cultivating on hill slopes. 	<ul style="list-style-type: none"> - Loss of soil fertility and increased sediment loads rivers due to soil erosion. -Destruction of infrastructure, crops,

Issues	Causes	Impact
		farmland, and displacement of downstream communities. -Waterborne diseases
Wetlands Degradation	-Conversion of wetlands into agricultural land due to shortage of arable land -Unsustainable harvesting of wetland products -Disposal of excessive toxic wastes into wetlands -Brick making -Lack of awareness/wrong perception on importance of wetlands	-Loss of wetland ecosystem (biodiversity, water supply, etc) -Loss of wetland functions (flood control, erosion control, water filtration, water storage, etc)
Effluent discharge	-Lack of or inadequate waste treatment facilities -Weak enforcement of effluent disposal standards and regulations -Inefficient wastewater discharge monitoring and testing facilities	-Poor water quality for human consumption and ecological functions -Water borne diseases
Solid waste disposal	-Lack of appropriate solid waste collection, handling and disposal facilities -Inappropriate packaging materials -Ignorance on proper waste disposal	-Ecological (environmental) degradation -Occurrence of diseases -Land, air, water and soil pollution -Loss of aesthetics
River bank cultivation	-Shortage of agricultural land due to population pressure -Weak enforcement of river bank protection regulations and guidelines	-Soil loss -Increased sediment loads in rivers -River bank failures and interference with natural river morphology.
Soil erosion	-Deforestation and vegetation removal -Inappropriate land use practices -Cultivation on steep slopes -Inappropriately designed drainage systems	-Soil/fertility loss -Increased sediment loads in rivers - -Low crop yields -Loss of agricultural land
Sand harvesting	-Increased demand for sand for building and construction activities	-Interference with natural river morphology

Issues	Causes	Impact
		-Increased suspended solids downstream
Mining and quarrying	-Demand for building and construction materials -Demand for precious metals and other mineral resources	-Environmental degradation open pits) -River water and air pollution -Loss of aesthetics
Over abstraction of groundwater	-Inadequate surface water sources in terms of quantity and quality -High investment and treatment costs for surface water supply schemes -Degradation of groundwater recharge areas	-Depletion of groundwater reserves -Land subsidence due to rapidly receding water table -Drying up of rivers and streams due to reduced base flows
Inefficient irrigation water use	-Lack of appropriate and/or poor irrigation infrastructure -Lack of knowledge on efficient water use irrigation practices -Inadequate extension and advisory services	-Water loss for downstream users -Conflicts on water use -Low crop yields (e.g. due to water logging)
Lack of adequate and reliable water resources related data and information	-Lack of and/or poorly maintained measuring and monitoring devices -Lack of and/or inadequate technical and financial resources to install appropriate monitoring equipment and ensure sustainable operation of the monitoring networks -Unreliable data collection, processing, quality control, and storage procedures, standards and guidelines. -Lack of data sharing and information exchange protocols	-Poor planning and decision-making processes -Poor designs for water related and drainage infrastructure - Water use conflicts

ANNEX 2 - LOCAL GOVERNMENT INSTITUTIONAL SET-UP

Uganda Local Government Set-up

Local Governments (Districts, towns, Sub-Counties) are empowered by the Local Governments Act (1997) to take responsibility for the provision of water supply and sanitation services. They receive grant funding from the central government and also mobilize local resources for implementing rural WSS programmes and to support small town WSS. Local Governments, in consultation with DWD/MWE also appoint and manage private operators for urban schemes outside the jurisdiction of NWSC. Districts are being encouraged to set up District Water and Sanitation technical Committees (DWSC) to oversee and provide effective coordination of water sector activities in the respective Local Governments.

There are two levels of local governments in Uganda. The District or Local Council 5 is the Higher Local Government (HLG) whereas the Sub-County council, town council, municipal council and division council (in the case of a city) is the Lower Local Government (LLG). Under these, there are also other administrative units such as the Parish Council and Village Councils. District councils and Sub-county councils have executive and legislative powers. They can make by-laws and also provide for regulations for the implementation of laws enacted by Parliament.

A Local Government (LG) Council is the highest political authority within its area of jurisdiction and has both legislative and executive power. In each LG, there is a Chairperson who is the political head. There is also an Executive Committee, which performs the executive functions of the council. The District Council is the planning authority of the district. Every local government is a body corporate with perpetual succession and a common seal.

The Chief Administrative Officer (CAO) is the chief accounting officer of the districts and head of all civil servants in the district. In the case of urban councils, the Town Clerk (TC) performs similar functions to the CAO. The CAO/TC are answerable to their respective councils.

In every District, there is a District Technical Planning Committee (DTPC) chaired by the CAO and comprised of all heads of departments and any other technical person co-opted by the CAO. The DTPC is the technical arm of the district responsible for all the planning, implementation, monitoring and evaluation of all development programmes in the district. The DTPC reports to the District Council through the District Executive Committee.

The DPTC's functions and mandate include development of Work plans, budgeting, management of programmes, supervision and monitoring, and accountability for funds used in implementation of development activities in the district. The District Planning Officer is responsible for ensuring cross-sectoral coordination and linkages during planning and implementation of district development activities. However, because the Chief Administrative Officer (CAO) is mandated with the supervisory role for all programmes and action plans, all the technical officers are answerable to him or her.

In most of the districts, there are ten departments; Administration, Finance, Health, Education, Production, Works, Community Development, Natural Resources, Planning and Internal Audit. There is no specific department responsible for Water Resources Management (WRM) in the districts. WRM related activities in LGs are implemented under different departments i.e.

- (i) The Production Department through the following divisions:
Agriculture, Fisheries, and Veterinary services.
- (ii) The Natural Resources Department through the following divisions:
Environment, Wetlands Management, Forestry and Land management.
- (iii) The Works/Engineering Department, which houses the District Water Office, which is responsible for Water Supply and Sanitation activities in the district.

The Organogram for the District management structure is shown in the **Figure** below.

LGs are empowered to collect revenue from their areas of jurisdiction and spend it in accordance with local priorities. The Local Government Act, 1997 mandates the LGs to formulate, approve, and execute their budgets and plans. Most LGs have been experiencing decline in revenue collection and are heavily dependant on central government transfers.

LGs have legislative powers. They pass ordinances (districts) and by-laws (LLGs), which should be consistent with the constitution or any law enacted by parliament. This provides an important opportunity, which could be seized by the SMM river basin in ensuring sustainable conservation practices.

LGs in principle are the main providers of social services to the local communities. Close collaboration between central government departments/agencies and the relevant LG institutions is crucial for efficient and timely delivery of social services to the local communities. It should be noted that apart from WRM functions, all other related functions such as environment, forestry, agriculture, land management, health and water supply have already been decentralized to LGs.

At the lower local government level there is a Sub-County Investment Committee, headed by the Sub-County Chief, which is responsible for identification, planning, management, monitoring and evaluation of all

development projects and action plans developed and funded at that level. The committee is composed of technical staff and members of the sub-county executive Committee, elected political leaders in the lower local government. The investment committee is expected to plan and initiate development projects through a participatory planning process that provides for the participation of all stakeholders in their areas of jurisdiction.

At the local community level, Parish Development Committees (PDC) are responsible for collecting views of the local communities and compile them into development projects and action plans that feed into the sub-county development plans. The Parish Development Committees are expected to develop projects through a participatory process that involves collecting views of the communities at the village level and compile them into parish action plans.

Another important water related committee in the local communities is the Water Users Committee. The committee, composed of selected responsible persons from the local communities (village), is responsible for the management and maintenance of specific water sources in the local communities such as boreholes and protected springs. Water User Committees are responsible for cleaning the water sources, collecting funds from water users for general maintenance and purchase of spare parts for repairs of boreholes in case of mechanical problems. Water User Committees have an element of democratic participation and gender sensitivity in their composition in that a committee is composed of eight persons, four of whom must be women.

Role of NGOs and CBOs in the Local Governments

NGOs and CBOs play a very crucial role in the provision of social services in the local governments and specifically in the local communities. They are actively involved in the provision of water supply and sanitation services to the local communities through drilling of boreholes, protection of springs, construction of pit latrines and sensitisation of local communities on hygiene and public health issues. They are also involved in promoting watershed protection activities through tree planting, training in appropriate soil and water conservation techniques and sustainable farming practices. Their intervention methodologies are oriented towards sustainability, involving the communities in decision-making and control over use, management and operations of water resources. They facilitate the formation of local community management structures such as water supply and sanitation committees and water users associations. NGOs transmit critical skills to communities through training and participatory planning methodologies. By working directly with communities, NGO interventions are important in ensuring ownership and sustainability of the development activities in the local communities. In Tororo District for instance, Plan International is carrying out a Community Led Total Sanitation (CLTS) campaign by working with communities to increase latrine coverage and enforcement of community decisions that require each household in the

target areas to construct a pit latrine. The community leaders are responsible for enforcement of the community led decisions and mobilizing households to participate in the campaign.

Some of the NGOs have been invited by the districts to become members of the District Technical Planning Committee (DPTC) and other sectoral committees in the district and Sub-county. Their work plans and budgets are incorporated into the Local Government Development Programmes and Plans.

Community Based Organisations (CBOs) are very important stakeholders in Integrated Water Resources Management (IWRM). Their interests and actions are rooted within the community and their interventions are localized.

One of the CBOs with invaluable experience in the SMM basin is Mahinga Environment Management Organisation (MAHEMO), which with funding from NTEAP has worked with communities in five villages in Tororo District to undertake integrated watershed management along the River Malaba. Together with Kwapa Women's Development Organisation (KWEDO), MAHEMO has facilitated the formation of water management sub-committees in each of the villages along the river Malaba. Six people form a village management committee chaired by the chairperson of Local Council 1 with provision for representation of women, youth, CBOs and interest groups.

Kenya Local Government Set-up

Unlike Uganda, Kenya has not gone far with decentralization reforms. The Local Government set up is a mixture of three organs i.e. The Local Administration (LA), The Provincial Administration (PA) and Line Ministry (LM). These are discussed in details below. This system of parallel structures is shown in the Figure below.

(1) Local Administration

The LG Act is structured to retain considerable power to the central government through the MLG to control, manage and regulate LAs, with substantial power vested personally with the Minister for Local Government.

The council, which is the policy-making arm of the LA, is headed by a chairman or mayor elected by the councillors. The Chairman/mayor is the political head of the LA and presides over all council meetings. However, he/she has no executive functions.

The council operates through a committee system, with the full council as the supreme authority. Typically, most councils have planning, works and markets/housing, education and social service, health and environmental committees. The Finance Committee and the Planning Committee are the two most important committees in both rural and urban LAs.

The administrative arm of the council is headed by a Clerk to the Council or a Town Clerk, who is appointed by the Public Service Commission (PSC) as the chief executive and administrative officer. The Clerk also serves as adviser to the council and is responsible for coordinating all the activities of the LA. The administrative arm operates through departments, each headed by a technical officer. The number of departments depends on the size and responsibilities of the LA. A typical LA would have the following departments: Administration, Finance, Planning, Works, Water and Sanitation, Education, Health, Social services, and Environment.

There is only one layer of local government in Kenya, made up of various local authority councils: city council, municipal council, county council and town council. These local authority units are autonomous bodies corporate. However, the central government administrative and service delivery structure is made up of several hierarchical layers. These levels overlap with the local authority at the district level. The de-concentrated Central Government district structure tends to dominate the LA, and most administrative and service delivery functions are still provided by the de-concentrated central government authorities.

(2) The Provincial Administration

Kenya is divided into seven administrative regions called provinces, with Nairobi having a special status as the eighth province. A Provincial

Commissioner (PC), appointed by the President to represent the government at the provincial level, heads each province. The PC is the head of the administrative arm of government at the provincial level, with wide ranging powers to monitor all activities, administrative, political (with special emphasis on law and order) and to a lesser degree service delivery. The term 'provincial administration' refers to the de-concentrated system of government operations made up of provinces, districts, divisions, locations and sub-locations in a hierarchical order. These administrative units are headed by Provincial Commissioners, District Commissioners (DC), Division Officers (DO), Chiefs and Sub-Chiefs, respectively.

The provincial administration is the central government's instrument for maintaining law and order, co-ordinating government services and disseminating government policies to the local communities.

(3) Line Ministries

Most of the public services, both at the national and local levels, are still planned and delivered by the central line ministries. The sector ministries are responsible for sector policies, standards, regulations, and monitoring and service delivery. While the LG Act permits LAs to undertake some service delivery functions, the assignment of the responsibility for specific functions is subject to the provision of the relevant sector legislation and the delegation by the sector ministry concerned. This is particularly so in the case of Water, Health, Education, Land and Roads.

In both, the productive and the social sectors service delivery is organised through the 'district system' with all ministries having offices at all levels of the administrative tiers. A few LAs have service delivery responsibilities, especially in education and health, but this is limited to the bigger municipalities, e.g. Nairobi, Mombasa, Kisumu, Nakuru, Eldoret, Thika and Kitale.

Whereas elected District Councils exist they do not exercise full planning authority as these powers are vested in sector/line ministries, which directly provide services and control staff. Technical staffs are directly answerable to line ministries through provincial offices. There is no formal linkage between Line Ministries and Local Administration.

NGOs and Civil Society Organisations

Like in Uganda, NGOs/CBOs in Kenya play a significant role in the delivery of social services to the local communities, especially services funded under the recently introduced Constituency Development Fund (CDF). The CDF is becoming increasingly important and now constitutes a significant part of locally available development funding.

Parallel Administrative systems for delivery of social services in Kenya

ANNEX 3 - SUMMARY OF RECOMMENDATIONS OF THE UGANDA WATER SECTOR REFORM

Rural Water and Sanitation Sub-sector

- (i) The focus of the rural WSS sub-sector reform is to strengthen the decentralized provision of WSS services;
- (ii) Central government is to co-ordinate the sector and facilitate technical assistance to local governments;
- (iii) Funds for rural WSS are channeled directly to district authorities;
- (iv) Demand-responsive and integrated approaches are to be introduced, based on community ownership and management of rural WSS facilities, with increased attention paid to hygiene promotion, gender awareness, and participatory planning.
- (v) Operation and maintenance costs of facilities are to be borne by the users, with support for rehabilitation and major repairs from central and local government.
- (vi) During the transition phase, Technical Support Units have been established in each region to support local governments and build local capacity.
- (vii) Promotion of private-sector involvement in service delivery. District authorities are encouraged to utilize local private-sector capacity for design, construction, and operation and maintenance of rural water supply and sanitation facilities and for the supply and distribution of spare parts and appropriate equipment.
- (viii) A major output of the rural WSS sub-sector study was an investment plan for the period 2000-2015.

Urban Water and Sanitation Sub-sector

- (i) Reform of the urban WSS sub-sector focuses on the introduction of commercialized operations, mainly through increased private sector participation.
- (ii) Recommended public-private partnership, whereby the public sector retains ownership of urban WSS assets, but private operators carry out service delivery.
- (iii) **Large towns:** The strategy for the large town group, which will comprise some 30-35 towns with populations above 15,000, is to give responsibility for management of all urban WSS services to a single private operator under a ten-year lease contract. The urban WSS assets involved will be vested in a wholly government-owned Asset Holding Authority, which will monitor the operator's performance, manage the leased assets, and plan future investments.
- (iv) **Small towns:** The strategy for the small towns group, which will comprise the 43-48 urban WSS systems not included in the lease

group, is that both responsibility and ownership of the systems will remain with local governments, which will also be responsible for ensuring that the systems are managed on a commercial basis. To this end, service delivery will be contracted out, either to newly created local water and sanitation authorities, or to local private operators.

- (v) Where possible, multiple systems will be consolidated in order to capture economies of scale in their management, and make the operation of the systems more attractive to private operators.
- (vi) In addition, a national urban water and sanitation development agency will be created to support local government and local WSS authorities in the provision of effective decentralized urban WSS services.
- (vii) An independent regulatory institution is to be created to regulate Private sector participation in the WSS sector. Its main duties will be to set tariffs, provide consumer protection, and resolve disputes between sector stakeholders.

Water Resources Management sub-sector

The key output of the study is a Strategic Investment Plan for the transformation of the Water Resources Management sub-sector into a viable entity capable of meeting the existing water resources management challenges at national and regional level in an efficient and timely manner.

Key recommendations of this study component include:

(a) Framework for decentralisation of WRM

The immediate objective for decentralising WRM is “to facilitate the involvement of Local Governments at all levels, NGOs and the private sector in the execution of WRM functions within the decentralisation context in Uganda”.

Option 1: Continued central operations with enhanced involvement of districts.

This option continues to operate the respective WRM regulatory and monitoring functions from the centre combined with increased involvement of the districts.

Option 2: Water Management Regions (WMRs)

This option includes the establishment of water management regions similar to the Catchment Regions in Kenya.

(b) Separation of Regulatory, Management and Development Roles

It is proposed that this separation be achieved through the following measures:

- (i) Creation of an independent Water Resources Regulatory Agency responsible for water rights administration and permitting;

- (ii) Core government department to retain strictly planning and management (monitoring and assessment) functions;
- (iii) Establishment of an independent (commercial) Water Quality Laboratory to offer water quality analysis services.

(c) *Strengthening Multi-sectoral Coordination*

Re-defining the role of the Water Policy Committee to become the overarching multi-sectoral coordination body of the WRM sub-sector playing a more pro-active role in guiding sector policy development and implementation, especially the long-overdue transboundary water resources policy.

(d) *Enhanced Management of Transboundary Water Resources*

- (i) Development of a policy and strategy for the management of transboundary water resources.
- (ii) Institutional restructuring:
 - o Creation of a fully-fledged department responsible for transboundary water resources management under the Ministry of Water and Environment.
 - o Creation of a multi-sectoral technical committee to support the WPC in the development and implementation of a national transboundary water resources policy and strategy.

(e) *Enhanced Stakeholder participation in WRM*

- (i) Develop a strategy to promote active stakeholder participation in WRM at all levels. This will specifically focus on a clear definition of roles for the local communities, NGOs, Women groups and the private sector in WRM and also clarify the reporting and coordination mechanisms.
- (ii) The strategy will also focus on capacity building of the different stakeholder groups to ensure their effective participation in WRM

Water for Production Sub-sector

The key outcome of the study was a comprehensive Strategy for the sub-sector focusing mainly on improving rural household incomes through use of water for increased agricultural productivity and food security.

Proposed strategic interventions include:

- (i) Improved access to water for livestock, especially in the cattle corridor.
- (ii) Promotion of water harvesting for small-scale supplementary irrigation.
- (iii) Promotion of small-scale aquaculture and culture-based fisheries in existing reservoirs.
- (iv) Creation of an enabling environment for private sector investment in the sub-sector.

ANNEX 4A - RESOLUTION ON THE MANAGEMENT OF THE SIO AND MALABA-MALAKISI RIVERS (under NBI)

The Council of ministers of the Nile Basin Initiative, at its ordinary meeting held at _____ (place) on ----- (date)

Taking into account the principle of subsidiarity,

Conscious of the need to promote management Nile water resources at the lowest possible level

Aware of the importance of public participation in the management of resources

Desirous to promote effective cooperation among the peoples living in the Nile Basin

Have resolved as follows:

1. Definitions

(i) Unless the context otherwise requires, the terms used in this regulation shall have the same meaning as ascribed to them in the Protocol and Treaty for the Establishment of the East African Community.

(ii) Without prejudice to paragraph 1 of this Article:

"Basin states" mean the basin states of the River Nile;

"Council" means the Council of Ministers of the Nile Basin Initiative;

"Emergency" means a situation that causes or poses an imminent threat of causing serious harm to a basin State or other States and that results suddenly from natural causes, such as floods, droughts, landslides or earthquakes, or from human conduct, such as industrial accidents or inland water transport accidents;

"Executive Director" means the Executive Director of the Nile Basin Initiative;

"Framework" means the Sio and Malaba-Malakisi Framework established under this Resolution;

"Lake Victoria Basin" means that geographical area extending within the territories of the Basin states determined by the watershed limits of the

system of waters, including surface and underground waters flowing into Lake Victoria;

"Nile River Basin" means that geographical area extending across the territories of various States drained by the River Nile and its tributaries and determined by the watershed limits of the system of waters, including surface and underground waters flowing into the river Nile system and eventually into the Mediterranean Sea;

“NBI” means the Nile Basin Initiative;

“Riparian states” means the states which are drained by the Sio and Malaba-Malakisi rivers namely the Republic of Kenya and the Republic of Uganda;

"Secretariat" means the Secretariat of the Nile Basin Initiative;

“Technical advisory Committee” means the Sio and Malaba-Malakisi Technical advisory Committee established by Article ---- of this Resolution;

"Stakeholder" means all persons, legal or natural and all other entities being governmental or non-governmental, residing, having interest or conducting business in the sub-basins;

"Sustainable development" means development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs;

"Sustainable utilisation" means use of resources by present generation, which does not impair the right of future generations to use the same to meet their needs;

“Technical Advisory Committee” means the Technical Advisory Committee of the Nile Basin Initiative;

“Operational Committee” means the Sio and Malaba-Malakisi Operational Committee established by Article ---- of this Resolution;

"Water resources" means all forms of water on the surface and in the ground including the living and non-living resources therein.

(3) Words importing the masculine gender include the feminine gender.

5. Establishment of the framework

(1) There is hereby established the Sio and Malaba-Malakisi Cooperation Framework (hereinafter referred to as "the Framework").

(2) The objectives of the Framework shall be to foster cooperation among the

riparian states, harmonize national measures for the sustainable utilization of the resources of the Sio and Malaba-Malakisi Sub-basins.

6. Objectives, functions and responsibilities

To achieve these objectives, the Framework shall have the function and responsibility to:

- a) promote the proper management and optimum utilization of the resources of the sub-basins;
- b) enhance capacity building of existing institutions and develop additional institutions dedicated to, or likely to contribute to, the purposes of this Resolution in cooperation with existing institutions established in or by the Community and with such international, regional or nongovernmental organizations as may be appropriate;
- c) provide a forum for discussion of the impacts of initiatives dealing with the environment and resources in the sub-basins and maintain a strong liaison with the existing bodies and programs;
- d) provide for the conduct of research concerning the water resources of sub-basin, including without limitation the quality of water resources;
- e) encourage, recommend, coordinate and, as appropriate, undertake training and extension activities in all aspects of water resource management;
- f) consider and advise on the effects of the direct or indirect introduction of any non-indigenous aquatic animals or plants into the the sub-basins and to adopt measures regarding the introduction, monitoring, control or elimination of any such animals or plants;
- g) serve as a clearing-house and data bank for information on the sub-basins and promote the dissemination of information, without prejudice to industrial property rights, by any appropriate form of publication;
- h) in respect of any or all of the foregoing, adopt budgets, seek funding, formulate plans for financial management and allocate funds to activities of the framework, or to such activities of the riparian states as it may determine to be in furtherance of the purposes of this Resolution;
- i) undertake such other functions as it may determine to be necessary or desirable in order to achieve the purposes of this Resolution.

7. Seat

1. The seat of the Framework shall be located within the sub-basin at -----
---- in the Republic of *Uganda/Kenya**. The Host State undertakes to accord, in respect of the Framework, its staff and its property, the privileges,

immunities and facilities set out under the framework of the Nile Basin Initiative.

[Matter not yet decided. The two states have however agreed on the present project headquarters.]*

(2) The Council of Ministers may with the consent of a riparian state, authorize the establishment of a centre of the Framework in the territory of a riparian state.

8. The organs of the Framework

1. The organs of the Framework are:

- a) the Council of Ministers;
- b) the Technical Advisory Committee,
- c) The Sio Malaba-Malakisi Executive Committee,
- d) The Sio Malaba-Malakisi Operational Committee,
- e) The Sio Malaba-Malakisi Consultative Forum,
- f) The Sio Malaba-Malakisi Secretariat,

2. The Council of Ministers may set up such committees or other subsidiary bodies as it may deem necessary for the performance of the functions of the Framework.

3. The Council of Ministers may set up such sub-committees or working groups as it may deem necessary for the work of the committees or the Council of Ministers itself.

9. The Council of Ministers

The supreme body of the Framework shall be the Council of Ministers as established under the NBI and operating in accordance with the procedures duly established under the NBI.

10. The Technical Advisory Committee,

The Technical Advisory Committee shall be the Technical Advisory Committee (hereinafter referred to as TAC) as established under the NBI, exercising the powers provided for and operating in accordance with the procedures duly established under the NBI.

11. The Sio Malaba-Malakisi Executive Committee,

(1) The Sio Malaba-Malakisi Executive Committee shall be composed of the ministers responsible for water resources of the Basin States.

(2) The executive committee shall be the apex body of the SMM framework.

(3) The executive committee may report its proceedings to the NileCOM.

(4) The executive Committee shall adopt its own procedure.

12. The Sio Malaba-Malakisi Technical Advisory Committee,

(1) The composition of the Technical Advisory Committee shall be drawn from agencies managing the following sectors at national level of the two riparian states:

- (a) Water Resources Management;
- (b) Agriculture;
- (c) Forestry;
- (d) Wildlife;
- (e) Tourism,
- (f) Water Supply and Sanitation;
- (g) Fisheries;
- (h) Environment;
- (i) Wetlands;
- (j) Meteorology;
- (k) Land Management;
- (l) Health;
- (m) Energy; and
- (n) Any other sector relevant to the Sio Malaba-Malakisi Basins.

(2) The attendance at the Sio Malaba-Malakisi Technical Advisory Committee may be composed of one or more sectors provided for in sub-section (1), depending on the issue to be addressed.

3. No session of the Sio Malaba-Malakisi Technical Advisory Committee shall take place unless the two riparian states are represented.

4. At its first regular session, the Sio Malaba-Malakisi Technical Advisory Committee shall select a Chairman from among the national level heads of the department responsible for water resources management. He shall hold office until the next regular session and thereafter the chairmanship of the Sio Malaba-Malakisi Technical Advisory Committee shall rotate among the national level heads of the departments responsible for water resources management. The Sio Malaba-Malakisi Technical Advisory Committee shall adopt its own Rules of Procedure.

5. The Sio Malaba-Malakisi Technical Advisory Committee shall hold one regular annual session and such other special sessions as it may determine. A special session shall be called upon request by any riparian state. The Executive Director shall inform the Contracting Parties of the date and place of any session.

6. All decisions and recommendations of the Sio Malaba-Malakisi Technical Advisory Committee shall be adopted by consensus. The Council of Ministers may establish rules whereby the Sio Malaba-Malakisi Technical Advisory Committee may be consulted by correspondence or any rapid means of written communication, if matters of exceptional urgency requiring action by the Sio Malaba-Malakisi Technical Advisory Committee arise between two of its sessions.

7. The Technical Advisory Committee shall:

- (a) Coordinate the activities of districts and national governments in developing the sub-basins;
- (b) Be responsible for the preparation of comprehensive implementation of programmes and the setting out of priorities for the sub-basins;
- (c) Monitor and keep under constant review the implementation of the programmes undertaken in the sub-basins;
- (d) Submit from time to time, reports and recommendations of working groups and stakeholders in the sub-basin; and
- (e) Perform such other functions as may be conferred on it by or under this Resolution.

8. At each session, the Sio Malaba-Malakisi Technical Advisory Committee shall adopt a report, which shall be submitted to the Technical Advisory Committee at its next session.

13. The Sio and Malaba Malakisi Operational Committee

(1) The composition of the Operational committee shall be drawn from agencies managing the following sectors at national and district levels of the two riparian states:

- (a) Water Resources Management;
- (b) Agriculture;
- (c) Forestry;
- (d) Wildlife;
- (e) Tourism,
- (f) Water Supply and Sanitation;
- (g) Fisheries;
- (h) Environment;
- (i) Wetlands;
- (j) Meteorology;
- (k) Land Management;
- (l) Health;
- (m) Energy; and
- (n) Any other sector relevant to the Sio Malaba-Malakisi Basins.

(2) The attendance at the Sio Malaba-Malakisi Operational Committee may be composed of one or more sectors provided for in sub-section (1), depending on the issue to be addressed.

(3) No session of the Sio Malaba-Malakisi Operational Committee shall take place unless the two riparian states are represented.

(4) At its first regular session, the Sio Malaba-Malakisi Operational Committee shall select a Chairman from among the national level heads of the department responsible for water resources management. He shall hold

office until the next regular session and thereafter the chairmanship of the Sio Malaba-Malakisi Operational Committee shall rotate among the national level heads of the departments responsible for water resources management. The Sio Malaba-Malakisi Operational Committee shall adopt its own Rules of Procedure.

(5) The Sio Malaba-Malakisi Operational Committee shall hold two regular sessions in each calendar year and such other special sessions as it may or the Council or TAC determine. A special session shall be called upon request by any two Contracting Parties. The Executive Director shall inform the riparian states of the date and place of any session.

(6) All decisions and recommendations of the Sio Malaba-Malakisi Operational Committee shall be adopted by consensus. The Council of Ministers may establish rules whereby the Sio Malaba-Malakisi Operational Committee may be consulted by correspondence or any rapid means of written communication, if matters of exceptional urgency requiring action by the Sio Malaba-Malakisi Operational Committee arise between two of its sessions.

(7) The Technical Operational shall:

(a) gather information relevant to the state of the resources of the sub-basins;

(b) discuss ways and means of finding solutions to local problems affecting the basin;

(c) monitor and evaluate the implementation of the Framework's programmes and projects in the sub-basins;

(d) disseminate information to the population regarding the sustainable utilization of the resources of the sub-basins;

(e) carry out any tasks assigned by the Council, TAC, or the Technical advisory Committee under this resolution and

(f) perform any other functions incidental or relevant to the above functions.

14. The Secretariat

The Framework shall have a Secretariat appointed and operating in accordance with the procedures applicable in the NBI.

15. Observers

(1) States indirectly concerned with the water resources of the Sio and Malaba-Malakisi sub-basins may, upon application, be granted observer status by the Council of Ministers. Observer States may participate, without right to vote, in meetings of all the statutory bodies of the Framework.

(2) Any other State interested in the activities of the Framework may, apply to the Technical advisory Committee be represented by an observer at a session of the Technical advisory Committee. It may submit memoranda and with the permission of the Chairman, participate without vote in the discussions.

(3) The Council of Ministers may invite intergovernmental, non-governmental organisation or any other entity having special competence in the field of the Framework's activities to attend such sessions as the Technical advisory Committee may specify.

16. National measures

The Contracting Parties hereby agree to take all necessary measures including legislative measures when appropriate, in accordance with their respective constitutional procedures and national laws, to implement the decisions of the Framework's statutory bodies.

Provided that such national laws and regulations are not less stringent or extensive than those required to fulfill the obligations under this Resolution.

17. The Sio and Malaba-Malakisi Consultative Forum

(1) There is hereby established the Sio and Malaba-Malakisi Consultative Forum.

(2) The purpose of the Forum is to ensure the effective involvement of water users, service providers, local communities and the general public in the decision making process and in setting development and management priorities in the basin.

(3) The Forum shall be an open and plenary body composed of national and district level officials in the following sectors:

- (a) Water Resources Management;
- (b) Agriculture;
- (c) Forestry;
- (d) Wildlife;
- (e) Tourism,
- (f) Water Supply and Sanitation;
- (g) Fisheries;
- (h) Environment;
- (i) Wetlands;
- (j) Meteorology;
- (k) Land Management;
- (l) Health;
- (m) Energy; and
- (n) Any other sector relevant to the Sio and Malaba-Malakisi sub-basins.

(4) The forum shall also be open to the participation of:

- (a) water users and water users associations,
- (b) service providers, and
- (c) the public whether as individuals or represented by civil society organizations and special interest groups,
- (d) centres of higher learning,
- (e) research institutions, and
- (f) Chambers of commerce.

(5) The Forum shall appoint its officers provided that the Operational Committee and the Secretariat shall convene the first meeting of the Forum and provide technical backstopping.

(6) The Forum may request the Operational Committee and the Secretariat to provide technical backstopping at its other meetings.

(7) The Forum shall have no power to make binding decisions.

(8) The Forum shall fund its own activities. Provided that when the Council so wishes funding may be extended from the Nile Trust Fund.

18. Funding:

(1) The principal source of funds for the framework shall be from the NBI budget and trust fund.

(2) The riparian states may make other agreed contributions to the budget of the Framework. Contributions by the riparian states shall be paid in freely convertible currency into an account or accounts established by the Framework in a banking institution of good standing

(3) The Framework may receive subventions, donations and legacies from any suitable body, whether governmental or non-governmental, provided that the terms of their use are compatible with the objectives of the Framework.

(4) The Framework shall manage all funds in accordance with the financial procedures established in the NBI.

19. Annual Report

The Executive Director shall submit annually to the Council of Ministers a report on the discharge of the Framework's duties during the preceding year. The recommendations received by the Council of Ministers from the committees, sub-committees and working groups during such year shall be appended to the annual report, along with an explanation of its response to each such recommendation.

20. Cooperation with other organizations and institutions

1. The Framework shall cooperate with other intergovernmental organizations and institutions, especially those active in the sector of fisheries, which might contribute to the work and further the objectives of

the Framework. To this end, the Executive Director, acting under the authority of the Council of Ministers, may establish working relations with such organizations or institutions and make such arrangements as may be necessary to ensure effective cooperation. Any formal agreements or memoranda of understanding proposed to be entered into with such organizations or institutions shall be subject to the approval of the Council of Ministers.

ANNEX 4B -RESOLUTION ON THE MANAGEMENT OF THE SIO AND MALABA-MALAKISI RIVERS (under EAC)

1. Citation

This Act may be cited as the Management of the Sio and Malaba Malakisi Rivers Act.

2. Definitions

(iii) Unless the context otherwise requires, the terms used in this regulation shall have the same meaning as ascribed to them in the Protocol and Treaty for the Establishment of the East African Community.

(iv) Without prejudice to paragraph 1 of this Article:

'Commission' means the Lake Victoria Basin Commission established under Article 33 of the Protocol.

"Community" means the East African Community established under the Treaty for the Establishment of the East African Community signed at Arusha on 30th November 1999;

"Council " means the Council of Ministers of the East African Community;

"Emergency" means a situation that causes or poses an imminent threat of causing serious harm to a Partner State or other States and that results suddenly from natural causes, such as floods, droughts, landslides or earthquakes, or from human conduct, such as industrial accidents or inland water transport accidents;

"Executive Secretary" means the chief executive and legal representative of the Lake Victoria Basin Commission;

"Framework" means the Sio and Malaba-Malakisi Framework established under this Act;

Fund means the Sio and Malaba-Malakisi Fund established under Section----- of this Act

"Lake Victoria Basin" means that geographical area extending within the territories of the Partner States determined by the watershed limits of the system of waters, including surface and underground waters flowing into Lake Victoria;

"Nile River Basin" means that geographical area extending across the territories of various States drained by the River Nile and its tributaries and determined by the watershed limits of the system of waters, including surface and underground waters flowing into the river Nile system and eventually into the Mediterranean Sea;

"Partner States" mean the parties to the Treaty for the Establishment of the East Africa Community;

"Protocol" means the Protocol for the Sustainable Development of the Lake Victoria Basin adopted at Arusha 20 November 2003;

"Riparian states" means the states which are drained by the Sio and Malaba-Malakisi rivers namely the Republic of Kenya and the Republic of Uganda;

"Secretary General" means the Secretary General of the East African Community;

"Secretariat" means the Secretariat of the East African Community;

Sectoral committee means the Sio and Malaba-Malakisi Sectoral committee established under Section----- of this Act

Sectoral council means the Sio and Malaba-Malakisi Sectoral council established under Section----- of this Act

"Stakeholder" means all persons, legal or natural and all other entities being governmental or non-governmental, residing, having interest or conducting business in the Basin;

"Sustainable Development" means development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs;

"Sustainable Utilisation" means use of resources by present generation, which does not impair the right of future generations to use the same to meet their needs; .

"technical committee" means the Sio and Malaba-Malakisi Technical Committee established under Section----- of this Act

"Treaty" means the Treaty for the Establishment of the East African Community signed at Arusha on 30th November 1999;

"Water Resources" means all forms of water on the surface and in the ground including the living and non-living resources therein.

(3) Words importing the masculine gender include the feminine gender.

3. *Objectives:*

The principle objectives of this Act are:

- (a) to extend the scope of the Protocol and mandate of the Lake Victoria Basin Commission to cover the Malaba-Malakisi Basin which hydrographically falls within the Lake Kyoga Basin but which would be conveniently administered by the Commission; and
- (b) to establish a common legal framework for the management of the Sio sub-basin and the Malaba – Malakisi sub-basin because of their geographical contiguity and hydrological, social and economic commonalities.

4. *Extension of the Mandate of the Commission*

(1) The territorial application of the Protocol is hereby extended to cover the Malaba-Malakisi sub-basin which hydrographically falls within the Lake Kyoga Basin but which shall be conveniently administered by the Commission.

(2) The Commission shall exercise all those powers entrusted to it under the protocol in the Malaba-Malakisi sub-basin.

5. *Establishment of the framework*

(1) The Sio and Malaba-Malakisi Cooperation Framework is hereby established (hereinafter referred to as "the Framework").

(2) The objectives of the Framework shall be to foster cooperation among the riparian states, harmonize national measures for the sustainable utilization of the living resources of the Sio and Malaba-Malakisi Sub-basins.

6. *Objectives, functions and responsibilities*

To achieve these objectives, the Framework shall have the function and responsibility to:

- a) promote the proper management and optimum utilization of the resources of the sub-basins;
- b) enhance capacity building of existing institutions and develop additional institutions dedicated to, or likely to contribute to, the purposes of this Act in cooperation with existing institutions established in or by the Community and with such international, regional or nongovernmental organizations as may be appropriate;
- c) provide a forum for discussion of the impacts of initiatives dealing with the environment and resources in the sub-basins and maintain a strong liaison with the existing bodies and programs;

- d) provide for the conduct of research concerning the water resources of sub-basin, including without limitation the quality of water resources;
- e) encourage, recommend, coordinate and, as appropriate, undertake training and extension activities in all aspects of water resource management;
- f) consider and advise on the effects of the direct or indirect introduction of any non-indigenous aquatic animals or plants into the the sub-basins and to adopt measures regarding the introduction, monitoring, control or elimination of any such animals or plants;
- g) serve as a clearing-house and data bank for information on the sub-basins and promote the dissemination of information, without prejudice to industrial property rights, by any appropriate form of publication;
- h) in respect of any or all of the foregoing, adopt budgets, seek funding, formulate plans for financial management and allocate funds to activities of the Organization, or to such activities of the Riparian states as it may determine to be in furtherance of the purposes of this Act;
- i) undertake such other functions as it may determine to be necessary or desirable in order to achieve the purposes of this Act.

7. Seat

1. The seat of the Framework shall be located within the sub-basin at -----
---- in the Republic of *Uganda/Kenya**. The Host State undertakes to accord, in respect of the Framework, its staff and its property, the privileges, immunities and facilities set out under the framework of the East African Community.

[Matter not yet decided. The two states have however agreed on the present project headquarters.]*

(2) The Council of Ministers may with the consent of a riparian state, authorize the establishment of a centre of the Framework in the territory of a riparian state.

8. The organs of the Framework

1. The organs of the Framework are:

- a) the Council of Ministers;
- b) the Sectoral Council,
- c) The Sio Malaba-Malakisi Sectoral Committee,
- d) The Sio Malaba-Malakisi Technical Committee,
- e) The Sio Malaba-Malakisi Consultative Forum,
- f) The Sio Malaba-Malakisi Secretariat,
- g) The Sio Malaba-Malakisi Trust Fund

2. The Council of Ministers may set up such committees or other subsidiary bodies as it may deem necessary for the performance of the functions of the Framework.

3. The Sectoral Council may set up such sub-committees or working groups as it may deem necessary for the work of the committees or the Sectoral council itself.

9. The Council of Ministers

The supreme body of the Framework shall be the Council of Ministers as established by the Treaty and operating in accordance with the procedures duly established under the Treaty.

10. The Sectoral Council,

The Sectoral Council established by the Protocol and operating in accordance with the procedures duly established under the Protocol shall supervise and manage all the institutions established under this Act.

11. The Sio Malaba-Malakisi Sectoral Committee,

(1) The composition of the sectoral committee shall be drawn from agencies managing the following sectors at national level of the two riparian states:

- (a) Water Resources Management;
- (b) Agriculture;
- (c) Forestry;
- (d) Wildlife;
- (e) Tourism,
- (f) Water Supply and Sanitation;
- (g) Fisheries;
- (h) Environment;
- (i) Wetlands;
- (j) Meteorology;
- (k) Land Management;
- (l) Health;
- (m) Energy; and
- (n) Any other sector relevant to the Sio Malaba-Malakisi Basins.

(2) The attendance at the Sio Malaba-Malakisi Sectoral Committee may be composed of one or more sectors provided for in sub-section (1), depending on the issue to be addressed.

(3) No session of the Sio Malaba-Malakisi Sectoral Committee shall take place unless the two riparian states are represented.

(4) At its first regular session, the Sio Malaba-Malakisi Sectoral Committee shall select a Chairman from among the national level heads of the department responsible for water resources management. He shall hold office until the next regular session and thereafter the chairmanship of the Sio Malaba-Malakisi Sectoral Committee shall rotate among the national level heads of the departments responsible for water resources management.

The Sio Malaba-Malakisi Sectoral Committee shall adopt its own Rules of Procedure.

(5) The Sio Malaba-Malakisi Sectoral Committee shall hold one regular annual session and such other special sessions as it may determine. A special session shall be called upon request by any riparian state. The Executive Secretary of the Framework shall inform the Riparian states of the date and place of any session.

(6) All decisions and recommendations of the Sio Malaba-Malakisi Sectoral Committee shall be adopted by consensus. The Council of Ministers may establish rules whereby the Sio Malaba-Malakisi Sectoral Committee may be consulted by correspondence or any rapid means of written communication, if matters of exceptional urgency requiring action by the Sio Malaba-Malakisi Sectoral Committee arise between two of its sessions.

(7) The Sectoral Committee shall:

- (a) Coordinate the activities of districts and national governments in developing the sub-basins;
- (b) Be responsible for the preparation of comprehensive implementation of programmes and the setting out of priorities for the sub-basins;
- (c) Monitor and keep under constant review the implementation of the programmes undertaken in the sub-basins;
- (d) Submit from time to time, reports and recommendations of working groups and stakeholders in the sub-basin; and
- (e) Perform such other functions as may be conferred on it by or under this Act.

(8) At each session, the Sio Malaba-Malakisi Sectoral Committee shall adopt a report, which shall be submitted to the Sectoral Council at its next session.

12. The Sio and Malaba Malakisi Technical Committee

The composition of the Technical committee shall be drawn from agencies managing the following sectors at national and district levels of the two riparian states:

- (a) Water Resources Management;
- (b) Agriculture;
- (c) Forestry;
- (d) Wildlife;
- (e) Tourism,
- (f) Water Supply and Sanitation;
- (g) Fisheries;
- (h) Environment;

- (i) Wetlands;
- (j) Meteorology;
- (k) Land Management;
- (l) Health;
- (m) Energy; and
- (n) Any other sector relevant to the Sio Malaba-Malakisi Basins.

(2) The attendance at the Sio Malaba-Malakisi Technical Committee may be composed of one or more sectors provided for in sub-section (1), depending on the issue to be addressed.

(3) No session of the Sio Malaba-Malakisi Technical Committee shall take place unless the two riparian states are represented.

(4) At its first regular session, the Sio Malaba-Malakisi Technical Committee shall select a Chairman from among the national level heads of the department responsible for water resources management. He shall hold office until the next regular session and thereafter the chairmanship of the Sio Malaba-Malakisi Technical Committee shall rotate among the national level heads of the departments responsible for water resources management. The Sio Malaba-Malakisi Technical Committee shall adopt its own Rules of Procedure.

(5) The Sio Malaba-Malakisi Technical Committee shall hold one regular annual session and such other special sessions as it may determine. A special session shall be called upon request by any two Riparian states. The Executive Secretary of the Framework shall inform the Riparian states of the date and place of any session.

(6) All decisions and recommendations of the Sio Malaba-Malakisi Technical Committee shall be adopted by consensus. The Council of Ministers may establish rules whereby the Sio Malaba-Malakisi Technical Committee may be consulted by correspondence or any rapid means of written communication, if matters of exceptional urgency requiring action by the Sio, Malaba-Malakisi Technical Committee arise between two of its sessions.

(7) The Technical Committee shall:

- (a) gather information relevant to the state of the resources of the sub-basins;
- (b) discuss ways and means of finding solutions to local problems affecting the basin;
- (c) monitor and evaluate the implementation of the Framework's programmes and projects in the sub-basins;
- (d) disseminate information to the population regarding the sustainable utilization of the resources of the sub-basins;

(e) carry out any tasks assigned by the Council, the sectoral Council , or the Sectoral Committee under this Act; and

(f) perform any other functions incidental or relevant to the above functions.

12. The Permanent Secretariat

The Framework shall have a Permanent Secretariat appointed in accordance with the Protocol, under the authority of the Executive Secretary appointed under the Protocol.

13. Observers

(1) States indirectly concerned with the living resources and the quality of the water resources of the Sio and Malaba-Malakisi sub-basins may, upon application, be granted observer status by the Council of Ministers.

Observer States may participate, without right to vote, in meetings of all the statutory bodies of the Framework.

(2) Any other State interested in the activities of the Framework may, apply to the Sectoral Committee be represented by an observer at a session of the Sectoral Committee. It may submit memoranda and with the permission of the Chairman, participate without vote in the discussions.

(3) The Sectoral council may invite intergovernmental, non-governmental organisation or any other entity having special competence in the field of the Framework's activities to attend such sessions as the Sectoral Committee may specify.

14. National measures

The Riparian states hereby agree to take all necessary measures including legislative measures when appropriate, in accordance with their respective constitutional procedures and national laws, to implement the decisions of the Framework's statutory bodies.

Provided that such national laws and regulations are not less stringent or extensive than those required to fulfill the obligations under this Act.

15. The Sio and Malaba-Malakisi Consultative Forum

(1) There is hereby established the Sio and Malaba-Malakisi Consultative Forum.

(2) The purpose of the Forum is to ensure the effective involvement of water users, service providers, local communities and the general public in the decision making process and in setting development and management priorities in the basin.

(3)The Forum shall be an open and plenary body composed of national and district level officials in the following sectors:

- (a) Water Resources Management;
- (b) Agriculture;
- (c) Forestry;
- (d) Wildlife;
- (e) Tourism,
- (f) Water Supply and Sanitation;
- (g) Fisheries;
- (h) Environment;
- (i) Wetlands;
- (j) Meteorology;
- (k) Land Management;
- (l) Health;
- (m) Energy; and
- (n) Any other sector relevant to the Sio and Malaba-Malakisi sub-basins.

(4) The forum shall also be open to the participation of:

- (a) water users and water users associations,
- (b) service providers, and
- (c) the public whether as individuals or represented by civil society organizations and special interest groups,
- (d) centres of higher learning,
- (e) research institutions, and
- (f) Chambers of commerce.

(5) The Forum shall appoint its officers provided that the Technical Committee and the Secretariat shall convene the first meeting of the Forum and provide technical backstopping.

(6) The Forum may request the Technical Committee and the Secretariat to provide technical backstopping at its other meetings.

(7) The Forum shall have no power to make binding decisions.

(8) The Forum shall fund its own activities. Provided that when the Council so wishes funding may be extended from the Sio and Malaba-Malakisi Fund.

THE SIO AND MALABA-MALAKISI FUND

16. *Establishment of the fund.*

(1) There is established a fund to be known as the Sio and Malaba-Malakisi Fund.

(2) The principal source of funds for the fund shall be from the East African Community budget.

(3) The riparian states may make other agreed contributions to the budget of the Framework. Contributions by the riparian states shall be paid in freely

convertible currency into an account or accounts established by the Framework in a banking institution of good standing

(4) The Framework may receive subventions, donations and legacies from any suitable body, whether governmental or non-governmental, provided that the terms of their use are compatible with the objectives of the Framework.

17. Administration of the fund.

(1) The Sectoral Council shall be responsible for the administration of the fund.

(2) The day-to-day management of the fund shall be performed by the Executive Secretary.

(3) The Sectoral Council may authorise the Executive Secretary to make such withdrawals as necessary to fulfill the functions of the Framework.

(4) The Council of Ministers may determine from time to time procedures governing the disbursement of funds under the control of the Sectoral Council.

18. Duty to operate on sound financial principles; investment and borrowing powers.

(1) The Sectoral Council in discharging its duties in relation to the fund shall perform its functions in accordance with sound financial and commercial practice and shall ensure that as far as possible revenue is sufficient to meet expenditure.

(2) The Sectoral Council may invest monies from the fund in conformity with good commercial practice.

(3) The Sectoral Council may borrow monies for the purposes of the fund.

19. Budget of the Framework.

(1) The Executive Secretary shall prepare and submit to the Sectoral Council for discussion and transmission for approval by the Council of Ministers estimates of the income and expenditure of the Framework for the next year, three months before the beginning of the year.

(2) The Executive Secretary may prepare estimates supplementary to the current estimates under subsection (1) and submit them to the Sectoral Council for approval.

(3) No expenditure shall be made out of funds of the Framework unless that expenditure is part of the approved annual estimates or estimates supplementary to those estimates. .

20. Accounts of the fund.

(1) The Sectoral Council shall cause to be kept proper books and other records of account in respect of receipts and expenditures of the fund.

(2) The accounts of the fund shall be audited in accordance with the procedures established by the community.

(3) The Sectoral Council shall cause to be prepared, as soon as practicable, but not later than ninety days after the end of the financial year, an annual report on all the financial transactions of the fund.

(4) The report under subsection (3) shall include a balance sheet, an income and expenditure account and the annual report and shall be laid by the Secretary General before the East African Legislative Assembly.

21. Financial year

The financial year of the fund shall be the period of twelve months ending on the 30th June in each year.

22. Annual Report

The Executive Secretary shall submit annually to the Sectoral Council a report on the discharge of the Framework's duties during the preceding year. The recommendations received by the Sectoral Council from the committees, sub-committees and working groups during such year shall be appended to the annual report, along with an explanation of its response to each such recommendation.

23. Cooperation with other organizations and institutions

1. The Framework shall cooperate with other intergovernmental organizations and institutions, especially those active in the sector of fisheries, which might contribute to the work and further the objectives of the Framework. To this end, the Executive Secretary, acting under the authority of the Sectoral council, may establish working relations with such organizations or institutions and make such arrangements as may be necessary to ensure effective cooperation. Any formal agreements or memoranda of understanding proposed to be entered into with such organizations or institutions shall be subject to the approval of the Council of Ministers.

ANNEX 5 - REGULATIONS FOR THE EXCHANGE OF INFORMATION IN THE SIO, MALABA-MALAKISI BASIN

COMMENTARY

The requirement that watercourse states regularly exchange data and information about the condition of a shared watercourse is no longer a matter of will but one of legal obligation. This obligation originates from customary international law and has since been included in the Convention on the Law of the Non-Navigational Uses of International Watercourses of 1997. The obligation has also been included in the Protocol for the Sustainable Development of Lake Victoria of 2003. Article 24 provides for the exchange of data and information:

“1. The Partner States shall, on a regular basis, exchange readily available and relevant data and information on existing measures and on the condition of the natural resources of the Basin, where possible in a form that facilitates its utilization by the Partner States to which it is communicated.

2. A Partner State that is requested by another Partner State to provide data or information which is not readily available, shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting Partner State of the reasonable costs of collecting and, where appropriate, processing such data or information.

3. The Partner States shall also provide an environment that is conducive for facilitating collaboration in research and the exchange of data, reports and information among stakeholders belonging to Partner States in the Basin through the Commission.

4. The exchange of information and data shall not extend to information protected under any law of a Partner State or an international treaty to which the Partner State is a party.”

The Protocol has entered into force. The Protocol also provides for exchange of information concerning planned measures in Article 13 as follows:

“1. A Partner State shall notify other Partner States and the Secretariat of planned activities within its territory that may have adverse effects upon those other Partner States.

2. The notifying Partner State shall provide technical data and information concerning the planned project to enable the notified Partner States to evaluate the effects of the planned measures.

3. The notification shall be followed by consultation among the Partner States in respect of the planned measures.

4. The notifying Partner State shall take into account the interest of the other Partner States in developing the planned measures.”

The following regulations only attempt to clarify and detail the procedures for both regular exchange of information and notification concerning planned measures within the institutional framework of the East African Community. In developing these Regulations, recourse has been had to other international instruments on the exchange of information. The highly developed procedures on notification of planned measures under the 1997 Watercourses Convention have been used in the same regard.

These regulations also cover other areas which require exchange of information such as equitable and reasonable utilization, the transboundary aspects of EIA, environmental audits, emergencies and disasters.

It is proposed that these regulations be adopted by way of regulations adopted by the Council of Ministers under Article 14(d) of the Treaty for the Establishment of the East African Community, 1999.

Part I: Preliminary

Article 1

Definitions

1) Unless the context otherwise requires, the terms used in these Regulations shall have the same meaning as ascribed to them in the Treaty for the Establishment of the East African Community, 1999 and the Protocol for the Sustainable Development of Lake Victoria of 2003.

2) Without prejudice to paragraph 1 of this Article:

“Basins” means the Basins of the Sio River and the Malaba-Malakisi River;

“Commission” means the Lake Victoria Basin Commission established under Article 33 of the Protocol.

“Community” means the East African Community established under the Treaty for the Establishment of the East African Community signed at Arusha on 30th November 1999;

“Council” means the Council of Ministers of the East African Community;

“Emergency” means a situation that causes or poses an imminent threat of causing serious harm to a Partner State or other States and that results suddenly from natural causes, such as floods, droughts, landslides or earthquakes, or from human conduct, such as industrial accidents or inland water transport accidents;

“Nile River Basin” means that geographical area extending across the territories of various States drained by the River Nile and its tributaries and determined by the watershed limits of the system of waters, including surface and underground waters flowing into the river Nile system and eventually into the Mediterranean Sea;

“Partner States” means the parties to the Treaty for the Establishment of the East Africa Community namely, the Republic of Burundi, the Republic of Kenya, the Republic of Rwanda, the Republic of Uganda and the United Republic of Tanzania;

“Protocol” means the Protocol for the Sustainable Development of Lake Victoria of 2003;

“Sectoral Council” means the Sectoral Council for Lake Victoria established under Article 35 of the Protocol;

“Secretariat” means the Secretariat of the East African Community;

“Stakeholder” means all persons, legal or natural and all other entities being governmental or non-governmental, residing, having interest or conducting business in the Basin;

“Sustainable Development” means development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs;

“Sustainable Utilisation” means use of resources by present generation, which does not impair the right of future generations to use the same to meet their needs;

“Treaty” means the Treaty for the Establishment of the East African Community signed at Arusha on 30th November 1999;

“Water Resources” means all forms of water on the surface and in the ground including the living and non-living resources therein.

Article 2

Application of the Regulation

This Regulation shall govern the Partner States’ Cooperation in the exchange of information and notification of planned measures in the Sio, and Malaba-Malakisi Basins.

Part II: Regular exchange of information

Article 3

Regular exchange of data and information

1. Partner states shall on a regular basis exchange readily available data and information on the condition of the watercourse.
2. If a partner state is requested by another partner state to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting State of the reasonable costs of collecting and, where appropriate, processing such data or information.
3. Partner states shall employ their best efforts to collect and, where appropriate, to process data and information in a manner, which facilitates its utilization by the other partner states to which it is communicated.
4. With respect to the condition of the water resources of the Sio, Malaba-Malakisi Rivers in their territory, each Partner state shall exchange information directly or through the Lake Victoria Basin Commission.

Article 4

Functions of the Commission

1. Where information is communicated through the Commission, the Commission shall forthwith communicate the information to the other partner States.
2. Upon the request of the Partner state making the communication, the Commission shall forthwith communicate the information to relevant international organizations.
3. The Commission shall maintain:
 - a) a website for information about the basins which shall be available to the public; and
 - b) a website for information about the basin which partner states have provided on the basis of confidentiality only accessible to the partner states.

Article 5

Information to be communicated

1. The information and data to be communicated under this instrument shall comprise the following information data as then available to the notifying Partner state:
 - a) Geographic, hydrological, climatic, Hydro-graphic digital elevation map (terrain); hydrographic river/lake network;
 - b) The socio-economic and administrative data including district boundaries; tribal and ethnic groups; population density and composition; public health statistics by disease; health centers, hospitals; main industries; education and income levels; current and future water and energy use and availability; and other socio-economic indicators;
 - c) Hydro-meteorological data including rainfall, temperature, evaporation, solar radiation, stream flow; borehole data, and rating curves;
 - d) The population dependent on the water resources in each Basin State;
 - e) The effects of the use or uses of the water resources in one Basin State on other Basin States;
 - f) Existing and potential infrastructure and development projects including transportation system, electrical grid, water and waste water treatment plants, water distribution systems, and sewer systems;
 - g) Conservation, protection, development and economy of use of the water resources and the costs of measures taken to that effect;

- h) The availability of alternatives, of comparable value, to a particular planned or existing use.
- i) Documents from Environmental Impact Assessment for projects with transboundary impacts including impact statements and project briefs
- j) Audit reports
- k) Environmental and ecological data including water quantity and quality data, sediment loads, pollution loads, fishery information; and biodiversity data;
- l) Information about emergencies and disasters
- m) Management plans
- n) Land use data including urban areas; regional growth centers; settlements; large scale agricultural developments; forests; wetlands; and national parks; and
- o) Agricultural data including soil types and stratification, agricultural areas by crop type, yields, cattle farms and aquaculture ponds.

2. Such information shall be supplemented at appropriate intervals by further relevant information on the development of the water resources.

3. Information received under this instrument may be used without restriction, except when such information is provided in confidence by the notifying Partner state.

**Article 6
Consultations**

A Partner state providing information under this instrument shall, as far as is reasonably practicable, respond promptly to a request for further information or consultations sought by a Partner state.

**Article 7
Competent authorities and points of contact**

1. Each Partner state shall make known to the Commission and to other partner States, directly or through the Commission, its competent authorities and point of contact responsible for issuing and receiving the notifications under this instrument. Such points of contact and a focal point within the Commission shall be available continuously.

2. Each Partner state shall promptly inform the Commission of any changes that may occur in the information referred to in paragraph 1.

3. The Commission shall maintain an up-to-date list of such national authorities and points of contact as well as points of contact of relevant international organizations and shall provide it to Partner States and to relevant international organizations.

Article 8

Mode of information delivery

1. Geo-referenced or spatially distributed data shall be provided in ARC-GIS format.
2. Temporal data shall be provided in EXCEL format.
3. Temporal data shall provide the location in terms of longitude and latitude of the stations.

Article 9

Development of policies and laws

The partner states shall develop and communicate any policies and laws regarding availability of data and information.

Part III: Exchange of Information Concerning Planned Measures

Article 10

Information concerning planned measures

Partner states shall exchange information and consult each other and, if necessary, negotiate on the possible effects of planned measures on the condition of the basins.

Article 11

Notification concerning planned measures with possible adverse effects

Before a partner state implements or permits the implementation of planned measures, which may have a significant adverse effect upon other partner states, it shall provide those States with timely notification thereof. Such notification shall be accompanied by available technical data and information, including the results of any environmental impact assessment, in order to enable the notified States to evaluate the possible effects of the planned measures.

Article 12

Period for reply to notification

Unless otherwise agreed:

(a) A partner state providing a notification under article 11 shall allow the notified States a period of six months within which to study and evaluate the possible effects of the planned measures and to communicate the findings to it;

(b) This period shall, at the request of a notified State for which the evaluation of the planned measures poses special difficulty, be extended for a further period of six months.

Article 13

Obligations of the notifying State during the period for reply

During the period referred to in article 12, the notifying State:

(a) Shall cooperate with the notified States by providing them, on request, with any additional data and information that is available and necessary for an accurate evaluation; and

(b) Shall not implement or permit the implementation of the planned measures without the consent of the notified States.

Article 14

Reply to notification

The notified States shall communicate their findings to the notifying State as early as possible within the period applicable pursuant to Article 12. If a notified State finds that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 15 of the Protocol, it shall attach to its finding a documented explanation setting forth the reasons for the finding.

Article 15

Absence of reply to notification

1. If, within the period applicable pursuant to article 12, the notifying State receives no communication under article 14, it may, subject to its obligations under articles 5 and 15 of the Protocol, proceed with the implementation of the planned measures, in accordance with the notification and any other data and information provided to the notified States.

2. Any claim to compensation by a notified State which has failed to reply within the period applicable pursuant to article 12 may be offset by the costs incurred by the notifying State for action undertaken after the expiration of the time for a reply which would not have been undertaken if the notified State had objected within that period.

Article 16

Consultations and negotiations concerning planned measures

1. If a communication is made under article 14 that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 15 of the Protocol, the notifying State and the State making the communication shall enter into consultations and, if necessary, negotiations with a view to arriving at an equitable resolution of the situation.

2. The consultations and negotiations shall be conducted on the basis that each State must in good faith pay reasonable regard to the rights and legitimate interests of the other State.

3. During the course of the consultations and negotiations, the notifying State shall, if so requested by the notified State at the time it makes the communication, refrain from implementing or permitting the implementation of the planned measures for a period of six months unless otherwise agreed.

Article 17

Procedures in the absence of notification

1. If a partner state has reasonable grounds to believe that another partner state is planning measures that may have a significant adverse effect upon it, the former State may request the latter to apply the provisions of Article 11. The request shall be accompanied by a documented explanation setting forth its grounds.

2. In the event that the State planning the measures nevertheless finds that it is not under an obligation to provide a notification under article 13, it shall so inform the other State, providing a documented explanation setting forth the reasons for such finding. If this finding does not satisfy the other State, the two States shall, at the request of that other State, promptly enter into consultations and negotiations in the manner indicated in paragraphs 1 and 2 of Article 16.

3. During the course of the consultations and negotiations, the State planning the measures shall, if so requested by the other State at the time it requests the initiation of consultations and negotiations, refrain from implementing or permitting the implementation of those measures for a period of six months unless otherwise agreed.

Article 18

Urgent implementation of planned measures

1. In the event that the implementation of planned measures is of the utmost urgency in order to protect public health, public safety or other equally important interests, the State planning the measures may, subject to articles 5 and 15 of the Protocol, immediately proceed to implementation, notwithstanding the provisions of article 13 and paragraph 3 of article 16.

2. In such case, a formal declaration of the urgency of the measures shall be communicated without delay to the other partner states referred to in article 13 together with the relevant data and information.

3. The State planning the measures shall, at the request of any of the States referred to in paragraph 2, promptly enter into consultations and negotiations with it in the manner indicated in paragraphs 1 and 2 of article 16.

REGULATIONS FOR THE EXCHANGE OF INFORMATION IN THE SIO, MALABA-MALAKISI BASINS UNDER THE NBI

Part I: Preliminary

Article 1

Definitions

1) Unless the context otherwise requires, the terms used in these Regulations shall have the same meaning as ascribed to them in the Official documents approved by the Council of Ministers of the Nile Basin Initiative.

2) Without prejudice to paragraph 1 of this Article:

“Basins” means the Basins of the Sio River and the Malaba-Malakisi River;

“Council” means the Council of Ministers of the Nile Equatorial Lakes Subsidiary Action Programme;

“Emergency” means a situation that causes or poses an imminent threat of causing serious harm to a Basin State or other States and that results suddenly from natural causes, such as floods, droughts, landslides or earthquakes, or from human conduct, such as industrial accidents or inland water transport accidents;

“Nile River Basin” means that geographical area extending across the territories of various States drained by the River Nile and its tributaries and determined by the watershed limits of the system of waters, including surface and underground waters flowing into the river Nile system and eventually into the Mediterranean Sea;

“Basin States” means the Republic of Kenya, and the Republic of Uganda as basin of the Sio River and the Malaba-Malakisi River;

“Secretariat” means the Secretariat of the Nile Basin Initiative;

“Stakeholder” means all persons, legal or natural and all other entities being governmental or non-governmental, residing, having interest or conducting business in the Basin;

“Sustainable Development” means development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs;

“Sustainable Utilisation” means use of resources by present generation, which does not impair the right of future generations to use the same to meet their needs;

“Water Resources” means all forms of water on the surface and in the ground including the living and non-living resources therein.

Article 2

Application of the Regulation

This Regulation shall govern the Basin States’ Cooperation in the exchange of information and notification of planned measures in the Sio, and Malaba-Malakisi Basins.

Part II: Regular exchange of information

Article 3

Regular exchange of data and information

1. Basin States shall on a regular basis exchange readily available data and information on the condition of the watercourse.
2. If a Basin State is requested by another Basin State to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting State of the reasonable costs of collecting and, where appropriate, processing such data or information.
3. Basin States shall employ their best efforts to collect and, where appropriate, to process data and information in a manner, which facilitates its utilization by the the other basin state to which it is communicated.
4. With respect to the condition of the water resources of the Sio, Malaba-Malakisi Rivers in their territory, each Basin State shall exchange information directly or through the Nile Basin Initiative Secretariat.

Article 4

Functions of the Secretariat

1. Where information is communicated through the Secretariat, the Secretariat shall forthwith communicate the information to the the other basin state.
2. Upon the request of the Basin State making the communication, the Secretariat shall forthwith communicate the information to relevant international organizations.
3. The Secretariat shall maintain:
 - a) a website for information about the basins which shall be available to the public; and

- b) a website for information about the basin which Basin States have provided on the basis of confidentiality only accessible to the Basin States.

Article 5

Information to be communicated

- 2. The information and data to be communicated under this instrument shall comprise the following information data as then available to the notifying Basin State:
 - (i) Geographic, hydrological, climatic, Hydro-graphic digital elevation map (terrain); hydrographic river/lake network;
 - (ii) The socio-economic and administrative data including district boundaries; tribal and ethnic groups; population density and composition; public health statistics by disease; health centers, hospitals; main industries; education and income levels; current and future water and energy use and availability; and other socio-economic indicators;
 - (iii) Hydro-meteorological data including rainfall, temperature, evaporation, solar radiation, stream flow; borehole data, and rating curves;
 - (iv) The population dependent on the water resources in each Basin State;
 - (v) The effects of the use or uses of the water resources in one Basin State on the other basin state;
 - (vi) Existing and potential infrastructure and development projects including transportation system, electrical grid, water and waste water treatment plants, water distribution systems, and sewer systems;
 - (vii) Conservation, protection, development and economy of use of the water resources and the costs of measures taken to that effect;
 - (viii) The availability of alternatives, of comparable value, to a particular planned or existing use.
 - (ix) Documents from Environmental Impact Assessment for projects with transboundary impacts including impact statements and project briefs
 - (x) Audit reports

- (xi) Environmental and ecological data including water quantity and quality data, sediment loads, pollution loads, fishery information; and biodiversity data;
- (xii) Information about emergencies and disasters
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- (xv) Agricultural data including soil types and stratification, agricultural areas by crop type, yields, cattle farms and aquaculture ponds.

2. Such information shall be supplemented at appropriate intervals by further relevant information on the development of the water resources.

3. Information received under this instrument may be used without restriction, except when such information is provided in confidence by the notifying Basin State.

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A Basin State providing information under this instrument shall, as far as is reasonably practicable, respond promptly to a request for further information or consultations sought by a Basin State.

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1. Each Basin State shall make known to the Secretariat and to the other Basin State, directly or through the Secretariat, its competent authorities and point of contact responsible for issuing and receiving the notifications under this instrument. Such points of contact and a focal point within the Secretariat shall be available continuously.

2. Each Basin State shall promptly inform the Secretariat of any changes that may occur in the information referred to in paragraph 1.

3. The Secretariat shall maintain an up-to-date list of such national authorities and points of contact as well as points of contact of relevant international organizations and shall provide it to Basin States and to relevant international organizations.

Article 8 Mode of information delivery

1. Geo-referenced or spatially distributed data shall be provided in ARC-GIS format.

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Unless otherwise agreed:

(a) A Basin State providing a notification under article 11 shall allow the notified State a period of six months within which to study and evaluate the possible effects of the planned measures and to communicate the findings to it;

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1. If, within the period applicable pursuant to article 12, the notifying State receives no communication under article 14, it may, subject to its obligations under articles 5 and 15 of the Protocol, proceed with the implementation of the planned measures, in accordance with the notification and any other data and information provided to the notified State.

2. Any claim to compensation by a notified State which has failed to reply within the period applicable pursuant to article 12 may be offset by the costs incurred by the notifying State for action undertaken after the expiration of the time for a reply which would not have been undertaken if the notified State had objected within that period.

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1. If a communication is made under article 14 that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 15 of the Protocol, the notifying State and the State making the communication shall enter into consultations and, if necessary, negotiations with a view to arriving at an equitable resolution of the situation.

2. The consultations and negotiations shall be conducted on the basis that each State must in good faith pay reasonable regard to the rights and legitimate interests of the other State.

3. During the course of the consultations and negotiations, the notifying State shall, if so requested by the notified State at the time it makes the communication, refrain from implementing or permitting the implementation of the planned measures for a period of six months unless otherwise agreed.

Article 17

Procedures in the absence of notification

1. If a Basin State has reasonable grounds to believe that another Basin State is planning measures that may have a significant adverse effect upon it, the former State may request the latter to apply the provisions of Article 11. The request shall be accompanied by a documented explanation setting forth its grounds.
2. In the event that the State planning the measures nevertheless finds that it is not under an obligation to provide a notification under article 13, it shall so inform the other State, providing a documented explanation setting forth the reasons for such finding. If this finding does not satisfy the other State, the two States shall, at the request of that other State, promptly enter into consultations and negotiations in the manner indicated in paragraphs 1 and 2 of Article 16.
3. During the course of the consultations and negotiations, the State planning the measures shall, if so requested by the other State at the time it requests the initiation of consultations and negotiations, refrain from implementing or permitting the implementation of those measures for a period of six months unless otherwise agreed.

Article 18

Urgent implementation of planned measures

1. In the event that the implementation of planned measures is of the utmost urgency in order to protect public health, public safety or other equally important interests, the State planning the measures may, subject to articles 5 and 15 of the Protocol, immediately proceed to implementation, notwithstanding the provisions of article 13 and paragraph 3 of article 16.
2. In such case, a formal declaration of the urgency of the measures shall be communicated without delay to the the other basin state referred to in article 13 together with the relevant data and information.
3. The State planning the measures shall, at the request of any of the State referred to in paragraph 2, promptly enter into consultations and negotiations with it in the manner indicated in paragraphs 1 and 2 of article 16.

ANNEX 6 - NILE BASIN STAKEHOLDER PARTICIPATION MODEL

INFORM	CONSULT	ENGAGE	COLLABORATE	EMPOWER
Goal:	Goal:	Goal:	Goal:	Goal:
Promote stakeholder understanding of issues, problems alternatives, opportunities and solutions through balanced and objective information	Obtain feedback on analysis, alternatives, and decisions.	Work directly with stakeholders to ensure that their concerns and aspirations are understood and considered.	Stakeholders become partners in each aspect of the decision, including development of alternatives and identification of preferred solution.	Final decision-making in the hands of stakeholders.
Commitment	Commitment	Commitment	Commitment	Commitment
“Will keep you informed.”	“As keep you informed, Will listen and acknowledge your concerns and aspirations	“Will work with you to ensure that your concerns/aspirations are directly reflected in the developed alternatives and Will provide feedback on how your input influenced the decision.”	“Will look to you for direct advice and innovation in devising solutions and incorporate your advice and recommendations to the maximum extent.”	“Will implement what you decide.”
Tactics/Techniques	Tactics/Techniques	Tactics/Techniques	Tactics/Techniques	Tactics/Techniques
<ul style="list-style-type: none"> ✓ Fact Sheets ✓ Websites ✓ Open Houses ✓ Briefings 	<ul style="list-style-type: none"> ✓ Public comment ✓ Focus groups ✓ Surveys ✓ Public meetings 	<ul style="list-style-type: none"> ✓ Workshops ✓ Deliberate polling 	<ul style="list-style-type: none"> ✓ Citizen Advisory Committees ✓ Consensus-building ✓ Participatory decision-making 	<ul style="list-style-type: none"> ✓ Citizen juries ✓ Ballots ✓ Delegated decisions

ANNEX 7 – SMM STAKEHOLDER GROUPS

The main stakeholder groups in the SMM basin identified during the study included Government Agencies, District Authorities, NGOs, CBOs, Special interest groups, Local community groups, etc. Details of the roles of the different stakeholder groups are given in the Tables below.

Uganda:

Stakeholder	Mandate, Role & Activities
NAADS	NAADS is a Government of Uganda rural development programme whose mission is to increase farmer access to information; knowledge and technology for increased agricultural productivity and profitability. NAADS activities are implemented in all the Ugandan districts within the SMM basin.
UWA	The Uganda Wildlife Authority (UWA) is responsible for the management of all game reserves and national parks in Uganda. UWA is also mandated to identify and declare wildlife conservation areas and prepare for each wildlife-protected area a comprehensive management plan.
MERECAP	The Mt. Elgon Regional Conservation Programme (MERECAP) is promoting tourism, conservation and management of natural resources within Mt. Elgon Ecosystem by actively supporting district environment action plans in Uganda and Kenya. MERECAP desires to work in close collaboration with NELSAP in the implementation of activities in the SMM basin that relate to the Mt. Elgon ecosystem.
NTEAP	The Nile Transboundary Environmental Action Project (NTEAP) is designed to support the development of a basin-wide framework for actions to address high-priority trans-boundary environmental issues in the Nile basin. Actions on the ground in the SMM basin include a Micro-grant (< \$25,000) Program for NGOs, CBOs, and youth and women groups for improved local land management, water weed control, soil conservation, and land and water degradation control. The activities are implemented at community and village levels.

Stakeholder	Mandate, Role & Activities
Eastern Umbrella Organization for Water & Sanitation (EUOWS)	EUOWS is responsible for supporting and strengthening the performance of water supply and sanitation boards/water user committees to operate and maintain piped water systems in rural growth centers, small towns and gravity schemes within the SMM Ugandan districts.
NEMA	NEMA is the principal agency in Uganda for management of the Environment. Its mandate is to coordinate, monitor and supervise all environmental related activities in Uganda.
NFA	The management and conservation of forests in Uganda fall under the mandate of the National Forest Authority (NFA).
LVEMP	The LVEMP is a comprehensive program whose main objective is the rehabilitation of the Lake Victoria ecosystem—using a regional transboundary approach—for the benefit of the inhabitants and national economies. The project addresses the major threats facing the Lake Victoria ecosystem, including over-fishing, eutrophication, pollution and invasive exotic species such as the water hyacinth. A follow-up project (Sustainable Management of the Lake Victoria Basin Program, SMLVBP) has been approved and its implementation is due to commence shortly. SMLVBP assumes specific relevance to SMM Project since River Sio drains into Lake Victoria. SMLVBP will be a primary vehicle for Bank support to NBI under all SAP investment in the Lake Victoria Basin
LVBC	The <i>Protocol for the Sustainable Development of the Lake Victoria Basin</i> establishes the Lake Victoria Basin Commission as the entity entrusted to manage the Lake Victoria basin and to coordinate activities related to the sustainable development and conservation of the basin's water resources.
NWSC	The National Water and Sewerage Corporation is responsible for provision of piped water and sewerage services in the major towns in Uganda, on a financially self-sufficient basis. Within the project area, NWSC provides these services to Tororo, Mbale and Malaba towns. NWSC operations are adversely affected by the high costs of treating heavily polluted water drawn from the River Malaba.
Directorate of	DWRM is the lead agency responsible for the management of Uganda's water resources.

Stakeholder	Mandate, Role & Activities
Water Resources Management (DWRM)	
Directorate of Water Development (DWD)	DWD is the lead agency responsible for coordinating and regulating all water supply and sanitation activities and provision of technical support services to local Governments and other service providers in the water sector.
Wetlands Inspection Division (WID)	The WID is the lead agency for the management of wetlands in Uganda. WID also provides technical support and guidance to the local Governments in the management of wetlands in their areas of jurisdiction.
Local Governments (LGs)	The Local Government Act (1997) mandates LGs to take responsibility for the provision of water supply and sanitation services within their areas of jurisdiction. LGs receive grant funding from the central government and also mobilize local resources for implementing rural WSS programmes and to support small town WSS. LGs also appoint and manage private operators for urban schemes outside the jurisdiction of NWSC. The districts of Manafwa, Bududa, Tororo, Busia, Bugiri, Namutumba and Butaleja are the relevant local government authorities in the Ugandan part of the SMM basin.
Town/Municipal Councils	Town Councils within the project area are Busia, Bugiri, Tororo, and Malaba. These constitute the Urban Water Authorities for core areas within the towns and are responsible for Water Supply & Sanitation issues within their areas of jurisdiction. They also have the mandate to plan and coordinate on-site sanitation improvements, develop and enforce bye-laws for non-piped water supply, household & sanitation practices, and monitor performance of private operators and contractors.
UWASNET	The Uganda Water and Sanitation Network of NGOs (UWASNET) is responsible for the coordination of NGOs involved in the management, development and protection of Uganda's Water Resources.
MAAIF	MAAIF is mandated to provide technical advice and support in designing and maintenance of farm structures, water use for irrigation schemes, fish ponds etc.

Stakeholder	Mandate, Role & Activities
ECOTRUST	Environmental Conservation Trust (Uganda) is active in the Districts of Manafwa and Bududa. However its support for CBOs to implement environmental management activities is dwindling.
JICA	JICA is a collaborating partner in the Agriculture and Water Sectors. JICA is active in Bugiri and Namutumba Districts.
FAO	FAO through its “Nile Basin Water Resources Project” is supporting the following activities that are relevant to SMM basin; <ul style="list-style-type: none"> • Upgrading of station 81269 in lower Sio • Establishment of geo-referenced databases in a standardized format • Updating databases for the Nile DST • Training in various aspects of water resources management
Nile Basin Discourse	This is an independent initiative of civil society and NGOS concerned with the development of the Nile Basin, primarily through the NBI. The key objective of the Discourse is promotion of dialogue, discussion and sharing of views on development in the Nile Rivers Basin between all actors concerned.

Kenya:

Stakeholders	Mandate, Role & Activities
Ministry of Water and Irrigation	Policy formulation, water sector coordination and guidance
Water Resources Management Authority	Responsible for the sustainable management of water resources
Ministry of Agriculture/Department of Agriculture	Provide technical extension services and related logistics on crop development, food security, land reclamation, river riparian land protection and farmers training
Ministry of Livestock and Fisheries Development/Department of Livestock Development	Provide extension services and related logistics on livestock development and farmers training
Ministry of Livestock and Fisheries	Provision of technical extension services and related logistics on fish

Development/Fisheries Department	farming and fish movement control
Department of Forestry	Protection of water resources towers
NEMA	Supervision, coordination and oversight of all matters relating to the environment
Ministry of Water and Irrigation/Department of Irrigation	Promotion of small scale irrigation projects, provision of technical services to the farmers and establishment of water users associations
Department of Public Health	Awareness creation on preventive health
Ministry of Lands/Department of Lands	Land administration and registration
Provincial Administration	Community mobilization and security
Ministry of Culture, Gender, Sports and Social Services/Department of Social Services	Community Mobilization, registration of societies
LVEMP	Partners in water resources management, provision of water resources management data and information
LVNWSB	Provision of domestic and industrial water supplies and sanitation services through Water Service Providers
KWS (Mt. Elgon District)	Protection of water catchment areas
LBDA	Water resources management and provision of water resources management data and information
Individual farmers	Food production and resource management
British American Tobacco Ltd. (BAT Ltd) (Teso District)	Provision of technical crop specific support services; social and physical infrastructure development and marketing avenues for tobacco leaves
Mastermind Tobacco Ltd (Teso District)	Provision of technical crop specific support services; social and physical infrastructure development and marketing avenues for tobacco leaves
Teso –Sugar Company (Teso District)	Provides technical crop specific support services;
Busia Sugar Company (Busia District)	Provides technical crop specific support services; social and physical infrastructure development and marketing avenues for sugarcane

Kenya Seed Co. Ltd	Provision of certified seeds and the production of horticultural seeds
International Christian Society (ICS)	Provision of farmers training services and farm inputs to community groups; spring protection
Christian Community Services (CCS)	Provision of farmers training services and farm inputs to community groups
Swedish International Development Agency (Sida)	Funding source for National Agriculture and Livestock Extension Programme (NALEP)
Community Based Organisations	Provision of capacity building to the local communities and promotional activities
IUCN (Mt. Elgon)	Responsible for the overall technical coordination and supervision of the Mt. Elgon Regional Ecosystem Conservation Programme
Catholic Church (Catholic Diocese of Bungoma)	Spring protection, provision of rain water harvesting tanks, drilling of boreholes and shallow wells.
Other NGOs	Provision of capacity building; promotional activities; Micro-financing; Farmers training

ANNEX 8 – SMM STAKEHOLDER CONSULTATION MEETINGS

District/Agency	Persons met/Designation	Summary of issued discussed
Bugiri	Mulengani Moses – District Planner	Indicated little awareness of SMM Project. Confirmed that all issues in the District are well articulated within the DDP and urged us to review it extensively
	Omunyakol – District Water Officer	
Namutumba	Namasoke – District Planner	Ongoing activities in Namutumba include wetland inventory, initial studies to promote irrigation by JICA. The district is overwhelmingly understaffed. Access to water is a big issue. Boreholes are reportedly dry up. No office infrastructure. CBOs in the area mentioned as Busiki Multi-purpose Development Association and Youth Alive. Their activities are community mobilization and promotion of environment and sanitation awareness among youths.
	Lwanga Samwiri – Development Office	
Butaleja	Taata Sam – Senior Planner	Only 40% of established positions are filled, Planning unit lacks an information database. 40 % of water committees are defunct. Many unregistered users of water exists e.g. Busolwe Hospital, Busolwe Ginnery, Mulagi Catholic Church Mission. Without knowledge of all these abstractions it is difficult to quantify water use by sector. Water table is very low in certain sub counties hence borehole development is not feasible. 3 existing valley dams need to be desilted. Existing NGOs/CBOs are World Vision, Christian Children's Fund and Youth or Orphan training groups.
	Waluswaka James – Water Officer	
	Richard Waya – District Chairman	
	John Wahwesa – Vice Chairperson	
	Eliabu Diaba Sec. for Production	
	Were Abubaker – Sec. for Finance & Plng	
M. Wanje – CAO		
Manafwa	Wanakina G.D. – Environment Officer	Deforestation, encroachment of forest reserves and conflicts amongst communities over

District/Agency	Persons met/Designation	Summary of issued discussed
	Mwenyi Davis – Principal Planner	<p>resource use mentioned as the major threats. Sources of alternative income are required to reduce dependence on forest ecosystems. These may include, Agro-forestry, use of energy saving stoves and solar energy, zero grazing, fruit farming, bee keeping, horticulture.</p> <p>Manafwa is a new District with low levels of staffing. Lack of capacity in development of sub-county environment management plans. Environment Action Plans still in formative stages of development. The district lacks essential equipment e.g. computers, transport. The natural resource department is perceived by central government as not directly contributing towards Poverty Alleviation and consequently is marginalized when PAF funds are disbursed. MERECP is funding some activities related to forest conservation and management together with the WSSP and Belgian Technical Cooperation. CBOs with capacity to carryout awareness on soil conservation, water harvesting, charcoal stoves, riverbank management and community mobilization to plant trees are Bubwaya development association, Nambale Widows Association, Bugobero Orphans of Hope.</p> <p>2 Gravity schemes have been constructed. Proposed gravity flow scheme at Ririma requires substantial funding.</p>
Bududa	Issa Bukoma– District Engineer	<p>Water supply is mainly through option of Gravity Flow Schemes. 4 GFS have been designed to extend water supply to every sub-county. However, no funds are available. No MIS system for water department in place as yet. EUOWS expected to revitalize water user committees that are largely not active. No viable NGOs or CBOs to supplement district efforts. District is in process of developing its state of environment Report. No Environmental Action Plan as yet. 45% of land area is protected or gazetted national park. Landslides and resource conflict over protected areas is an issue. No bye laws issued as yet. District is functioning with skeleton staff. &0% of posts within the establishment are vacant. Regulations governing minimum permitted distances of settlements along river banks or rivers need to be reviewed to enhance their applicability to mountainous areas.</p>
	M. Wamimbi – Natural Resources Officer	
	S.P. Wolumeti – District Planner	

District/Agency	Persons met/Designation	Summary of issued discussed
Tororo	Owio Felix – District Planner	<p>78% of households are connected to the NWSC grid. The population served by NWSC in Malaba is 68%. Malaba town has no piped sewerage system, has high water table hence pit latrines difficult to construct. Average water abstractions from R. Malaba that are supplied to Tororo & Malaba are as follows:</p> <ul style="list-style-type: none"> • Domestic : 16,000 m³ – 20,000 m³ per month • Commercial : 10,000 m³/month • Institutional : 10,000 m³/month • Public Stand pipes : 2,000 m³/month • Ministries, Police & Defence : 30,000 m³/month • Local Athorities & Parastals : 2,000 m³/month <p>River Malaba meanders as it traverses the plain. Intake works could be disrupted if river banks are not trained. Excessive sand mining, settlement near river banks and brick making are the major causes of excessive turbidity. NWSC frequently registers very high concentrations of Nitrates and Phosphate. During the dry season, a fishing culture among the Bagisu that entails pounding tree leaves and dumping them in the water to force fish to surface for oxygen, also adversely affects NWSC treatment operations. SMM project should consider investing in sewerage treatment facility for Malaba town.</p>
	J. Gongo – Environmental Office	
	M. Opio – Water Officer	
	L. Ogwal – Wetlands Officer	
	E. Nyanga – Branch Manger, NWSC	
Busia	I. Natukunda – Water Officer	<p>Fish ponds are in advanced stages of construction at Bunyede, Budiimo & Bunyadette. A bridge across River Sio at Budimo has also been proposed. MoWHC has been approached to technical assistance. MAAIF has also bee approached for technical advice and assistance about the proposed irrigation scheme. These projects were identified at</p>
	R. Nanjala – Environment Officer	
	M. Sekamanya – D/Principal Town Council Engineer,	

District/Agency	Persons met/Designation	Summary of issued discussed
	T. Massa – Jowa Eng. Services, Private Operator Busia Town Council	<p>inception phase of SMM project. However implementation is proving to be challenging. Budgets allocated are insufficient since cost estimates were not based on sound feasibility studies. Another investment project that could be considered for funding under an expanded SMM project is the swamp crossing at Shamwenge that joins two neighboring villages across river Sio. A Big opportunity also exists to help fund costed activities under Busia Town Council Sewerage and Solid Waste Management master plan. Unfavorable geological conditions in Buia e.g. rock outcrops make pit latrine construction difficult.</p> <p>Environmental threats in the District are cited as Bush Burning, loss of soil fertility, deforestation and non- existent solid waste collection, open drain sewerage disposal, flash floods originating across the border. NTEAP project is supporting CBOs e.g. Youth Environment Services (YES), Happy Child Foundation and IRUCODI under its micro grants program. Ongoing activities that are implemented by these 3 CBOs are; collection of garbage waste management and recycling, tree-planting along riverbanks, protection of springs, drilling of shallow wells, solar power for domestic use, promotion of solar ovens and cooking stoves and exotic goat rearing.</p> <p>The German Development Service is supporting the Town Council under the Urnan Water Supply project to mange the Town Council Water Supply Systems, design a Sewerage and Waste Management Master Plan.</p>

District/Agency	Persons met/Designation	Summary of issues discussed
PMU Kakamega -	a) Eng. M. Badaza,	➤ Had a lengthy discussion with the staff at the PMU office to obtain background information

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Kenya	Coordinator of PMU b) Daniel Muikia – Project Officer c) Santo Alengo – Finance Officer	<p>on the SMM.</p> <ul style="list-style-type: none"> ➤ The project Coordinator Eng. Badaza outlined the main objectives of the project as being “to create a cooperative frame work and develop a common strategy for the joint management of Sio –Malaba –Malakisi river catchment” ➤ The main emphasis of the project is poverty alleviation and identification of Development options. <p>Eng. Badaza also outlined some of the Key issues in the SMM. These include</p> <ul style="list-style-type: none"> • Overgrazing in the upper catchment areas which comprise the slopes of Mt. Elgon where all the three rivers originate. • Heavy settlement at the lower catchment area. The intensive settlement and cultivation has led to massive pollution loads into the rivers. • Encroachment into the Fragile Ecosystem/watershed has led to loss of forest cover. This in turn has resulted into soil erosion leading to high sediment load getting into the rivers. • Conflicts over access to river water particularly Malakisi River resulting sometimes to deaths. • Eng. Badaza also outlined opportunities to develop the river basin particularly for sustainable agricultural production and forest management to protect the catchment from destructive practices. <p>Finally Eng. Badaza discussed with the consultants possible sources of information and key stations to be visited.</p>
2. Water Resources Management Authority Kakamega-Kenya	Mr. Wanyonyi Regional Manager of the Lake Victoria North Water resources.	<ul style="list-style-type: none"> • Mr. Wanyonyi explained that the Ministry. of water and Irrigation recently went through some reform which led to the formation of the Water Resource Management Authority (WRMA) • He explained that catchment destruction has been a serious problem largely due to <ul style="list-style-type: none"> ○ Poor farming ○ Deforestation ○ Population increase leading to farming in marginal areas ○ There are also issues arising from resettlements of people by Government <p>He pointed out that most of the activities and trends on the SMM have been negative.</p>

District/Agency	Persons met/Designation	Summary of issues discussed
		<p>However, there is now increased emphasis on</p> <ul style="list-style-type: none"> ○ Increased water storage ○ increased effort to stop run off ○ improved conservation of riverine areas
Provincial Office – Kakamega	Ms. Clare A. Omolo PC II	This was largely a courtesy call.
Agricultural Business Development – Kakamega	Mr. Luke Rotich: Agric. Business Development Officer	<p>Discussed with Mr. Rotich the Environmental concerns in the SMM</p> <p>Mr. Rotich outlined the key issues:</p> <ul style="list-style-type: none"> ● The area receives Bimodal rainfall but farming is largely for subsistence ● Average farm size 2-3 acres/House Hold ● A number of activities are on-going e.g. ● Environmental conservation particularly soil conservation funded by SIDA ● National Agricultural Ext. also funded by SIDA ● There have been unfair distribution of land ● Government has given out part of the Forest reserves and Title deeds have been unfairly given to some people. ● This has led to conflicts particularly in the mount Elgon areas. ● Some families have lost ownership of land ● There is also massive cultivation on the marginal areas such as steep hill slopes and River Banks ● People are not observing the no cultivation zones which can be up to 100 m depending on the size of the river. ● There is a penalty for non-compliance but the penalty is not serious enough to deter people cultivating in marginal areas ● Areas in the lower catchment are prone to flooding e.g. around Busia. ● A number of activities on conservation have been initiated e.g

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		<ul style="list-style-type: none"> • Conservation agriculture aims at conserving the Natural Resource and include: <ul style="list-style-type: none"> ○ Organic farming ○ Minimum Tillage ○ Use of cover crops ○ The role of the Ministry of Agriculture is coordination. ○ Formulation of community Action Plan which cover a wide range of activities ○ There is also emphasis on gender roles including Daily Gender calendar which helps identify and categorize gender activities on daily basis. ○ Some soil conservation structure such as contour bunds have been destroyed during subdivision of land and also because farmers have found that bunds are the only fertile portion of the land left.
	Mr. Raphael Migose District Social Development office Kakamega	<p>Mr. Migose outlined the activities of the social groups i.e women and Youths. The activities include</p> <ul style="list-style-type: none"> • Zero grazing • General animal production • Tree planting <p>The groups are provided with funds through the CDF (Constituency Development Fund) to undertake the group activities. The main aims are:</p> <ul style="list-style-type: none"> • Poverty alleviation • Improving Education and Literacy • Environmental conservation through Tree planting.
Kakamega Provincial HQ	Mr. Samuel Ayogo fisheries officer	➤ Mr. Ayogo explained that there are many activities taking place in the area. The main one being fish farming largely for Tilapia and cat fish. Many studies and information available indicate that fish farming has been successful.
Kakamega Provisional HQ	Mr. Juma Muhammed: Ag. Provincial Irrigation Officer	<ul style="list-style-type: none"> ➤ Irrigation used to be in the Ministry of Agriculture but now it is a separate Dept. under the Directorate of Water. ➤ Irrigation guidelines are being developed ➤ Projects being done are at various stages but none is yet completed

District/Agency	Persons met/Designation	Summary of issues discussed
Bungoma District HQ	1. Ms. Irene O. Ondeng Senior District Commissioner 2. Eng. Mulinde Environment Officer	<ul style="list-style-type: none"> ➤ There are a number issues on quantity and quality of water. ➤ This was largely a courtesy call on the DC to brief her on the consultancy assignment and the SMM project ➤ The DC emphasized that the poverty situations in SMM area is very serious ➤ She had hopes that the project might produce solutions to the biting poverty in the region. ➤ She pointed out the need for income generation activities and projects that focus on Environmental conservation and sustainability. ➤ She noted that the issues on both sides of the border are similar and the approach the project was adopting is good i.e it involves the peoples participation.
Bungoma District HQ	1. Mr. James Sikola: District Water Officer 2. Mr. Osale Duncan: District Environment Officer 3. Mr. Omolo Bethel: Fisheries 4. Ms. Stella Miriti: Planning Officer 5. Dr. Murekefu W.K: District Vet. Officer 6. Mr. Solomon Mulindi: district Agricultural Officer 7. Mr. H. Were: Livestock Dev. Officer 8. Mr. Antony Luvain: District Irrigation Officer	<ul style="list-style-type: none"> ➤ The consultants met many Technical Staff of Bungoma District in one place. Each Technical Officer was given time to outline key issues in his sector. The following is a summary of key issues raised. ➤ Both quantity and quality of water not adequate. ➤ Environment is being rapidly destroyed ➤ Equipments are being vandalized ➤ Some local communities particularly around Mt. Elgon are opposed to the water project: <ul style="list-style-type: none"> ○ Some deaths have occurred because some members of the community put poison in water. ○ Technical Programmes ignore social aspects but where social aspects have been taken into consideration, the projects have been successful e.g DANIDA supported projects. ➤ Note communities have to be involved from the beginning. <ul style="list-style-type: none"> ○ Generally no proper consultations with communities and this has led to failures. ➤ Politicians sometimes take over the control of projects without using appropriate Technical staff. ➤ There is inadequate coordinate among stakeholders ➤ Some communities have protective behavior and need to be sensitized ➤ Poor waste disposal management

District/Agency	Persons met/Designation	Summary of issues discussed
	9. Mr. Tom M. Onyina District Social Dev. Officer	<ul style="list-style-type: none"> ○ Industries pour waste direct into rivers ○ Solid waste disposal is of serious concern. ➤ Excessive use of fertilizers in sugar cane plantation, most of these end up into the rivers thus polluting the water. ➤ Cultivation along riverbanks is common leading to soil erosion and increased sediment load in rivers. ➤ Most catchments are deforested leading to serious soil erosion particularly during the peak of long rains. ➤ Fuel wood concern 80% of the population rely on fuel wood leading to serious reduction in tree cover. ➤ Awareness creations is important – most communities are not aware of the dangers of deforestation ➤ New Regulations have been gazetted and take effect on 1.4.07 which will provide new standards of management of resources ➤ New program encourage planting trees and discourage deforestation. ➤ Farm forestation Program provide tree seedlings ➤ No one is allowed to cut trees for commercial purposes ➤ Charcoal burning is banned and movement of charcoal is restricted. ➤ Forestry staff are now armed (Instituted under the Kakamega Forestry Protection Project) ➤ Invasive species have become a problem e.g ➤ Striga spp now occupies half the District of Bungoma Current efforts to control are by ICIPE and Ministry of Agriculture ➤ There are conflicting messages being given on the planting of Eucalyptus trees ➤ Some people claim it has advantages, it is fast growing e.g. E. grandis and of high value. ➤ Others claim it tends to dry up the surrounding areas very fast particularly when planted in Wetlands. ➤ There is need for research on the consumptive water pattern of Eucalyptus trees.
		<ul style="list-style-type: none"> ➤ General productivity of crops is low hence the farmers require more land to produce the required amount to sustain family ➤ Need to improve level of Technology Transfer in order to improve productivity and standard

District/Agency	Persons met/Designation	Summary of issues discussed
		<p>of living of farmers</p> <ul style="list-style-type: none"> ➤ In put level is generally low i.e below thresh hold e.g for cotton pest control. Inputs are minimal ➤ Also price paid to farmers are low and tends to discourage use of improved farming practice. ➤ New crop cultivars/varieties are developed but adoption has been slow. ➤ Currently funds are provided by Govt. and various NGOs/CBOs to improve production e.g. to <ul style="list-style-type: none"> ○ School projects to encourage schools to be self-sustaining in food production ○ Funds are also given to service providers for service to the community (up to 800 m, K.sh given by GK so far). ○ Improving farmers field schools ○ For Energy saving projects ○ Fish Development Activities ○ Expansion of ponds ○ Improving infrastructure ○ Stocking the Dams ➤ Women involvement in fish farming is about 40%, most are widows. ➤ Key issues in Fisher farming include ➤ Increased urbanization which has led to more waste disposal problems ➤ Siltation of rivers ➤ Heavy metal accumulation in fish ➤ Wetland clearing ➤ Currently there are over 700 fish farmers along the rivers particularly in the flood plains ➤ Coordination of key stakeholders by the Department of planning is difficult because of resistance/conflict with mother ministries. ➤ Currently no guidelines for coordination ➤ Use of constituency Development fund (CDF) usually involves politicians hence more difficult to coordinate. ➤ A number of Tourist sites/Activities have been identified e.g.

District/Agency	Persons met/Designation	Summary of issues discussed
		<ul style="list-style-type: none"> ○ NABIOLE falls in Nzoia ○ MWIBALE Rock (Stone age foot prints) ○ Forest Reserves for Tracking ➤ Unfortunately some wild life species are disappearing due to large scale clearing of forests.
		<ul style="list-style-type: none"> ➤ Government is currently focusing on privatization ➤ Many other Development activities are already in place e.g <ul style="list-style-type: none"> ○ Formation of catchment Area Advisory Committee ○ Catholic Church interested in developing ground water
SIO RIVER SOURCE at Kandusi /Sinoka	A local resident accompanied the consultants to source of the River	<ul style="list-style-type: none"> ➤ Observed considerable evidence of soil erosion on both sides of the source – characterized by deep galleys. ➤ The local guide explained that during the peak of rains, the river expands considerably further down reaching width of up to 500 m. ➤ In the surrounding areas farmers grow various crops including cassava, potatoes, maize and cabbages. But sometimes there is flooding and no crops are grown.
VISIT TO MALAKISA RIVER	-	<ul style="list-style-type: none"> ➤ The main activities include: Sand mining, Fishing, Crop production in the surrounding areas. Crops include maize, sugar cane, cassava.

District/Agency	Persons met/Designation	Summary of issued discussed
BUSIA/BUNDIKA water supply	Mr. Samuel Ogola Machine Operator Mr. Patrick Shimota	<ul style="list-style-type: none"> ➤ Water quality during the dry season is ok but quality deteriorates during wet season particularly at the peak of the rains due to large amounts of soil and suspended matter arising from the surrounding areas. ➤ It was observed at the riverbanks that cultivation was up to the river. ➤ Infact some plants (Bananas) were even touching the water.
SIO PORT LANDING SITE	Mr. Kennedy Sukuma Mr. Peter Othiemo Mr. Hamuza Habibu Mr. John Odong Mr. Victor Ojaju Mr. James Ojambo Ms. Gladys Nafula Ms. Pamela Ms. Christine Asini	<ul style="list-style-type: none"> ➤ Discussion with the community at the landing site indicated there are a wide range of activities. ➤ A part from fishing, some members grow crops on the Lake shore/River bank. <ul style="list-style-type: none"> ➤ Crops include: Coco yam in water logged areas, Maize and cassava in the upper areas. ➤ Sand mining is an important activity ➤ The area is associated with a wide range of problems: i.e. Worms of different types; water hyacinth; Snakes; Typhoid; Bilharzias; prevalence of HIV/AIDS; poor food hygiene; no market for papyrus products.
TORORO DISTRICT HQ	Ms. Joshua Eshepeti Environment Officer Mr. Ogwang Forest Officer	<p>Key issues include</p> <ul style="list-style-type: none"> ➤ Pollution of river Malaba ➤ Siltation largely due to degradation of river bank because of cultivation up to river edge. ➤ Regular meeting are held with people from both sides of the border to discuss security matters ➤ Malaba Town Sewage disposal direct into River Malaba ➤ Solid waste management is a big problem ➤ Buvera (plastic bags) are used as mobile toilets, on Uganda side and the material ends up into River Malaba. ➤ The Uganda Forestry Association is in the process of beginning sensitization and

District/Agency	Persons met/Designation	Summary of issued discussed
		<p>awareness campaigns particularly on importance of tree planting and disposal of Buvera.</p> <ul style="list-style-type: none"> ➤ The sensitization are planned for Mela and Kisoko subcounties of Tororo District. ➤ Other issues include ➤ Dust storms is becoming a serious problem ➤ Smuggling of charcoal and trees into Kenya ➤ Kenya banned charcoal burning and apparently most charcoal is smuggled from Uganda ➤ Poor agricultural practice largely due to inadequate extension advice and lack of facilitation. ➤ There is high demand for tree seedlings – some times leading to thefts of available seedlings. ➤ Bye-laws are inadequate and many times the formulation of Bye-laws has not involved the communities. ➤ Zero grazing is not practiced is a large scale ➤ Most wetlands have been reclaimed for Rice production. ➤ There is high level of prostitution particularly at Malaba and Busia leading to high incidences of HIV/AIDs. ➤ Main activity in River Malaba is sand mining which helps to desilt the river. ➤ Decreased size of land holding largely as a result of increased population and customary land tenure system
TORORO DISTRICT HQ - ADMINISTRATION	Mr. Osuna LCV- Chairman Mr Felix Esoku –Chief Administration Officer Mr. Martin Etori – Deputy LCV Chairperson	<ul style="list-style-type: none"> ➤ Largely courtesy call to brief the administration of the consultation and the project as a whole. ➤ The Chairman emphasized the need for quick solution in view of the high siltation level of the river Malaba and cultivation taking place up to river edge. ➤ Cassava, maize, millet, sorghum and Bananas are important crops. But productivity is low. There is need to improve farming methods.
TORORO WATER SUPPLY	MR. Emmanuel Olupot: Treatment plant supervisor Mr. Edmond Opio Water supply Superintendent	<ul style="list-style-type: none"> ➤ The raw water from Malaba river is heavily silted and carries a lot of suspended matter particularly during wet season. ➤ Sand mining is an important activity and helps to desilt the river.
BUSIA DISTRICT HQ	MS. REBECCA NANJALA DISTRICT ENVIRONMENT	<p>Key issues</p> <ul style="list-style-type: none"> ➤ Flooding is a major problem during rainy season: flooding affect crop production, maize,

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	OFFICER	<p>cassava, potatoes.</p> <ul style="list-style-type: none"> ➤ Crossing bridges and canoes are available ➤ But there are wrangles on ownership ➤ Fishing ponds are being developed to improve fish production. ➤ High, level of pollution and siltation largely due to poor farming practice. ➤ On the Kenya side of the river, cultivation is done up to the stream. The situations is slightly better on the Ugandan side. ➤ Busia District Ordinance has been produced but not approved. ➤ Gazetted Forest is available; Investors are required to start tourism. ➤ A number of NGOs/CBOs are implementing selected project on the area e.g <ul style="list-style-type: none"> ○ Nile Transboundary Environment Action Project ○ Christian Associations involved in tree planting; Goats Project and sinking of wells. ○ Youth Environmental services involved in recycling of wastes. ○ Similar projects and services are also being carried on SIO river in Kenya. ➤ Irrigation Projects are planned in four sites of 5 hectares each for the production of Rice and Citrus. ➤ Currently the communities are being sensitized to own the project before it starts. ➤ The District is also exploring the possibility of Integrated Aqua culture and farming.
BUSIA DISTRICT HQ	Eng. ISAAC NATUKUNDA water engineer Eng. Stephen Mangeni – Assist. Water Engineer Mr. Geoffrey Wandera Assistant Engineer Officer Ms. Rebecca Gimbo Fisheries Officer Mr. Fred Wakapisi – District Production – Officer	Key Issues: <ul style="list-style-type: none"> ➤ The Flood plains are large and usually flood during wet season and affect crop production ➤ Water Quality issues are serious but no monitoring of quality has been done. ➤ Only smallscale fishing is possible for Nile perch, Tilapia, Cat fish, <i>Babes Alestis</i>. ➤ Survey is to be carried out for possible construction of bridge at Lumino/Bukhehe. But problem is that there are no serious activities on the other side of the border to warrant construction of bridge.

	NAME	DESIGNATION	INSTITUTION
1	Enock Wanyonyi Sabuni	Regional Manger	LVNCA
2	Pius Mwanje	Community Mobiliser Officer	LVNCA
3	Eng. Claude Kirwa Busieney	Development Services Manager	LVNWSB
4	Francis Kwendo	Water Service Provider Officer	LVNWSB
5	Isaac Ruto	Water Service Provider Officer	LVNWSB
6	Daniel Muikia	Project Officer	SMM-IWRM Project
7	Stephen W. Kahunyo	Provincial Forest Officer	MENR – Western Province
8	Eliud Salano Mwavali	Provincial Planning Officer	MPND
9	Kenyoru Oyaro	District Water Officer	Teso District
10	Joseph Olubero	District Water Officer	Busia District
11	Florence Chege	Programme Officer	MERECAP - IUCN
12	Eng. C. K. Koske	Director of Irrigation	MWI
13	Dr. Tom Okurut	Executive Secretary	LVBC
14	Mr. Meraj Msuya	Deputy Executive Secretary	LVBC

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