EAST AFRICAN COMMUNITY LAKE VICTORIA BASIN COMMISSION SECRETARIAT



TRANSBOUNDARY WATER FOR BIODIVERSITY AND HUMAN HEALTH MARA RIVER BASIN (TWB-MRB) PROJECT

ESTABLISHING MARA RIVER BASIN POLICY, LEGAL AND INSTITUTIONAL COOPERATIVE FRAMEWORK

FINAL REPORT

The Executive Secretary

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ACRONYMS

CF Cooperative Framework
COM Council of Ministers
EA Environmental Audit
EAC East African Community

EFA Environmental Flow Assessment
EIA Environmental Impact Assessment
EMA Environmental Management Act

EMCA Environmental Management and Coordination Act
ESARPO Eastern and Southern Africa Regional Programme Office

IUCEA Inter University Council of East Africa
LVBC Lake Victoria Basin Commission
LVFO Lake Victoria Fisheries Organisation

LVEMP Lake Victoria Environmental Management Programme

MMRM Maasai Mara River management

MRB Mara River Basin

MRBP Mara River Basin Programme
NAWAPO National Water Programme Office

NBI Nile Basin Initiative

NELSAP Nile Equatorial Strategic Action Programme

NEMA National Environment and Management Authority
NEMC National Environment and management Commission

NGO Non Governmental Organisation
NRM Natural Resources management
OBSC Okovango Basin Steering Committee

OKACOM Okovango Council of Ministers

OKASEC Okovango Secretariat
RBO River Basin Organisation
SENAPA Serengeti National Park

SMME Serengeti Maasai Mara Ecosystem

TFR Transmara Forest Reserve

WBH Water for Biodiversity and Health

USAID United States Agency for International Development

WRMA Water Resources management Authority

WWF World Wide Fund for Nature

ESTABLISHING A MARA RIVER BASIN POLICY, LEGAL AND INSTITUTIONAL COOPERATIVE FRAMEWORK

CHAPTER 1: INTRODUCTION

1.1 Background

The East African Community (EAC)/ Lake Victoria Basin Commission (LVBC) received funds from the United States Agency for International Development (USAID) East Africa to support Sustainable Development of the Mara River Basin as a project implemented by both the Republic of Kenya and the United Republic of Tanzania. The project was coordinated by LVBC Secretariat and implemented by key stakeholders including those from urban and village settlements, subsistence and large scale agriculture, livestock, fisheries, tourism, conservation areas and biodiversity, mining and industries. The project addressed the central trans-boundary issues regarding water, biodiversity and livelihoods as an integrated approach to natural resources management.

The overall objective of the Sustainable Development of the Mara River Basin project is to promote harmonized Mara River Basin management practices for sustainability. The specific objectives were to:

- a) Develop and promote the implementation of an appropriate trans-boundary management framework for Mara River Basin;
- b) Improve the protection and management of Maasai Mau Forest Blocks resources and Mara riverine forests;
- c) Enhance sustainable management of the protected areas of Maasai Mara and Serengeti ecosystems;
- d) Improve water resources management in the basin; and,
- e) Enhance institutional capacity of the Lake Victoria Basin Commission to undertake its regional mandate.

The present consultancy was one amongst three other related consultancies aimed at achieving the objectives stated above.

1.2 Rationale of the Consultancy

Success in river basin development and management depends on a range of policy, legal and institutional issues. Adequate policies are a guarantee that guiding principles and prerequisites of river basin management can, institutionally, be internalised. Informed policies provide the legal framework within which river basin management activities can, actually, be implemented on the ground. If harmonized at basin wide scale, the policies and laws not only provide unity of vision among the different basin stakeholders, but also consistency of strategies to attain the goals and targets of river basin management and the fullness of commitment to dedicate sufficient resources to carry out river basin management activities. Additionally coherence of river basin policies is necessary to guide plans, programmes and strategies in the river basin.

The Mara River Basin (MRB) has been divided into four distinct biophysical and/or land-use sections, mainly on the basis of location along the river: the upper catchment comprising of two sections, namely, the forested Mau Escarpment and a section characterized by large-scale agricultural farms; the open savannah grassland protected by the Maasai Mara National Reserve on the Kenyan side and the Serengeti National Park on the Tanzanian side; the flood plains located in Tanzania where the Mara River discharges into Lake Victoria. High human and livestock population densities and subsistence agriculture characterize this section.

The MRB is well known as a trans-boundary water resource shared by Kenya and Tanzania. The river water, dependent on rainfall and other hydrological variables, determines the vitality of the ecosystem and all the natural resource use and development in the basin. Coordinated management of the biodiversity of the entire Mara River Basin is also interlinked through the enjoyment of ecosystem services and products¹. To date the management of this trans-boundary resource depends on national policies, legislations and regulations. Management of water and biodiversity resources in the Mara River Basin requires an effective and efficient trans-boundary management framework. Currently, there is no trans-boundary Cooperative Management Framework between Kenya and Tanzania to manage this basin as a shared resource. In order to develop the Mara River Basin Cooperative Management Framework, under LVBC, there is a need to review the past initiatives made towards the same goal and ensure the new proposed trans-boundary management framework is in place and operational under LVBC. To this end, it is necessary review the policy, legal and institutional cooperative framework developed by Nile Equatorial Lakes Strategic Action Project (NELSAP) and other key stakeholders.

The Mara River Basin is undergoing drastic changes due to water scarcity, land use changes, poor water quality and environmental degradation². Some of the most important threats to this basin include loss of native forest cover in the upper parts of the catchment and along rivers, agricultural expansion and intensification (including irrigation), human population growth, resource-intensive tourist facilities, and discharge of untreated wastewaters from settlements and tourist hotels. The EAC priority sectors are agriculture, industry, tourism and wildlife (EAC, 2006).

1.3 Objectives of the Consultancy

The overall objective of this consultancy is to establish Mara River Basin (MRB) trans-boundary management framework under LVBC framework. Detailed Terms of Reference are shown as Annex 1.

¹ Bhat, M; Ombara, D; Kasanga, W; McClain, M; and Atisa, G. 2009. "Payment for Watershed Services in the Mara River Basin: A Starter Document to Facilitate the Development of a PES Mechanism to Preserve and Protect Freshwater Flows in the Mara River Basin of Kenya and Tanzania". A Report Submitted to USAID, Under the Cooperative Agreement EPP-A-00-04-00015-00.

² Mutie S. M., Mati B., Gadain H. & Home P. Land Cover Change Effects on Flow regime of Mara River Proceedings of the 2nd International ISCRAM Conference (B. Van de Walle and B. Carlé, eds.), Brussels, Belgium, April 2005 237; Bancy M. Mati 1, Simon Mutie, Patrick Home, Felix Mtalo and Hussein Gadain: Land Use Changes in the Transboundary Mara Basin: A Threat to Pristine Wildlife Sanctuaries in East Africa, 8th International River Symposium, Brisbane, Australia, September 6-9, 2005.

1.4 Specific Objectives

The specific objectives of the consultancy are to:

- a) Review the already existing Mara River Basin Policy, Legal and Institutional Cooperative Framework developed by NBI/NELSAP and other frameworks within the Basin;
- b) Identify the gaps in the current MRB cooperative framework in (a), against the overall goal, objectives and the aspiration of the TWB-MRB, the various policy and legal instruments at the EAC and LVBC; and,
- c) Propose policy, legal and institutional Cooperative Framework for the Mara River Basin and its operational implications under the EAC/LVBC.

1.5 Organisation of the Report

The background and introduction are presented in the Chapter 1. This is followed by the objectives, scope of the consultancy, and methodology. Chapter 2 reviews the socio-economic and natural resources potential, development challenges and possible solutions aspects in the Mara River Basin with a view to demonstrate the linkages between natural resources for integrated transboundary management. Chapter 3 discusses the national policies, legislations and programmes in the two Partner States as they would relate to the Mara River Basin . The analysis of these national policies, legislations and programmes provides a compelling reason for the establishment of the tran-sboundary natural resources management for the Mara River Basin. The proposed Trans-boundary Management Cooperative Framework of the Mara River Basin is presented in Chapter 4.

The Report has several Annexes each of which contains specific studies that have informed the drafting of the Cooperative Framework Agreement. These include:

- Terms of Reference of the Study (Annex 1);
- Workshop Programme(s) Annex 2); and
- Summary of Workshop Reports (Annexes 3 and 4).

2. CHAPTER 2: METHODOLOGY OF THE STUDY

2.1 Mara River Basin Scooping

The Team carried out a rapid assessment of the basin characteristics aimed at comprehensive river basin characterisation. Scooping involved document reviews, assembling of relevant literature and discussions between the consulting team and some key stakeholders such as National Focal Points, officials of Ministries of Water and Irrigation and selected NGOs. In addition, several field visits were made mainly to identify:

- Basin physical and biological characteristics, socio-economic profiles including land use, livelihoods, community organizations, etc, using maps, aerial photos, and satellite imagery of the MRB;
- Community level investigation of interest, capabilities, and potential conflicts as well as impact of various projects, programmes and governance decisions at community level;
- Historical profiles on settlements and livelihood support systems using secondary data; and
- Gain first-hand knowledge (from communities) in dealing with the identified impacts, thematic seminars held for groups of actors to address issues and concerns related to various aspect of the MRB, etc.

2.2 Desk Literature Reviews and Interviews

2.2.1 Legislative Perspectives

Literature review on the resource base, trends of utilisation and limitations were reviewed in order to premise the Framework on felt needs of the local population. Reviews of the Kenyan and Tanzanian Constitutions and sectoral legislations such as Kenya Water Act (2002)³ and Tanzania Water Resources Management Act (2009)⁴ that pertain to river basin management and Wetland and Wildlife Management, Forest, Fisheries, etc that relate to biodiversity conservation were made. The reviews provided a strong case for socio-economic development and sustainable management of natural resources particularly with respect to resource potential, provisions for the mandate of the state to guarantee sustainable use of natural resources, and institutional arrangements. International, regional and national legislations on biodiversity conservation and transboundary water resources management have also been reviewed.

2.2.2 Policy Framework

Additional reviews of strategic policies that influence specific aspects of river basin management in Kenya and Tanzania were done with the aim of identifying strengths and weaknesses and examining conformance with guiding principles and supportive elements of a transboundary river management regime. The review showed various conflictual sectoral policies within and between the two countries and formed the basis for the establishment of a harmonised trans-boundary river management framework.

³ Republic of Kenya, 2002. The Water Act, Kenya Gazette Supplement no. 107, Acts No.9

Mara River Basin

Kenya

Tanzania

Tanzania

Mau

Forest

Masai Mara

Saharwer

Saharwer

Figure 1: An outline map of River Mara Basin

Source: Mara EFA Final Report - Assessing Reserve Flows for the Mara River, Kenya and Tanzania

The international, regional and national policy commitments on biodiversity conservation, and water resources management, forest standards, wetlands, etc. have been reviewed.

2.2.3 Reviews of literature on Natural Resources Management Institutions and Organizations

Institutional issues including mandates and functions, including organisational structure and arrangements, coordination, monitoring and enforcement or compliance were assessed with the aim of determining the role of stakeholders in the basin. Several river basin organizations have been discussed and the most appropriate model for the Mara River has been chosen and incorporated in the Cooperative Framework. Central in this analysis was the operational implications of the implementation of the Cooperative Framework under the EAC/LVBC.

Reviews of documents on the ongoing programmes and projects in MRB have provided trends in utilisation and management of natural resources within the basin⁵ and international, regional and national plans and targets on biodiversity conservation, water resources management⁶, forest standards, wetlands, etc.

⁵ LVBC & WWF-ESARPO, 2010 A. Assessing Reserve Flows for the Mara River; LVBC & WWF-ESARPO, 2010 B. Biodiversity Strategy and Action Plan for Sustainable Management of the Mara River Basin and East African Community Secretariat (2007) Strategic Action Plan for the Lake Victoria Basin.

⁶ WWF-EARPO, WWF-Norway, 2007. "Project Proposal 2007-Mara River Basin Management Initiative". WWF-EARPO, Nairobi-Kenya and WWF-Norway, Oslo, Norway; WWF-EARPO; GLOWS; and USAID/RESDCO/ESA; 2006. "Trans-boundary Water for Biodiversity in the Mara River Basin (TWB-MRB), Kenya/Tanzania-Year 1 Annual Report". WWF-EARPO, Nairobi-Kenya; GLOWS Secretariat, Florida International University, Miami, Florida, USA.

2.2.4 Structured Interviews and Consultations

Structured interviews were carried out with officials of NBI/NELSAP, EAC and LVBC Secretariats, LVBC National Focal Point Officers (NFPO) and other key stakeholders including the Governments of Kenya and Tanzania, partners and private sector engaged in Mara River Basin resources management. Specific organisations included the LVBC, EAC Focal Point Ministries in Kenya and Tanzania, World Wide Fund for Nature (WWF) and Lake Victoria Environmental Programme (LVEMP). The field work was undertaken between 6th and 9th August, both in Kenya and Tanzania, simultaneously.

Interviews were extended to a limited number of community based institutions that have the capability and capacity to promote responsive research on MRB in order to generate benchmark information that can be used for the development of sound policies and technologies for river basin management.

2.3 Data Analysis

Secondary data was collected from published and web-based sources. Such information included:

- The MRB biophysical and socioeconomic data;
- Description of the nature, extent, and causes of MRB degradation and future risks;
- Development trends and livelihoods of basin communities;
- Challenges and problems facing natural resources utilisation and management;
- Type and nature of challenges facing implementation of sectoral programmes and projects (agricultural production, water supply, forest resource, tourism, and MRB environmental issues) at national, regional and local levels;
- Priorities of drivers, pressures, responses (DPIRs) at household and community levels;
- Key stakeholders including formal and informal interest groups within the MRB
- Suggested solutions for the challenges and problems identified above;
- Regional linkages such as upstream-downstream interests; and
- Broad policy considerations for development of an integrated MRB.

Structured interviews were limited to officials of NBI/NELSAP, EAC and LVBC Secretariats, National Focal Point Officers and other key stakeholders including the Governments of Kenya and Tanzania, partners and private sector engaged in Mara River Basin resources management. Focus Group discussions involving various opinion leaders, Government officials and development partners were held in each country. The aim was to receive views and comments, obtain a buy in, and build consensus on priority issues that could constitute the basis of the Cooperative Framework Agreement. The results of these reviews are included in the Annexes.

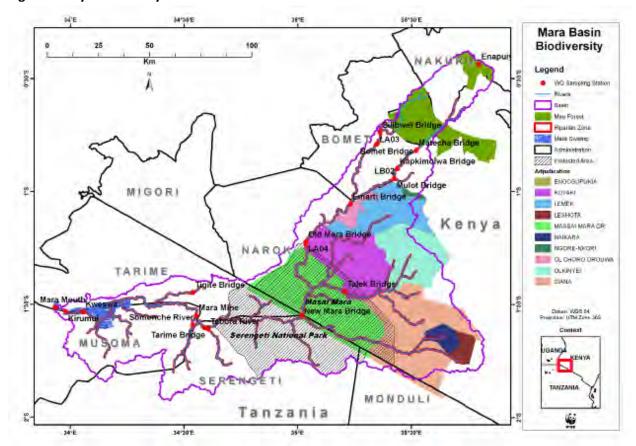


Figure 2: Key biodiversity sites classified in Mara River Basin

Source: Biodiversity Strategy and Action Plan for Sustainable Management of the Mara River Basin, WWF/GWP/EAC/USAID

2.4 National Workshops in Tanzania and Kenya

Two national workshops were convened in Tanzania and Kenya to receive comments and gather additional information regarding the status of natural resources management and Cooperative Framework Agreement. The workshops were held within the basin in Musoma and Bomet in Tanzania and Kenya, respectively, on the 14th and 16th August, 2010. The purpose of the workshop was to subject critical issues and strategies to discussion and also build consensus on the same. The summary of Workshop Proceedings are provided as Annexes to this Report

CHAPTER 3: REVIEW OF THE EXISTING NATIONAL POLICY AND LEGAL FRAMEWORKS RELEVANT TO TRANSBOUNDARY NATURAL RESOURCES MANAGEMENT

3.1. Introduction

The anticipated benefit of Transboundary Natural Resources Management (TBNRM) is improved ecological integrity, and includes guaranteed long-term conservation of valuable wildlife resources in the trans-frontier conservation areas, thus helping to maintain the integrity of the ecosystem; improved management of shared resources through the development of joint management and tourism plans; availability of a larger pool of expertise for problem solving; and having expanded conservation areas as achieved through TBNRMs results in less need for extensive intervention.

This section focuses, specifically, on the policies and legislative frameworks that affect the development of TBNRM initiatives in Kenya and Tanzania. It also covers a review of policies and legislation relating to conservation and natural resources, in particular, protected forestry, wildlife, land, water, fisheries and mining. Further, the section discusses various land use types that tend to impact on natural resources management such as agriculture (both rain fed as well as irrigated) livestock, investment, trade and tourist facilities. For instance, deforestation rates may partly be driven by logging bans and improved forest governance across the border. Land degradation in upstream parts of Mara River affects downstream water users, expansion of wetlands, and impact on fishers, etc. International Environmental Agreements that Kenya and Tanzania have signed or ratified that are of significance to TBNRM are also presented in this section.

3.2. Kenya National Policies and Legal Frameworks

3.2.1. The Constitution of the Republic of Kenya, 2010

The Constitution is the supreme law of the land that lays the fundamental principles for the governance. The Kenyan Constitution is very explicit regarding environment and natural resources management and conservation. It sets the tone regarding environmental protection, conservation and management in the Preamble⁷. It makes it explicit in Chapter 2, on National Values and principles of Governance⁸. In regards to water, Art. 43 (d) states that every person has the right to clean and safe water in adequate quantities. In regards to environment, Art. 42 states that "every person has the right to a clean and safe environment"; and Art 69 (1) to have the environment protected, for the benefit of present and future generations, through legislative and other measures. In Chapter 5, Art. 60. (1) Land is Kenya's primary resource and the basis of livelihood for the people, and shall be held, used and managed in a manner which is equitable, efficient, productive and sustainable. Art 83 deals with regulation of land use and property. Chapter 5, Part 2, deals with Environment and Natural Resources, Obligations in respect of the environment and states.... "Ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources and ensure the equitable sharing of the accruing benefits".

⁷ Republic of Kenya, 2010, The Constitution of Kenya, Respectful of the environment, which is our heritage, and determined to sustain it for the benefit of future generations

⁸ Republic of Kenya, 2010, Chapter 2, Art. recognition of the responsibilities of the State to future generations, by pursuing policies for the sustainable management of the environment"

3.2.2. National Water Policy, 1999

The Sessional Paper No. 1 of 1999 on National Water Policy on Water Resources Management and Development⁹, which sets out the policy direction in the management and development of the water resources in Kenya, specifies four principles to guide the activities in the water sector as follows:

- (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 where private sector and community participation are the prime movers in the structural set up aimed at guaranteeing sustainability. Under this policy dispensation, the role of the Ministry is to be refocused towards policy formulation, coordination, support in resource mobilization and sector regulation.

Despite its comprehensiveness, the National Water Policy does not have specific provisions for transboundary water resources management and therefore, in 2002, the Government embarked on the process of preparing a specific policy on the utilization of shared water resources. That 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* but is still going through the review process by the relevant Government organs.

3.2.3. National Environment Management Policy

In 1999, the then Kenyan Ministry in charge of Environment developed a Sessional Paper on Environment and Sustainable Development. The Sessional Paper was neither presented to Cabinet for approval, nor was it presented to Parliament for debate and approval. The draft went through further review in 2008/2009 but the process was abandoned mid way. Despite the lack of an explicit environment management policy, the Kenya Government still emphasizes 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".

⁹ Republic Of Kenya, Sessional Paper No. 1 of 1999 on National Water Policy on Water Resources Management and Development

¹⁰ East African Community, 2004, *Protocol for sustainable development of Lake Victoria Basin*, EAC Secretariat, Arusha, Tanzania

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 1999¹¹, to exercise general supervision and co-ordination over all matters relating to the environment. EMCA 1999 entitles each and everyone to a clean environment but also requires us to safeguard environmental quality.

The Sessional Paper envisaged the use of the "polluter pays principle", where one is expected to make good any damage made to the environment and further emphasizes 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, defined 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.

3.2.4. National Wetlands Policy

Kenya does not have a Wetlands Management Policy¹². The process for developing a wetlands management policy was initiated, but lack of focus and overlapping jurisdiction made it impossible to conclude and gain consensus on the matter. The Kenya Wildlife Service, presently, manages wetlands protected under the RAMSAR Convention. The Policy spells out clearly eight objectives to achieve its aim. The draft Policy seeks to:

- Establish an effective and efficient institutional and legal framework for integrated management and wise use of wetlands which will provide an enabling environment for the
- Participation of all stakeholders;

• Enhance and maintain functions and values derived from wetlands, protect biological diversity and improve essential processes and life-support systems of wetlands;

 Promote communication, education and public awareness among stakeholders to enhance their participation in wetland conservation;

 $^{^{11}}$ Republic of Kenya, Environmental Management and Co-ordination Act (EMCA) of 1999.

Republic of Kenya, Draft Framework for the Development of a National Wetlands Conservation and management Policy, 2007.

- Carry out demand driven research and monitoring on wetlands to improve scientific information and knowledge base; enhance capacity building within relevant institutions and for personnel involved in conservation and management of wetlands;
- Establish a national wetlands information management system and database including tools and packages to targeted groups; promote innovative planning and integrated management approaches towards wetlands conservation and management in Kenya; and
- Promote partnership and cooperation at regional and international levels for the management of transboundary wetlands and migratory species.

Both NEMA and the WRMA have jurisdiction over specific wetlands, each arising from its respective statute¹³. The WRMA has gazetted rules dealing with the management of wetlands. Management of wetland in Kenya is at very best confusing.

3.2.5. Kenya Forest Development Policy

The upper catchment comprises the forested Mau escarpment at approximately 2400 – 2900 meters above sea level. This includes the upper catchment and source of the Mara River and the Mau forest at 2500 meters above sea level and covers 82,410 hectares. The Enapuiyapui swamp located in the Kiptanga forest is in this section

The draft Kenya Forest Development Policy¹⁴, Draft Sessional Paper of May 2005 has the following objectives:

- (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 apply to conservation of water catchment in one way or another. The draft Policy has neither been discussed by Cabinet not sent to the National Assembly for debate.

¹³ Both NEMA and WRMA have published regulations on water quality and effluent discharges as NEMA Regulations 2005 and WRMA Draft Rules 2006.

¹⁴ Republic of Kenya, Kenya Forest Development Policy, Draft Sessional Paper No.9 of May 2005

The Mau forest forms major conservation areas which include: (i) South Turkana National Reserve, with scenic landscape and abundance of wildlife; (ii) the Kerio Valley and Kamnarok National Reserves; (iii) Lake Baringo; (iv) Lake Nakuru National Park, a RAMSAR site (since 1990), and an important bird area for the flamingo and about 450 other species; (v) Lake Natron which is the main breeding area for the flamingos in the Rift Valley; (vi) Maasai Mara National Reserve; (vii) Serengeti National Park, which is a heritage site, world famous for big game and migratory species; (viii) Kakamega Forest, which is the only remnant in Kenya of the Guineo-Congolian forest ecosystem with high biodiversity for birds, butterflies and plants. While most of the forest blocks in the Mau Forest Complex have been gazetted and are managed by the Kenya Forest Service, the Maasai Mau Forest covering 46,278 hectares is Trust Land, managed by the Narok County Council (NCC). The Mau forest forms the main lifeline for the Mara River and hence the Maasai Mara National Reserve (MMNR). Most part of Maasai Mau Forest forms the upper catchment of the Mara River which crosses the MMNR and Serengeti National Park, both world famous for big game. MMNR is an Important Bird Areas (IBA) with 540 species of birds.

3.2.6. Draft National Irrigation Policy

There is large scale rain fed and irrigation farming mainly on the Kenyan side. The Draft National Irrigation Policy¹⁵ aims at achieving sustainable development and management of the irrigation and drainage sector. The policy direction shifts the role of the Government from implementation of the policy and let communities, the private sector and other sector stakeholders to play a bigger role. The policy objectives include:

- (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.

In the absence of an Irrigation Policy, the Ministry of Water and Irrigation 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.

3.2.7. National Land Policy

Intensive land use has transformed most of the natural landscape in the Mara River Basin. Like any other basins in the region, approximately 46 % of the Lake Victoria Basin is severely eroded ¹⁶. In Tanzania, the rate of expansion of agricultural land is about 2 %/year and in Rwanda agricultural land has expanded to 7% from 2000 to 2005.

¹⁵ Ministry of Water and Irrigation, National Irrigation development Policy, 2010.

¹⁶ Sida-EEU, Environmental Policy Brief for the Lake Victoria Basin School of Economics and Commercial Law Göteborg University, November 2007

Deforestation is particularly rampant in Kenya, Burundi, Rwanda and Uganda where forest cover has decreased by 47 %, 27 % and 26 %, respectively, during the last two decades 1980 to 2000¹⁷. In Kenya, with less than 2% remaining forests cover, deforested areas in recent years include parts of Maasai Mau forest. Deforestation rates are also particularly high in the mining Districts of northern Tanzania, both being within the Mara River Basin. In the Nyando River Basin (Kenya) soil erosion rates are estimated at 40 tonnes per hectare per year and in Rwanda losses average 10 tonnes per hectare per year. In some areas, degradation has reached a point where up to 30 % of farm land is abandoned for agricultural use. Programmes to halt land degradation and increase forest cover have been introduced to counter the challenges.

The Government of Kenya has formulated policy¹⁸ and strategies 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 Land policy has recommended that the Government should provide secure tenure to ensure access to land by rural poor for production purposes.

3.3 Kenya Water related Legislation

3.3.1 Water Act, 2002

The water is used for Towns and municipal water supply, for rural domestic uses, and in hotels and tourist lodges. There are Group Ranching and Pastoralists in Kenya.

The Water Act, 2002¹⁹ 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 Act came into effect in Mach 2003, with the establishment of the institutions, development of regulations to supplement its provisions and devolution of the ministry's previous activities. Section 7 of the Water Act creates the Water Resources Management Authority (WRMA) with the responsibility 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.

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¹⁷ Burundi and Uganda, FAO figures 1995-2005, Rwanda 1993-2003

¹⁸ Government of Kenya, National Land Policy, 2010

 $^{^{19}}$ Government of Kenya, 2002. The Water Act. Government Printer, Nairobi, Kenya.

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. The emphasis is that management of water resources is to be undertaken on a catchment basis.

Section 14 of the Act provides that WRMA may designate catchment areas. 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 of which Lake Victoria North covers the Mara River Basin.

The Act provides a role for user groups, organized as Water Resources Users Associations (WRUAs), 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.

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. 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.

Another important regulatory instrument is the water permit, which is required for the use of water. 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 including being subjected to public consultation, 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. It is not clear how much the charge comprises of the cost of processing the permit application or the economic value of the water resources being used or both. 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.

3.3.2 Environmental Management and Coordination Act, 1999

The institutional and management framework set up by the Environmental Management and Coordination Act²⁰, (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;

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²⁰ Government of Kenya, Environmental Management and Coordination Act, (EMCA), 1999

- (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 pivot of EMCA is the requirement for Environmental Impact Assessment (EIA) and Environment Audit (EA), which are introduced in Parts V and VI, respectively, of the Act. EIA and EA are important regulatory tools, 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. The EIA and audit has a number of limitations when it comes to trans-boundary natural resources management and the application of national laws.

3.3.3 The Agriculture Act

The Agriculture Act²¹ aims 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 Mara River Basin area is agriculture, agricultural laws are an integral and 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 and section 48 invests a lot of powers on the Minister regarding the conservation of the soil of, or the prevention of the adverse effects of soil erosion on, any agricultural land. The Minister is also empowered to require, regulate or control afforestation or re-afforestation, protection of slopes and catchment areas, and drainage of land, including the construction, maintenance or repair of artificial or natural drains, gullies, contour banks, terraces and diversion ditches. The Minister may determine the type of vegetation to be planted on a given piece of land or make rules regarding unoccupied land, prohibiting, restricting or controlling the use of land for any agricultural purpose.

The Minister may make rules for the preservation, utilization and development of agricultural land (Part XII) to dispossess owners or occupiers of agricultural land in view of persistent contravention of such rules. The provision of Part XII, 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 and sets limits and condition cultivation on slopes that may be cultivated. Rule 6 limits any cultivation on land lying within 2 metres of a watercourse, or in the case of a watercourse more than 2 m wide, within a distance equal to the width of that watercourse to a maximum of 30 m.

²¹ Government of Kenya, The Agriculture Act, Chapter 318.

3.3.4 The Fisheries Act

The Oceans and Fisheries Policy (2008)²² is the basis of a new Fisheries Coordination Act to replace the Fisheries Act CAP 378 of the Laws of Kenya. The Fisheries Act and the Policy (2008)²³ relating to the management of fisheries has implications on transboundary water resources management. The Act governs the management and exploitation of fisheries resources and vests ownership of fisheries resources in the central government. Accordingly, rights to harvest fisheries resources are defined in the law and granted to individual fishermen through a licensing system on an annual basis. The overall objective of the Act is "providing for the development, management, exploitation, utilization and conservation of fisheries." Water quality becomes an important variable in fisheries development. More recently, the Ministry has embraced co-management incorporating the participation of resources users through Beach Management Units (BMUs) in order to stem lake pollution.

3.3.5 The Physical Planning Act

The Physical Planning Act²⁴ 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 including areas with unique development potential, special planning areas, protected areas, etc. 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 determine the type of development permissible in any given land in consultation with the local authorities. In this regard, there is very heavy hand of government and the Act is very weak in its enforcement rendering it insignificant when it comes to water resources management.

3.3.6 Lake Basin Development Authority Act

The Lake Basin Development Authority Act²⁵ Chapter 442 of the Laws of Kenya 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.

²² Ministry of Fisheries Development, Kenya National Oceans and Fisheries Policy, Sept. 2008.

²³ Republic of Kenya, The fisheries Act, Chapter 378, Revised 1991

²⁴ Government of Kenya, The Physical Planning Act, Chapter 286, 1996

²⁵ Government of Kenya, Lake Victoria Basin Development Authorty Act, Cap. 442, 1979

The Lake Basin Development Authority (LBDA) was established in 1979 by the Government of Kenya to spearhead development in the Lake Basin Catchment area in Western Kenya. The area covers 39,000km², representing 6.8% of the total land area of Kenya's 580,000km². The Mara River Basin on the Kenyan side is within the Lake Basin Development Authority. The problems of catchment property rights and management of public good dogs most of the planning within the basin²6.

3.3.7 Wildlife (Conservation and Management) Act

The Wildlife (Conservation and Management) Act²⁷ provides for the establishment and protection of game parks and reserves, including wetlands. The Act prohibits activities that might hamper the proper management of wildlife and their habitats. These include activities such as deforestation, cultivation of land or grazing livestock within a national parks or game reserves. Kenya Wildlife Service also manages some protected forests which are water catchments as was evidence during the rehabilitation of the Mau Forest Complex²⁸.

At the local level, management of wildlife is carried out by County Councils, which are responsible for game reserves. KWS has mandate on wetlands management, particularly wetlands under the Ramsar Convention. Mara River Basin has the Maasai Mara National Reserve are managed by the Narok County Council and Tans Mara County Council.

3.3.8 The Forest Act, 2005

The Forest Act²⁹ (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 Forests Act 2005 is more closely aligned to the Water Act 2002, especially to the recently formulated Integrated Water Resources Management Plan and Water Efficiency Plan³⁰, in so far as it provides for management of the natural resources on an ecological basis.

Forest management is an important aspect of integrated water resources management due to the fact that many gazetted forest areas coincide with water catchments. 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.

²⁶ Swallow, Brent; Leah Onyango and Ruth Meinzen-Dick Catchment Property Rights and the Case of Kenya's Nyando Basin, Proceedings of the Africa Regional Workshop on Preparing the Next Generation of Watershed Management Programmes, Cohosted by the Food and Agriculture Organizations and the World Agroforestry Centre, ICRAF, Nairobi, Kenya, 8-10 October 2003.

²⁷ Republic of Kenya, The Wildlife (Conservation and Management) Act Cap 376, Laws of Kenya

²⁸ Republic of Kenya, 2009. "Report of the Government's Task Force on the Conservation of the Mau Forests Complex". Office of the Prime Minister, Nairobi, Kenya

²⁹ Republic of Kenya, The Forest Act Chapter 385, Laws of Kenya, 2005

³⁰ Ministry of Water and Irrigation, Integrated Water Resources Management Plan and Water Efficiency Plan, 2009.

The Kenya 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; and
- (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 jointly by the Forest Service and the local communities, each with respect to the forest over which it has jurisdiction. The Community Forest Associations (CFAs) may be established to manage community forests.

3.3.9 Vulnerability and climate change

Climate change adds to existing stresses such as land degradation, food security, diseases and natural disasters in the basin. Intergovernmental Panel on Climate Change (IPCC) 4th Assessment³¹ projections indicate higher temperatures and increased rainfall and frequency of natural disasters such as flood and drought in the Lake Victoria basin. Climate change affects biodiversity and the capability for an ecosystem to deliver services like food, climate regulation, flood protection, etc. for human well-being. Well managed ecosystems reduce vulnerability and are useful for both mitigation and adaptation to climate change. Additionally land scarcity and population pressure is forcing the poor to cultivate and inhabit marginal lands, floodplains, slopes etc thus increasing their vulnerability to floods.

Urban poor, living in slums with inadequate and poorly managed drainage channels are particularly exposed to floods and diseases. The great dependence of rain fed agriculture makes the rural poor specifically vulnerable to drought. According to IPCC main adaptation strategies to climate change are diversification of livelihood activities, institutions rules and governance (early warning systems), adjustment in farming operations and migration. These climate change impacts will likely affect water resources availability as well as land use practices in the Mara River Basin³².

3.3.10 National Climate Change Adaptation Plans of Action Tanzania, 2009

Tanzania's economic base is dependent on the use of natural resources, rain-fed agriculture and biomass for household energy³³. The economy depends heavily on agriculture, which accounts for more

³¹ Intergovernmental Panel on Climate Change (IPCC) 4th Assessment Report

³² Alison M Jones; No Water No Life Project Director Kenya and Tanzania, Africa; No Water No Life takes to the mara River basin, September 15—October 15, 2009; see also Urama, K. Policy Brief. Bordering on a Water Crisis: The Need for Integrated Resource Management in the Mara River Basin

Tanzania Economy 2010. 2010 CIA World Fact book and Other Sources http://www.theodora.com/wfbcurrent/tanzania/tanzania economy.html

than one-fourth of GDP, provides 85% of exports, and employs 80% of the work force. The economy is highly vulnerable to the adverse impacts of climate change and to extreme weather events. There is a steady increase in temperature for the past 30 years causing adverse impacts in all sectors of the economy and are threatening human life. Temperatures are likely to increase in Tanzania by up to 1.5 °C in the next 20 years and by up to 4.3 °C by the 2080s. Changes in rainfall patterns, total annual rainfall amounts and rainfall intensity are expected but there is less certainty here³⁴. Droughts in the past few years have triggered the recent devastating power crisis, drop of water levels of Lake Victoria, Lake Tanganyika and Lake Jipe in recent years and the recession of Lake Rukwa in about 50 years, are associated, at least in part, with climate change, and are threatening economic and social activities. Eighty per cent of the glacier on Mount Kilimanjaro has been lost since 1912 and it is projected that the entire glacier will be gone by 2025³⁵. The intrusion of sea water into water wells along the coast of Bagamoyo town and the inundation of Maziwe Island in Pangani District, off the Indian Ocean shores, are yet another evidence of the threats of climate change³⁶.

The Tanzania National Adaptation Programme of Action (NAPA) was prepared in 2007 to identify immediate short-term priorities that could be addressed by the UNFCCC LDC fund for adaptation to climate change effects. Kilimanjaro glaciers and snow cover have been retreating (55% of glacier loss between 1962 and 2000. Debate over past and current climate change and ice cap coverage, however, persists. Over the 20th century, the spatial extent of Kilimanjaro's ice fields has decreased by 80%. It is suggested by some, that if current conditions persist, the remaining ice fields are likely to disappear between 2015 and 2020, for the first time in 11,000 years.

Loss of 'cloud forests' since 1976 resulting in 25% annual reductions of water sources derived from fog, affecting annual drinking water of 1 million people living in Kilimanjaro. Aside from warmer surface waters, deep water temperatures (which reflect long-term trends) of the large East African lakes (Victoria, Malawi) have warmed by 0.2 to 0.7°C since the early 1900s. The overall vision of Tanzania's NAPA is to identify immediate and urgent Climate Change Adaptation Actions that are robust enough to lead to long-term sustainable development in a changing climate. It will also identify climate change adaptation activities that most effectively reduce the risks that a changing climate poses to sustainable development.

The main objectives of NAPA are:

- a) To identify and develop immediate and urgent NAPA activities to adapt to climate change and climate variability;
- a. To protect life and livelihoods of the people, infrastructure, biodiversity and environment;

³⁴ Hepworth, N D, 2010. Climate change vulnerability and adaptation preparedness in Tanzania. Heinrich Böll Foundation, Nairobi, Kenya.

³⁵ United republic of Tanzania, Tanzania National Adaptation Programme of Action (NAPA), 2007, Dar es Salaam.

Mpeta, E. J. 2010. Climatic History and Trends in Tanzania, Research Project on Impacts of Climate Change on Water Resources and Agriculture and Adaptation Strategies in Tanzania, Tanzania meteorological department, Dar Es salaam.

- b. To mainstream adaptation activities into national and sectoral development policies and strategies, development goals, visions and objectives;
- c. Increase public awareness to climate change impacts and adaptation activities in communities, civil society and government officials;
- d. To assist communities to improve and sustain human and technological capacity for environmentally friendly exploitation of natural resources in a more sustainable way in a changing climate;
- e. To complement national and community development activities which are hampered by adverse effects of climate change; and,
- f. To create a long-term sustainable livelihood and development activities at both community and national level in a changing climatic conditions.

The NAPA ranks sectors according to priority and identifies 14 priority actions amongst which the most relevant ones include increased irrigation and water efficiency, watershed management and afforestation, and increased tourism.

3.4 Tanzania National Policy and Legal Framework

3.4.1 Constitution of the United Republic of Tanzania

The Constitution of the United Republic of Tanzania³⁷ (1977) provides the overall framework for the protection of natural resources in Tanzania. Article 27(1) of the Constitution of Tanzania stipulates that: "Every person is obliged to safeguard and protect the natural resources of the United Republic, State property and all property jointly owned by the people, as well as to respect another person's property." Protection of natural resources is further fortified in the Constitution by the requirement for every person to safeguard both state and communal property and to ensure the prevention of the misuse of resources.

Thus Article 27(2) of the Constitution provides that: "All persons shall be by law required to safeguard state and communal property, to combat all forms of misappropriation and wastage and to run the economy of the nation assiduously, with the attitude of people who are masters of their fate of their own nation."

3.4.2 Tanzania Vision 2025 and the Mara Trans-boundary Conservation Area.

The objective of this Development Vision³⁸ is to awaken, co-ordinate and direct the people's efforts, minds and national resources towards those core sectors that will enable Tanzania attain the development goals and withstand the expected intensive future economic competition. It aims to achieving "high quality livelihood", to attain "good governance through the rule of law" and to develop a "strong and competitive economy". Tanzania is looking forward to:

³⁷United Republic of Tanzania the Constitution of the United Republic of Tanzania of 1977

³⁸Tanzania Development Vision 2025 (1999) http://www.tanzania.go.tz/vission_2025f.html

- Adiversified and semi-industrialised economy with substantial industrial sector compareable to typical middle-income countries.
- Macroeconomic stability manifested by a low inflation economy and basic macroeconomic balances. A growth rate of 8 % per annum or more.
- An adequate level of physical infrastructure needed to cope with the requirements of the Vision in all sectors.
- An active and competitive player in the regional and world markets, with the capacity to articulate and promote national interests and to adjust quickly to regional and global market shifts.

In order to produce a competitive economy capable of providing sustainable growth and shared benefits, all the resources within the Mara River Basin must be planned well and in an integrated manner.

3.4.3 Water Sector Development Programme and Strategy 2006-2015

The Water Sector Development Programme focuses on infrastructure investment and provision for urban and rural water supply and sanitation alongside implementation of a reformed water resource management regime. This has seen the operationalisation of new water resource law through nine Basin Water Offices, charged with the task of allocating water to multiple sectors and controlling water resource development impacts including pollution.

The Water Sector Development Strategy (WSDS) documentation confines discussion of climate change and extremes and their management includes the development of alternative resources (rainwater harvesting, wastewater reuse, desalination and inter-basin transfer) to supplement during times of scarcity; the provision of early warning systems and contingency planning.

The major shortcomings of the present policy and strategy are the absence of robust prioritisation of drought and flood management in the water sector, the use of fixed level abstraction permits rather than conditions proportional to flow, and difficult barriers in the implementation of water resource management reforms.

3.4.2 National Water Policy, 2002

The National Water Policy (NAWAPO)³⁹, promulgated in 2002, defines the direction for achieving sustainable development and management of the water resources for the economy and water supply and sanitation services.

³⁹ United Republic of Tanzania, 2002. The Water Policy. Government Printer, Dodoma, Tanzania; United Republic of Tanzania. 2008. The Water Resource Management Act. Government Printer, Dodoma, Tanzania, National Water Policy http://www.tzonline.org/maji/start.htm

The policy aims to promote optimal, sustainable and equitable development and use of water resources for the benefit of all, based on a clear set of guiding principles. The broad objectives of NAWAPO are Integrated water resources planning and development with the government providing coordination, policy and guidelines formulation, and regulation, ensuring ensure full cost recovery in urban areas and cost sharing in rural areas and full participation of beneficiaries. The Policy stipulates specific objectives for water resources management, all revolving around equitqble and rational water allocation, effectiveness and efficiency of water resources utilization, water quality and conservation, management and conservation of ecosystems and wetlands, stakeholder participation, sustainable financial resources and a robust institutional framework and legislation. The Policy addresses cross-sectoral interests in water, watershed management as well as integrated and participatory approaches for water resources planning, development and management. It also sets priority that water requirement for all humans to maintain human health, and to restore and maintain ecosystems function.

Overall, with regard to water resources management, NAWAPO demands for the establishment of a "comprehensive framework for promoting the optimal, sustainable and equitable development and use of water resources for the benefit of all Tanzanians based on a clear set of guiding principles". The guiding principles are subsidiarity through decentralization; equity amongst diverse stakeholders; participation of stakeholders in use and decision making; and, sustainability of the resources. The main policy elements are a) the river basin is recognized as the fundamental planning unit for water resources development and management, b) water is considered as a social, economic, and environmental good, c) involvement of beneficiaries in all phases of the project cycle, d) management of operation to involve the private sector, e) full cost recovery for urban water supplies, f) at least full Operation and Maintenance (O&M) cost recovery and about 5% contribution on capital costs for rural areas. These policy elements are common to both Tanzania na Kenya and hence would enhance integrated planning and management of the Mara River Basin.

NAWAPO makes explicit provisions for the management of transboundary water resources. To address these challenges the 2002 policy sets out an ambitious strategy to introduce integrated planning processes, devolution of decision making to lower echelons of government, to reduce the share of public financing of water supply and sewerage services and to open up traditional public monopolies to private competition. This will introduce a new set of challenges and potential conflicts.

2.4.1 3.4.3 The National Environmental Policy, 1997

The National Environmental Policy⁴⁰ of 1997 identified six major problems namely, land degradation; lack of accessible, good quality water for both urban and rural inhabitants; environmental pollution; loss of wildlife habitats and biodiversity; deterioration of aquatic ecosystems; and deforestation. The overall objectives of the National Environmental Policy are:

⁴⁰ United republic of Tanzania, National Environmental Policy, Office of the Vice President, Dar es Salaam, 1997.

- (i) To ensure sustainability, security and equitable use of resources for meeting the basic need of the present and future generations without degrading the environment or risking health or safety;
- (ii) To prevent and control degradation of land, water, vegetation, and air which constitute our life support systems;
- (iii) To conserve and enhance our natural and man-made heritage, including the biological diversity of unique ecosystems of Tanzania;
- (iv) To improve the condition and productivity of degraded areas including urban and rural settlements in order that all Tanzanians may live in safe, healthful, productive and aesthetically pleasing surroundings;
- (v) To raise awareness and understanding of the essential linkages between environment and development, and promote individual and community participation in environmental action; and
- (vi) To promote international co-operation on the environmental agenda, and to expand our participation and contribution to relevant bilateral, sub-regional, regional, and global organization and programs, including implementation of treaties.

The National Environmental Policy also outlines environmental areas that need to be addressed in sectoral policies. In the water sector, the Policy identifies the following objectives that must be pursued:

- (i) Planning and implementation of water resources and other development programs in an integrated manner and in ways that protect water catchment areas and their vegetation cover;
- (ii) Improved management and conservation of wetlands;
- (iii) Promotion of technology for efficient and safe water use, particularly for water and waste water treatment and recycling;
- (iv) Institution of appropriate user-charges that reflect the full value of water resources.

3.4.4 National Wildlife Policy

The Serengeti National Park⁴¹ in Tanzania, covering 14,763 km² (5,700 square miles) of grassland plains and savanna as well as riverine forest and woodlands is most famous for its annual migration of over one and a half million wildebeest and 250,000 zebra. Serengeti National Park is widely regarded as the best wildlife reserve in Africa due to its density of predators and prey. As a result of the biodiversity and ecological significance of the area, the park has been listed by UNESCO as one of the World Heritage Sites. The administrative body for all parks in Tanzania is Tanzania National Parks (TANAPA).

⁴¹ UNESCO World Heritage Convention.

The management of the park is controlled by the Wildlife Policy⁴² The Policy introduces some positive concepts for better management of the protected areas, sustainable use of wildlife resources, devolution of wildlife user rights to communities and sharing of benefits derived from wildlife uses and resources. The new policy, however, retains state ownership and control of wildlife resources. The Policy recognises the need to empower local communities by giving them wildlife user rights and management opportunities and responsibilities in recognition that conservation and management can no longer disregard interests of rural communities, especially adjacent to protected areas. The recognition started in the early 1990s when TANAPA established a modest 'Parks as Neighbors' Programme (*Ujirani Mwema*) also known as the Community Conservation Service (CCS). The intention is primarily to placate local communities and minimise conflicts with TANAPA.

The Wildlife Policy also has provisions on the management of wetlands while the National Environmental Policy also recognizes the important role played by wetlands in environmental protection and water resources sustainability. The lower section comprises of the MRB flood plains located in Tanzania where Mara River discharges into Lake Victoria and characterized by high human and livestock population densities (2.1 million heads of cattle and a large portion of sheep and goats by 2003). The predominant land use pattern in this section is small scale, mixed farming for maize, beans and sorghum. The Amasurura swamp, an extensive wetland, occupies the lower reaches of the river and extends to the Mara bay, which is the discharge point into Lake Victoria. Fishing is an important and integral part of the economic activities. The Wildlife Division in the Ministry of Natural Resources and Tourism has the responsibility to coordinate the management of wetlands in Tanzania.

3.4.5. National Tourism Policy and Strategies

The sector directly accounts for about 16% of the GDP and nearly 25% of total export earnings. It directly supports the estimated 156,050 jobs (2000). Foreign exchange receipts from tourism grew from US\$ 259.44 million in 1995 to \$ 729.06 million in 2001. These receipts were generated by tourists' arrivals in the stated years, which have shown a steady growth from 295,312 in 1995 to 525,000 in 2001. With an average growth rate of 20%, we hope to reach the target of one million tourists by the year 2010. ⁴³ The National Tourism Policy first formulated in 1991 and revised in 1999, the overall objective of the policy is to assist in efforts to promote the economy and livelihood of the people, essentially poverty alleviation through encouraging the development of sustainable and quality tourism that is culturally and socially acceptable, ecologically friendly, environmentally sustainable and economically viable. It is also sought to market Tanzania as favoured tourist destination for touring and adventure in a country renowned for its cultural diversity and numerous beaches.

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⁴² United Republic of Tanzania, The Wildlife Policy of Tanzania, Ministry of Natural Resources and Tourism, 1998. See also Wildlife Policy of Tanzania

http://www.tzonline.org/pdf/wildlifepolicy.pdf

⁴³ National Tourism Policy http://www.tzonline.org/pdf/Tourismpolicy.pdf

The tourism development in Tanzania is not as advanced as that on the Kenyan side⁴⁴. Issues relating to payment for environmental services have not been openly discussed between upstream and downstream inhabitants. People from downstream are affected adversely by activities upstream including water pollution. There are also investors upstream who benefit from the resources was discussed in the workshop and was felt to be useful only in joint management where there will be total evaluation of all the product and services from the ecosystem.

2.4.2 3.4.5 The National Agriculture and Livestock Policy (1997)

The principal livestock keepers in Tanzania are Sukuma and the Maasai occupying the region from the North West to the south of Lake Victoria. They make extensive use of wetlands to the delta of River Mara during the dry season. In 2002, the MRB in Tanzania had 1,291,516 cattle, 620,748 goats, 179,018 sheep and 9,866 donkeys. Tarime district has the highest number of cattle and accounts for 31% of the region's population. 32% of sheep were in Tarime. Cattle increased by 33% from 1984 to 2002, goats increased by 65% while sheep increased by 17%. However lack of water is a major problem in many villages. The Mara basin currently supports the life of about 167,670 cattle, 46,265 goats and 23,042 sheep valued at Tsh. 25.15 billion, 416.4 million and 172.8 million respectively. Sustainable land management (SLM) defined as the use of land resources such as soils, water, animals and plants for the production of goods - to meet changing human needs — while assuring the long-term productive potential of these resources, and the maintenance of their environmental functions, has remained elusive. An integrated land use planning has been proposed for the Mara River Basin (MRB).

The National Agriculture Policy⁴⁶ (1997) recognizes the need to improve agricultural technologies and practices to enhance agricultural production. The Policy highlights development of smallholder irrigation systems based on water harvesting technology and emphasizes private sector participation in agricultural production, agro-processing and marketing of agricultural produce with the Government focusing on Policy formulation and sector coordination and regulation.

The National Livestock Policy⁴⁷ aims at promoting the livestock industry so as to increase production and productivity to enhance farmers' income, production of hides and exports of both live animals and other products. The strategies to improve the livestock industry include:

- (i) Encouraging Private sector to participate in promotion of community based management of livestock infrastructure; grazing lands, dips and range development;
- (ii) Strengthening extension services and research by both government and private sector participation;

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⁴⁴ Transboundary Natural Resources Management for Peace and Cooperation: Promoting Cross-border Co-operation in the Management of Natural Resources in Shared Ecosystems, InWEnt and the GTZ Wildlife and Water Sector Reform Programmes in Tanzania Dar es Salaam 2005

⁴⁵ Wambua, B. 2010. Land Use Types And Related Issues In Mara River Basin, **REDPLAN Consultants Ltd**, Report.

⁴⁶ Agricultural Policy (1997) http://www.tanzania.go.tz/government/sectoralpol.htm#Agricultural%20Policy

⁴⁷ Livestock Policy

http://www.tanzania.go.tz/government/sectoralpol.htm#Livestock%20Policy

- (iii) Encouraging the pastoral communities to form savings and credit institutions such as saving, and credit societies, trust funds and rural banks and work with pastoral communities and develop appropriate credit systems;
- (iv) Establishment of livestock associations in the pastoral areas to enhance their bargaining and purchasing power in the supply of inputs, organizing the market of products and dissemination of new technology;
- (v) Encouraging Private sector to participate in processing and export of livestock products and livestock surpluses; and,
- (vi) Providing marketing information, including potential import markets, by the government.

In the second (middle) section, expansion of large scale wheat cultivation and large scale irrigation activities are affecting water resources in the Mara River which affects downstream levels. These large scale wheat, maize and horticultural crops rely on water from Mara river and therefore it will be difficult to sustain such investments without compromising water resource depletion and subsequent effects on other water users.

3.4.6 The National Forest Policy (1998)

The landscape of Northern Serengeti is dominated by open woodlands predominantly *Commiphora*. The main guiding principles for National Forest Policy⁴⁸ implementation are the involvement of all stakeholders in management of forest resources. It encompasses involvement of communities through participatory forest management (PFM) and private sector involvement (PSI). The main objectives of the Policy are:

- (i) Ensure sustainable supply of forest products and services by maintaining sufficient forest area under effective management;
- (ii) Increase employment and foreign exchange earnings through sustainable forest-based industrial development and trade;
- (iii) Ensure ecosystem stability through conservation of forest biodiversity, water catchment areas and soil fertility; and,
- (iv) Enhance national capacity to manage and develop the forest sector in collaboration with other stakeholders.

3.4.8 National Fisheries Policy (1998)

The overall goal of the National Fisheries Policy⁴⁹ is to promote conservation, development and sustainable management of the Fisheries Resources for the benefit of present and future generations. The strategy statement focuses on the promotion of sustainable exploitation, utilization and marketing of fisheries resources and effective protection of aquatic environment to sustain development. The main policy strategies include:

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⁴⁸ National Forest Policy http://www.tzonline.org/pdf/nationalforestpolicy.pdf

⁴⁹ National Fisheries Sector Policy and Strategy Statement,

http://www.tzonline.org/pdf/NationalFisheriesSectorPolicyandStrategyStatement.pdf

- Effective mechanism for monitoring fishing activities especially in deep water fishing for export to minimize unrecorded exports and to ensure that appropriate Government revenue is collected;
- (ii) Establishment of conservation centres in all lake waters and sea waters and ensure effectiveness in maintaining quality and managing the natural ecosystem;
- (iii) Provision of research and extension services for fishermen;
- (iv) Improvement of infrastructure for fish handling, processing, packaging, preservation, storage and marketing.

3.4.9 The National Land Policy (1961)

Land is a critical resource that affects any form of economic activity. The land tenure system that governs the use of a particular piece of land determines how that land is to be used and by whom. In the middle catchments of the Mara basin around Mulot, Longisa, Norengore and Kaboson in Kenya used to be sparsely populated rangelands, but in recent years, the area has attracted immigrants' farmers thus affecting the Mara river hydrological levels and cycles. As more land is opened for crop production, pastoralists and livestock keepers are finding it increasingly difficult to support their families and are highly vulnerable to drought. For instance in 2000, pastoralists lost 35% of their cattle due to drought. In the Mara river flood plain, the Masurura wetland in Tanzania expanded from 791km² in 1986 to 1,394.4 km² in 200. This build up has been associated with sediments downstream as a result of serious soil erosion in the upper catchment areas of Kenya due to high water velocities and high peak flows caused by reduction in the vegetation cover these changes are shown in table 1.

The net effect has been felt in wildlife conservation, livestock development and farming activities. Farmers and livestock keepers have abandoned formerly arable lands and generally human livelihoods have been greatly affected. Grazing resources have drastically dwindled as noted by Machiwa (2002). The overall aim of a National Land Policy⁵⁰ is to promote and ensure a secure land tenure system, to encourage the optimal use of land resources and to facilitate or prevent endangering the ecological balance of the environment. The policy, among other things, governs land tenure, land use management and administration.

⁵⁰ United Republic of Tanzania. 2002. The Water Policy. Government Printer, Dodoma, Tanzania. See also National Land Policy http://www.tzonline.org/pdf/nationallandpolicy.pdf

Table 1: Shows lands use changes between 1986-2000

Land use	1986 (Km²)	2000 (Km²)	Change (km2)	% Change (km2)
Forest	893	689	-204	-23
Agricultural land	1617	2504	887	55
Tea/open forest	1073	1948	875	82
Shrub land	5105	3546	-1559	-31
Grassland	1621	1345	-276	-17
Savannah	2867	2354	-513	-18
Wetlands	604	1394	790	131
Water bodies	54	455	-1	2

Source: Kithia, S. 2010. Land use change in the Mara River Basin. Consultancy report for REDPLAN Consultants, Nairobi.

Unresolved issues include the land use issues in Musoma rural, Tarime and Serengeti districts involve the following border disputes between and among villages which remains unresolved because villages in the MRB were relocated and boundaries redrawn. Subsequently unscrupulous officials have taken advantage of this confusion to allocate village land to powerful and rich outsiders at the expense of the villagers. There is also heavy siltation downstream on the Tanzanian side caused by upstream activities.

3.5 Tanzania Water related Legislation

3.5.1 The Water Utilisation (Control and Regulation) Act

The Act⁵¹ vests all water resources in to the United Republic. The water is allocated to users through the water rights system. The Act provides for the sustainable use and protection of water resources in Tanzania. The Act has provisions on pollution control but still lacks most of the current instruments of water resource management under the integrated water resource management approach.

Section 25 provides for situations where water rights may be compulsorily acquired. The Water Officer may do so where he determines that a certain quantum of water is needed for 'public purposes' and may be used in enforcing the "reserve flows". The Water Utilisation (Control and Regulation) Act, 1974 has no explicit provisions that deal with the management of transboundary water resources. However, the Environmental Management Act, Cap. 191, provides for transboundary environmental management programmes.

 $^{^{51}}$ United Republic of Tanzania, The Water Utilisation (Control and Regulation) Act 1974 (Act No. 42)

The Act requires the Minister responsible for Environment to consult with neighbouring countries on environmental management programmes and measures aimed at avoiding and minimizing transboundary environmental impacts.

3.5.2 The Water Resources Management Act, 2009

The Water Resources and Management Act⁵² repeal the Water Utilisation (Control and Regulation) Act Cap. 331. The Act intends to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled for basic human needs for the present and future generation. The Bill is divided into sixteen parts. The Act seeks to implement the Integrated Water Resources Management concept and incorporates in its provisions of modern water resources management tools. The Act reiterates that ownership of water resources is vested in the United Republic. The Act introduces Water User Permits and requires that an application of a Water User Permit be made by any person who intends to divert, dam, store, abstract or use water from surface or underground water source or for such purpose constructs or maintains any water works.

The Water User Permit may also be issued for non abstraction uses or maintaining environmental flow requirements. The Act further provides for:

- (i) Classification of water resources and reserves according to type, location, geographical or other factors;
- (ii) Determination of reserve for the whole or part of each water resource;
- (iii) Restrictions during drought and natural disasters there may be suspension or variation of water use permits)

3.5.3 The Water Supply and Sanitation Act, 2009

Tanzania has witnessed declining water access, intermittent supply and poor service and increasing but snail speed growth in sanitation. Integrated water resources management was initiated in 2002 and aggressive water supply and sanitation in 2005⁵³. About 88 % of water development funding is through external support. Nearly 50 % of the population has access to clean water. Like Kenya, community participation is a critical variable in water resources planning and development. Non revenue water ranges between 25% and 45%, with the lowest estimated for the utility in Tanga⁵⁴. This Act⁵⁵ provides for sustainable management and adequate operation and transparent regulation of water supply and sanitation services with a view to give effect to the National Water Policy, 2002; to provide for the establishment of water supply and sanitation authorities as well as community owned water supply organisations; to provide for appointment of service providers, repeal of the Waterworks Act and to provide for the related matters.

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⁵² United Republic of Tanzania. 2008. The Water Resource Management Act. Government Printer, Dodoma, Tanzania.

⁵³ African Development Bank, Appraisal Report Rural Water Supply And Sanitation Program, Tanzania Water Department, May 2006.

⁵⁴ United Republic of Tanzania, Water Sector Status Report 2009, Ministry of Water and irrigation, September 2009.

⁵⁵ United Republic of Tanzania, The Water Supply and sanitation Act, No. 12, 15th May 2009.

The objective of the Bill is to enact the Water Supply and Sanitation Act, 2009 and repeal the Waterworks Act, Cap 272. The Act intends to promote and ensure the right of every person in Tanzania to have access to efficient, effective and sustainable water supply and sanitation services.

3.5.4 Environmental Management Act, 2004

The Environmental Management Act⁵⁶, is designed to organize various agencies of Government charged with aspects of environmental protection to promote coordination and cooperation among them, and define environmental management tools of general scope that facilitate an even degree of policing and enforcement. Sectoral legislations were expected to be repealed in such a way as to factor environmental policy objectives in their area of coverage. There are instruments or tools of modern environmental management which are now universally accepted and included in legislation taking into account the specific situation⁵⁷. These are provided for by the Environmental Management Act, Cap. 191 and in the Third Schedule to the Act are elaborated in the Environmental Impact Assessment and Audit Regulations, 2005.

The Environmental Impact Assessment and Audit Regulations, 2005 provides more details to the types of project requiring and not requiring EIA. The Act and the Regulations outline the process and procedure of carrying out of an EIA, its review and approval by the appropriate authorities. These procedures are quite similar to those practiced in Kenya. The sector ministries and the Local Government Authorities through their Sector Environmental Coordinator and Local Government Authorities, Environmental Management Officers, respectively, participate in assisting the National Environmental Management Council (NEMC) in the process of overseeing the preparation of an EIA study. NEMC, *inter alia*, is charged with the responsibility of reviewing the EIS once submitted by the proponent. The power to approve the EIS and issue an EIA Certificate is vested with the Minister. Strategic Environmental Assessment (SEA) is for bills, regulations, policies, strategies, programmes and plans. The Act also provides for the need of SEA to be carried out where a mineral or petroleum resource is identified and before specific details are planned or hydroelectric power station is planned or a major water project is planned. The Government, through the Ministry responsible for that specific activity, would undertake the SEA.

There are problems with water pollution mainly from agriculture; especially from the use of commercial chemicals including fertilizers and pesticides. Although Tanzania and Kenya have considerably more experience of EIA, neither fulfills the legislative requirements nor do reaches international standards of practice.

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⁵⁶ United Republic of Tanzania, Environmental Management Act,2004-Tanzania; and National Environmental Policy http://www.tzonline.org/pdf/nationalenvironmentalpolicy.pdf

Such instruments and tools include Environmental Management Plans; Ecosystem Management Plans; Economic Instruments; Environmental Impact Assessment; Environmental Audits; Social, Health, Biotechnological and Risk Impact Assessment; Strategic Environmental Assessment; Pollution Prevention and Control; Waste Management (covering solid waste, litter, liquid waste, gaseous waste and hazardous waste); and Environmental Quality Standards (catering for water, air, noise and vibration pollution, radiation and soil quality standards).

The general challenge includes the need to improve implementation of environmental assessments (EIA and SEA) by strengthening awareness and capacity and to improve public participation. The Environmental Management Act empowers the Minister to order any one to conduct other types of impact assessments, such as social, health, biotechnological or any other risk impact assessment, where deemed necessary.

3.5.5 The Forest Act, 2002

The Forest Act⁵⁸, 2002 is for the management of forest resources for the benefit of the present and future generations. It incorporates modern concepts and principles of environmental management such as sustainable development and Environmental Impact Assessment. Forest management plans are required to be drawn up for each forest reserve. The plans not only have to contain provisions for protection of wild animals and plants, but also details on involvement of communities in the use and management of forest resources. In establishing new national forest reserves, consideration has to be given to whether it is better to establish a village or community forest reserve as the most efficient and equitable way to maintain the balance between existing rights and protection of forest resources. Village reserves may be owned and managed by one or more villagers, and community forest reserves are managed by a group of people who are members of a village or live in or near a forest. The aim is to meet a wide range of objectives from equitable access to sustainable utilization and protection of forest resources. However, critics of community involvement in natural resource management have suggested that this is simply a way of government passing on costs from central to local level. Ultimately it may be impossible to reconcile the local need for forest products and global interests for biodiversity conservation. In this case equity could be restored through direct payments for conservation, an initiative that already exists in Kenya.

The Act requires the undertaking of an EIA in developments and undertakings that will be taken in the sector. The Forest Act, 2002 stipulates that an EIA must be undertaken for any development proposal in a forest reserve, private forest, and sensitive forest area including a watershed and obliges any person proposing any development to submit an EIA for the proposed development.

The Act lists the following developments and undertakings in forest reserves, private reserve and sensitive forest reserve as requiring an EIA:

- i. Commercial logging and forestry industry
- ii. Mining developments
- iii. Road construction or the laying of pipes
- iv. Construction of dams, power stations, electrical or telecommunication installations
- v. Construction of a building or group of buildings for purposes other than the management of forest reserve on an area of land exceeding one hectare
- vi. Agricultural, aqua-cultural or horticultural development on an area exceeding 5 hectares

⁵⁸ United Republic of Tanzania, The Forests Act, 2002, Tanzania.

Once the EIA has been approved the developer is required to incorporate the Environmental Management Plan into the Forest Management Plan. The result of the EIA is used to approve a concession or not in respect of the purposes of the applicant.

3.5.6 The Wildlife Act, 2008

This is an Act⁵⁹ which is meant to both repeal and replace the Wildlife Conservation Act Cap. 283 of 1974. It makes provisions for the conservation, management, protection and sustainable utilisation of wildlife, wildlife products and to provide for other related matters.

3.5.7 The National Parks Act

The National Parks Act⁶⁰, revised in 2002 and it provides for procedures for establishment, control and management of National Parks. Tanzania National Parks Act governs non-consumptive wildlife resources and their habitats in National Parks. The National Parks Act has no provisions which require the undertaking of EIA for developments or undertaking in wildlife sector. This can be attributed to the fact that the Act was enacted when EIA was not known. However, the overarching Environmental Management Act, 2004, redresses the lack of provisions on EIA or other assessments under the Tanzania National Parks Act. That means proponents of developments in the wildlife sector must undertake EIA as stipulated by the Environmental Management Act, 2004, and the Environmental Impact Assessment and Audit Regulations, 2005.

3.5.8 The Fisheries Act⁶¹, 2003

The Fisheries Act, 2003 is the main fisheries legislation in Mainland Tanzania, repealing the Fisheries Act, 1971 and came into operation in July 2005. The Act makes provision for sustainable development, protection, conservation, aquaculture development, regulation and control of fish, fish products, aquatic flora and its products, and for related matters and establishes the Fisheries Departments with powers to undertake monitoring, control and surveillance activities. The main enforcers of the law are Directors of the Fisheries Departments assisted by the Fisheries Officers in form of authorized officers. It also establishes Beach Management Units. The Act contains provisions on the protection and management of both the aquatic environment and surrounding terrestrial environment and the Government would take measures aimed at strengthening regional and international collaboration in the sustainable utilization, management and conservation of resources in shared water bodies such as Lake Victoria.

Fisheries of Musoma Bay and the Mara swamp complex will need to be managed according to legally recognized community-based plans. The Act links economic development with proper environmental management in the utilisation of fisheries resources. Various provisions in the Act exist to strengthen regional and international cooperation.

⁵⁹ United Republic of Tanzania, The Wildlife Act, 2008, Tanzania.

 $^{^{60}}$ United Republic of Tanzania, The National Parks Act, 2002, Tanzania.

⁶¹ United Republic of Tanzania, The Fisheries Act, 2002, Tanzania.

3.5.9 The Land Act, Cap. 113

Land is a very important asset for poverty reduction and creating wealth. The Land Act⁶² continues to vest radical title over all lands in Tanzania in the State, with the President being a Trustee of the land for the benefit of citizens with ultimate control and authority of all lands. The Act also limits the amount of land that any individual entity can own and therefore ensure equity in land ownership.

The implementation of the new land laws will release substantive land resources and provide the Government and opportunity to push for economic and social development objectives under the liberalized free market economy and poverty eradication strategy and the realization of the National Development Vision 2025.

3.5.10 Village Land Act, Cap. 114

Like the Land Act, the Village Land Act also contains provisions empowering the President to declare and transfer village land to be either reserved land or vice versa. Land use and land tenure need to be in one legislation to ensure that environmental issues regarding land are not allowed to fall through the cracks. Village Land, however and unlike Kenya, is meant to curb sources of land conflict, instituting lower or minimum limits on land holding, increasing the number of surveyed villages and delivering Certificates of customary right of occupation, conceiving and introducing a national village resettlement scheme, and setting up Village Land Councils and other Land Courts.

Because of the multiplicity of stakeholders, the Land Act No.4 and Village Land Act No.5 of 1999, the Land Disputes Courts (Tribunals) Act No.2 of 2002 and the (Amendments) Act No.2 of 2004 (Mortgages) over the medium (3 years) and long (10 years) term period need to be read together to ensure that there is an integrated approach to sustainable management of the land resources in the Mara Basin. This has been part achieved through the Preparation of Strategic Plan for Implementation of New Land Laws (SPILL) 1999 that was completed in April, 2005.

3.5.11 Land Use Planning Act, 2007

This Act⁶³ provides for procedure for the preparation, administration and enforcement of land use plans. The National Land Use Planning Authority has now replaced the Commission. The Planning Authorities under the new Act include a Village Council, a District Council, and a National Land Use Planning Authority.

The Act, under section 28, requires relevant land use planning authorities, when preparing land use plans, among others, to include matters relating to:

- (i) Preservation of protected or sensitive areas, parks, game reserves, coastal ecosystems including swamps, beach land and marine parks, biodiversity colonies and other flora and fauna.
- (ii) Preservation of the quality and flow of water in a dam, lake, river or aquifer.

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⁶² United Republic of Tanzania, Land Act, Cap. 113, 1999.

⁶³ United Republic of Tanzania, Land Use Planning Act, 2007, Tanzania.

3.5.12 Mining Act 2002

Mining accounts for 2.3% of Tanzania's GDP with diamonds and gold a mainstay of the country's mineral production (URT, 2001). The Mining Act⁶⁴, deals with prospecting for minerals and mining in Tanzania except for the search for or production of petroleum. The Act was the first legislation covering the whole of the United Republic of Tanzania to make Environmental Impact Assessment (EIA) a legal requirement.

The requirements of EIA in the mining sector are further clarified in the Mining (Environmental Management and Protection) Regulations, 1999 (Gazette Notice No. 218 of 1999). The regulations cover an array of environmental management aspects such as EIA, avoidance of pollution to the air, surface and ground water and soils, as well as matters relating to the protection of the environment and minimizing all adverse impacts to the environment including the restoration of land on which mining operations have been conducted. In order to ensure that people in the areas where mining activities will take place understand the EIS and effectively participate in the EIA process the Mining (Environmental Management and Protection) Regulations, 1999 require that the EIS and EMP submitted should have a summary in Swahili language. Moreover it must be published in Swahili and English newspapers circulating in the locality in which the land is situated.

3.5.13 Local Government Laws and Environmental Management

The Local Government (District Authorities) Act, Cap. 287 R.E. 2002⁶⁵ has issues of environment included as objectives of functions of Local Governments in their respective areas. Section 111A (2) (c) of the Act stipulates that: "In performance of their functions, Local Government Authorities shall provide for the protection and proper utilization of the environment for sustainable development". In section 148(1) the District Councils have powers to make by-laws with consent of the Minister responsible for Local Government. The sub-section provides that such by-laws may be made by the District Council and designed to achieve the following:

- i. To promote and secure the good rule and orderly Government of its area of jurisdiction;
- ii. To foster and maintain the health, safety and well-being of the inhabitants of its area of jurisdiction; and
- iii. For carrying into effect and for the purposes of any of the functions conferred by or under the Act or any other written law.

It is clear that the District Councils have powers to enact by-laws in matters related to public order and security as well as to sanitation and environment. The Councils are given general and wide legislative powers under section 148 (1) (1) and they can virtually legislate on natural resources management issues. The Local Government Authorities in Urban Authorities and District Councils as well as Village Councils have made a number of by-laws that deal with the protection of the environment.

⁶⁴ United Republic of Tanzania, The Mining Act, 2002, Tanzania.

⁶⁵ United Republic of Tanzania, The Local Government (District Authorities) Act, Cap. 287 R.E. 2002

Table 2: Summary of policy environment in Kenya and Tanzania

Sector	Kenya	Tanzania	Comments
Constitution	Has comprehensive treatment of Land, NRM	1977 Art. 27(1) Safeguard and protection of environment; 27(2)on abuse, misuse, wastage, etc	Relatively safeguards environmental protection and right to clean environment
Water	National Water Policy, 1999; Draft Transboundary, 2008	Water Policy (NAWAPO) 2002, Issue of full cost recovery.	Tanzania has transboundary issues. Water must be planned with land use in mind.
Environment	National Environment Management Policy Draft. Well detailed. NEMA.	National Environment Policy 1997. NEMC	Sectoral policy may be conflicting in some cases. EIA/EAs to be streamlined.
Land	National Lands Policy, 2010; Constitution 2010.	National Lands Policy 1961.	Major differences on lands issues. Land use very important in Mara River Basin context.
Wetlands	Draft National Wetland Policy – KWS, WRMA, NEMA	No Wetlands Policy. National Wildlife Policy 2007; National Environment Policy, 1997	It is desirable to have a specific Wetlands Policy. Tanzania probably needs to prepare one to safeguard sensitive ecological niches.
Forestry	KFS Development Policy, 2005; National Policy draft discussed but never went to Cabinet.	National Forestry Policy, 1998;	There are close similarities between the two legislations and policies.
Irrigation	National Irrigation Policy, Draft 2008. Ambitious, Guidelines and targets, Manual for Irrigation.	Irrigation Policy, 1997	Both countries have ambitious plans to increase irrigation, without emphasis on water efficiency and environmental controls.
Agriculture	NAEP, 2001. Extensve use of fertilizers causing pollution downstream.	National Agriculture policy, 1997; National Livestock Policy, 1997	Both countries relie on agriculture. Need to harmonise land use.
Fisheries	National Fisheries Policy, Draft 2009;	National Fishery Policy 1998	Lake fishing at the Mara River delta affected by pollution of the river.

Table 3: Summary of Legislative Environment in Kenya and Tanzania

Sector	Kenya	Tanzania	Comments
Constitution	Comprehensive, Constitution 2010		Both have some similarities and could be harmonized under the auspices of the EAC
Water	2002; separation of function, creation of institutions;	Legal frameworks from water resources management, water supply and sanitation	Tanzania's approach is more comprehensive as compared to Kenya.
Water Resources management	WRMA; NEMA; KWS, Agriculture.	Water utilization (Control and Regulation) Act (Cap 331), 2002.Water Resource Management Act 2008 has provision for transboundary water resource.	Tanzania National Waiter Policy (NAWAPO) and Kenya National Water Policy recognizes IWRM and plans a suitable institutional framework
Environment	EMCA, 1999; Guidelines for EIA, EAs, Regulations in place.	EMA 1974 Cap 191 provides for transboundary environmental management.	Both countries have very strong and comprehensive environmental laws.
Agriculture	Fairly comprehensive, but ineffective, NEMA, WRMA		Several issues such as seeds sales, etc are not harmonized.
Wildlife Management	Conservation and Management Act, Cap. 376, 1989. Created KWS.	Wildlife Conservation Act, 1974; National Parks Act 1959, r.v. 2002.	Both countries have very strong and comprehensive Wildlife Management laws.
Forestry	Forest Act 2005	Forest Act 2002	Comprehensive and adequate for integration
Fisheries Act	Draft Fisheries Bill, 2010.	Fisheries Act 2002	Comprehensive and adequate for integration.
Land Use	Physical Planning Act	Land Use Planning Act, 2007	Land use and land tenure need for one comprehensive legislation
Regional Development Authorities	Lake Victoria Basin Authority.	Village Act, Cap 114	
Mining	Draft Mining Bill 2010;	Mining Act, 2002, with EIA	Similarities in content and spirit of the law.

Although policies, laws and regulations can be enhanced implementation of existing instruments is the key governance problem.

3.6 Joint Management of Wildlife and Tourism in Serengeti Masai Mara Ecosystem

The Serengeti-Maasai Mara Ecosystem (SMME) is one of the largest remaining natural ecosystems in Africa, covering approximately 25,000 km². It offers unique concentrations of predators in the midst of migratory wildebeest, zebras and gazelles, which freely criss-cross the Tanzania-Kenya border every year in search of food and water. The Maasai Mara National Reserve (MMNR) and Serengeti National Park (SENAPA) cannot be effectively managed as separate systems. This is primarily because the Mara-Serengeti ecosystem transcends the two state boundaries and activities or jurisdictions in either one of these states affect environmental and social systems in the other. The Cooperative Framework for Kenya and Tanzania should aim at developing a shared visionary responsibility on conserving and managing the ecosystem and articulating and harmonizing policies and legislation that underpin the socio-economic and ecological sustainability of the entire system.

The tourism potential of the spectacular movement of these animals is not yet fully realized since the two countries continue to manage this trans-boundary resource separately. Tourism based on wildlife and cultural resources is an industry with high growth potential, especially in this area which has marginal value for agriculture. The present study proposes a joint management and marketing strategies that will expand tourist opportunities and provide integrated tourism products, which will make this region much more attractive as a destination. Additionally, the two countries should consider opening the border to facilitate cross-border movements of tourists and develop guidelines for sharing benefits accruing from conservation and management of the joint ecosystem resources. The arrangement created should foster regional cooperation and promote rational management and sustainability of the ecosystem resources for the people of the region. It is expected that as the tourism sector flourishes other stakeholders such as local communities will benefit through employment and trade opportunities.

3.7 Conclusion

Joint action provides an opportunity to reduce costs for natural resources governance, to improve knowledge transfer and harmonise policies and laws. Moreover, the Cooperative Framework will create a political momentum that could facilitate implementation of legislation on the national and local level.

The top three national interventions in the Strategic Action Plan (Indicate what this SAP is all about because this part of the sentence is hanging), adopted by the EAC in April 2007 are:

Invest in re-forestation and afforestation programmes.

- i. Invest in rehabilitation and restoration of degraded wetlands and rangelands.
- ii. Mechanisms that promote efficient use and investment in farming methods and practices that reduce pressure on forests and wetlands.

Land use planning remains largely sectorised and unintegrated, is usually centralized and is mainly top down. There remains little effective participation by beneficiaries in the process. Indicate whether this is the case in the two countries?

CHAPTER 4: THE INSTITUTIONAL ARRANGEMENT

4.1 EAC Secretariat and Autonomous Institutions

EAC Secretariat is the executive organ for East African Community⁶⁶. The coordination at EAC Secretariat level provides a forum for Partner states to harmonise their laws, policies and standards. The other EAC specialized institutions that are involved include:

Lake Victoria Basin Commission (LVBC): This is a specialized institution established by EAC Partner States through a negotiated protocol for sustainable development of Lake Victoria Basin. LVBC is the EAC organ for ensuring sustainable development and management of natural resources of the Lake Victoria Basin. LVBC Secretariat will house the Programme Management Unit (PMU) in Kisumu. In transboundary management of the Natural resources of the Mara River Basin, the Secretariat will provide office space, programme oversight, technical backstopping, access to policy levels for taking forward transboundary matters for resolution and agreement by its member states, programme coordination with national focal points in lead Ministries in Kenya and Uganda, and prepare for and provide timely technical and financial reports to the annual meeting.

The Lake Victoria Fisheries Organisation (LVFO): This is an institution under EAC based in Jinja, Uganda. The main objectives of the LVFO are to harmonise national measures for sustainable use of the lake's fisheries resources and to develop and adopt conservation and management measures, accordingly. The Convention delineates a set of functions to achieve the overall objective, *inter alia*, to provide a forum for discussion of initiatives to deal with environmental conditions and water quality in the Lake Basin, to promote research with respect to the living resources of the lake, and to address problems of non-indigenous species.

The highest-level decision-making body is the Council of Ministers (Art. V of LVFO Convention). It consists of the Ministers responsible for fisheries from the different member countries. Their delegations include the heads of departments responsible for fisheries management, fisheries research, environment, industry and tourism. On the intermediary level, the LVFO has two bodies established (Art. VII and VIII LVFO Convention): the Policy Steering Committee and the Executive Committee. The former one consists of representatives from all Ministries dealing with fisheries matters and is responsible for reviewing and recommending activities on the organization and developing guidelines for the management of the lake. The Executive Committee, consisting of six members from ministerial departments responsible for fisheries management and fisheries research, is in charge of specific measures for fisheries management and monitoring. Two additional Committees are in charge of more specific issues of Lake Basin Management (Art. IX LVFO Convention): The Fisheries Management Committee, consisting of the heads of ministerial departments dealing with fisheries management related issues, is in charge of fisheries related data and information and the development of the lake's fish resources.

⁶⁶ Treaty Establishing the East African Community, 1997.

And the Scientific Committee, consisting of the heads of ministerial departments responsible for fisheries related research, deals with scientific and research activities related to the fish and other aquatic resources in the lake. The Permanent Secretariat provides administrative and technical services to the institution. Furthermore, the LVFO foresees the establishment of National Committees in each of the member states in order to better coordinate activities on the national level with the work of the RBO (Art. XI LVFO Convention). LVFO will support the harmonization and management of the Mara River wetland and its interaction with Lake Victoria to ensure sustainable fisheries development there.

The Inter-University Council for East Africa⁶⁷ (IUCEA) is a regional inter-governmental organisation whose mission is to encourage and develop mutually beneficial collaboration between Universities in East Africa, and between them and governments and other organisations, both public and private. It is one of the autonomous institutions of EAC. The IUCEA, through Lake Victoria Research (VicRes) Initiative, is supporting staff of Universities to undertake research on poverty reduction and environmental restoration. Research activities associated with the transboundary nature of the natural resources within the Mara River Basin shall be coordinated from IUCEA.

4.2 Case study of The Permanent Okavango River Basin Water Commission

The Permanent Okavango River Basin Commission⁶⁸ (OKACOM) was established in September 1994 with a declared political agreement to work toward joint management of the basin. The 1994 OKACOM Agreement, the 1995 SADC Protocol on Shared Watercourse Systems and the 1997 UN Convention on the law of the non-navigational uses of international watercourses provides a framework for this agreement. Under the OKACOM Agreement, the riparian countries are working toward the implementation of an Integrated Management Plan (IMP) for the basin on the basis of an Environmental Assessment (EA). An examination of the Okavango River Basin Water Commission (OKACOM) as an example of transboundary management of natural resources in other river basins reveals that its task is to coordinate the different activities that have been established in the river basin involving Angola, Botswana and Namibia. It was established officially with the OKACOM Agreement in 1994, but was only truly institutionalized in 2007.

The main policy-making body of the OKACOM is the Commission, consisting of representatives of each of the members. It is in charge of defining and guiding the development of the river basin from a very general perspective. Decisions of the Commission are translated into concrete strategies by the Okavango Basin Steering Committee (OBSC), consisting of representatives from member states. Task Forces can be set up to implement any issue regarded as important by the policy level of the organization. Currently, there are Task Forces on Hydrology (dealing with issues related to the collection, management and interpretation of water-related data in the basin and the development of plans for water management), on Biodiversity (looking into policies and practices related to the

⁶⁷ Treaty Establishing the East African Community, 1997.

⁶⁸ Permanent Okavango River Basin Water Commission (OKACOM), http://www.okacom.org/

conservation of plant and animal life in the basin), and on Institutional Issues (responsible for policy and institutional matters related to the governance of the basin). Okavango Secretariat (OKASEC) is responsible for providing administrative services to the Okavango River Basin Water Commission (OKACOM). Besides the formal structure of the OKACOM, the Basin Wide Forum (BWF) has been established. It is comprised of representatives from local communities of member states, meets once per year on the basin level and exchanges experience and knowledge aiming at providing a bird's eye perspective on socioeconomic as well as hydrological issues in the basin in order to formulate action plans for local communities.

4.3 EAC Institutional Structure and Function

The existence of East Africa Legislative Assembly⁶⁹ (EALA) and the East African Court of Justice (EACJ) within EAC Framework is of strategic advantage in respect to fast tracking regional legislation and conflict resolution within the region.

The Council of Ministers (CoM) is the main decision making of the Community. The **Sectoral Committee** on Environment and Natural Resources is composed of seniors Officials from Ministries of respective EAC Partner States responsible for Water, fisheries, Environment, Forests, Minerals and Wildlife issues. Besides, regional Non Governmental Organisations (NGOs) and the private sector are also represented in the Committee.

There are four working groups, namely:

- i. Terrestrial Ecosystems
- ii. Aquatic Ecosystems
- iii. Pollution
- iv. Policy, legal and institutional framework.

The members are drawn from Partner States specialists with the relevant disciplines for each working group. LVBC Secretariat usually invites eligible consultants to indicate their interest in providing the consultancy services. The consultants that are interested must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). The Consultants may associate to enhance their qualifications.

4.4 Mara River Basin Organisation (MRBO) Institutional Structure

It is proposed that the institutional commission for cooperation in the Mara River Basin under the Cooperative Framework (CF) shall be the Lake Victoria Basin Commission (LVBC). River Basin Organizations (RBOs) are typically established with the aim of transferring parts of the river basin management activities of riparian states to a transboundary level.

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⁶⁹ Chapter 9: Treaty Establishing the East African Community, 1997.

The role of MRBO can therefore be seen as crucial for the long-term sustainability of institutionalized river basin management, ensuring their efficiency.

The institutional structure of MRBOs is crucial to their performance in the management of river basins. These structures vary with regard to:

- 1. Institutional design, i.e. the way its organizational bodies are designed and interact with one another
- 2. The institutions' link to its member states and the distribution of tasks between the different governance levels, and,
- 3. The financing of the institution depending on the MRBOs functions as determined by the Member States.

A general distinction can be made between *implementation-oriented MRBOs*, responsible for the development, implementation and maintenance of joint projects, that shall have a development focus and going beyond pure water resources management, and *coordination-oriented MRBOs*, in charge of coordinating water resources management and other natural resources management tasks that may be developed and implemented on the national level but coordinated and harmonized on the transboundary level.

The choice either to centralize or not the Mara River basin management functions at the RBO is a consequence of the general goal the riparian states are pursuing in its creation. The case for a decentralized structure is made by findings from public management theories, which suggest that administrative decentralisation leads to increased efficiency. This is because decision making processes are accelerated and information overloads reduced when decisions are brought closer to the user and taking into account the local contexts⁷⁰ according to the principle of "subsidiarity". However, since there is a trade-off between assigning responsibilities in a decentralised manner in order to benefit from decentralisation related efficiency gains and maintaining the transboundary element for which RBOs are created in the first place, a balance has been found for the MRBO in its specific river basin context. This balance has been achieved by dealing with issues at the most decentralised level possible without going too low to still benefit from the advantages of joint institutional management, i.e. having some responsibilities related to the general political maintenance of long term cooperation performed at the highest institutional level while tasks related to the implementation of jointly agreed polices, strategies and measures can be transferred to lower governance levels within the member states (line agencies, political actors in provinces, local communities, or even beyond to NGOs).

Arising from the argument above, a centralised decision-making and coordination structure, with Member State based implementation, is therefore recommended.

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⁷⁰ Pollitt, Christopher 2008 'Moderation In All Things': Governance Quality And Performance Measurement, Paper For The Structure and Organization Of Government (SoG) Meeting, Gotenburg, November 2008 BOF/ZAP Research Professor of Public Management Public Management Institute Katholieke Universiteit Leuven.

4.5 Institutional Design and Linkage to Member States

The successful trade-off between delegation and centralisation as described above is a factor of the linkage between the MRBO and its Member States as well as their embeddedness within the region. This is because the Member States are their implementing partners, while the regional, political and economic developments within the broader regional context in which they operate will often have a significant impact on the work of the MRBO.

The Lake Victoria Basin Commission⁷¹ (LVBC) was established by the East African Community by a protocol for the sustainable management of the LVB. Structurally, the policy and decision making organ for the Commission is the Sectoral Council which is constituted by Ministers from the Partner States while the Committee comprises of all Permanent Secretaries from the Partner States whose Ministries' mandates relate to the Lake Victoria Basin, particularly Water, Agriculture, Transport, Communication, Energy, Tourism and Wildlife, Fisheries, Environment and Economic development. The Mara River Basin emphasizes the key sectors of water, biodiversity, land use and environment.

The LVBC is, therefore, uniquely suited for the anchorage of the CF being a part of the larger regional institutionalized body that is the EAC and being linked to the Member States by structure.

The following scenario has emerged from the present consultancy:

- 1. Critical issues regarding integrated natural resources management in the Mara river basin have been identified.
- 2. Members jointly agree on a Cooperative Framework to handle transboundary issues
- 3. Implementation of the measures shall be done at the Member States level

The LVBC will act as a transboundary coordination body, coordinating the activities of the different Member States, integrating the various national and sub-national governance levels as well as stakeholders, reporting on the state of the river and the development of policy solutions, monitoring of implementation activities and the dissemination of information. The proposed management structure assumes that Member States possess sufficient financial, human and technical capacity to efficiently implement joint decision. The capacities in Member States are, however, not yet fully developed.

4.6Funding Arrangements

Although River Basin Organisation (RBO) financing varies highly across RBOs, several types of financing can be distinguished: RBOs can either be funded through Member States or other types of Members} contributions or external funding (or any combination of those). Member State funding or Member contribution can be further distinguished into RBOs where members share the costs equally and RBOs which apply certain cost-sharing keys.

⁷¹ Article 34, EAC, 2004. Protocol for sustainable Development of Lake Victoria Basin. EAC, Arusha Tanzania.

In the latter mechanism a specific key is applied to determine the contributions of each Member State – based, for instance, on the share of each Member State of the basin; Member States' level of economic development; or on the benefits each Member State gains from joint projects the institution is in charge of managing. If socioeconomic differences among member countries are, particularly, high as is the case of the Mara River Basin⁷², cost-sharing keys can provide an appropriate means for taking into account different levels of capacity and Gross Domestic Product (GDP). However, in order to maintain the willingness of all Member States to contribute financially to the RBO, additional indicators, such as benefits from cooperation and joint projects, might be taken into account, providing incentives for a more developed state in the basin to engage in institutionalised cooperation.

As well as contributions from the Member States, external contributions are of particular importance. Development Partner contributions are beneficial because they not only provide financial means to the respective RBO, but also play an important role in the provision of technical and scientific knowledge and the building of capacity.. It needs to be stated, however, that despite their importance to the development of RBOs and the management of river basins, the downside of strong Development Partner engagement can be a lack of donor harmonisation and alignment, leading to inefficiencies and overlaps as well as the threat of financial stress caused by the end of programs funded entirely by development partners.

Other examples of mechanisms/instruments for funding the RBO activities include:

- Licensing charges
- Raw water charges
- Wastewater treatment and effluent charges
- payments for ecosystem services (PES)
- Local property taxes
- Natural resource management charges, including for basin management
- Cross subsidies from other sectors/users.

A specific and more suitable form of channeling Development Partner contributions are through Trust Funds (TFs). TFs have been established for some decades in various areas of development cooperation including in the field of water resources management. Their suitability derives from the fact that they have the advantage of being extremely flexible; provide a particularly helpful means in situations in which Development Partners reduce their contributions or other reasons for financing reforms occur; enable the RBO to channel funding in a flexible manner to where it is needed most, responding to short-term financial needs of specific programs and projects as well as to gaps in the financial capacity of Member States. Moreover, TFs can contribute to ownership within the institution, especially when they are executed by the recipient RBO itself.

⁷² EAC, 2006. East African Community: Economic Potentials and constraints of Developing Lake Victoria Basin as an Economic Growth Zone. Lake Victoria Development Programme. EAC, Arusha Tanzania.

The key regional interventions discussed in the present study include:

- 1) Enhancing community awareness and involvement in management of transboundary natural resources; and
- 2) Strengthen, harmonize and coordinate and implement land allocation systems as priority areas of contention.

All previous activities have been done in the context of national development. This entails the utilisation of the natural resources for the economic and social benefit of both countries and the betterment of all activities should be done in the context of national development but for the benefit of both countries. The policies and legislations governing natural resources that have been promulgated in Kenya and Tanzania have a clear intent of protecting natural resources found in each country is jurisdiction. Being evident from the wording of the laws and policies and from the fact that substantial percentages of the total land area in both countries are used as national parks and game reserves, or protected forest reserves, joint management of these natural resources shall be a win-win situation.

CHAPTER 5: DRAFT INTERIM BILATERAL AGREEMENT

5.1 Introduction

The report has discussed the resource potential, current national policies, sectoral laws and institutions and the linkages between these institutions and utilisation of different natural resources in the Mara River Basin. From the documents review and field visits in the two countries there is a strong justification for the establishment of bilateral agreement by the 2 countries for the management of the Mara River Basin. Following is a draft bilateral agreement for the joint management of the mara River Basin Resources hereby proposed.

The vitality of the ecosystem and all other natural resource in the Mara River Basin are dependent on rainfall and biodiversity on one hand and on human development on the other. Upstream and downstream benefits from the watershed products and services of the entire Mara River Basin are also interlinked through environmental imperatives such as climate change, increase in population, and the global demand for tourism. Sustainable livelihoods are therefore intricately intertwined with the prudent management of the Mara River Basin.

From the analysis done in this report, there is compelling argument for the establishment of bilateral agreement between the Republic of Kenya and the United Republic of Tanzania for the joint cooperation for the management and rational utilization of the transboundary natural resources of the Mara River Basin.

5.2 MRB Draft Interim Bilateral Agreement.

DRAFT INTERIM BILATERAL AGREEMENT BETWEEN THE REPUBLIC OF KENYA AND THE UNITED REPUBLIC OF TANZANIA ON A JOINT COOPERATION FOR THE SUSTAINABLE MANAGEMENT AND RATIONAL UTILIZATION OF THE SHARED NATURAL RESOURCES OF MARA RIVER BASIN AND ESTABLISHMENT OF THE MARA RIVER BASIN MANAGEMENT SECRETARIAT PREAMBLE

The State Parties to this Agreement:

AFFIRMING that the natural resources of the Mara River Basin are shared and the State Parties as stewards have a duty to protect, conserve and manage these renewable but finite and interrelated resources;

RECOGNISING that protecting, conserving, restoring, and improving these resources is the foundation of sustainable water resource management and essential to maintaining the integrity of the Protected Areas and ecosystem in the Mara River Basin;

RECOGNISING that the State Parties must balance economic development, social development and environmental management as interdependent and mutually reinforcing pillars of sustainable development;

CONVINCED that sustainable development and harmony with nature and the maintenance of peace among neighbours require cooperative arrangements for the development and implementation of watershed protection approaches in the Basin;

HAVING noted that the State Parties, being signatories to the Treaty for the Establishment of the East African Community, have adopted and put into effect the Protocol for the Sustainable Development of the Lake Victoria Basin;

NOTING, further, that the Mara River, which are shared between the Republic of Kenya and the United Republic of Tanzania, lies within the geographical area of the Lake Victoria Basin and therefore under the mandate of the Lake Victoria Basin Commission and its organs;

ACKNOWLEDGING that effective management is dependent upon both Parties acting in continuing spirit of comity and mutual cooperation; what is the meaning of the word "comity"?

DETERMINED to foster bilateral cooperation and good neighbourliness in the utilization of the natural resources of the Mara River;

HAVING noted the willingness of the Republic of Kenya and the United Republic of Tanzania to decide to enter into a bilateral agreement establishing a Cooperative Framework for the sustainable management and optimal utilization of the natural resources of the Mara River Basin:

HAVE AGREED AS FOLLOWS:

ARTICLE 1: Citation

This Agreement may be cited as the Bilateral Agreement between the Republic of Kenya and the United Republic of Tanzania on a Co-operative Framework for the Sustainable Management and Rational Utilization of the Transboundary Natural Resources of the Mara River Basin.

ARTICLE 2: Purpose and Objectives

The purpose of this Agreement is to establish common principles for the cooperative management of the natural resources of the Mara River Basin; to establish an institutional secretariat with administrative mechanism to facilitate participatory and sustainable Integrated Mara River Basin Management (IMRBM) initiatives for conservation, economic development, sustainable and equitable use and restoration of freshwater resources and ecological processes within these principles; and to make provisions for Mara River Basin Management Agreement.

ARTICLE 3: Use of Terms

For the purpose of this Cooperative Framework Agreement:

- (a) "Agreement" means this Agreement.
- (b) "Aquatic Ecosystem" means the interacting components of air, land, water and living organisms including humans that relate to the water resources of the Mara River Basin.
- (c) "Basin" means the Mara River Basin.
- (d) "Biological diversity" means the variety and the variability among living organisms from all sources including, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
- (e) "Climate change" means a change of long term weather conditions which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
- (f) "Conservation area" means a protected area designated and managed mainly or wholly for purposes of science or wilderness protection ecosystem protection and recreation, cultural or heritage, conservation of specific natural features, conservation through management interventions, landscape/seascape conservation and recreation, the sustainable use of natural ecosystems.
- (g) "Council" means the Council of Ministers of the Mara River Co-operative Commission;
- (h) "Environment" means the complex set of physical, geographic, biological, social, cultural and political conditions that surround an individual or organism and that ultimately determines its form and nature of its survival;
- (i) **"Executive Secretary"** means the chief executive and legal representative of the Mara River Cooperative Commission;
- (j) "Fund" means the Mara River Basin Fund established under this Agreement.
- (k) "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;

- (I) "Land use" means all the economic interventions of natural and human resources on surface of the earth.
- (m) "Mara River" means the Mara River and any other tributary to the Mara River including catchment forests, deltas, tributaries of deltas, wetlands and other water sources which contribute water to the Mara River;
- (n) "Member States "means the parties to this Agreement and "Member State" shall have a corresponding meaning;
- (o) "Natural Resources" means renewable and non renewable resources, tangible and non tangible, such as minerals, climate, soil, water, flora and fauna;
- (p) "Protocol" means the Protocol for the Sustainable Development of the Lake Victoria Basin adopted at Arusha, Tanzania on 20th November 2003;
- (q) "Protected Areas" means geographical area that has been delineated for protection and exclusive use for a specific conservation purpose.
- (r) "Riparian states" means the states which are drained by the Mara River namely the Republic of Kenya and the United Republic of Tanzania;
- (s) "Secretariat" means the Permanent Secretariat of the Mara River Cooperative Commission;
- (t) "Stakeholder" means all persons, legal or natural and all other entities being governmental or non-governmental, residing, having interest or conducting business in the area that is the subject of this Agreement;
- (u) "Sustainable Development" means development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs;
- (v) "Transboundary Natural Resources Management" (TBNRM) means any process of co-operation or collaboration across boundaries that facilitates or improves the management of natural resources or biodiversity conservation goal(s) (to the benefit of all parties in the area concerned);
- (w) "Treaty" means the Treaty for the Establishment of the East African Community signed at Arusha, Tanzania on 30th November 1999;
- (x) "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;
- (y) "Water Resources" means all forms of water on the surface and in the ground including the living and non-living resources therein.

ARTICLE 4: General Principles

1. The right of states to use natural resources in their territories

The State Parties, in accordance with the Charter of United Nations and the principles of international law, the sovereign right to utilise their resources to meet their environmental and sustainable development needs.

2. Sustainable Development

(a) Managing the natural resources in a manner consistent with the maintenance of the ecological integrity and aquatic ecosystem within the limits of their national jurisdiction;

- (b) Managing the use of water resources in a sustainable and rational manner for present and future generations;
- (c)Establishing, developing, harmonising, adoption and implementation of common policies, laws, strategies, plans and programmes relating to the conservation and use of all forms of biological resources including protected areas, sustainable land management and land use;
- (d) Sustainable agriculture and livestock production.

4. Equity and rational utilisation

There shall be equitable and rational utilization of the MRB natural resources.

5. Sustainable land management

Institute the use of land resources (soils, water, animals and plants for the production of goods) to meet changing human needs while assuring the long-term productive potential of these resources, and the maintenance of their environmental functions.

6. Information sharing and planned measures

The principle that Partner States provide information to, and consults with, each other in a timely manner on planned projects and programmes that may have significant adverse effects upon the other before implementing or permitting implementation of such projects or programmes.

7. Subsidiarity

Adoption of the principle of subsdidiarity, where by natural resources management should be planned and managed at the lowest appropriate level.

8. Prevention of the causing of significant harm

Ensure that activities within their jurisdiction or control do not significantly harm or damage the environment of another state beyond national jurisdiction.

9. Environmental, Social Impact Assessment and audits

The principle of Environmental Impact Assessment and Audits, social impact assessment

10. Polluter pays principle

That polluter pays principle and penalty on non-compliance will be enforced.

11. Precaution

In decision making affecting the Mara-Serengeti Eco-region and the immediate surroundings, lack of scientific certainty shall not be used as a reason to postpone action to avoid potentially or irreversible harm to the region.

12. Peaceful Resolution of Dispute

Resolving issues amicably in a cooperative and harmonious manner

ARTICLE 5: Rights and Freedoms

- 1. Building capacity for Water Resources Users Associations (WRUA) in -Kenya, Water Users' Associations (WUA), Community Forest Associations (CFAs) and Mara River Basin Water Users' Forum (MRTWUF) to undertake their mandate.
- 2. Improved communication, documentation and dissemination of results, lessons learned and best practices.

ARTICLE 6: Shared Water Resources of the Basin

1. The two states shall enjoy rights and discharge their duties that the transboundary natural resources of the Mara River Basin are utilized and managed sustainably for the use of the present and future generations.

2. The Partner states shall:

- (a) Share the available water resources on the principle of "some for all" and not "all for some".
- (b) Ensure that fresh water, which is a finite resource, ought to be utilised sustainably.
- (c) Recognise that water has economic value and therefore ought to be considered as a resource in economic production for whose use a charge ought to be imposed.
- (d) That water is not just an economic good but is also a social good and therefore, in imposing a charge for the use of water resources, account must be taken of the social functions of water which make it imperative that everyone has access to a basic supply of water.
- (e) That there should be full cost recovery and a greater role for the private sector in the provision of water services, but because water is a basic need there should be targeted subsidies for the poor.
- (f) That the management of water resources should be on an integrated basis and on the basis of the basin or catchment.
- (g) That in the utilization and management of the shared water resources the two countries should endeavour to achieve environmental sustainability.
- (h) That in the use of the shared water resources, there should be prior assessment of the potential impacts of planned measures.
- (i) Ensure that the shared water resources ought to be developed and utilized on a sustainable, optimally, and equitable basis;

ARTICLE 7: Land and Land Use

The parties agree to:

- a) Increase the capacity of the MRB riparian communities and other stakeholders to participate in the co-management of the MRB; and,
- b) Create mechanisms by which communities and stakeholders may participate in the sustainable management of the MRB.

ARTICLE 8: Sustainable Agriculture and Livestock Production

The parties agree to:

- a) Harmonise the often conflicting objectives of intensified economic and social development,
- b) Maintain and enhance the ecological and global life support functions of land resources,
- c) Promote an innovative, commercially-oriented, and modern agricultural sector, and
- d) Sustainable and integrated land use planning.

ARTICLE 9: Ecosystem and Protected Areas

The Partners States commit to the promotion of cross border cooperation in the management of natural resources in the shared Mara ecosystem:

- (a) Restoring ecological integrity and thereby promoting ecosystem resilience;
- (b) Promoting sustainable and equitable use of land and water resources in the basin;
- (c) In decision making affecting the Mara ecosystem and immediate surroundings, lack of scientific certainty shall not be used as a reason to postpone action to avoid potentially or irreversible harm to the ecosystem;
- (d) Agree to the promotion of:
 - a) Harmonised park regulations;
 - b) Uniform fee structure for tourists;
 - c) Good working relations between the two conservation agencies; and
 - d) Joint research.

ARTICLE 10: Forestry Resources

The parties agree to:

- (a) The conservation and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.
- (b) Share information regarding:
 - Extent of forest resources;
 - Biological diversity, health, and vitality;
 - Productive, protective and socio-economic functions of forest resources Legal, policy and institutional framework.
- (c) Cooperating, and where necessary, entering into agreements or other arrangements, in the management of forest resources including implementation of management plan for Transmara Forest Reserve (TFR)

ARTICLE 11: Sustainable Management and Development of Fisheries

The partner states commit to ensure fisheries will be managed and developed to promote the socially and economically sustainable use of fisheries resources and the protection of aquatic ecosystems so as to meet the needs of present generations without compromising the ability of future generations to meet their needs.

The Partner States further agree to:

- a) Strengthen, harmonise and implement policies and legislation including quota for fishing and fish processing.
- b) Support the Beach Management Units (BMUs) as grassroots institutions for the management of fishery resources along the Mara River delta.
- c) Ensure ecosystems based fisheries management system in which fishing activities are conducted within an enforceable legislative framework, conservation ethics and responsible fishing operations.

ARTICLE 12: Information Sharing

The Partner States commit to provide information to the other state party concerning planned measures in respect to the shared water resources which might have potential impacts on the neighbouring state.

ARTICLE 13: Prevention of the causing of significant harm

The Partner States commit to ensure that activities within their jurisdiction or control do not significantly harm or damage the environment of another state beyond national jurisdiction.

ARTICLE 14: Prevention of Significant Harm

The parties agree:

- (a) To provide for early and effective consultation, joint planning, notification and sharing of information on developments and activities that might affect the ecological integrity of the aquatic system in another jurisdiction.
- (b) That in using shared water resources adverse impacts on neighbouring states ought to be avoided.
- (c) To the implementation of Environmental Flow Assessment (EFA) recommendations; use of economic instruments such as Payment for Ecosystem Services (PES) schemes and any other funding for watershed services in innovative ways; and the implementation of Biodiversity Strategy and Action Plan recommendations
- (d) To develop a Strategic Environmental Assessment (SEA) document including water allocation, and a shared vision.

ARTICLE 15: Climate Change

Resulting from the impacts of climate change, the states agree to provide emergency planning for droughts and floods, joint procedures for risk reduction and responses; Development and implementation of catchment strategies at the lower levels by WRUAs, CFAs and WUAs.

ARTICLE 16: Impact Assessment

Where a proposed activity may generate transboundary environmental harm especially to the Mara ecosystem, an environmental and, where appropriate, social impact assessment shall be undertaken.

There shall be prior ad timely notification to potentially affected state(s) and consultation should be carried out in good faith with such states and with potentially affected persons.

Potential affected persons in the other states shall be granted access and due process in administrative and judicial proceedings without discrimination on the basis of residence or nationality.

ARTICLE 17: Subsidiarity

The stakeholders ought to be involved in decision making with opportunity given to potentially affected communities to participate in managing the water resources.

THE COMMISSION – ROLES AND FUNCTIONS

ARTICLE 18: Establishment of the Mara River Basin Management Commission

The institutional Commission for cooperation in the Mara River Basin, under this Agreement, shall be called the Mara River Basin Management Commission and shall, for the purpose of the exercise of its functions, enjoy the status of an international body, including entering into agreements and obligations with the development partners, international community, local organizations and institutes.

<u>ARTICLE 19</u>: Powers, Functions and Responsibilities of the Commission

- 1. The objectives of the Commission shall be to foster cooperation among the riparian states, harmonize national measures for the sustainable utilization of the resources of the Mara River Basin.
- 2. To achieve these objectives, the Commission shall have the function and responsibility to:
- (a) Promote the proper management and optimum utilization of the resources of the basin;
- (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 basin 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 basin 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 basin 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 Commission, or to such activities of the riparian states as it may determine to be in furtherance of the purposes of this Agreement; and
- (i) Undertake such other functions as it may determine to be necessary or desirable in order to achieve the purposes of this Resolution/resolution.

ARTICLE 20: Location, Staffing and Property of the Commission

- 1. The seat or headquarters of the Commission shall be located within the LVBC offices in Kisumu.
- 2. The Host State undertakes to accord the headquarters of the Commission, including its staff and its property, the privileges, immunities and facilities that are customary for a headquarters of an international organization.

ARTICLE 21: Organs and Responsibilities

- 1. The organs of the Commission are:
- (a) The Council of Ministers,
- (b) The Mara River Basin Sectoral Committee,
- (c) The Mara River Basin Technical Advisory Committee,
- (d) The Mara River Basin Consultative Forum,
- (e) The Mara River Basin Secretariat,
- (f) The Mara River Basin Fund,
- (g) Community Forests Associations CFAs (CFAs) around the Transmara Forest Reserve,
- (h) Mara River Trans-boundary Water Users Forum (MRTWUF), Water Resource Users' Association in Kenya (WRUA) and Water Users' Associations in Tanzania (WUA).
- 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 Commission.
- 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.

ARTICLE 22: Council of Ministers

- 1. The Council of Ministers, comprising the Ministers of the State Parties, shall be the supreme body of the Commission.
- 2. The Council of Ministers shall be composed by Ministers responsible for water resources management and not more than two other Ministers representing sectors under article 12.
- 3. The Council of Ministers shall provide policy guidance and shall take decisions regarding the matters within the mandate of the Commission. It shall supervise and manage all the institutions established under this Agreement.
- 4. The Council of Ministers shall operate in accordance with the procedures duly established under this Agreement.

ARTICLE 23: Composition and Meetings of the Mara River Basin Steering Committee

- 1. The Mara River Basin Steering Committee consist of Permanent Secretaries of the Ministries at the national level of the two riparian State Parties of the following sectors:
 - (a) Water resources management;
 - (b) Water supply and sanitation;
 - (c) Agriculture;
 - (d) Forestry;
 - (e) Wildlife;
 - (f) Tourism;
 - (g) Fisheries;
 - (h) Environment;
 - (i) Wetlands;
 - (j) Land use;
 - (k) Irrigation
 - (I) Energy; and,
 - (m) Any other sector relevant to the management of the Mara River Basin.
- 2. Attendance at the Mara River Basin Sectoral Committee will depend on the agenda of the meeting but will be composed of the representatives of any of these sectors.
- No session of the Mara River Basin Sectoral Committee shall take place unless both member states are represented.
- 4. Members of the Mara River Basin Sectoral Committee shall, at its First Regular Session, select a Chairman from among the Permanent Secretaries of the Ministries responsible for water resources management.
- 5. The Chairman shall hold office until the next regular session and thereafter the Chairmanship of the Mara River Basin Sectoral Committee shall rotate among the Permanent Secretaries responsible for water resources management.
- 6. The Mara River Basin Sectoral Committee shall adopt its own Rules of Procedure.
- 7. The Mara River Basin Sectoral Committee shall hold one regular annual session and such other special sessions as it may determine.
- 8. An extra ordinary session of the Mara River Basin Sectoral Committee shall be called upon the request of either of the Member States and the Executive Secretary of the Commission shall inform the member states of the date and place of any session.
- 9. All decisions and recommendations of the Mara River Basin Sectoral Committee shall be adopted by consensus.
- 10 The Rules of Procedure may provide that the Mara River Basin Sectoral Committee may be consulted by correspondence or any rapid means of written communication, if matters of exceptional urgency requiring action by the Mara River Basin Sectoral Committee arise between two of its sessions.
- 11. At each session, the Mara River Basin Sectoral Committee shall adopt a report, which shall be submitted to the Council of Ministers at its next session.

ARTICLE 24: Functions of the Mara River Basin Sectoral Committee

The Sectoral Committee shall:

- (a) Coordinate the activities of Districts and national Governments in developing the basin;
- (b) Be responsible for the preparation of comprehensive implementation of programmes and the setting out of priorities for the basin;
- (c) Monitor and keep under constant review the implementation of the programmes undertaken in the basin;
- (d) Submit from time to time, reports and recommendations of working groups and stakeholders in the basin; and
- (e) Perform such other functions as may be conferred on it by or under this Agreement.

<u>ARTICLE 25</u>: Composition and Meetings of the Mara River Basin Technical Advisory Committee (TAC)

- The composition of the Technical Committee shall be drawn from the Technical Officers within the agencies managing the following sectors at national and district or other appropriate devolved levels of both member states:
 - (a) Water resources;
 - (b) Water supply and sanitation;
 - (c) Agriculture;
 - (d) Forestry;
 - (e) Wildlife;
 - (f) Tourism;
 - (g) Fisheries;
 - (h) Environment;
 - (i) Wetlands;
 - (j) Land use;
 - (k) Energy; and,
 - (I) Any other sector which the Council of Ministers determines to have a role in the sustainable management and equitable utilization of the water resources of the Mara River Basin.
- 2. The attendance at the Mara River Basin 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 Mara River Basin Technical Advisory Committee shall take place unless the two states are represented.
- 4. At its First Regular Session, the Mara River Basin 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 River Basin Technical Advisory Committee

- 5. The Chairmanship of the Mara River Basin Technical Advisory Committee shall rotate among the national level heads of the departments responsible for water resources management.
- 6. The Mara River Basin Technical Advisory Committee shall adopt its own Rules of Procedure.
- 7. The Mara River Basin Technical Advisory Committee shall hold one regular annual session and such other special sessions as it may determine.
- 8. A special session shall be called upon request by any two Riparian states. The Executive Director of the Commission shall inform the Riparian States of the date and place of any session. Consider the use of (Partner States, Members States and Riparian States) interchangeably for consistency in the use of terms and words
- 9. All decisions and recommendations of the Mara River Basin Technical Advisory Committee shall be adopted by consensus. The Council of Ministers may establish rules whereby the Mara River Basin Technical Advisory Committee may be consulted by correspondence or any rapid means of written communication, if matters of exceptional urgency requiring action by the Mara River Basin Technical Advisory Committee arise between two of its sessions.

ARTICLE 26: Functions of the Mara River Basin Technical Advisory Committee

The Mara River Basin Technical Advisory Committee shall:

- (a) Gather information relevant to the state of the resources of the basin;
- (b) Discuss ways and means of finding solutions to disseminate information to the population regarding the sustainable utilization of the resources of the basin;
- (c) Carry out any tasks assigned by the Council Steering Committee;
- (d) Monitor and evaluate the implementation of Commission's programmes;
- (e) Disseminate information to the population regarding the sustainable utilization of the resources of the basin;
- (f) Perform any other functions incidental or relevant to the above functions.

ARTICLE 27: Permanent Secretariat

- 1. The Commission shall have a Permanent Secretariat appointed in accordance with the Agreement, under the authority of the Executive Director appointed under the Agreement.
- 2. The Permanent Secretariat shall be responsible for the day to day administration and management of the activities of the Commission.
- 3. The Permanent Secretariat shall operate under the authority of the Executive Secretary appointed under this Agreement. Clarify Executive Director in N0 1 of this Article is synonymous with Executive Secretary as indicated here.
- 4. The Executive Secretary shall be appointed by the Council of Ministers on such terms and conditions of service as the Council shall decide.
- 5. The Secretariat shall consist of other staff, recruited competitively from among the nationals of the State Parties on the principle of parity.

The Permanent Secretariat shall facilitate the work of the organs of the Commission and shall provide financial, technical, administrative and secretariat services and support to all the organs of the Commission.

ARTICLE 28: Granting of Observer Status

- Member States of the East African Community other than the two State parties to this Agreement 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 Commission.
- 2. Any other State of the East African Community interested in the activities of the Commission 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, nongovernmental organisation or any other entity having special competence in the field of the Commission's activities to attend such sessions as the Technical Advisory Committee may specify.

ARTICLE 29: National Measures

The two states hereby agree to take all necessary measures including policy and legislative measures when appropriate, in accordance with their respective constitutional procedures and national laws, to implement the decisions of the Commission's statutory bodies provided that such national laws and regulations are not below the standard of those standards that they are required to fulfil the obligations under this Agreement.

ARTICLE 30: The Mara River Basin Stakeholder Consultative Forum

- 1. There is hereby established the Mara Stakeholder 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) Water Supply and Sanitation;
 - (c) Agriculture;
 - (d) Forestry;
 - (e) Wildlife;
 - (f) Tourism;
 - (g) Fisheries;
 - (h) Environment;

- (i) Wetlands;
- (j) Land Use;
- (k) Energy; and,
- (I) Any other sector relevant to the Integrated Mara River Basin Natural Resources Management.
- The forum shall also be open to the participation of water users and water resources users associations, water service providers, the public whether as individuals or represented by civil society organizations and special interest groups,
- b) Centres of higher learning,
- c) Research institutions, and,
- d) Chambers of commerce.
- 4. The Forum shall appoint its officers provided that the Secretariat shall convene the first meeting of the Forum and provide technical backstopping.
- 5. The Forum may request the Secretariat to provide technical backstopping at its other meetings.
- 6. The Forum shall have no power to make binding decisions.
- 7. The Forum shall fund its own activities.

Article 31: Annual Report

The Executive Secretary shall submit to the Council of Ministers an Annual Report on the discharge of the Commission'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.

Article 32: Cooperation with other Organizations and Institutions

- The Commission 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 Commission.
- 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.
- 3. 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.

RESOURCES OF THE COMMISSION

ARTICLE 33: Funding Sources

1. The main source of funds for the Commission shall be contributions made by the two States to the budget of the Commission.

- 2. The Commission 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 Commission.
- 3. The Commission shall manage all funds in accordance with the Financial Procedures established in the East African Community.

ARTICLE 34: Data Generation and Management

- 1. The Secretariat shall establish, generate, maintain and manage a data bank of information on the shared water resources of the Mara River Basin and it shall be the clearing house for that information.
- 2. The Council of Ministers shall establish the rules and procedures for the supply of information to the Secretariat as well as for accessing information from the data bank provided always that the rules and procedures shall be designed so as to facilitate unrestricted and direct access to the data bank by organs of the Commission including members of the Consultative Forum.

ARTICLE 35: Dispute Resolution

- Any disputes between the State Parties to this Agreement which cannot be resolved amicably by
 the Council of Ministers for a period of more than twelve (12) months shall be referred for
 determination to the East African Court of Justice established under the Treaty for the
 Establishment of the East African Community in accordance with the rules of that Court. Any
 State Party may initiate the referral of the dispute to the East African Court of Justice.
- 2. The Executive Director (See earlier comment on the use of Executive Director and Secretary in these articles), with the approval of the Council of Ministers, may submit a question regarding the interpretation of this Agreement to the East African Court of Justice and the State Parties agree to be bound by and to give effect to such interpretation once delivered.

ARTICLE 36: Amendment

- 1. The Council of Ministers shall have the power to amend this Agreement on the recommendation of the Sectoral Committee.
- 2. Notice of any proposal to amend this Agreement, together with particulars of the proposed amendment(s), shall be given at least six months before the meeting of the Council of Ministers at which the proposal to amend is to be tabled.
- 3. Following the adoption of the proposed amendment by the Council of Ministers the amendment shall be submitted to the Government of the State Parties for ratification and the amendment shall only come into effect three months after its ratification by both State Parties.

ARTICLE 37: Ratification and Entry into Force

This Agreement shall enter into force three months after its ratification by both of the State Parties.

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ANNEX 1: TERMS OF REFERENCE FOR CONSULTANCY ON ESTABLISHING MARA RIVER BASIN POLICY, LEGAL AND INSTITUTIONAL COOPERATIVE FRAMEWORK

TRANSBOUNDARY WATER FOR BIODIVERSITY AND HUMAN HEALTH MARA RIVER BASIN (TWB-MRB) PROJECT TENDER No. LVBC/TWBH-MRBP/2009-10/CS/05 TERMS OF REFERENCE (TOR)

FOR

ESTABLISHING MARA RIVER BASIN POLICY, LEGAL AND INSTITUTIONAL COOPERATIVE FRAMEWORK

1. Introduction

1.1 Background

The East African Community/ Lake Victoria Basin Commission (LVBC) has received funds from the USAID East Africa to support Sustainable Development of the Mara River Basin. The project is implemented by both the Republic of Kenya and the United Republic of Tanzania. It is coordinated by LVBC Secretariat and implemented by key stakeholders in Mara River Basin.

The overall objective of the project is to promote harmonized Mara River Basin management practices for sustainability. The specific objectives are to:

- a) Develop and promote the implementation of an appropriate trans-boundary management framework for Mara River Basin;
- b) Improve the protection and management of Maasai Mau Forest Blocks resources and Mara riverine forests;
- c) Enhance sustainable management of the protected areas of Maasai Mara and Serengeti ecosystems;
- d) Improve water resources management in the basin; and
- e) Enhance institutional capacity of the Lake Victoria Basin Commission to undertake its regional mandate.

1.2 Need for consultancy

The Mara River Basin is the trans-boundary resource shared by Tanzania and Kenya. To date the management of this transboundary resource depends on national policies, legislations and regulations. There no transboundary cooperative management framework between Kenya and Tanzania to manage this basin as shared resource.

Management of water and biodiversity resources in the Mara River Basin requires effective and efficient trans-boundary management framework. In order to develop Mara River Basin cooperative management framework under LVBC, there is a need to review the past initiatives made towards the same goal and ensure the management framework is in place and operational under LVBC.

In order to establish Mara River Basin cooperative management framework under LVBC, there is a need to review the Policy, Legal and Institutional Cooperative Framework developed by NELSAP; and other key stakeholders and come up with proposed trans-boundary management framework to be established under LVBC.

2. Objectives of the consultancy

2.1 Overall objective

This consultancy is to establish MRB trans-boundary management framework under LVBC framework.

2.2 Specific objectives

The specific objective of the consultancy is to:

- a) Review the already existing Mara River Basin Policy, Legal and Institutional Cooperative Framework developed by NBI/NELSAP and other frameworks within the Basin;
- b) Identify the gaps in the current MRB cooperative framework in (i), against the overall goal, objectives and the aspiration of the TWB-MRB, the various policy and legal instruments at the EAC and LVBC;
- c) Propose policy, legal and institutional Cooperative Framework for the Mara River Basin and its operational implications under the EAC/LVBC; and

3. Scope and tasks of the consultancy

The consultant will:

- a) Review the existing Mara River Basin Cooperative Framework developed by NBI/NELSAP and other frameworks within the Basin,
- b) Identify the gaps and the missing link with the Kenya and Tanzania transboundary water management framework
- c) Prepare MRB Trans-boundary management framework

4. Tasks of the consultant(s)

The tasks of the consultant(s) will include, but not limited to the following:

- a) Review the existing Mara River Basin Cooperative Framework developed by NBI/NELSAP and other frameworks within the Basin;
- b) Identify the gaps and the missing link with the Kenya and Tanzania transboundary water management framework; and
- c) Prepare MRB Trans-boundary management framework

5. Methodology

This shall involve desk reviews and interviews with NBI/NELSAP, EAC and LVBC Secretariats, National Focal Point Officers and other key stakeholders including the governments of Kenya and Tanzania, partners and private sectors engaged in Mara River Basin resources management.

6. Deliverables from Consultant(s)

The Mara River Basin Policy, Legal and Institutional Cooperative Framework.

7. Duration of Assignment

The consultancy is expected to take 20 consultancy days. The final report should be produced not later than 31st August 2010.

8. Qualifications and Experience required of Consultants

The study will require consultancy firm with a team of Specialists having the following skills and experience:

- a) The Team Leader shall be an expert in Institutional Development. She/he shall possess post graduate degree in Socio-sciences, with experience in developing institutional framework
- b) Other team members should possess post graduate degrees in natural resources management preferably in Forestry, Water resources and wildlife management (others include policy analyzer/legal expert); and
- c) The team members must demonstrate working experience of at least five years in policy, legislation and institutional analysis.

9. Reporting

The consultant will report to the Executive Secretary, LVBC but on a day to day basis work closely with the Mara River Basin Project Coordinator.

Consultant (s) will be required to produce the following:

- a) Inception report to be delivered **one (1)** week after the date of signing the contract;
- b) Draft Report to be delivered **three (3)** weeks after presentation acceptance of inception report; and
- c) Final report to be delivered **two (2)** weeks after submission of the draft report

All reports will be submitted in six hard copies and a soft copy in a CD.

EAC institutional Structure and Function

The management of Natural resources in the EAC is through the establishment community structure shown in the organ-gram of the EAC. The function and roles of various organs are defined in the Treaty for establishment of East African Community.

The existence of East Africa Legislative Assembly (EALA) and the East African Court of Justice (EACJ) within EAC Framework is of strategic advantage in respect to fast tracking regional legislation and conflict resolution within the region.

The Council of Ministers (CoM) is the main decision making of the Community.

The **sectoral Committee** on Environment and Natural Resources is composed of seniors Officials from the Partner States origination from the Ministries Responsible for Water, fisheries, Environment, Forests, minerals and Wildlife issues. Besides, regional NGOs and the private sector are also represented in the Committee.

There are four **working groups** that are drawn from Partner States specialists, with the relevant disciplines for each working group; the working groups support the Sectoral Committee. These working Groups are Terrestrial Ecosystems working group, Aquatic Ecosystems working group, Pollution issues working Group and Policy, legal and institutional framework working group.

Conclusion

Appropriate and adequate legal instruments, institutions, management tools and practices are critical for efficient, equitable, sustainable use of the shared resources. There is a need to strengthen transboundary water Governance on an environmental dimension especially through capacity building and information sharing.

Stake Holder's Forum Discussion in Tanzania (Musoma) and Kenya (Bomet) Workshops Issues raised from Musoma workshop, Tanzania

- There is information gap especially to the grass-root the sharing of information between project management and the local community is inadequate. There are no mechanisms of ensuring that results from research conducted in the area is disseminated to all the stakeholders
- Lack of research on fisheries, water quality and obstruction within the wetlands consequently no regulatory mechanism in place
- Payment for environmental services. People from downstream are affected adversely by activities upstream including contamination. Investors upstream
- Benefit sharing
- Problems with environmental impact assessment and enforcement of regulations imposed
- Minimum distance from water edge including rivers, lakes and sea. There are no harmonized regulations on this, each country has its own policy and even where these policies exist, and there is no enforcement mechanics. The need to harmonize policy on minimum distance from water bodies within the basin and the region
- Problems with water pollution mainly from agriculture; explore alternatives to the use of commercial chemicals including fertilizers and pesticides. Research should be conducted to identify natural products that can be used in place of these commercial products
- There seems to be lack of understanding of the problem especially at the grass-root level.
- The need to identify local conflicts (conflict at the grass-root) in each part of the basin (lower basin and upper basin) before dealing with the trans-boundary conflicts. It will be possible to identify the trans-boundary issues if we understand the local ones better.
- Some of the conflicts identified in Tanzania are those between large-scale and small-scale
 miners, miners and pastoralists, wildlife conservation and pastoralists, wildlife conservation and
 farmers, famers and pastoralists all in the utilization of water and other resources
- The first sentiment was the feeling that there was no way the participants could react to the document because they had not reviewed it.
- A question on why the issue of climate change although extremely important was not included in the first cooperative framework document. Explanation was made
- The question of benefit sharing kept on arising and therefore the need to develop guidelines to address the issue. Identify programs that can generate revenue for sharing. There was a general consensus that there were no benefits accruing from the MRB in the lower basin
- People have not benefited especially from the wetland as they have no idea it has any benefits.
 Need for information on what benefits can accrue from the wetlands and how they can secure those benefits.
- There is no information on the values of the river at all stages from source to where it
 discharges into the lake. This will ensure effective exploitation of the river. It is important for all
 the stakeholders in the river basin to understand the full value of the entire river and not only
 segments

- The issue of water users associations in both countries. In Kenya, water users associations are privately managed while in Tanzania they are overseen by the government. It is therefore easier for the Kenyan associations to attract funding but not possible for the Tanzanian. Explore ways of harmonizing these associations
- The need for interpretation of the water act in Tanzania for the grass-root to understand.
 According to representative from the Ministry of Water in Tanzania, the act has been translated into Kiswahili and is already being presented to people at the grass-root in a language they can understand.
- Legislation is there in both countries what remains is harmonization and ensuring enforcement of the legislation

Issues raised from Bomet workshop, Kenya

- Maasai Mara and Serengeti conservation areas cannot be handled in isolation hence need for a
 joint management for the benefits of the communities and the two governments
- Population increase in Maasai Mara is an important issue of concern as far as management of resources is concerned
- Small markets are expanding with creation of the new districts and there are challenges on how to manage the growing urbanization within the basin
- Lack of Transboundary vision for MRB featured prominently. This is the genesis of problems in the management of the basin. Reference should be made from the Grater Lake Victoria basin vision. Who will be the vision carrier?
- It is important to have full information on who is doing what within the basin and share information to avoid duplication
- The two governments are critical as pillars of the cooperative framework. There is need for harmonization within different departments in the ministries
- Community awareness on Transboundary issues should be raised. This should focus on agriculture, livestock keeping etc. they should be sensitized on how activities upstream affect downstream stake holders. The focus of Kenyan farmers has been on how to improve livelihoods and therefore, what happens downstream does not concern them
- We need to look various acts in Kenya and Tanzania and check how they can harmonized
- There is need for rewards and suction on doing good and bad within the basin
- Issue of rents should be discussed in details and agreed on modalities on how it can be done wholly in the basin, i.e. standardization of rents is important
- Conservation agriculture on the riverside areas is not clear in Kenya. Do the actors know?
- The existing agreements should be hungered in a legal framework and joint monitoring and
 planning Transboundary activities. Example is pollution monitoring which is not clear to the two
 countries. There should be joint training and laboratory calibrations
- Water consumption by the large irrigation schemes and other stake holders should be quantified to determine whether it is sustainable

- Land owners do not recognize river boundaries as title deeds does not specify the distance required to left from the river
- There is lack general enforcement on regulations concerning management of the basin by relevant organs
- There is obstruction of river springs by hotel and lodges by fencing them. This leads to blocking the sources of the spring thus pushing wildlife from their natural streams to public land
- There is need to come up with better benefit sharing arrangements. How can the benefits go down stream
- We need strong private and public partnership. Hotels should plough back part of their profits to discourage catchment destruction
- Competition among stake holders can handled by a cooperative framework
- Livelihoods should be looked at together with environmental sustainability
- Water allocation plans needs harmony upstream and downstream. Control over use of the
 allocated quantity of water is important. Tanzania should be able to monitor whether the water
 allocated is what reaches downstream
- Large water users should store during foods to minimize waste. The store water can used during dry season

Major threats

- Water pollution from hotels and lodges, towns and municipalities. Bomet town does not have a sewerage system
- Soil erosion and degradation
- Deforestation leading to high surface runoff
- Unsuitable utilization of wetlands
- Degradation of river banks
- Uncontrolled mining and quarrying
- Unsuitable farming methods
- Degradation of rangelands from overgrazing
- Water related diseases and HIV/AIDS
- Wildlife/livestock competition

Information gaps

- Quantities of water used in irrigation farms. How much is left and whether it is of impact
- Water quality and water quantity data to allow informed decisions on suitable water resource
 uses
- Are the land use systems in MRB sustainable? E.g. large scale farming, mushrooming hotels and lodges

Challenges

- Balancing livelihoods and conservation initiatives
- Trans boundary consensus and enforcement of agreed policy issues
- Equitable distribution and use of basin water in line with the intra country regulations
- What are the options available?

ANNEX 2: ESTABLISHING THE MARA RIVER BASIN COOPERATIVE FRAMEWORK WORKSHOP PROGRAMME 14th AND 16TH August 2010

PROGRAM

8:00 a.m. Registration and Introduction

Objectives & Expected Results of the Workshop

8:30 a.m. Issue Paper: Resources, Stakeholders & Environmental Management

9:00 a.m. Plenary Discussion

10:00 a.m. Tea Break

10:30 a.m. Issue Paper: Joint Management Regimes & Conflicts in Resource use in

Transboundary River Basins

11:00 a.m. Plenary Discussion

12:00 noon Review of Cooperative Framework Arrangement: An Introduction

1:00 p.m. Lunch Break

2:00 p.m. Review of Cooperative Framework Arrangement

Open Discussion

4:00 p.m. Coffee Break

4:20 p.m. Summary of Workshop Discussion

5:00 p.m. Closure

ANNEX 3: WORKSHOP REPORT FOR THE MUSOMA MEETING

1. Rationale of the workshop

Although the MRB is a transboundary river basin, there is no cooperative framework agreement between Kenya and Tanzania to manage this basin as a shared resource. As a part of the work to develop an effective and efficient trans-boundary management framework for the MRB, REDPLAN Consultants was contracted by LVBC to develop Mara River Basin policy, legal and institutional cooperative management framework. REDPLAN Consultants would achieve this assignment by carrying out two major processes. First, the consultants would review the Policy, Legal and Institutional Cooperative Framework developed by NELSAP and other key stakeholders to identify gaps that need attention. Second, the consultants would hold consultative forums with actors and stakeholders in the MRB to seek their input to the establishment of a cooperative framework agreement on the MRB. The second process led to the Bomet Workshop, which followed a similar workshop that was held in Musoma, Tanzania. Besides sharing in the stakeholder ideas, the workshops also sought views from grassroots levels about the way forward for a workable cooperative framework agreement to manage the MRB as a shared resource.

2. Objectives of the workshop

- Review and share information, knowledge, ideas and experiences about various activities and project interventions that have taken place or were taking place in the Mara River Basin;
- Share on key issues (environmental, socioeconomic, sociopolitical, hydrological, etc) affecting the management of the Mara River Basin as a shared resource;
- Examine any controversies, conflicts, synergies, and options for action with respect to resource tenure and use, and project interventions in the Mara River Basin; and
- Make resolutions regarding the way forward for the cooperative framework agreement for the management the Mara River Basin as a shared resource.

The workshop participants had very fruitful discussions and exchanges regarding the subjects in the four bulleted objectives above. The next section presents the resolutions arising thereof from the discussions.

3. Discussion Points

Issues raised by participants during the various discussions following presentations by Prof. Khroda

An important tenet in this discussion is that ideas from the grass-root are extremely important and therefore consultative initiatives need more time so as to capture the aspirations of everyone at the grass-root level.

Issue Paper 1: 1Resources, Stakeholders, and Environmental Management

- 1. Participants indicated that there is definitely information gap especially to the grass-root. The sharing of information between project management and the local community is inadequate. Further, there are no mechanisms of ensuring that results from research conducted in the area are disseminated to all the stakeholders. Many Master's and Ph.D. studies have been conducted but the results of such studies do not reach the grass-root.
- 2. Lack of research on fisheries, water quality and abstraction of water within the wetlands consequently no regulatory mechanism in place
- 3. Payment for environmental services. People from downstream are affected adversely by activities upstream including contamination. Investors upstream should be made to pay those downstream for the damage caused including water contamination, siltation and loss of livelihoods due to such damages
- 4. Benefit sharing should be addressed carefully
- 5. Problems with environmental impact assessment and enforcement of regulations imposed. Both countries have regulatory bodies like NEMA in Kenya but enforcement of the various regulations is not done. Need to harmonize the functions of these regulative bodies
- 6. Minimum distance from water edge including rivers, lakes and sea. There are no harmonized regulations stipulating how far from water bodies certain developments including cultivation, construction of houses should be located, each country has its own policy and even where these policies exist, there is no enforcement mechanisms. There is need to harmonize policy on minimum distance from water bodies within the basin and the region in general.
- 7. Problems with water pollution mainly from agriculture; explore alternatives to the use of commercial chemicals including fertilizers and pesticides. Research should be conducted to identify natural products that can be used in place of these commercial products

Issue Paper 2: Joint Management Regimes and Conflicts over Resources In Transboundary River Basins

- 8. There seems to be lack of conceptualization of the problem especially at the grass-root level. People have a feeling that there is a problem but they cannot isolate it. There is therefore need to create a forum where people can collectively discuss and zero down on the real problems in the areas they occupy in the basin.
- 9. The need to identify local conflicts (conflict at the grass-root) in each part of the basin (lower basin and upper basin) before dealing with the trans-boundary conflicts. It will be possible to identify the trans-boundary issues if we understand the local ones better. This is related to the issue raised in 8 above.
- 10. Some of the conflicts identified in Tanzania are those between large-scale and small-scale miners, miners and pastoralists, wildlife conservation and pastoralists, wildlife conservation and farmers, famers and pastoralists. All these are related to the utilization of water and other resources, they have nothing to do specific groups or communities or tribes.

Issue Paper 3: Review of Cooperative Framework Arrangement

- 11. The first sentiment was the feeling that there was no way the participants could react to the document because they had not reviewed it. It was agreed that the document should be reviewed/interpreted so that everyone understands what it contains.
- 12. A question on why the issue of climate change although extremely important was not included in the first cooperative framework document. Explanation was made Professor Khroda
- 13. The question of benefit sharing kept on arising and therefore the need to develop guidelines to address the issue. Identify programs that can generate revenues that can be shared among stakeholders in the basin. There was a general consensus that there were no benefits accruing from the MRB in the lower basin but this issue needs to be interrogated further. Serengeti National Park and MMNR generate a lot of revenue from tourism but very little trickles to the community a situation that has exacerbated conflict between wildlife conservation and the needs of the community. This needs to be addressed urgently.
- 14. People have not benefited especially from the wetland as they have no idea it has any benefits. Need for information on what benefits can accrue from the wetlands and how they can secure those benefits.
- 15. There is no information on the values of the river at all the stages from the source to where it discharges into the lake. An understanding of such values will ensure effective exploitation of the river. It is important for all the stakeholders along the river basin to understand the full value of the entire river and not only segments of it
- 16. The issue of water users associations in both countries. In Kenya, water users associations are privately managed while in Tanzania they are overseen by the government. It is therefore easier for the Kenyan associations to attract funding but not possible for the Tanzanian. Explore ways of harmonizing these associations so that they can effectively address their mandates for the benefit of the basin.
- 17. The need for interpretation of the water act in Tanzania for the grass-root to understand. According to representative from the Ministry of Water in Tanzania, the act has been translated into Kiswahili and is already being presented to people at the grass-root in a language they can understand.
- 18. It was generally observed that the relevant legislations regarding the management and utilization of natural resources exist in both countries what remains is harmonization and ensuring enforcement. This therefore means there is need to develop a framework to address issues raised in the initial report
- 19. It was observed that there need for members from both countries to understand issues in both countries and there need for exchange visits and a tour of the entire basin

ANNEX 4: WORKSHOP REPORT STAKEHOLDERS' WORKSHOP, BOMET, AUGUST 16, 2010 1. Introduction

A river basin may be defined as the entire area of land that contains a river, its tributaries and its watershed including all ecosystems (forests, farmlands, pasturelands, grasslands, mountains, wetlands, etc) in the extent of the basin. The Mara River Basin (MRB) is a transboundary basin shared by Kenya and Tanzania, and is one of the most important rivers especially for its conservation importance and for the use of its goods and services to promote lives and livelihoods.

The Research and Development Planning (REDPLAN) Consultants Limited was contracted by the Lake Victoria Basin Commission (LVBC) to establish a Mara River Basin Policy, Legal and, Institutional Cooperative Framework that will contribute towards the attainment of a Shared Vision for the Management and Development of the Lake Victoria Basin through the strengthening of regional and national institutions to promote effective governance of trans-boundary resources in the basin and, facilitate public and private environmentally friendly investments in the Mara River Basin. The assignment is a part of the Trans-boundary Water for Biodiversity and Human Health Mara River Basin Project, which is implemented in the Mara River Basin in the republic of Kenya and the United Republic of Tanzania.

In order to accomplish the consultancy assignment, REDPLAN Ltd sought to solicit inputs from stakeholders of the Mara River Basin. In regard, REPLAN held a workshop in Bomet Town (Kenya) to bring together various actors and stakeholders in the Mara River Basin to brainstorm and share information, knowledge, ideas, and experiences about the way forward for a policy, legal, and institutional cooperative framework on the Mara River Basin. Twenty-five participants drawn from government agencies, nongovernmental organizations, community-based organizations, Nile Equatorial Lakes Subsidiary Action Program (NELSAP), international organizations working in the Mara River Basin, and local authorities in the Basin attended the one-day workshop.

The next parts of this report are organized in sections as follows. Section 2 presents the rationale of the workshop while section 3 has the main resolutions agreed upon by the workshop participants regarding what issues should be addressed by the CFA instrument on the transboundary management of the Mara River Basin. In part 4, the report makes a summary of the presentations and submissions on various thematic areas of the workshop before presenting workshop conclusions in part 5.

2. Rationale of the workshop

Although the MRB is a transboundary river basin, there is no cooperative framework agreement between Kenya and Tanzania to manage this basin as a shared resource. As a part of the work to develop an effective and efficient trans-boundary management framework for the MRB, REDPLAN Consultants was contracted by LVBC to develop Mara River Basin policy, legal and institutional cooperative management framework. REDPLAN Consultants would achieve this assignment by carrying out two major processes.

First, the consultants would review the Policy, Legal and Institutional Cooperative Framework developed by NELSAP and other key stakeholders to identify gaps that need attention. Second, the consultants would hold consultative forums with actors and stakeholders in the MRB to seek their input to the establishment of a cooperative framework agreement on the MRB. The second process led to the Bomet Workshop, which followed a similar workshop that was held in Musoma, Tanzania. Besides sharing in the stakeholder ideas, the workshops also sought views from grassroots levels about the way forward for a workable cooperative framework agreement to manage the MRB as a shared resource.

Objectives of the workshop

- review and share information, knowledge, ideas and experiences about various activities and project interventions that have taken place or were taking place in the Mara River Basin;
- share on key issues (environmental, socioeconomic, sociopolitical, hydrological, etc) affecting the management of the Mara River Basin as a shared resource;
- examine any controversies, conflicts, synergies, and options for action with respect to resource tenure and use, and project interventions in the Mara River Basin; and
- make resolutions regarding the way forward for the cooperative framework agreement for the management the Mara River Basin as a shared resource.

The workshop participants had very fruitful discussions and exchanges regarding the subjects in the four bulleted objectives above. The next section presents the resolutions arising thereof from the discussions.

3. Resolutions and the way forward

The consultants invited a few key stakeholders to make comments on their experiences in the Mara River Basin. Then the consultants made brief thematic presentations about the Mara River basin aimed at provoking the participants to a discussion and sharing of views. The resolutions below are a concise summary of what the workshop participants agreed:

- There is an overriding need for a shared vision to manage the Mara River Basin. The lack for a shared vision is the greatest challenge to sustainable management of the MRB. The shared vision should be anchored in the East Africa Community but with links to the Nile Basin Vision. A visioning study project could more appropriately link various concerns in the Basin.
- A study on rents on natural resources would help harmonize rents and increase equity among beneficiaries
- There is a need to get a clear profile of actors and activities in the basin, including institutions and responsibilities for basin management. Awareness and education is necessary to address linkages in resource use. There is a need for a framework to enable coordination of sectoral activities in the basin
- There is a need to carry out comprehensive studies to understand and document issue linkages in the MRB. This includes upstream-downstream linkages, urban-rural linkages, and ecosystem linkages, among others.

- In terms of the management of the ranges, participants suggested that conservancies are a better way for sustainable resource management than land ales and subdivision
- The CFA should place a great emphasis on management regimes that promote sustainable livelihoods. This is because most activities that degrade the watershed are normally intended to meet livelihood needs. Without a strong focus on livelihoods and poverty reduction, communities will be hesitant to participate in the shared vision and this would undermine sustainability
- There is a need for an information sharing and documentation framework. Information in the MRB is scattered and need consolidation. Infrastructure for data gathering is weak or absent. There is a need for a shared database management system to ease data sharing and documentation.
- There is a conflict of policies and laws with respect to natural resource management. These need reconciliation and coordinated approach
- The CFA should lay a greater emphasis on people who make things work rather than those who make policies or those articulate the policies
- There is a need for a grassroots movement to be a key part of the cooperative framework. There is a
 need to incorporate indigenous knowledge in the design and implementation of a shared vision for
 the management MRB. The level of participation of group of stakeholders should be well thought
 and properly designed..

4. Presentations and discussions

4.1 General comments from key stakeholders

The consultants invited some key stakeholders to make remarks, comments and any submissions, which preceded short presentations by the consultants. A representative from the government Ministry of Water and Irrigation suggested that the cooperative framework instrument should be a dynamic document in the sense that it should be designed in a way that makes it possible to undergo amendments whenever it would be necessary.

The representative from WWF said that one of the major challenges in the management of the MRB is how we can ensure smooth communication flows across the entire basin community. He suggested that there should be a principle of communications and pathways for exchange of information at all levels within the MRB. In this regard, the participants suggested that the consultants design suitable mechanisms to guarantee information exchange on a basin-wide scale and one that would help actors and stakeholders see the basin as one ecological and economic entity. For example, there already exists a transboundary water resources forum but it has no legal backing. A policy, legal and institutional framework and an institutionalized management of the MRB could therefore give such a forum and other similar ones an anchor. The representative from Water Resource Management Authority (WRMA) informed participants that WRMA uses the river basin approach to coordinate, regulate and involve stakeholders in the management of water resources n Kenya.

She said, Water Resource User Associations (WRUAs) were the entry points for water resource management in the country just as the Water Service Trust Fund (WSTF) was the entry point for water supply and sanitation. She said work in the MRB had already passed the planning stage and much of the implementation was yet to enter the full gear.

4.2 Presentations by REDPLAN consultants

The Director of REPLAN Consultants, Prof. George Krhoda informed participants about the background of the workshop and referred them to the Terms of Reference for the consultancy assignment. He said that two cooperative frameworks ha been proposed before. One was commissioned by the Nile Basin Initiative and carried out by Water Resources and Energy Management (WREM) International of the United States. The Nile Equatorial Lakes Subsidiary Action Program (NELSAP) commissioned another. Prof. Krhoda asked participants to examine the basin entity and all its natural resources and feel extremely free to contribute to the making of history. He particularly asked participants to determine the nature of stakeholdership that each stakeholder holds in the basin and the manner in which in which we would like to manage the basin as a transboundary watercourse regime. He suggested that the participants would use discussions and brainstorming to share their ideas and concerns. He then took participants though the day's schedule of events.

4.2.1Resources, stakeholders, and environmental management

The consultants made a presentation on "Resources, stakeholders, and environmental management" in which they highlighted and provoked debate on issues related to participatory management of the MRB and its resources. The presentation systematically raised issues in various parts of the basin beginning at the point when River Mara water mixes with Lake Victoria water. The consultants gave a physiography to the basin.

Issues and concerns

- Population in many parts of the basin will grow
- Urban centers will grow. Urbanization currently stands at 60% and will call for prudent management
- The need for economic growth will exert pressure on resources in the MRB
- Climate change will cause increased climate variability
- Demand for water will increase
- Pressure on forests will call for prudent forest management
- Environmental degradation and decline in ecosystems
- Laws and regulations may be made but laxity in their implementation is a serious concern

Responses to issues and concerns

Overall, participants strongly pointed to a lack of a vision for transboundary management of the MRB as the greatest impediment to any efforts to respond to issues and concerns raised by the presentation.

The participants also pointed to the following needs and options for dealing with issues affecting the management of the MRB:

- The need for a comprehensive information sharing framework
- Improve and strengthen stakeholder participation in MRB management
- Strengthen capacities of governments to manage the MRB
- Improve irrigation efficiencies to get more production from less water
- Improve and strengthen national MRB resources management by legal reforms to strengthen stakeholder participation
- Improve and strengthen information and resources monitoring capabilities at basin level
- Improve and strengthen source rights concepts and management.

4.2.2 Joint management regimes and conflicts over resources in transboundary river basins

The consultants made a presentation on "Joint management regimes and conflicts over resources in transboundary river basins" to stimulate a discussion on joint management regimes and conflicts over natural resources with a focus on the Mara River Basin. In particular, the presentation raised the need to fill gaps in information with respect to:

- a vision for transboundary natural resources management (TBNRM);
- joint management of natural resources in the Mara River Basin;
- magnitude and frequency of conflicts over natural resources; and
- new mechanisms for conflict management.

Issues and concerns

The plenary discussions raised the following issues and concerns:

- Suspicions and lack of trust often undermine good intentions
- Identify interests of various local communities in the basin
- Past environmental impact assessments in the basin have not been jointly done
- Development processes and livelihood systems in the MRB may not necessarily take into account all downstream needs and ecosystem management principles
- Local communities may have no capacity especially after donor funding expires
- Public-private partnership programs for resource management may be weak or lacking in the MRB
- Intra- and inter-state conflicts over the use of MRB resources. For example, within sectors, resource users may have conflicts. In particular, participants raised a need to bring stakeholders on the Kenyan side together to act in a coordinated way
- Without commitment by governments to address issues at bilateral level, a shared vision would be as good as it would appear on paper
- CFA should consider issues of state sovereignty

- Conflicts in the Mau Ecosystem
- CFA should address various local interests to the greatest extent possible and sustainability of local livelihoods in the MRB
- Water conflicts between tourism enterprises and wildlife especially in the Maasai Mara region.
 Tourism enterprises also pump local springs in Maasai Mara Game Reserve dry and this leads wildlife to seek for water on to farms adjacent to the game reserve. The result is human-wildlife conflicts and threats to conservation efforts.
- Infrastructural developments such as the planned Arusha Musoma may degrade ecosystems, undermine conservation efforts, and lead to conflicts.

Responses to issues and concerns

- The principle of continuous consultations and visioning would reduce suspicion and build trust at all levels of MRB management. Also, the CFA should promote joint activities in the MRB i.e. joint management processes should be anchored in the CFA. Such activities may include joint strategic environmental assessments; joint environmental impact assessments and audits; joint research and community participation for conservation of natural resources; joint planning; joint resource monitoring; joint pollution and effluent monitoring, joint infrastructural development; etc
- Compile a joint resource use master plan that will provide for controlling resource use, environmental pollution, safety standards, controlling access to resources by unauthorized persons;
- Build adequate local capacity to ensure local institutions progress even after donors and funding institutions have withdrawn:
- Link the CFA to other efforts in the resolution of issues in the Mau Ecosystem
- CFA should address human-wildlife conflicts especially in wildlife conservation areas such as the Maasai Mara and Serengeti
- Joint development projects would address conservation concerns and answer to ecosystem needs

4.2.3 Review of cooperative framework arrangement

The consultants made a short introductory presentation on "Review of cooperative framework arrangement" and reminded workshop participants that the ultimate aim of the workshop was to get stakeholder views on a suitable framework for natural resource management in the MRB. In carrying out a visioning process of the MRB, the consultants asked participants to place an emphasis on five things:

- Identifying key NR
- Determining challenges
- Setting up priorities
- Determining where we want to go as a basin (long term ideal situation)
- Obtaining consensus on the vision.

The presentation was followed by an open discussion before wrapping the entire workshop deliberations into resolutions presented on section 3. The open discussion focused on the following issues:

- LVBC program of work and LVBC vision (examine the CFA in the light of LVBC program of work and LVBC vision)
- Fundamental principles of a cooperative framework (development principle, sustainability principle, ecosystem management and protected areas, water utilization, and institutional issues, etc)
- Policy guidelines (CFA should be anchored in the EAC framework. Consultants should also look at the
 differences and similarities between policies, laws and institutions in Kenya and Tanzania. For
 example, participants noted that the Lake Victoria South Catchment Area of WRMA is quite similar
 to Lake Victoria Basin Office in Tanzania)
- Legal issues (the CFA should examine legal instruments such as the EAC treaty and protocols, bilateral and multilateral environmental agreements, Water Acts in Kenya and Tanzania, etc)
- Institutional issues (examine institutions such as EAC, national, local, NGOs, CBOs, cultural institutions, etc)
- policy, legislative, and institutional gaps (examine gaps with respect to what we need in the shared vision, equitable and rational use, benefits sharing arrangements, resource mobilization, and cover natural resource themes such as biodiversity, forestry, fisheries, protected areas, etc in detail, and climate change issues that need redress)

Issue, concerns and responses

In the open discussion, participants said the CFA should address the following issues:

- Water for humans, livestock, and ecosystems
- NRM regime that could support sustainable livelihoods and poverty reduction
- Partnership arrangements between and among various groups of actors in the basin (e.g. hoteliers and farmers) to promote sustainable management of the MRB. Partnerships are possible at various levels e.g. at he level of WRUAs. Partnership, they noted, would boost trust and enforcement of laws and regulations.
- Use Payment for Environmental Services (PES) schemes where they can work.
- Competition for natural resources at local, sub-basin, basin-wide, bilateral levels.
- explore the possibility of side payments by downstream state or payments by upstream state to promote sustainable MRB management
- CFA should entrench channels for launching and handling complaints at all levels of basin management [participants noted that complaints about the rate at which the swamp in near the mouth the Mara River is expanding have been there for some time. there have also been complaints over too many tourist facilities especially campsites in the Maasai Mara Game Reserve. A similar overconcentration of facilities in Serengeti will have serious adverse consequences for the entire Maasai Mara-Serengeti ecosystem].

- CFA should address the issue of upstream-downstream resource sharing framework for development.
- CFA should address capacity in institutions charged with managing the MRB at all levels.
- Resource use planning and management (e.g. set resource quality objectives to realize certain desired outcomes, water allocation plans should ensure adherence to set allocations, there is a need for development of water storage to promote water availability and reduce deficits in dry seasons).
- Pollution prevention and control (entrench in the CFA a provision for pollution prevention and control through mechanisms as cleaner production, industrial ecology, etc).
- CFA should provide an anchor an MRB management plan that can inform all other management processes of the MRB

The way forward

The consultants thanked the workshop participants for finding time to travel and share their ideas. They informed the participants that the workshop would be ready sharing in the next one or two days. The report would also feed into the regional workshop to be held in Kisumu on the 27th August 2010. Overall, the consultants promised to build the various issues and concerns raised by the participants into the policy, legal, and institutional cooperative framework, which is the focus of the assignment.

5. Conclusions

The Bomet Workshop was considered a success since it achieved its objectives to share information about the way forward for a new cooperative framework instrument for the Mara River Basin. The workshop examined issues and concerns that should be addressed by an effective and efficient Cooperative Framework instrument for the Mara River Basin. Workshop participants recognized the need for the consultants to maintain continuous consultations with stakeholders in the entire process of making a cooperative instrument for the Mara River Basin to promote a consensus that is necessary for the implementation of the cooperative framework. REDPLAN consultants Ltd, on the other hand, assured participants that it would take the resolutions of the workshop and build them into the text for the cooperative framework instrument to the best extent possible. The workshop might be termed as a first step and a milestone to building a sustainable basin community for the Mara River Basin.