

Presentation given the TransLinks workshop:

Modeling and Managing Watersheds

September 13-16, 2011

Kigali, Rwanda

Umubano Hotel, Boulevard de l'umuganda

This workshop was hosted by the Wildlife Conservation Society, the United States Forest Service (USFS) and the United States Agency for International Development (USAID)



USAID
FROM THE AMERICAN PEOPLE



This workshop was generously supported by the American people through the United States Department of Agriculture (USDA) Forest Service and the United States Agency for International Development (USAID), under the terms of the TransLinks Cooperative Agreement No.EPP-A-00-06-00014-00 to the Wildlife Conservation Society (WCS). TransLinks is a partnership of WCS, The Earth Institute, Enterprise Works/VITA, Forest Trends and the Land Tenure Center. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States government.



Modeling and Managing Watersheds Workshop
September 13-14, 2011
Umubano Hotel, Boulevard de l'Umuganda
Kigali, Rwanda

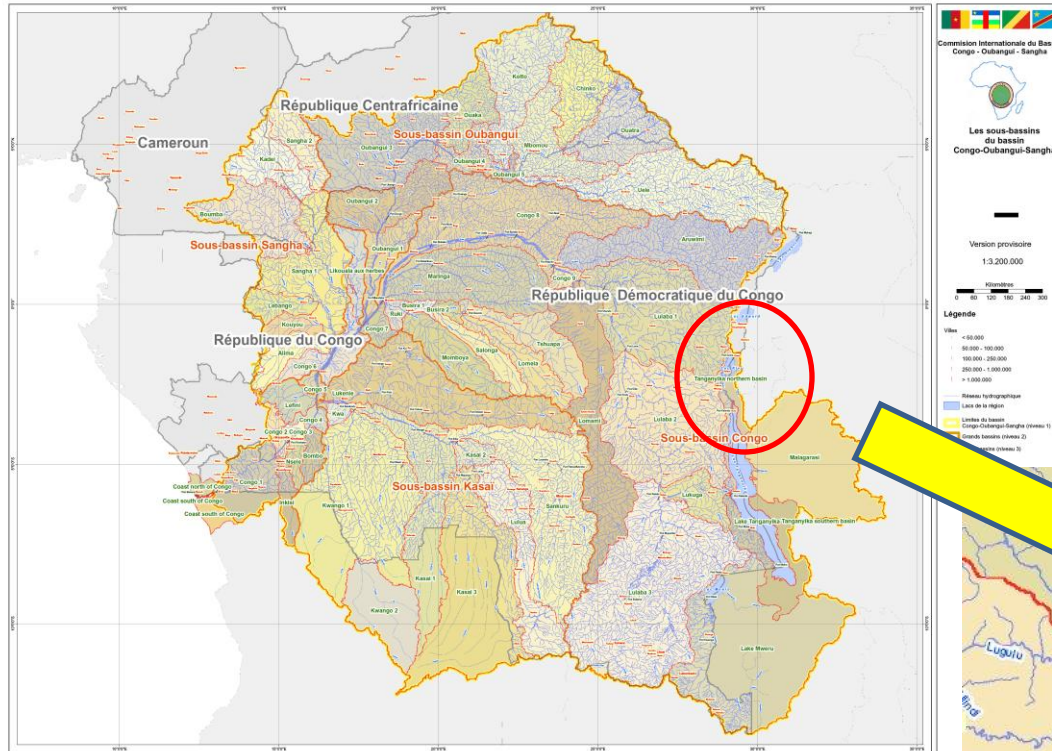
BASIN AUTHORITY FOR THE LAKE KIVU AND THE RUZIZI RIVER

**A new Initiative for Integrated Water Resources
Management at a Regional Scale**

Claude KAYITENKORE



LAKE KIVU AND RUZIZI RIVER BASIN



The Lake Kivu and Ruzizi River Basin is a sub-basin of the Lake Tanganyika Basin which is itself a sub-Basin of the Congo River Basin.



Two International River Basin Authority already exist: the CICOS (Commission Internationale du Bassin Congo-Oubangui-Sangha) covering the entire Congo river basin and the LTA (Lake Tanganyika Authority) covering the Lake Tanganyika sub-basin.



Indicative Limits of the Kivu Lake And Ruzizi River Basin

Lake Kivu Area:

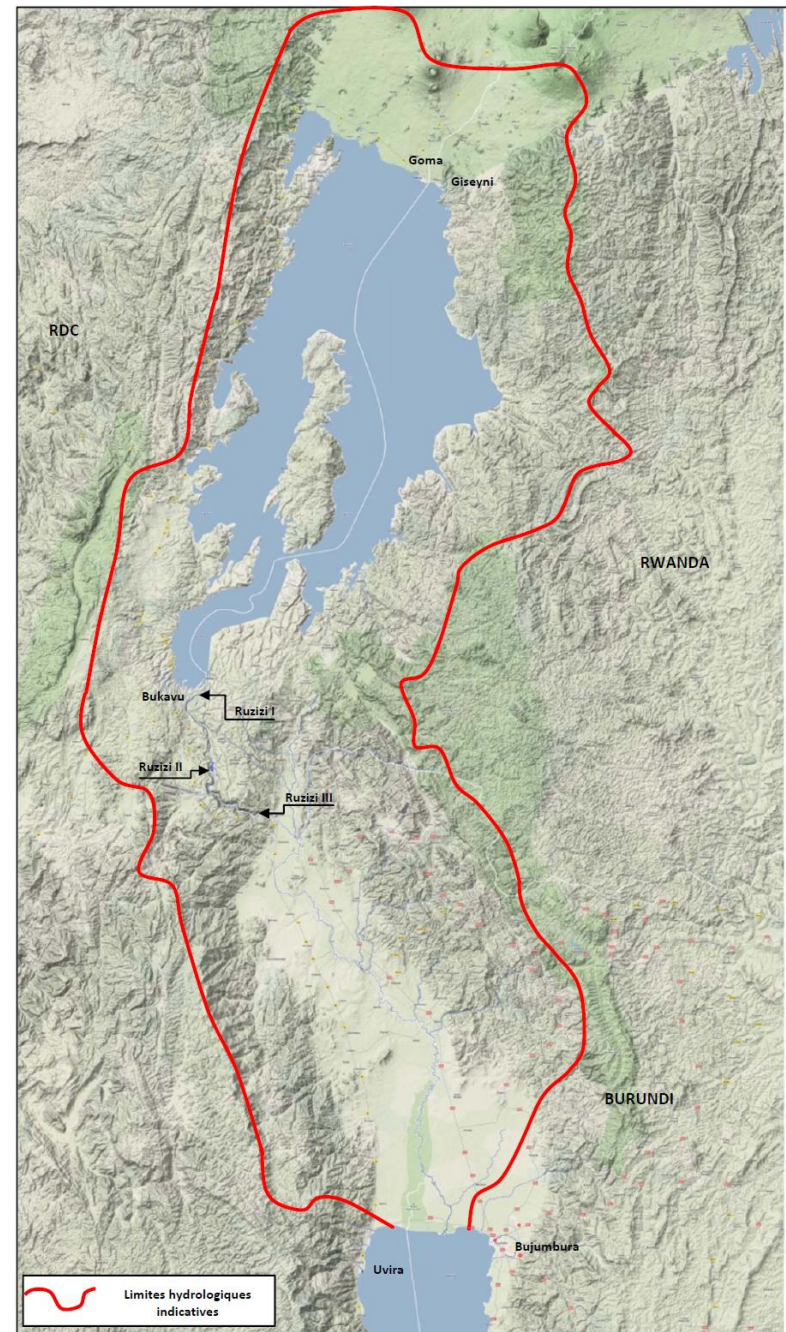
2,416 km²

Lake Kivu Watershed Area:

7,528 km²

Ruzizi River Watershed Area
between Lake Kivu Outlet and
Ruzizi III Dam:

325 km²





SPECIFICITY of RUZIZI CASCADE

- Dependent upon a multi-national reservoir: Lake Kivu
- The Lake supports multiple activities
- The cascade comprises of several plants to be operated in a coordinated mode
- The project requires substantial financing but needs to be financially viable



HOW TO RESPOND TO THESE CHALLENGES?

- **International Reservoir**  **A Treaty for water management**
- **Multiple water uses**  **A water basin management Authority for Lake Kivu & Ruzizi River**
- **Optimizing the operation**  **A Coordinating Entity for all the plants**
- **Financing**  **Structure the Project as a PPP**



THE INTERNATIONAL CONVENTION

- Involves three countries (Rwanda, Burundi, RDC);
- Establishes a stable legal framework for water uses
- Covers the long term ;
- Stipulate how water rights are shared ;
- Acknowledges the need for a joint management;



RIVER BASIN AUTHORITY

Area mandate: the hydrological basin of the Lake Kivu and Ruzizi river (Lake Kivu basin represents the upstream part of the Ruzizi River basin).

Countries involved: Burundi, D.R. Congo, Rwanda

Management principle: Integrated Water Resource Management (IWRM)

Framework: Water conservation and Sustainable Development.

Objectives: for all uses

WATER QUALITY (controlling quality and limiting discharge pollution)

WATER QUANTITY (controlling withdrawal and flow)

Purpose:

- Increase water quality for health security and ecosystems protection
- Insure the quantity of water to cover demand for ecosystems and economic development (water uses: agriculture, energy, industry , society ...)
- Long term sustainability of the water resource



OBJECTIVE AND ROLE OF THE BASIN AUTHORITY

- The objective of the International Convention creating the Basin Authority is to ensure the protection and conservation of the water resource of the Lake Kivu and Ruzizi River Basin on the basis of integrated and sustainable management.
- The Parties undertake to comply with and apply the following principle of common interests in the sustainable and equitable use of the water resource:
 - Precautionary Principle
 - Polluter Pays and User Pays Principles
 - Principle of preventive action
 - Principle of participation
 - Principle of fair and equitable benefit sharing
 - Principle of subsidiarity



PRESERVATION AND PROTECTION OF THE ENVIRONMENT OF THE BASIN

- The Parties undertake to :
 - Develop, adopt, implement and enforce appropriate legal, administrative and technical measures to protect and preserve the Basin's ecosystems in particular the natural areas protected either by national regulations or by international conventions.
 - Prevent or refrain from taking or authorizing any decision liable to cause damage to the quality of the water resource and the environment, and take all necessary measures to protect them.
 - Take any useful measure to maintain and protect the installations, facilities and other structures that have an impact on the water resource of the Basin.
 - Take as a priority all appropriate legal, administrative and technical measures to prevent any cause of erosion.

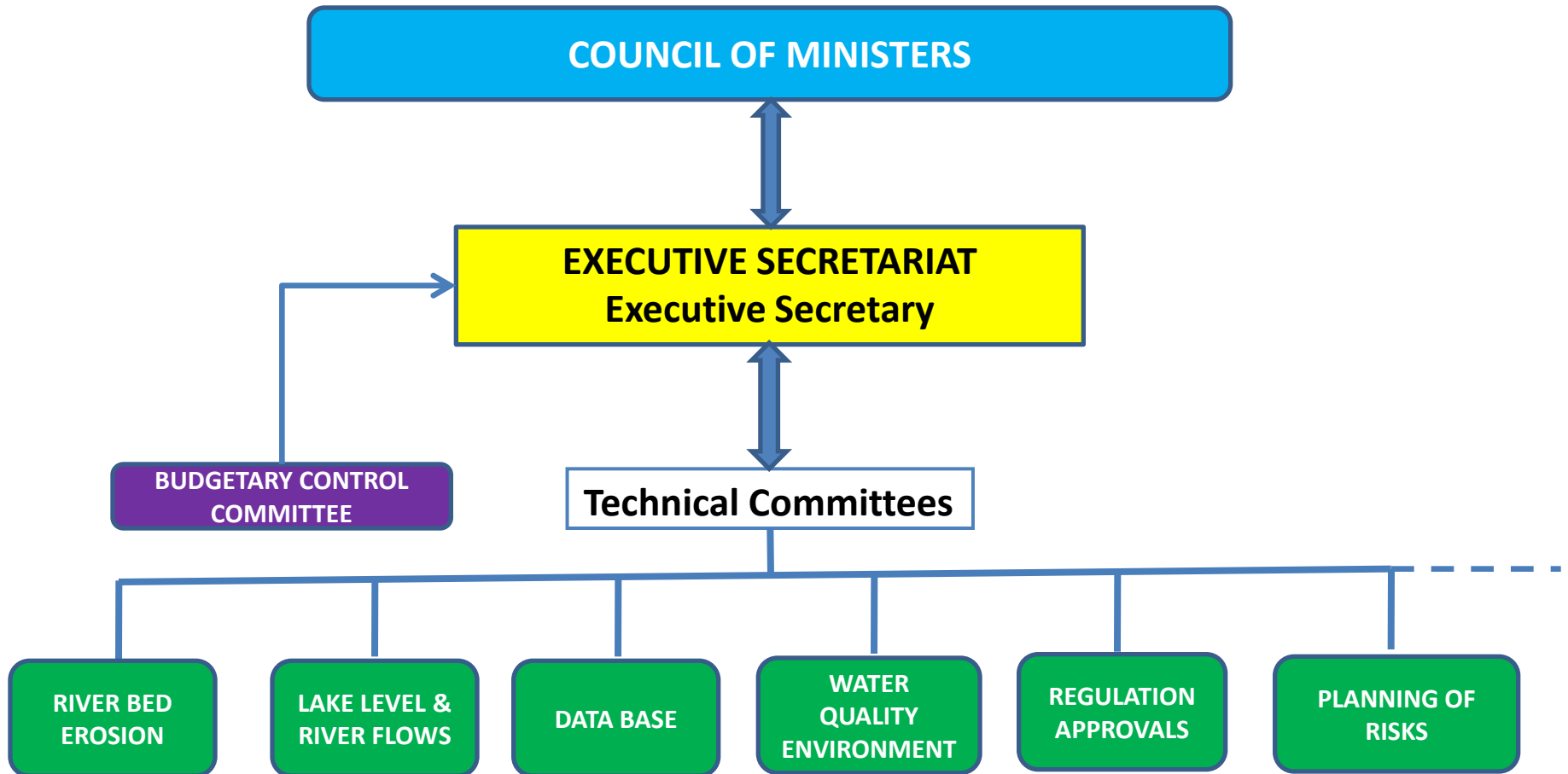


PRESERVATION AND PROTECTION OF THE ENVIRONMENT OF THE BASIN [2]

- The Parties undertake to :
 - Ensure enforcement of legal, administrative and other measures requiring an assessment of impacts on the water resource of any proposed project in the Basin;
 - Ensure proper enforcement of all conditions pertaining to water usage licenses imposed to protect this resource.



LAKE KIVU and RUZIZI RIVER BASIN AUTHORITY GOVERNANCE PROPOSAL



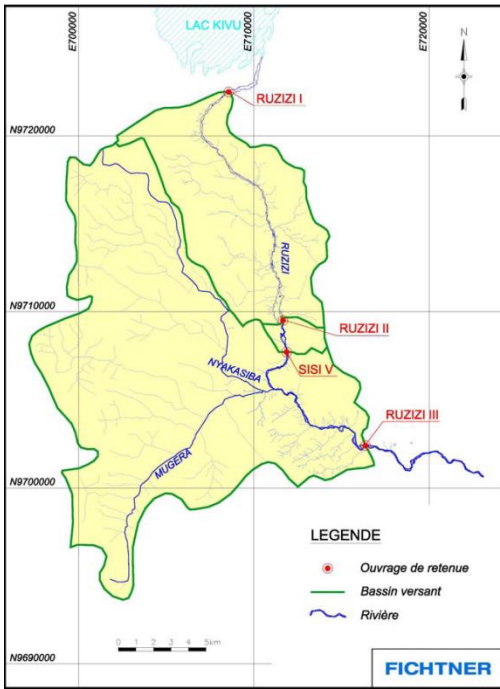


ROLE OF THE BASIN AUTHORITY IN ENERGY PRODUCTION



GAS EXTRACTION → **WATER QUALITY:**

- Discharging quality
- Impact on lake ecosystem



HYDRO ENERGY → **QUANTITY**

Hydropower Plants:

- Limit conditions and control for lake level
- Limit condition and control for downstream flow
- Impact on river ecosystem and wetlands

INTERIM STRUCTURE OF THE BASIN AUTHORITY

A transitional structure for the management of the water resource of the Basin is determined by the Council of Ministers to work until the effective establishment of the Authority. Its mission is mainly to:

- Facilitate the ratification of this Convention;
- Prepare and lead the process for setting up the BAKIR;
- Initiate the studies necessary for the proper start-up of the BAKIR taking into account the on-going projects.
- Its activity shall end with the final ratification of the Convention and the establishment of the BAKIR.



ROAD MAP UNTIL CREATION OF THE BASIN AUTHORITY

- Signature of the Declaration by the Ministers in charge of Water Resource: 6 July 2011
- Signature of the Convention and Appendices : October 2011
- Financing of the Interim Structure: 15 November 2011
- Set up and start of the Interim Structure : 15 January 2012
- Financing for the preparatory studies : 15 March 2012
- Start of the inventory of the water resource: 1st April 2012
- Start of the Studies: 15 June 2012
- Ratification of the Convention by the States: October 2012
- First Meeting of the Ministers' Council : November 2012
- Setting up of the Authority: November 2012
- Nomination of the Executive Secretary of the Authority: November 2012



**TANK YOU FOR
YOUR
ATTENTION**