

IPRA Working Paper Series

**Trans-boundary Resources Management
in East Africa**

**Review of Water Sector Policies in
Burundi, Rwanda, Tanzania and Uganda**

Milton Ayoki

IPRA Working Paper 41

Institute of Policy Research and Analysis
P.O. Box 7138 Kampala

November 2007



Informing and enhancing policy debate for poverty alleviation in Africa

© 2007 by Milton Ayoki

All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

IPRA Working Papers contain preliminary material and research results, and are circulated prior to a full peer review in order to stimulate discussion and critical comment.

Email: milton.ayoki@ipraa.org

Table of Contents

1	Introduction	4
1.1	Introduction: Water in the context of national priorities	4
2	The policy framework and performance of the water sector	6
2.1	Resource planning, national plans and implementation	2
3	Water resources development project selection and approval criteria	9
3.1	Water allocation and transfers	10
3.2	Gender mainstreaming and stakeholder participation in implementation of IWRM within the river basin	11
3.3	Linkages with other economic, land, environment policies, etc	12
3.4	Assessment of the adequacy of existing policy	12
3.5	Proposal for harmonised improvements to policy frameworks in the four countries	15
4	Step-wise process and time frame for transformation from present situation to end situation	16
4.1	Water use and water rights applied in each country of Kagera region	16
4.2	Gaps for water resource management in the transboundary sites	17
4.3	Provisions for stakeholder participation in implementation of IWRM within the Kagera River Basin	17
	References	20

About the report

This report was prepared as part of the process to develop the Kagera Cooperative Framework in the four riparian countries of Burundi, Rwanda, Tanzania and Uganda. The work was commissioned in 2007, by the Nile Basin Initiative (NBI). It reviews the policies in the four riparian countries (Burundi, Rwanda, Tanzania and Uganda) with regard to integrated water resources management. It looks at past performance of the water sector under the existing policy framework.

After 1991, the global water sector outlook changed rapidly, especially after the Dublin Conference in 1992 where four powerful messages were given, which became the basis for the Rio Agenda 21 and for the Millennium Vision-to-Action. First, that freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment i.e. one resource, to be holistically managed. Second, that water development and management should be based on a participatory approach; involving users, planners, and policy-makers at all levels i.e. manage water with people - and close to people. Third, that women play a central role in the provision, management and safeguarding of water. Lastly, that water has an economic value in all its competing uses and should be recognized as an economic good – suggesting that after ensuring basic human needs, allocate water to its highest value, and move towards full cost pricing rational use, and recover costs.

The Dublin principles aim at wise management of resources with focus on poverty reduction. Formulation of a water resources related policy in the four countries, to a large extent reflect Dublin principles and the Rio Agenda 21. Countries that did not have water policy before 1992, manage to formulate one or to review and update the old one. In each of the riparian countries the process of policy formulation has largely been participatory involving various stakeholders. Draft policies are discussed and passed by cabinet/council of ministers and later by parliament or senate, as a final approving body. The entire process is quite involving and requires time and substantial amount of human and financial resources to accomplish. However, as we have noticed, policies have largely national focus with very little attention to transboundary issues. Integrated, multi-sectoral approach as a framework for proper water resources management is very advanced in Tanzania and Uganda, slowly advancing in Rwanda, but non existent in Burundi. The level of coordination and consultation is also very advanced in Tanzania and Uganda and greatly improving in Rwanda, but weak in Burundi. Capacity building measures ought to go along with the dialogue. This is an area which may need attention.

1 Introduction

This paper reviews policies in the four riparian countries (Burundi, Rwanda, Tanzania and Uganda) with regard to integrated water resources management. It looks at past performance of the water sector under the existing policy, legal and institutional framework (including resource planning and project development); adequacy of existing policy, legal and institutional framework; water use and water rights; resource management in transboundary sites; and participation in implementation of IWRM. To the extent possible, the section has endeavoured to point out some of the successes as well as the existing gaps, failures, threats and challenges.

1.1 Introduction: Water in the context of national priorities

Priorities differ across countries, with implications on policies, political will / commitment and resources allocated to water sector and programmes. The Poverty Reduction Strategy Paper (PRSP) – national planning framework for each country – sets out priority as follows:

Burundi:

- i) Improving governance and security
- ii) Promoting sustainable and equitable economic growth – including revitalisation of sectors with growth potential, revising private sector, diversifying employment and income opportunities for rural communities;
- iii) Developing human capital – targeting health and education sector;
- iv) Combating HIV/AIDS

Rwanda:

- i) Rural development and agricultural transformation - including agriculture and environment, land, supporting off-farm employment, credit, rural energy, small-scale rural infrastructure and labour-intensive rural public works.
- ii) Human development - including health, family planning, skills development, education, water and settlement. Settlement is included partly because it is operationally so closely linked to water supply.

- iii) Economic infrastructure - including the development of roads, energy, and communications to support economic development both in urban and rural areas.
- iv) Governance - including security, constitutional reform, the justice system and *gacaca*, decentralisation, sectoral strategies, accountability and transparency, and civil service reform.
- v) Private sector development - including the promotion of investment, the reduction of the costs and risks of doing business, and the promotion of exports.
- vi) Institutional capacity-building (cross-cutting in all sectors) - includes the design of institutional structures and incentives to encourage the development and retention of the relevant skills in public and private sectors.

Tanzania:

- i) Reducing poverty through equitable economic growth;
- ii) Improving human capacities, survival and social wellbeing; and
- iii) Containing extreme vulnerability among the poor.

Uganda:

- i) Restoring security, dealing with the consequences of conflict, and improving regional equity
- ii) Restoring sustainable growth in the incomes of the poor
- iii) Human development – addressing quality and drop in universal primary education, reducing mortality and increasing people’s control over the size of their families
- iv) Transparency and efficiency in use of public resources – to reduce poverty

Among the four countries it is Tanzania, Uganda and to some extent, Rwanda that make explicit reference/emphasise to water resources in the overall national policies and goal of poverty reduction, and have clear allocation to water sector in national budget. In Burundi, water does not appear as a priority sector and is only included in the annual budget at activity level.

2 The policy framework and performance of the water sector

This section focuses on existing policies in the four riparian countries dealing with water resources management. It highlights adequacy of existing policy, the strength and successes as well as existing gaps, failures, and challenges. Past performance of the water sector under the existing policy, framework (including resource planning and project development); water use and water rights; resource management in transboundary sites; and participation in implementation of IWRM are discussed as well.

Table 2 identifies the lead government ministries in the management of water resources in the respective countries.

Country	Ministry
Burundi	Ministère de l'Aménagement du Territoire, de l'Environnement et du Tourisme
Rwanda	Ministry of Lands, Environment, Forestry, Water and Mines
Tanzania	Ministry of Water and Livestock Development
Uganda	Ministry of Water, Lands and Environment

In **Uganda**, the overall responsibility of initiating the national policies and for setting national standards and priorities for water resources management is with the Ministry of Water, Lands and Environment (MWLE). The Water Policy Committee (WPC), established by the Water Statute 1995 plays an advisory role to the MWLE. WPC is also responsible for initiating revisions to legislation and regulations and for coordinating sector ministries' plans and projects (affecting water resources) and the formulation of an international water resources policy. A part from representatives from government ministries and departments, members of the WPC include representatives from district administration, private sector and civil society. The Directorate of Water Development (DWD) is the Government sector lead agency responsible for managing water

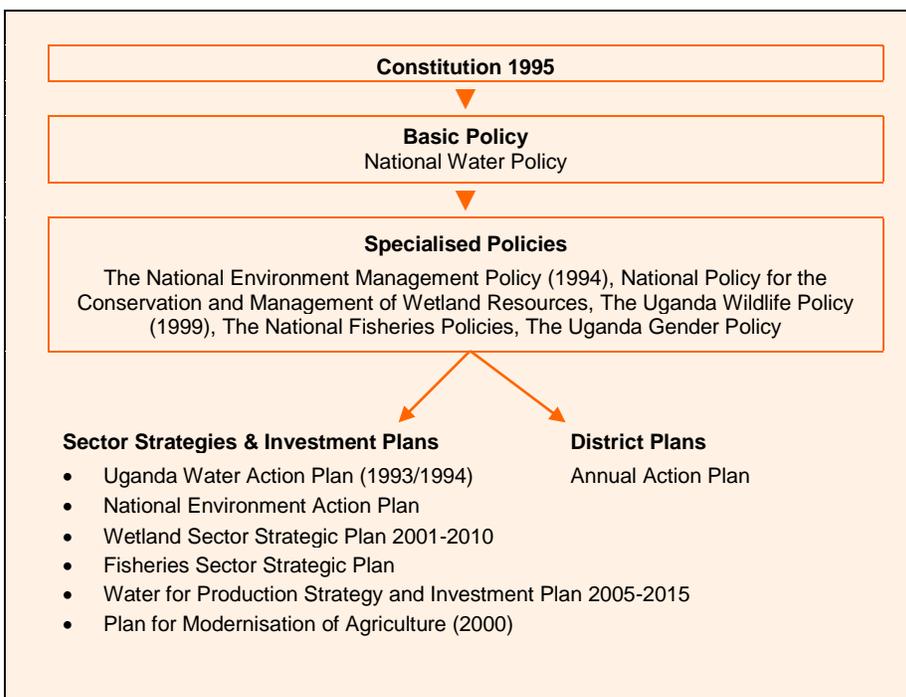
resources, coordinating and regulating all sector activities and provides support services to the local governments and other services.

The activities of the DWD have now been decentralized to district and lower government level. For instance, districts set local priorities, bye-laws and annual action plans regarding the use of water resources such as fish ponds, irrigated areas, livestock watering, rural and urban domestic water supply. The operation and maintenance of the point source water supply is the responsibility of the user community under the technical support of the district administration. Planning and development of new sources is the role of the district councils. There are number of government projects under the DWD, providing the services to the rural sector. For urban areas, the urban water supply (under the DWD) is under the umbrella programme called the Rural Towns Water and Sanitation Programme (RTWSP). The Rural Water and Sanitation (RUWASA) project operates in Eastern Uganda covering over 10 districts. However, major uses like hydropower generating and other uses with trans-district and or transboundary implications are dealt with at the national level but with full participation of the stakeholders.

The water sector policy recognizes Uganda's regional obligations including NBI related objectives and issues, and adheres to various currently accepted principles of international law on the use of shared water resources. The policy framework is influenced by Uganda's participation in international, regional and basin-wide bodies of cooperation such as Technical Cooperation Committee for the promotion of the Development and Environmental Protection of the Nile Basin (TECCONILE), Inter-Governmental Agency for Drought (IGAD), the defunct Kagera Basin Organisation (KBO), and Lake Victoria Fisheries Organisation (LVFO).

In addition to guiding principles adopted from the international experience, Uganda's water sector policy is guided by set of specific policies and strategies related to broader context of water resources e.g. the Constitution of the Republic of Uganda, the decentralization and privatization policies and the Environmental Management Policy and Statute. This provides the basis for integrated, multi-sectoral approach to water resource management and linkages with the different agencies.

Figure 1. Policies and strategies for water resources management in Uganda



The National Environment Action Plan – a process undertaken between 1991 and 1994 – among others, took stock of the related environmental laws and policies in relation to the challenges for a sustainable future. Since then, several policies (and laws) have been formulated.

The Constitution of the Republic of Uganda (1995) states that:

*“The state shall endeavour to fulfill fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that all Ugandans enjoy rights and opportunities and access to education, health services, **clean and safe water**, ...”* (Objective XIV).

*“The State shall take all practical measures to promote a **good water management system at all levels**”* (Objective XXI). *“The State shall promote sustainable development and public awareness of the need to manage land, air and **water resources** in a balanced and sustainable manner for the present and future generations”* (Objective XXVII).

The National Environment Management Policy includes key policy objective on water resource conservation and management:

To sustainability manage and develop the water resources in a coordinated and integrated manner so as to provide water of acceptable quality for all social and economic needs.

The National Policy for the Conservation and Management of Wetland Resources (NPCMWR) considers wetland resources as an integral part of the environment and their management must be pursued in the context of an interaction between conservation and the national development strategies. The policy (NPCMWR) set out specific policy strategies. For example, drainage of wetlands is prohibited unless more important environmental management requirements supersede. Only those uses that have been

proved to be non-destructive to wetlands and their surrounding are permitted; these include water supply, fisheries, wetland edge gardens and grazing. Any decision to use wetlands must consider the requirements of all other users in the community. Any wetland serving as a source of water supply or receiving effluent as part of a designated service to any human settlement is by definition, a fully protected wetland from any encroachment, drainage or modification. Policy recognizes that wetland resources have trans-boundary significance, and therefore require regional and global approaches.

Policy objective

The overall policy objective of the Ugandan Government for the water resources management is:

To manage and develop the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations with the full participation of all stakeholders.

Objectives of water sector as outlined by the 1997 PEAP include:

- i) The provision of a safe drinking water supply network to 100% of the population by 2015, and an adequate water supply for livestock;
- ii) The building of local community capacity to operate and maintain water supply facilities, and increasing community ownership through community participation and financial contributions towards their construction;
- iii) The conserving of water resources by adhering to environmentally friendly practices; and
- iv) Increasing efficiency in the delivery of water services through proper coordination of government water programmes with those of NGOs and other stakeholders.

Uganda's interest (as stated in policy) lie within securing her equitable share of the water resources of the Nile basin; ensuring that the good water quality in the water bodies within the national boundary is maintained for sustainable use. At the same time, it is recognized that, in the management and utilization of its water resources, Uganda will do so in accordance with all international and regional obligations under various regional conventions, declarations, principles and organizations relating to the River Nile Basin and Lake Victoria.

Current policy also calls for a coordinated strategy regarding international water resources issues in particular related to utilization of Nile waters and safe guarding of the water quality of Lake Victoria, Kyoga, Albert, George and Edward.

The priority actions in water resource management as outlined by the PEAP 2004/5 focus on finalising water resource management reform study and develop an action plan for the short, medium and long term for the water resources management.

Table 2. Strategies for water resource management under the current PEAP

Strategic Objectives	Challenge/constraint	PEAP policy actions
Strengthened environmental and natural resource (ENR) management regime in support of sustainable production of goods and services.	Degraded forests resources Environmental impact assessment regulations not enforced	Prepare a ENR strategy to ensure that economic activities consistent with sustainable use of natural resources and protection of the environment NEMA rationalized in interests of cost effectiveness Prepare National Environmental regulations, standards and guidelines
	Significant degradation of wetlands	Develop and disseminate guidelines for wise use of wetland resources Improve community skills and diversification of wetland products in order to add value to wetland products Enforce appropriate policies, laws, procedures and regulations to curtail degradation of wetland resources Assess wetland resources to determine resource availability and trends Promote community initiatives that promote wise use of wetlands
Strengthened infrastructure in support of increased production of goods and services	Limited water supply to supplement rainfall	Finalise water for production strategy (increase irrigation areas to 10,500 ha by 2013/14) Establish a coordination mechanism

In regard to environment and natural resources (ENR) sector, Government's objectives are to: i) have a sufficiently forested, ecologically stable and prosperous Uganda; ii) ensure that Uganda's wetlands are managed and used in ways that conserve the environment and its biodiversity while optimizing benefits to people in the host communities, and iii) maximize the use of timely and accurate climate information for socio-economic development.

In FY 2006/7, Government aligned policies of 19 out of 21 lead agencies in an effort to strengthen their capacity to plan for and manage the environment and natural resources; issued 4 out of the planned 5 key sectors with Environmental Impact Assessment guidelines; and compelled all the 21 identified most polluting industries to meet their obligations in accordance with agreed standards.

Water coverage in urban areas (under National Water and Sewerage Corporation, NWSC) has increased from 68% to 70% with an increase in connections from 100,000 to 150,000 between June, 2005 and June, 2006 (GoU, 2007). While the sector continues to register an increase in the number of installed water points in rural areas as well, the overall average coverage for rural areas fell from 61.3% to 61% between June 2005 and June 2006. According to Background to the Budget 2007/2008, this was partially attributed to the increasing per capita cost of supplying safe water in rural areas, which increased by 85% between 2002/03 and 2005/06.

In **Burundi** responsibility of initiating the national policies and for setting national standards and priorities for water management is shared between eight (8) government

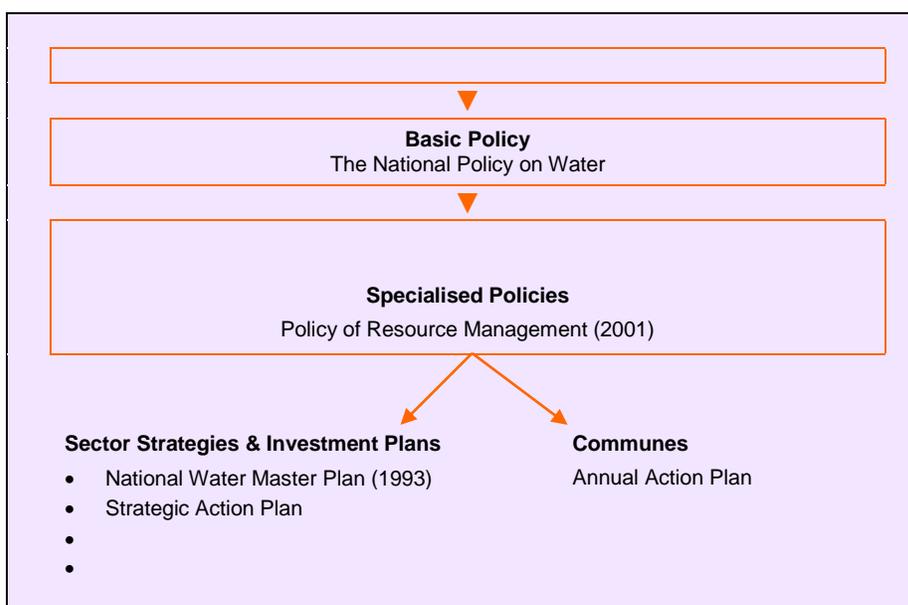
ministries. Without clear policies on collaboration, and coordination, responsibilities of the different agencies with regard to water management, administrative conflicts continue to be a problem. It is not clear who is in charge of water management. In other countries, the mandates are quite clear.

Burundi still lacks clear authority and policies in water resources management. Implementation of policies and development plan e.g. Water Master Plan and Water law (Nov 26, 1992) have not taken place. There is need for water sector reform. In 1991 government created National Commission for water and energy (under the Ministry of energy and mines). Other institutions include National Urban Water Authority (which sells and supplies water to the urban areas. This was the first ministry); Ministry for Rural Development (DTER), Ministry for Land Use, Environment and Tourism; Ministry of Planning; Ministry of Public Health (for quality); Ministry of Commerce; Ministry of agriculture; the big water consumers (– the breweries). Within the ministry of Environment is institute for mapping and autography; and a dept of Water Resource Management.

When Global Water Parntership came to Burundi they did not know who to approach. At least there is a good data base compared to other countries. When there are floods, it is the ministry of public works to plan for whatever action to be taken.

The National Policy on Water (2001) is the overriding policy instrument for the management of water resources. It is supported by the Order of Council 26th November 1992 on the institutions and organisation of water in the public domain, as the basic legislation on water resources. However, the law and the policy remain unimplemented due to lack of lead institution directly responsible for the coordination of the policy.

Figure 2. Policies and strategies for water resources management in Burundi



The National Policy on Water (2001) covers the following areas with regards to water resources management: access to domestic water supplies, rural hydropower development, increasing the use of water to provide for productive sectors (agriculture and pastoral production in particular), sustainable development of the resources, and better mechanisms for coordination and capacity building in the sector.

A national water master plan which was developed in 1993 has the principal objective of ensuring the rational management of the country's water resources and optimizing development of the resource. It outlines the resource base, the structure of demand by sector, and assesses demands against supplies on the basis of the data supplied in GIS format. However, the data from the plan is not currently utilised within the sector.

The Environment Code (2000) sets the rules for environmental management and protection. It includes only small reference to water issues and does not provide a baseline for water quality against which the impact of the code can be measured. The Convention on the Sustainable Management of Lake Tanganyika seeks to protect and conserve the biological diversity of the lake and to ensure sustainable development of its resources between Burundi, DRC, Tanzania and Zambia.

The policy of resource management (adopted in September 2001) is based on basic fundamental principles and lays down the main trends as well as the strategies of development of the water resources in the various socio-economic fields in Burundi. The policy was developed by a multi-sector working group, set up by government in 1999, with the assistance of FAO. Whilst other ministerial interests were involved in the formulation process the private sector, NGOs and donors were not consulted.

The strategic action plan for implementation covers indicators of performance, institutional roles and responsibilities, estimated budgets and timelines for implementation. However, implementation of the plan is hampered by a lack of legislation institutionalising the implementation structure. The action plan envisages the participation of the public sector and municipal authorities, but leaves out the private sector and civil society. Even if the institution in charge of the coordination of the policy had been created, implementation would still have been hampered by lack of financial resources.

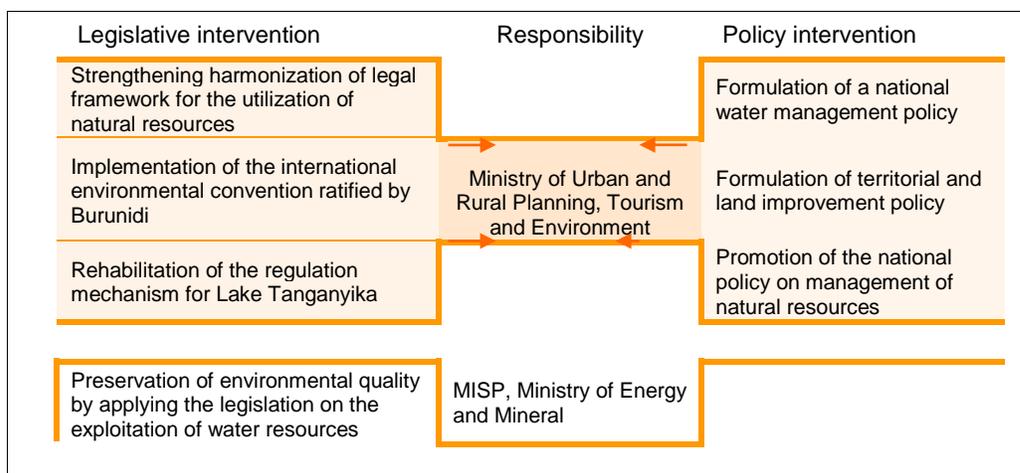
Strategy on natural resource management comes under environmental protection. Government strategy on environmental protection comprises: (i) upgrading institutional, technical, and financial capacities; (ii) promoting natural resources management; and (iii) promoting the sustainable use of natural resources – which include maintenance of the water treatment in Buteera, construction of a waste water treatment station in Kanyosha, control of public dumping and protection of lake water against pollution.

Other policy focus concerns the strengthening and harmonisation of the legal framework for the utilisation of natural resources; promotion of the national policy on management of natural resources; formulation of a national water management policy; formulation of territorial and land improvement policy; restoring the dynamism of the National Commission on Environment; implementation of the international environmental conventions ratified by Burundi.

Unlike in Rwanda, Tanzania and Uganda, in the case of Burundi, water does not appear as a sector in development strategy and has no specific budget line in the government

recurrent and development budgets. Unlike Tanzania and Uganda, Burundi does not follow a sector-wide approach in implementation of water development programmes and projects.

Figure 3 Priority areas of public intervention under the Burundi's PRSP



In **Tanzania**, the overall responsibility of initiating the national policies and for setting national standards and priorities for water management lies with the Ministry of Water and Livestock Development (MOWLD). MOWLD is also responsible for. In addition to overall management responsibility and policy implementation, the ministry also undertakes regulation through water boards and basins, and indirectly through an independent authority—the Energy and Water Utilities Regulatory Authority (EWURA) - formed by the EWURA Act 2001 to regulate water supply and sewerage services, amongst others.

There are nine (9) water basin offices governed by the basin water board, 6 are trans-boundary in function. The role of national water board (which is represented by different sectors) is advisory to the ministry – but is responsible for coordinating the planning, and overseeing multi investments. Different sectors are represented on the board. Basin board is overseeing entire catchment areas. This responsibility falls directly under the new Planning Section of the ministry.

Following the restructuring of the ministry, there are now four sections /departments (previously they were two) responsible for (i) water assessment and monitoring; (ii) water resources planning and research; (iii) trans-boundary water resources management; and (iv) water resources protection and environment. The cardinal roles of the Trans-boundary water resources management section is essentially dialogue and negotiation with riparian countries, how to manage treaties

There are three technical divisions under the ministry: water resources; Commercial water supply and sewerage division; and Community water supply and sanitation

Responsibility for regulation is in process of being transferred to specific government regulatory institution. The ministry will be concerned with policy formulation, providing guidelines and policy monitoring.

National Water Policy became operational in 2002. Most of the things including trans-boundary issues are now in water policy. In preparing water sector policies focus was made on other sectors. Other sectors incorporated into the team hence looked at the other sector policies and took up appropriate linkages; consultations from sector level to district levels.

As of June 2005, 9,283 water committees have been formed and increase in rural water supply coverage rose from 42% (1995) to 53.56% (2005). Water sector reforms have also involved formation of Municipal and town water authorities (eventually to be privatized when they become commercially viable and self sustaining). Nineteen (19) Water Authorities and 62 Water Boards have been formed to-date. Water supply coverage in cities and municipals has increased from 68% (1995) to 74% (2005).

The analysis of available information was done and presented at a national workshop on September 14, 2005. The NAWAPO has fairly addressed trans-boundary issues. Although it has not been too committal to such issues it has left room for cooperation and dialogue on trans-boundary water related aspects. However, taking into account that six out of nine River/Lakes Basins in Tanzania are trans-boundary in nature, there is a need for an elaborate trans-boundary Waters policy chapter within the NAWAPO. Policy Formulation involves analysis and authorization. The formulation of the Tanzania water policy has far advanced. A National Water Policy (NAWAPO) was passed by Parliament in July 2002 and inaugurated in March 2003. The National Water Sector Development Strategy (NWSDS) has been developed (February 2005).

Figure 4. Policies and strategies for water resources management in Tanzania



Tanzania's PRSP recognises the dependence of the poor on the environment (soil, water and forests) and the importance of water in the socio-economic development and

the fight against poverty. The National Water Policy views water as one of the most important agents to enable Tanzania achieve its Development Vision objectives, which include: (i) improving livelihoods (with universal access to safe water as one of the aims); (ii) good governance and the rule of law; (iii) strengthening growth and competitiveness.

The following are the major documentations already produced as part of the water sector reform process in Tanzania.

Major Strategic Documents for the Water Sector in Tanzania

Ministry	Policy	Year	Comments
MWLD	National Water Policy	2002	It is the outcome of the review of the previous national water policy of 1991.
	Budget Speech for the Financial Year 2005/2006	Dodoma, July 2005	Provides summarized information on the overall sector performance, future plans and current key policy issues.
MWLD	National Water Sector Development Strategy 2005-2015	February 2005:	It provides policy implementation guidelines, which become operational once approved and the legal framework is in place.
MWLD	Water Resources Bill	February 2005	It provides the enabling principal water resources management legislation.
MWLD	Water supply and Sanitation Bill	February 2005	It provides the enabling principal legislation for water supply and sanitation services.

Note: MWLD = Ministry of Water and Livestock Development

The new water policy of July 2002 was preceded by the first national policy of 1991.

In **Rwanda**, overall responsibility of managing water resources and initiating national policies and guidelines is vested on the Ministry for Lands, Environment, Water and Mines (MINITERE). The responsibility is shared with a number of line ministries including hydroelectricity and transport, health and hygiene, agriculture and irrigation and planning and finance. Under decentralization framework, districts are responsible for water supply and sanitation. Districts involve NGOs and private sector as partners.

The national water policy takes account of recent international policies and conforms to various commitments entered into under regional and international agreements. The National Vision 2020 documents provides a framework under which, inter alia, Rwanda must provide for integrated management of the resources, access to drinking water for all, and storage and conservation for economic development.

The policy on decentralisation adopted in 2000 provided a key overall framework within which sector policies could be implemented. The Ministry of Lands, Environment, Forestry, Water and Mines (MINITERE) is responsible for implementation, capacity building and financing, planning and management of water resources, rivers and wetlands and for public infrastructure. The provinces play an intermediary role between local government and MINITERE. Communes are responsible for water resources management at a local level. The water supply sector has been liberalized.

The main objectives of the water (and sanitation) sector as outlined by the PRSP are:

- i) To improve the water supply and extend its network;

- ii) To encourage community management of water supply;
- iii) To increase access to sanitation services;
- iv) To develop a sector strategy; and
- v) To build capacity at the central and district levels.

Rwanda development vision 2020 sets the goal of providing safe water to 100% of the population (access to portable water) by 2020. The president mandate sets 2010 as the time when 80% of people will have access to portable water. It is estimated that 64% today have access to safe water. A core objective of the water and sanitation sub-sector is to provide sustainable safe water supply and sanitation facilities to 77% of the rural population and 100% of the urban population by the year 2015, with management responsibility and ownership assumed by the users, and an 80%-90% effective use and functionality of facilities.

The 1996 Sector Policy for Water and Sanitation suggests that based on the water distribution points established over the years, coverage in rural areas should have been close to 70 percent. However, by 2000, using norms related to number of users served, the coverage may have declined to 44 percent, taking into account the actual condition of facilities¹. Rehabilitation of systems along with effective community based management systems are the key to increasing access to safe water supply.

Electrogaz, a Government owned company for water, electricity and gas, provides drinking water in urban areas (Kigali plus the ten other town centres). While information on actual coverage in urban areas is not readily available, it is not likely to exceed 60 percent of the population, of which about half receives the water through standpipes².

Under the strategy developed in 1999, a demand-led approach is envisaged for the supply of rural water and sanitation. Key elements of this approach are being incorporated into the ongoing Rural Water Supply and Sanitation Project. This project, along with some other smaller projects, is likely to increase the coverage from an estimated 44 percent to 50 percent. To further enhance coverage in a sustainable manner, the emphasis will be on learning from a pilot project, from which approaches for a countrywide scaling-up will be developed. The further development of the strategy will involve:

- Redefining the sub-project cycle using a demand responsive approach
- Restructuring and capacity building at MINERENA at central and province levels
- Capacity building of districts to develop sub-projects for accessing funds
- Promoting private sector and NGO role in planning and maintenance of the rural water supply
- Developing uniform cost recovery policies, including guidelines for the complex systems;
- Developing guidelines for accessing funds from the CDF and other mechanisms

¹ Based on World Bank (2000), *Project Appraisal Document for Rural Water Supply and sanitation Project*, p. 3. A different estimate by Groom S. (1997) suggests somewhat better coverage at 50 percent (p.3).

² Based on the World Bank, Draft Appraisal Report for the Third Water Supply Project as reported on Groom S. op.cit.

- Water harvesting is being promoted under the settlement programme (see below). This technology needs to be integrated into the water sector

EAC

The EAC Water Resources Policy underlying objective is the importance of addressing the management, conservation and development of water resources in an integrated and holistic approach based on institutionalised gender and economic principles. The main objective of EAC Water Resources Strategic Action Programme is to ensure that the Partner States freshwater, coastal related ecosystems are protected, that every person has access to safe water at affordable cost to lead a healthy and productive life and that the communities are protected from risks of water related hazards.

Table 3 Areas of commonalities and differences in the 4 riparian countries and the EAC

	National policies				Regional level
	Burundi	Rwanda	Tanzania	Uganda	EAC
Relevant policies in place					
National Water Policy	✓	✓	✓	✓	
National Environment Management Policy	X	✓	✓	✓	
Policy for the Conservation and Management of Wetland Resources	X	X	X	✓	
Wildlife Policy	X	X	✓	✓	
National Fisheries Policy	X	X	✓	✓	
Gender Policy	X	✓	✓	✓	
Land Policy	X	✓	✓	✓	
Agriculture and Livestock Policy	X	X	✓	X	
Forestry Policy	X	X	✓	✓	
Energy Policy	X	X	✓	X	
Tourism Policy	X	X	✓	X	
Nature/characteristics of policy regime					
Embraces international resolutions, declarations & guidelines e.g. UN Conference on Environment & Development in Rio de Janeiro especially agenda 21 (chap 18) on fresh water resources.	Not fully	✓	✓	✓	
Recognises regional obligations including NBI related objectives /issues, and accepted principles of int. law on the use of shared water resources.		✓	✓	✓	
Focuses on transboundary resources issues	X	X	✓	Weak	In reference L. Victoria
Promotes gender mainstreaming	✓	✓	✓	✓	✓
Promotes participatory decision making and management involving resource users		✓	✓	✓	✓
Reinforces decentralised management at a catchment level.	not clear	✓	✓	✓	
Promotes decentralisation and management at the lowest appropriate levels with strong support to user-based management and high levels of participation.	Weak	✓	✓	✓	
Development Strategy/Plan includes key policy objective on water resource conservation and management:	✓	✓	✓	✓	✓
Emphasis on environmental impact assessment	✓	✓	✓	✓	✓
Water abstractions - subject to a "water use permit" and fee	X	✓	✓	✓	✓
In allocating water, water for basic human needs receives highest priority.	✓	✓	✓	✓	✓
Policy/development strategy provides guideline on utilisation of trans-boundary water resources.	X	X	✓	X	X

Policies have largely national focus with very little attention to transboundary issues. Integrated, multi-sectoral approach as a framework for proper water resources management is very advanced in Tanzania and Uganda, slowly advancing in Rwanda, but non-existent in Burundi. The level of coordination and consultation is also very advanced in Tanzania and Uganda and greatly improving in Rwanda, but weak in Burundi. Capacity building measures ought to go along with the dialogue. This is an area which may need attention.

2.1 Resource planning, national plans and implementation

Resource planning in each of the four countries is guided by country Poverty Reduction Strategy Papers (in Uganda, Poverty Eradication Action Plan is the country's PRSP). Other principal instruments that guide country plans and resource allocations are country Visions and presidential manifestos: Uganda Vision 2025; Rwanda Vision 2020 Umurenje.

The vision framework contains long term goals and objectives and national aspirations. The PRSP is the national planning framework, which guides detailed medium term sector plans and district plans. The planning processes are the same in Rwanda, Tanzania and Uganda, except the timing. In Tanzania and Uganda the planning process starts in November and ends in October. In Rwanda and Burundi, it begins in January and ends in December. Rwanda is in the process of bringing its planning calendar in conformity with those of its EAC partners' (Uganda, Kenya and Tanzania's) by 2009. This will call for change in Article 70, 72 of the State Finance Law.

Figure 1. Annual Planning, Budget Preparation, and Policy Review Process					
	Districts	Line Ministries	Ministry of Finance	Development Partners	Cabinet / Parliament
Joint Review Process	District Plans	Report - Annual Action Plan & Budget execution	Macro economic review, resource envelope		
Strategic Planning	Strategic issues papers	Strategic issues papers, budget consultation based on draft BFP	BFP, indicative transfers to districts		
Budget Preparation	Budget Framework Paper	Detailed budget based on budget ceilings		Joint budget support	Discussion of budget/bill in cabinet
			Finance Bill		Vote on Bill

Rwanda: OBL Article 70 suggests Budget Agencies submit their annual report to Ministry of Economic Planning and Finance by end of January. Article 71 indicates that these need to be sent to Auditor General by March 31. In Burundi, the Constitution requires the ministry responsible for the budget to submit finance law to parliament by 5 October

In the Ugandan case, the 1995 Constitution (Article 15, section 1), stipulates that the President, as the head of the executive branch of Government will cause the budgetary estimates for each financial year to be prepared and presented to the Parliament - not later than 15 days to commencement of the new financial year.

In all the four countries, budgetary processes take a long process of consultations between line ministries, ministry of finance and the cabinet through the review process,

strategic planning and the budget preparation (Figure 1). It differs slightly in Burundi, but they all involve the cabinet and the parliament.

Aligning resources with policy priorities

Rwanda, Tanzania and Uganda are using the Medium Term Expenditure Framework (MTEF) as the means of aligning aggregate spending with sustainable levels of financing and provide a predictable framework at the sectoral level. Budget ceilings are set for every sector (e.g. water sector) and district local governments. Prudent fiscal policies which are needed to maintain macroeconomic stability requires that spending agencies must contain their expenditures as set out in the MTEF, within the available budgetary resource envelope. The resource envelope comprises mainly tax and non-tax revenues and disbursements of donor loans and grants.

However, in the current framework (MTEF) there is still limited policy-level engagement and commitment, incomplete expenditure coverage, focus on details rather than strategic consideration, weak linkage to operational decision-making, problem of needs-based rather than resource-constrained planning and weak linkages to ongoing public sector reform.

In Uganda, water and sanitation is treated as sector in national programmes and budgets (receive donor budget and project supports).³ It has Sector Working Group which contributes to sector policies – under the programme sector-wide approach.

In Rwanda, Policy (PRSP II) seeks to optimize the use of water in the agricultural sector, energy reduction, transport and tourism as well as environmental management. Government budgets are detailed by programme under the heading of each Ministry, though eventually budget programmes will be classified solely under their respective sector. Water sector programmes do not involve sector-wide approach as is the case in Uganda and Tanzania. It is, therefore, imperative to adopt a programmatic sector-wide approach.

Policy challenges faced by Kagera Basin Organisation

It appears from the KBO Agreement that the policy making function of the KBO was overlooked. It is not clear which of the four (4) KBO organs was responsible for policy formulation at basin level. While the KBO Secretariat was required to prepare, refine and maintain a comprehensive plan for the development of the Kagera River Basin, the KBO Agreement was silent on the issue of policy formulation. This was a major weakness of the KBO Agreement.

In addition, KBO faced two challenges which adversely affected its smooth operations. The first one was the dispute on assessments of the proportion of contribution payable by the member states. While some member states wanted the contribution towards the running of the organization to be divided equally, others preferred to have this based on the members' GDP. The second issue was the payment for the national projects. Whereas some members wanted the projects to be financed exclusively by the domicile state (i.e. where projects were located) others

³ Other sectors are: agriculture; education; health; economic functions; works, roads and transport; accountability; Justice, law and order; public administration and security.

wanted them to be financed from a common pool of financial resources. Incidentally, these issues were not fully resolved by the time KBO was dissolved.

Regional cooperation's objectives and areas of policy priorities

The East African cooperation's objectives as stated in the EAC Development Strategies (1997-2000 and 2006-2010) are to: *(i) strengthen and consolidate cooperation in agreed fields with a view to bringing about equitable development among the Member States and thereby uplift the living standards and quality of life of the people; (ii) promote sustainable utilization of the region's natural resources and put in place measures for effective protection of the environment; (iii) enhance the role of women in development; and (iv) promote peace, security and good neighbourliness in the region.*

EAC Development Strategies 1997-2000, 2001-2005, and 2006-2010

Each Development Strategy sets out the priority programmes to be implemented during a particular period. The First EAC Development Strategy (1997-2000) launched on 29th April 1997 by the three Heads of Partner States aimed to:

- promote the spirit of regional co-operation which was deeply rooted in the history of the region;
- support the existing forces which have major interest in the strengthening of regional institutions and in the free movement of people, capital, goods, as well as services and information within the region;
- place immediate emphasis on economic co-operation with a view to promoting enhanced political co-operation, and integration in the long run; and
- reinforce institutional capacities for regional co-operation.

Areas of Policy and Programme of Action (1997-2000)

In the Policy Action Matrix, the first strategy earmarked twelve policy and programme areas of action for implementation by Partner States: (i) easing of border crossing; (ii) free movement of capital; (iii) harmonization of fiscal and monetary policies; (iv) facilitation of inter-State transport and improvement of communication links between Partner States; (v) development of adequate, reliable and affordable energy supply in the region; (vi) development of areas of common interests (e.g. environment); (vii) sector policies to facilitate trade and investment; (viii) preparation of EAC region for the technological challenge of the 21st Century; (ix) strengthening institutions of co-operation; (x) legal and judicial framework to support economic integration; (xi) attainment of satisfactory co-operation; and (xii) facilitation and strengthening of regional joint programs to sustain agricultural and livestock development.

The 12 areas of co-operation in 2001-2005 cooperation strategy:

- Macroeconomic policies including monetary and fiscal policies;
- Trade liberalization and development;
- Productive sectors consisting of agriculture and food security, investment and industrial development, tourism and wildlife and environment and natural resources;
- Infrastructure and supportive services;
- Human resource development and science and technology;
- Social sectors, immigration and labour policies;
- Legal and judicial affairs;

- Political matters including peace, security and defence;
- Broad participation of women, private sector and the civil society;
- Relations with other regional and international organizations;
- Institutional arrangements at the level of the Partner States and the EAC Secretariat;
- Managing distribution of benefits and costs as a cross-cutting issue.

Co-operation in environment and natural resources

The strategy commits Partner States to co-operating in environmental and natural resource conservation activities. Much emphasis has however, been accorded in areas of common interest such as the Lake Victoria and its Basin and other shared ecosystems e.g. the major watershed/catchment areas of Mt. Elgon, Mt. Kilimanjaro, Ewaso Ngiro and the Pemba Channel. It recognizes the need to harmonise management programmes in these areas by the Partner States in order to achieve the maximum benefits possible and to reverse environmental degradation. Institutions to manage resource exploitation are to be identified.

Co-operation in management of the environment

Management programmes for trans-boundary eco-system already identified by Environment Committee of EAC, such as Mt. Kilimanjaro and Mt. Elgon are meant to be harmonised and co-ordinated. The following are included for harmonization or attention:

- Exchange of research findings in forest management in tree breeding;
- Joint forest/bush fire surveillance and fighting programmes;
- Joint position as regards international issues touching on forests;
- Cross-border trade in forest products;
- Restoration of degraded common forest resources;
- Formalisation of meetings between Directors of forest, training and research heads of forest institutions and other interested stakeholders;
- Conservation of forest endemic species, assessment documentation and sustainable use of medicinal plants;
- Joint pest and disease monitoring and management programmes;
- Completion of work on harmonisation of Environmental Regulations that had been on-going, along with the Environmental Impact Assessment System;
- Partnership in capacity building in the sector; and
- Exploitation of the potentials in the coastal zone.

Co-operation in sustainable development of Lake Victoria Basin

The development strategy in this area focuses on establishing an institutional and legal framework that will coordinate the regional aspects of the activities of the different actors and interest groups in the Lake Victoria basin, based on the outcome of the legal and institutional study.

East African Community Development Strategy 2001-2005

- Prepare and implement a comprehensive Development Strategy and Action Plan for the Sustainable Development of Lake Victoria Basin that shall focus on economic growth, poverty reduction, and protection of the environment. The

- recommendations of completed and on-going studies shall be incorporated in the comprehensive development strategy.
- Implement the Strategic Partnership Agreement between the Partner States and the Development Partners supporting sustainable development of Lake Victoria Basin.

Co-operation in integrated water resources management and development

Water is highly recognized and is at the heart of sustainable development. Every human being now and in the future, should have access to safe water for drinking, appropriate sanitation, and enough food and energy at reasonable cost. Water is the basis for all living ecosystem and habitats and part of an immutable hydrological cycle that must be respected if the development of human activity and well being is to be sustainable.

Partner States are therefore committed to developing the following:

- A shared Water Resources Vision;
- A common Water Resources Policy;
- A comprehensive Water Resources Strategic Action Programme.

The strategic interventions that have been proposed in the current strategy (2006-2010) have been driven by, among other things, the link between regional and national plans and long term visions; operationalising areas of common economic interests; greater involvement of the key stakeholders; equitable sharing of benefits of the integration process. The vision of regional integration in East Africa is to create wealth, raise the living standards of all people of East Africa and enhance international competitiveness of the region. These are expected to be achieved through increased production, trade and investments in the region.

The provisions of the EAC Treaty guide this Development Strategy. The Development Strategy identifies twelve areas of co-operation

Focus, in the implementation of the strategy is mainly on achieving a Customs Union and a Common Market.

Table 4. Priority Areas of Co-operation as Identified by EAC Development Strategy

	<i>Development Strategy 1997-2000</i>	<i>EAC Development Strategy 2006-2010</i>
1	Harmonization of fiscal and monetary policies	Macroeconomic policies including monetary and fiscal policies
2	Transport and communication	Trade liberalisation and development
3	Immigration	Productive sectors consisting of agriculture and food security, investment and industrial development, tourism and wildlife, and environment and natural resources ◀
4	Security	Infrastructure and supportive services
5	Energy	Human resource development, and science and technology
6	Promotion of investment in the region	Social sectors, immigration and labour policies

7	Trade and industry	Legal and judicial affairs
8	Agriculture and animal husbandry	Political matters including peace, security and defence
9	Tourism and wildlife conservation	Broad participation of women, private sector and the civil society
10	Environment and natural resources ◀	Relations with other regional and international organizations
11	Social and cultural activities	Institutional arrangements at the level of the Partner States and the EAC Secretariat
12	Legal and judicial cooperation	Managing distribution of benefits and costs as a cross-cutting issue. ◀
13	Political cooperation	
14	Health	
15	Labour and employment	
16	Development of information system	
17	Education and training	

Policy oriented programmes

Implementation of policy-oriented activities (in order of priority) has included the following:

1997-2000

- Policy harmonization and rationalization (macroeconomic policies and sectoral policies – e.g. trade and industry, tourism, investment, transport and communications, energy, agriculture and animal husbandry, environment, etc.);
- Development of technological capacity;
- Development and harmonization of institutional, legal and judicial framework; and
- Ensuring safety and security in the region.

Some of these challenges and lessons since the implementation of these strategies are as follows:

The past, the feasibility for implementing various policy and programme actions based on country specific conditions were not determined. Policy actions, which required negotiation (protocol), such as free movement of capital, reduction of internal tariffs, and the like, lagged behind schedule.

Slow decision making processes at national levels raised some concern. Country specific modes of operation were not fully considered. Decision making often involved several statutory steps. The process involved development of Cabinet Paper by the respective Ministry whereby the Paper had to be submitted to the Cabinet Secretariat for discussion by the Inter-Ministerial Technical Committee, and from there to the Cabinet. If the issue requires approval from the higher level it had to be passed to the Parliament for final approval. Issues, which required amendment of the Law and other sensitive issues had to pass all this process. The time taken could be quite substantial. This fact was not always taken into account in preparing time frame for activities. The decision making processes and prioritization at national level had not adapted to the new situation of the existence of EAC. The need to harmonize regional level priorities and

national level priorities was not always recognized or appreciated. In spite of the decisions made at regional level, national level decisions and prioritization tended not to be coordinated with decisions made at EAC level. It is also possible that the speed of implementation may have been limited by the absence of a legally binding agreement, like the Treaty.

There was a time lag between changes made and change of attitudes and modalities of operation on the part of the operational staff on the ground. In future, awareness campaigns and public education may be required to reduce the gravity of this problem.

Sequencing of certain activities was sometimes inappropriate. For instance, the Policy action that required development of adequate and reliable energy supply in the region demanded for *further inter-grid connection by Jan.1997*. In order to have this task undertaken, national power master plan should have been in place first.

Resource constraints caused delays in implementation. For those activities whose implementation required additional finances from governments, timing for inclusion in the budget process was crucial. With the flow of international resources not forthcoming at the required time, programmes that were tied to the goodwill of the international community were not implemented on time. The implementation of large regional projects was constrained by the narrow resource base. The lesson to be drawn from this experience is that ways of broadening the sources of finance should be sought. Concerted effort need to be placed on increasing the sources of finance and broadening the resource base for implementation of projects.

While the large public institutions in particular were stuck in restructuring and privatization, new actors were emerging in the respective industries (e.g. in telecommunications, airlines, banking and insurance). Yet the EAC programmes did not adjust to these changes as expected under the principle of subsidiarity which the EAC has endorsed. The lesson to be drawn from this experience is that in future the EAC programmes will need to take fuller account of actors outside government for implementation of programmes.

Managing distribution of costs and benefits. Partner States are not equally developed. The perception of unequal development and unequal sharing of benefits and costs of integration has contributed to delaying the process of negotiations. However, these factors can be viewed as challenges for effective participation in the Community. The delays experienced during implementation of various policy and programme actions was in some cases a subsequent result of lack of awareness of implications of the actions. Negotiations have taken long in some areas because the benefits were not obvious. More comprehensive identification of benefits and costs and analysis of options available was not always carried out by the respective Partner States. The lessons to be drawn from this experience is that there is need to develop the institutional and human capacity to manage regional co-operation in the context of unequal levels of development of Partner States. Systematic lessons from the experience of other regional blocks would be useful.

3 Water resources development project selection and approval criteria

Procedures and guidelines concerning project selection and approval are contained in various policy documents and legislations such as national water policy, national constitutions, environmental legislations, procurement regulations, funding (donor) guidelines, etc. None of the countries has a policy or a blue-print on development project selection and approval. As a result, application of rules is left to the judgement of the parties involved in the process. In all the four countries, when you talk about water development projects references are usually made to domestic water supply. Very little, in terms of projects are said about water for agricultural production and other water uses including industry, hydropower, recreation and ecosystem needs. This clearly shows that in the Kagera Basin most countries will be concerned about safe water issues although investment on hydropower and irrigation is emerging.

Lesson from a cross section of projects suggest that criteria and procedures with regard to selection and approval of public projects are similar across the countries. Emphasis are put on project feasibility, economic/financial viability, needs (demand) and ownership, quantity (returns/output), quality, public health aspects and environmental standards, among others. Involvement of the community and the policy actors in project selection is minimal. Selection is top-down and is usually dominated by technocrats. Cabinet and parliament are consulted when the project is being approved. Yet, very few projects (e.g. hydropower) go to cabinet or parliament.

In Rwanda, Tanzania and Uganda, under the decentralized programme, the district local governments are responsible for interfacing with central government (especially the ministry of finance) and donor agencies in the identification of development projects (e.g. rural water supply for consumption and livestock), design and appraisal. In Burundi projects are identified within the ministries.

As provided for in law, application of environmental impact assessment (for large projects such as irrigation, industrial project, and hydropower projects; and obtaining water rights) happens in all the countries – in both public and private sector projects.⁴

⁴ Information obtained from Tanzania indicates that after a full environmental impact assessment is done, a team of technical personnel is sent to the site to compare what is in the report and what is on the ground. Review by technical advisory committee is done and comments are sent to consultant or owner of project to revise the report (if needs be) and submit final report. If the council is satisfied, it will send recommendations to ministry concerned with environment to issue a certificate. As the implementation progresses, authority monitors to ensure compliance with recommendations.

Otherwise, environmental examination is applied when authority decides that there is no need for full environmental impact assessment. Findings from studies are used in process of project selection and design, but not common. In Rwanda, Tanzania and Uganda this was being done. Use of feasibility studies cuts across the board.

After approval, all government/ donor funded project have to go through the tender process (donor participate in selection) for service provision and the project is sanctioned. In case of foreign project convention is signed through foreign affairs (as is the case in Burundi) or a memorandum of understanding /agreement is signed through Ministry of Finance (Rwanda, Tanzania and Uganda).

3.1 Water allocation and transfers

Principles for water allocation and transfers are very stringent especially in Uganda and Tanzania. According to **Uganda's National Water Policy**, there are no permanent water rights. All rights on water are vested in the state to protect and manage its use as a common good. First priority in water allocation is to meet the domestic water demand. Second consideration is given to resource management and environment (allocations are reserved to ensure continued viability of the resource and for the conservation of the environment).

Allocation of water for production takes into consideration the socio-economic value of the use and optimal development of the water potential (e.g. hydropower schemes), and the impact on water resource. Principle governing water allocation in response to emergencies requires that an assessment be first made and detail strategy developed to determine whether allocations of selected categories of users be reduced during such periods. A market-based approach to water allocation is yet to be developed, which will put to practical use the principle of "water as a social and economic good". The water available to be allocated in this manner is determined based on the available yield, after reserving for domestic needs and for ecosystem maintenance.

All water abstractions are subject to a "water use permit" and abstraction fee. Administration of water use permit and fee is the role of the central government through the Directorate of Water Development, but plan is underway for districts to take-over this role to administer application and permit procedures. Policy is lacking with regard to utilisation of trans-boundary water resources.

The **Tanzania's National Water Policy** provides for prioritization of water allocations so as to ensure that socio-economic activities and the environment receive their adequate share of the water resources on the basis of its availability, and to enable the sectors increase productivity, and to mitigate conflicts. Policy also provides guideline on utilisation of trans-boundary water resources.

In allocating water, water for basic human needs receives highest priority. Water for the environment to protect ecosystems and ensures viability of water resources attains second priority. Other uses are subject to social and economic criteria, which is subject to review from time to time. Utilisation of trans-boundary water resources is based on the

principle of equity, rights and rationality in accordance with agreements among the riparian state, and by respecting the principle of international obligations on transboundary water resource.

All water abstractions and effluent discharges into water bodies are subject to a “water use permit” or “discharge permit” that is issued for a specific duration. Water use permits are issued only after ascertaining the benefits of water use.

3.2 Gender mainstreaming and stakeholder participation in implementation of IWRM within the river basin

Authorities in all the four countries have embraced the need for gender mainstreaming in water resources issues, agriculture and other development processes. Across the countries, gender mainstreaming is emphasized in policy documents. In water sector development program, all the sectors present different elements that spell out gender mainstreaming. In the National Environment Management Policy for Uganda, involvement of water resource users particularly women are emphasized in the design, implementation, monitoring and evaluation of water policies, programmes and projects. Greater stakeholder participation is being encouraged across sectors in all the countries. In Uganda’s water policy, essential role of women in the provision, management and safe-guarding of water; and important role of the private sector in water management are elaborated.

All the countries have acted to increase female political representation, setting up women’s councils at all political levels and promoting affirmative action in local administration. This has succeeded at policy level but is difficult to see it work in programme implementation such as implementation of IWRM within the river basin. This indicates that there is a weak link between policy and actual programme implementation and lack of capacity to integrate gender related concern in programme design.

Gender ministry in each country (in Rwanda, the Ministry of Gender and the Promotion of Women – MIGEPROFE; in Uganda, Ministry of Gender and Social Development) are supposed to assist sectoral ministries in ensuring that the objectives of the national gender policy are mainstreamed and monitored in each sectoral strategy. It is mandatory for all ministries to follow this policy, but this action is not followed in programme design and implementation. In all the four countries, authority admitted that projects do not follow equity. The ministry in The Gender Action Plan has been adopted for Uganda (2000) and Rwanda (in August 2000) in which it offers to provide guidelines and modalities for gender mainstreaming and to undertake gender sensitisation of key staff in all line ministries and other institutions. Gender awareness has been created. Building capacity for gender mainstreaming policies and integration of gender perspective into national policies and planning and local governments is still needed.

In Tanzania, there has been participatory involvement of various departments and ministry for e.g. in preparing a zonal land use plan, various sectors were represented including agriculture, wild life, water resources – contributed relevant sections. In case of trans-boundary plan, various ministries are involved e.g. water, water, wildlife to provide guidelines on issues related to their respective sectors of a trans-boundary nature.

3.3 Linkages with other economic, land, environment policies, etc

Particularly in Rwanda, Tanzania and Uganda, it has been recognised that the three major environmental problems are intimately linked with actions in the water, energy and agricultural sectors. As such, water resources management and policies have components that relate to environment, land and other issues like trade. Similarly, environmental policies have integrated issues of land, agriculture, water and trade, among other issues. In Rwanda, apart from regulation, most of the positive interventions to support environmental protection are taken within other sectors. In particular, infrastructure such as terracing, reforestation and water management within marshes is undertaken as part of the agricultural strategy.

From the discussion we had with officials in the Ministry of Lands, Environment, Forestry, Water and Mine in Kigali; the Ministry of Land, Resettlement and Environment (MINITERE) in Rwanda is expected to play an important role in the formulation of agricultural policy. The process of reforestation is also expected to receive support from the energy sector, encouraging more efficient use of fuel-wood and substitution into other fuels. The management of water supply is supported by ministry of energy (MINERENA) as well as actions to encourage water harvesting in the settlement and housing sector. This multi-sectoral approach reinforces the spirit of integrated water resources management.

3.4 Assessment of the adequacy of existing policy

Gaps in policies are compounded by different legislative procedures and policy instruments in the riparian countries. Whereas the water policies and laws of the Nile Equatorial Lakes riparians have all just been updated in the last decade and bear generic resemblance stemming from their development with support from the UN Secretariat's Department of Economic and Social Affairs, and reference to norms established at international conferences such as Rio and Dublin, there are considerable differences in their details.

Lack of coherence within each member state's administration of the water sector adds to the complexity of the regional conflict configuration. Different aspects pertaining to the water sector fall under the different legal instruments and bodies within the respective riparian countries. This leads to a situation of tensions within each country's sector, which, in turn, impedes holistic management of the basin.

In Uganda, for instance, there are about 73 legal provisions relating to the management and conservation of water resources. These provisions are scattered across 14 pieces of legislation and are to be implemented and enforced by almost as many institutions, which, as a result of divergent mandates; conflicts of responsibility; and duplicity, constitutes a constraint on the effectiveness of implementation of the legislative measures. A case in point is the stipulation that in the performance of any of its functions, the National Environmental Management Authority (NEMA) may delegate any of its functions to a lead agency by a Statutory Instrument. Division 5 of Part II, - water quality and safety – of the Water Statute shall not be in force until NEMA, acting under Section

6 (2) of the National Environment Act, has delegated to the relevant authorities its pollution licensing and waste discharge functions, respectively listed under Part VIII and Sections 26 and 34 (2) of the National Environment Act. But while NEMA delegated to the Directorate of Water Development (DWD) the functions and powers to ensure that operators undertake pre-treatment of effluent before discharge of such effluent into any water body, it has not, in the 10 years of its existence, delegated the function of granting pollution licences. Thus, the operationalisation of Division 5 Part II of the Water Statute is in limbo.

Again, despite all the legal and institutional set-ups for water and environmental conservation and management, there are a number of gaps in the laws that curtail Uganda's involvement in a regime of cooperation on the Nile. Most conspicuously, the Water Statute makes no provisions for either sharing Uganda's transboundary water resources with other countries or promoting socio-economic development through the use of water, both of which are fundamental objectives of the NBI. Some of the main omissions brought to light during the document review process include: provisions with adequate details on the concept of water resource rehabilitation after overuse and destruction. The concept is mentioned in passing in Section 8 (1) (e) – repairing of damage to a source of water or neighbouring land from the watering of stock – and Section 31 (4) – remedying or rehabilitating the environment upon damage due to unlawful release of waste into water – of the Water Statute⁵.

Indeed Uganda's environmental and natural resources legislation relies on implementation processes that are in essence "sanctioning" for the realisation of set objectives. Prohibition, administrative and judicial remedies, and coercion through criminal law are the techniques employed. These techniques neither require rehabilitation of the damage nor enhance the undertaking of positive measures to promote issues of quality which ought to be the primary tools for sound management of the environment and natural resources; provisions for the concept of establishing catchment areas, water conservation and or river basins. This despite the fact that the Water Works Act that was repealed by the Water Statute had those provisions, and several catchment areas, water conservation and river basins had actually been created; provisions for the regulation, control and monitoring of irrigation activities and other related water for production aspects such as livestock use and aquaculture. These activities have a significant impact on water use and will undoubtedly form the basis of whatever share of the Nile's waters Uganda negotiates for; provisions for water storage and rainwater control and harvesting.

The issue of rainwater harvesting, as a significant alternative source of Uganda's water supply will certainly come up during negotiations over the Nile. Similarly, there are no provisions for flood control and management as well as procedures for establishing and monitoring of water control structures and issues relating to their safety; and in a surprising departure from the global agenda for environment and natural resource management, which is a great influence on Uganda's legal framework for water resources, there are scant provisions for gender equality and women participation or role in water resources management.

⁵ No mention whatsoever is made of recharging groundwater sources.

In Burundi, issues that are not tackled in existing policies, treaties and agreements include the diversion and utilisation of waters, environmental protection upstream, sale of water beyond national borders, communication and decision-making tools and principles of cooperation to cover exigencies such as natural disasters and inter-state conflict. Current policy only refers to the 'development of cooperation on transboundary waters' and makes no further reference on utilization.

Although a national water master plan has been developed (since 1993) lack of data base and resources have made it difficult to implement the plan. Whilst other ministerial interests were involved in the formulation of policy of resource management, which was adopted in September 2001 process, the private sector, NGOs and donors were not consulted. This is reflected in the difficulty in implementing the policy.

Implementation of the strategic action plan is hampered by a lack of legislation institutionalising the implementation structure. The action plan includes the participation of the public sector and municipal authorities, but leaves out the private sector and civil society. Also the institution in charge of the coordination of the policy is lacking.

In Rwanda, the legislative basis for the current policies on water resource management is fragmented and outdated. Lack of a clear sector-wide approach has created a fragmented and uncoordinated approach. It is, therefore, imperative to adopt a programmatic sector-wide approach. This will not only enable MINERENA to develop a sector strategy and investment plan in coordination with the group of development partners, with a view to achieving overall and sustainable improvements in sector performance, but will also increase the flow of resources to the sector. Again, improving the sector strategy process is vital for the effective planning and budgeting. At present, all ministries draft separate ministerial policies that sometimes overlap (such as agriculture and environment) and at times duplication may occur due to insufficient coordination of programmes and resources.

In Tanzania, a water sector review conducted in 1993 revealed that Tanzania's National water policy had a number of shortfalls e.g. non-involvement of the private sector; involvement of beneficiaries being limited to provision of free labour; Inadequacy in legal and institutional framework; and more emphasis was on water supply than water resources management. After that review, there followed reforms in the sector which opened the door to formation of autonomous urban water supply and sewerage authorities and community owned rural water supply schemes.

A rapid water resources assessment study that was carried out in 1994 also underscored the need for pursuing integrated water resources management [IWRM] approach for sustainable development.⁶

⁶ IWRM is defined as a process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystem.

3.5 Proposal for harmonised improvements to policy frameworks in the four countries

Policies across countries are similar in a number of aspects although each country tends to have different set of policy instruments. What is important now is to bring the individual national policies in line with requirements for regional obligations such as the Kagera and Nile Basin related objectives and issues, and currently accepted principles of international law on the use of shared water resources. There is little that can be achieved by trying to harmonise the policies. Only aspects that have implications for the shared resources should receive greater attention across the board. For example, there is a need for an elaborate section on trans-boundary water allocation, sharing and management within the water sector policy and other in complementary policies such as environmental policy and land use policy.

In setting standard requirement for policy framework within individual countries, consideration should be given to policy coordination which apparently is strong in some countries particularly Uganda but weak in others. Administrative level of water resources management differs. This is an area that may require attention. In Tanzania it is now from the Basin to the lowest level, including the sub-catchment water committees and water user associations. Already 9 Basin Water Boards are functioning, so that water management in the entire country is under Basin Water Boards. As for water supply and sanitation, different governments are gradually pulling out from service provision responsibility to that of coordination, planning, policy and regulation. Private participation and community involvement is being promoted. Yet in Burundi, the system is heavily centralized. This is another aspect that needs to be looked at.

4 Step-wise process and time frame for transformation from present situation to end situation

Within the Water Resources Planning and Management Project of the SVP, the NBI seeks to lay a foundation for supporting a Basin-wide dialogue on good practice in water policy formulation and implementation. It also seeks to build skills in each country to formulate and implement effective national policies and strategies for integrated water resources management (IWRM) in Nile Basin countries (NBI and World Bank, 2001: 28).

There are limitations in wording of this objective. While it acknowledges that policy, institutional and administrative failures have the effect of reducing the value of resources to society, it becomes apparent that there is a lack of harmonisation of the riparian legal and administrative systems. It is also an admission that it will not be possible to harmonise the policies and laws within the framework of cooperation. And rightfully so, considering that some countries with small portions of their territory within the basin, may not wish to shape their water policies entirely to conform to the special requirements for the cooperation. Step wise harmonization process is likely, in this particular case to be more acceptable to all. The process should start with inclusion or strengthening elements of policies dealing with transboundary issues, environmental impact assessment, joint monitoring, and policies and procedures governing activities, development and approval of projects with transboundary implications.

4.1 Water use and water rights applied in each country of Kagera region

Water use and water rights are elaborated in each country's water policy document, in some cases supported by legislation. The Water Utilisation (Control and Regulation Act) in Tanzania provides for rights for water use and issuing of user permit. The permit can be withdrawn by failure to comply with conditions set in the law. Threshold that does not require issuing of permit or user fee is: 22700l/day, beyond this one is required to pay. Special consideration is given to mining and forestry – can extract water without paying water user fee.

In Rwanda, under existing legislation water is regarded as a common good that is not owned by anyone, but management of which is entrusted in the government for the 'public interest'.

4.2 Gaps for water resource management in the transboundary sites

A number of gaps are already highlighted in previous sections. One of the gaps that currently exist for water resource management in the transboundary sites is that the existing policies do not explicitly address the problem of water quality affecting users across the territorial boundaries. Potential conflicts between upstream and downstream users of transboundary water resources arising from water contamination are cited in Uganda's National Water Policy. This signifies the gaps in policies of the riparian countries. There is no mechanism in place to protect not only the interest of the national users - in the transboundary sharing of water resources, but the interest of other users in partner states. Similar concern that has been raised by the Uganda's water sector policy (where upstream riparian may use the water in ways, which compromises the quality of the water downstream, for instance, discharge of sewage upstream) is also found in the UNDP's 2005 Development Report. According to the UNDP Development Report, the water quality in Lake Victoria and part of the Nile has deteriorated over the last two decades due to domestic and industrial waste discharge, siltation from catchment degradation and conversion of wetlands around the lake to other uses. Also some

4.3 Provisions for stakeholder participation in implementation of IWRM within the Kagera River Basin

Tanzania water sector policy emphasise that the central government has a responsibility of protecting water resources while environmental protection was not accorded its due importance. The policy aims at ensuring that beneficiaries participate fully in planning, construction, operation, maintenance and management of community based domestic water schemes. In addition, the policy seeks to address cross-sectoral interests in water, watershed management and integrated and participatory approaches for water resources planning, development and management.

A water sector review conducted in 1993 revealed that the National water policy had the following critical shortfalls: Non-involvement of the private sector; involvement of beneficiaries being limited to provision of free labour; inadequate legal and institutional framework; and more emphasis was on water supply than water resources management. After that review, there followed reforms in the sector which opened the door to formation of autonomous urban water supply and sewerage authorities and community owned rural water supply schemes.

Again, a Rapid Water Resources Assessment study carried out in 1994 underscored the need for pursuing integrated water resources management [IWRM] approach for sustainable development [Definition: IWRM is a process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystem].

The outcome of Rapid Water Resources Assessment led to the implementation of this approach in the Rufiji and Pangani Basins, through the River Basin Management and Smallholder Irrigation Improvement Project (RBMSIIP). Under RBMSIIP a review of the

National Water Policy of 1991 was done, leading to the current National Water Policy of 2002 (NAWAPO). NAWAPO helped to eliminate some of the short falls of the 1991 policy and also adequately addresses the requirements of Rio, Agenda 21, 1992, as well as IWRM principles. The water sector reforms that started after 1993 are still going on, aiming at improving the management of the water resources and water supply and sanitation services. The reforms focus on: introduction and enforcement of the “integrated” cross-sectoral approach to water resources management; clear division between policy making/regulation and service delivery; empowerment of Local Governments and communities for water service delivery (Management at lowest appropriate level); introduction and enforcement of cost recovery principles. The implementation of the above principles includes: institutional restructuring; development of national water sector development strategy; revision of current legislation; preparation of a national water sector strategic action plan; harmonisation of sub-sector investment plans which should pay tribute to the requirements of the national strategy for growth and reduction of poverty targets and priorities.

Collaborating with other sectors in promoting water resources development and the conservation and management of the environment, is also improving. There are currently three GEF funded lake management programs in Tanzania, namely: Lakes Nyasa, Tanganyika and Victoria environmental management programs, under the Ministry dealing with environmental affairs. The Ministry of Agriculture and Food Security has prepared a National Irrigation Master Plan and is drafting an Irrigation Bill. The Ministry of Energy has also prepared a Power Master Plan, showing potentials targeted for future hydropower development. The Ministry of Water and Livestock Development is involved in these programs in various ways.

The Tanzania National Water Policy (NAWAPO), 2002, is a comprehensive document that takes on board all requirements of IWRM and poverty alleviation needs, postulated in many National and international declarations, conventions, protocols, treaties, visions and strategies. It aims at creating enabling environment for provision of efficient water services and changing the role of the Ministry of Water to ensure effective implementation of the policy, through participatory strategies, education and awareness raising campaigns targeting all range of stakeholders (both national and international). Although the framework to support operationalization of the policy is not yet fully in place (i.e. the legislations and strategies), that has not stopped possible actions, including reforms to implement it to be undertaken. These include: Implementing a transitional organization structure for water affairs (under 4.3: legal and institutional framework). Water resources management is now from the Basin to the lowest level, the sub-catchment water committees and water user associations. Already 9 Basin Water Boards have been formed (7 formed between 2000 – 2004), so that water management in the entire country is under Basin Water Boards. As for water supply and sanitation, the government is gradually pulling out from service provision responsibility to that of coordination, planning, policy and regulation. Private participation and community involvement is being promoted.

Uganda: The Water sector has been undergoing reforms since 1995 with a long-term objective to ensure that services are provided with increased performance and cost effectiveness, to decrease the government burden while maintaining the government’s commitment to equitable and sustainable water sector services in Uganda. In recognition of the management challenges, the GoU has since the early 1990’s

undertaken activities to promote integrated water resources management. The main elements in the process include: Formulation of a Water Action Plan (WAP) and Policy; Establishment of an institutional framework with the required human resources; Increasing knowledge of water resources availability and quality through monitoring and assessments; and Establishment, implementation and enforcement of the legal framework.

References

- EAC Secretariat. 1997. EAC Development Strategy 1997-2000, EAC Secretariat, Arusha
- EAC Secretariat. 2001. The Second EAC Development Strategy 2001-2005, EAC Secretariat, Arusha
- EAC Secretariat. 2006. EAC Development Strategy 2006-2010: Deepening and Accelerating Integration, EAC Secretariat, Arusha
- The Republic of Uganda. 1994. *The National Environment Management Policy for Uganda*, National Environment Action Plan Secretariat, Ministry of Water, Lands and Environment, Kampala.
- The Republic of Uganda. 1995. *National Policy for the Conservation and Management of Wetland Resources*, Ministry of Natural Resources, Kampala.
- The Republic of Uganda. 1999. *A National Water Policy*, Ministry of Water, Lands and Environment, Kampala.
- The Republic of Uganda. 2000. *Plan for Modernization of Agriculture (Eradication of Poverty in Uganda – Government Strategy and Operational Framework)*, Ministry of Agriculture, Animal Industry and Fisheries, and Ministry of Finance, Planning and Economic Development, Kampala.
- The Republic of Uganda. 2001. *Wetland Sector Strategic Plan 2001 – 2010*, Ministry of Water, Lands and Environment.
- The Republic of Uganda. 2004. *The National Fisheries Policy*, Ministry of Agriculture, Animal industry And Fisheries (Department of Fisheries Resources), Entebbe.
- The Republic of Uganda. Provisional Fisheries Sector Strategic Plan, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe.
- The Republic of Uganda. 2004. *Poverty Eradication Action Plan 2004/5- 2007/8*, Ministry of Finance, Planning and Economic Development, Kampala
- The Republic of Uganda. 2005. "Water for Production Strategy and Investment Plan 2005-2015", Ministry of Water, Lands and Environment.
- The Republic of Uganda. 2007. The Uganda Gender Policy, Ministry of Gender, Labour and Social Development, Kampala.

The United Republic of Tanzania. 1997. *National Fisheries Sector Policy and Strategy Statement*, Ministry of Natural Resources and Tourism, Dar es Salaam

The United Republic of Tanzania. 1998. *National Forest Policy*, Ministry of Natural Resources and Tourism, Dar es Salaam

The United Republic of Tanzania. 1998. *Wild Life Policy of Tanzania*, Ministry of Natural Resources and Tourism, Dar Es Salaam.

The United Republic of Tanzania. 2002. *National Water Policy*, Ministry of Water and Livestock Development, Dar es Salaam

The United Republic of Tanzania. 2003. *The National Energy Policy*, Ministry Of Energy and Minerals, Dar es Salaam

The Republic Of Burundi. 2007. *Poverty Reduction Strategy Paper- PRSP*, Bujumbura.

United Nations Development Programme (UNDP). 2005. *Uganda Human Development Report 2005* (Linking Environment to Development: A Deliberate Choice), Kampala.

Appendix 1: List of Persons Met

Name	Country/Institution	Position	e-mail
REGIONAL INSTITUTIONS			
Tom Waako	NBI Secretariat, Entebbe	Programme Officer	twako@nilBasin.org
Nicholas Azza	Water Resources management Department	National Liaison Officer, Uganda	Azza.wrmd@dwd.co.ug
Dr. Tom O. Okurut	Lake Victoria Basin Commission	Executive Secretary	okurut@lvbc.org
Meraji Msuya	Lake Victoria Basin Commission	Deputy Executive Secretary	msuya@lvbc.org
Gaspard Bikwemu	Nile Basin Initiative Kagera Basin TIWRM	Project Manager	gbikwemu@nilebasin.org
Nyamajeje C. Weggoro, PhD	East African community Secretariat	Director- Productive and Social Sectors	
Wilbert T. K. Kaahwa		Counsel to the Community	
RWANDA			
Mr. Samuel Munyakyanza	Ministry of Foreign Affairs, Rwanda		
Remmy Mugunga	Office of the President, Rwanda		
Mr Augustine Hayifayi	Solicitor General		
Dr. Rose Mukankomeje	Rwanda Environment Authority	Director General	
John Metzger	BRLi	Water Resources Management Expert / Team Leader	jfmetzger@gmail.com
Prof Munyanganizi Bikoro	Ministry of, Lands, Environment Water Forestry and Mines	Minister of State in charge of Water and Mines	
Musango Karumia Jacques	Ministry of, Lands, Environment Water Forestry and Mines	Environment Officer	moussagho@yahoo.fr
BAINGANA Elias	National Budget	Director	
MUSAFIRI Prospel	Economic Planning	Director General	
BURUNDI			
Nichol Bagamba Nesto			
Marie Rose Kabura	Forestry, Tourism and Environment	Director General	
Gabriel Hakizibimana			hakizimanag@hotmail.com
Maurice Shiramanga	IGEBU	Advisor to the Director General	nayuburundjose@yahoo.com
Eugene Nduwayo	Programme Nationale Lutte Anti – Erosif (Burundi)	Director	eugnduwayo@yahoo.fr

BARINDONGO Vincent	Kagera Transboundary Integrated Water Resources Management Project	National Liaison Officer	vebarindongo@yahoo.fr
COME NIJIMBERE		Technical advisor of the Permanent Secretary	nicomefr@yahoo.fr
Denis BARANDEMAJE	CBSI	National Project Coordinator	dbrandemaje@yahoo.com
Dr Liboire NGENDAHOYO	Ministry of Agriculture and Livestock	Advisor	idngenda@yahoo.fr
Ntunguka Charles	Ministry of Agriculture and Livestock	Directem Ge'ne'ral de la Planification Agricole et de l'Elevage	ntucharl@yahoo.fr
Ninganza Longin		Director de Etudes at Programmation	ninganza2001@yahoo.fr
Joseph NDAYI		Directeur suici-'evaluation	Josephndayi2007@yahoo.fr
Dr. Fr. Bunyungu Phillippe			bunyungu@yahoo.fr
UGANDA			
Dr Festus Bagoora	National Environment Management Authority	Natural Resources Management Specialist	fbagoora@nemaug.org
Nsubuga Senfuma	Ministry of Water and Environment	Technical Advisor	nsubugas@utlonline.co.ug
Eng Henry Bidasala	Ministry of Energy and Mineral Development	Commissioner for Energy	bidasala@energy.go.ug
Joel Okonga	Directorate of Water Resources Management	Assistant Commissioner, Transboundary	Okonga.wrmd@dwd.co.ug
TANZANIA			
Eng. Amandus David Lwena	Ministry of agriculture, Food Security & Cooperatives, Dar- es-Salaam	Senior Agricultural Engineer	
Julius Shilungushela	National Land use Planning Commission	Ag. Director Land Use Planning	shilungushelaj@yahoo.com
Bartholomew D. Tarimo	National Environment Management Council (NEMC)	Senior Environmental Management Officer	
Ruzika N. Muheto	National Environment Management Council (NEMC)	Director Environmental Planning and Research	muhet@yahoo.uk.co
Mir. Lister Kongole	Water Resources Division	Assistant Director(for Director)	lrek52@yahoo.com
Saidi Faraji	Ministry of Water, Dar-es- Salaam	Principal Hydrologist	saidifaraji@yahoo.co.uk
Joseph M. Kubena	Ministry of Water	Environmental Coordinator	
Mr. Mutayoba	Ministry of Water	Director Water Resource	

Mr. Kongula	Ministry of Water	Sector Environmental Coordinator	