



EAST AFRICAN COMMUNITY

**Regional Workshop for East Africa on Updating National
Biodiversity Strategy and Action Plans (NBSAP)**

27-30 June, 2011

**Management of Transboundary Ecosystems at the
Regional Level**

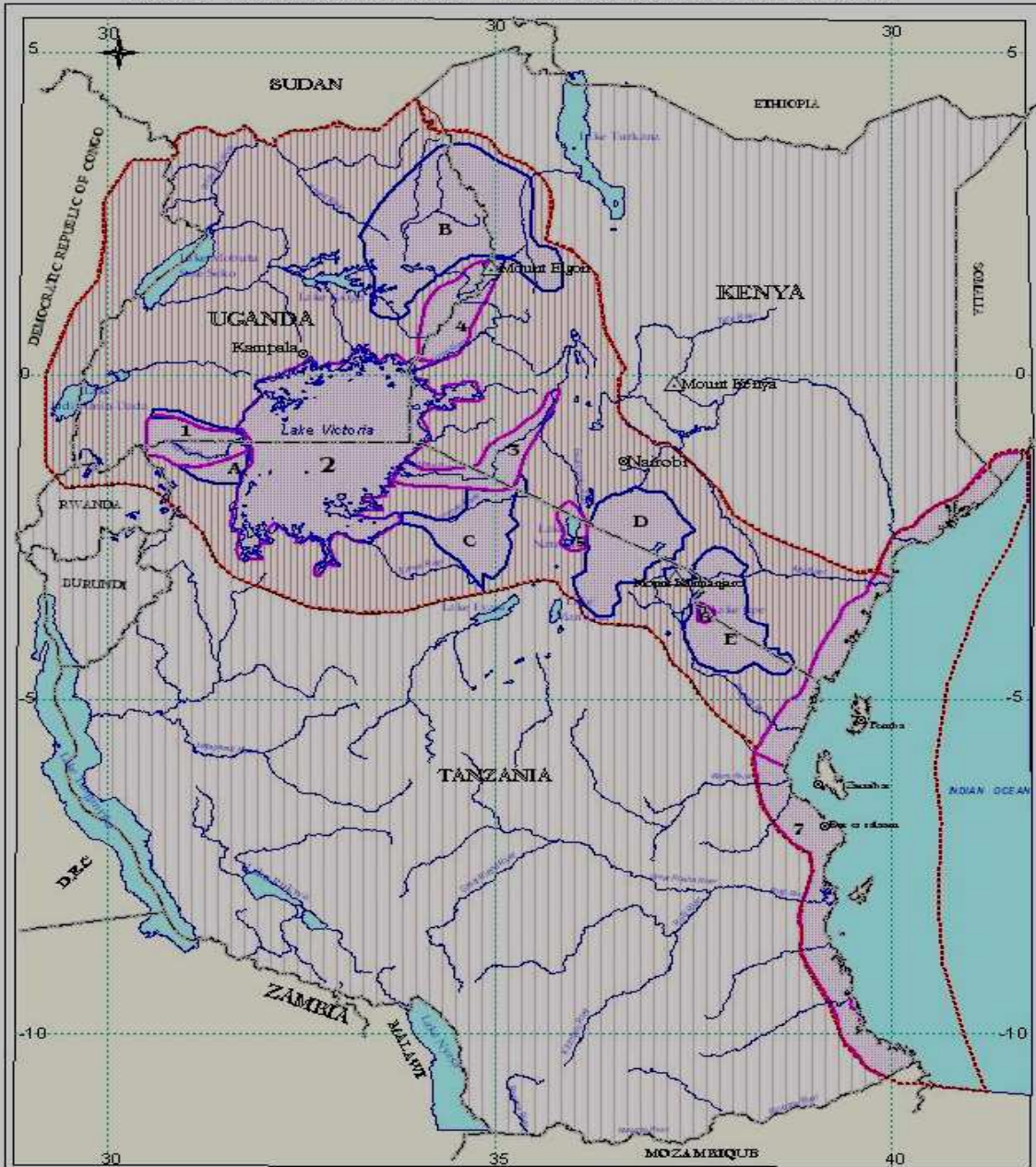
**Presented by
Brian O. Otiende
Climate Change Coordinator
Department of Environment and Natural Resources**



Outline and Content

1. Shared Ecosystems of Eastern Africa
2. Constraints and Challenges
3. Regional Trans-boundary Management Efforts
4. Recommendations

MAP 1: TRANSBOUNDARY ECOSYSTEMS IN EAST AFRICA



LEGEND

- | | | |
|--------------------------------------|---|--------|
| ----- Immediate Impact Area Boundary | ▨ Terrestrial ecosystems (A-E, Core Area) | ▭ Lake |
| ----- Country Boundary | ▨ Aquatic ecosystems (1-7, Core Area) | |
| ----- River | ▨ Areas of Immediate Impact | |
| • Town | | |

Shared Ecosystems in East Africa

Terrestrial Ecosystems

- Mt. Kilimanjaro (TZ/KE)- highest Mt in Africa;
- Mt. Elgon (KE/UG);
- The Eastern Arc Mountain Forests (Taita and Pare Hills in KE/TZ);
- Mara-Serengeti (KE/TZ)-wildebeest migration;
- Kajiado – Moduli dry lands (KE/TZ);

Terrestrial Ecosystems

- Loima – Moroto dryland mountains (KE/UG);
- The low-lying savannas of Amboseli - Loliondo, Tsavo West National Park (KE/TZ);
- Mkomazi/Umba Game Reserve between (KE/TZ);

Aquatic Ecosystems

- The Lake Victoria Basin-Africa's largest lake (KE/UG/TZ);
- Lake Tanganyika, “aquatic biodiversity hotspot”, (TZ/BR/ZM/DRC) -2nd longest and 2nd deepest lake in the world found in the Albertine Rift;
- Minziro-Sango Bay Swamp Forest (UG/TZ) along the shores of Lake Victoria;
- Lake Malawi-TZ /Mozambique;
- Lake Jipe and Chala (KE/TZ); Lake Kivu (BR/RW);

Aquatic Ecosystems

- The Western Indian Coastal and Marine Ecosystem (KE/TZ);
- Numerous Rivers including the longest river in the world- R. Nile (10 riparian states in Great Lakes Region; Kagera etc



A prosperous, competitive, secure and politically united East Africa

Constraints and Challenges

- Socio-Political: policy, legal and institutional Frameworks ; administrative & geographical;
- Socio-Economic: emerging development;
- Socio-Ecological: human & natural induced environmental degradation and CLIMATE CHANGE
- Implementation and Management

Socio-Ecological

- Climate change- a leading global threat to management of trans-boundary ecosystems with severe regional implications
- Environmental degradation (point and non-point source pollution from riparian industries and agriculture, deforestation, NR overutilization, proliferation of invasive plants/ alien species, drainage of wetlands, eutrophication, siltation etc)

What is Climate Change?

- ❑ Climate change- changes in climatic conditions attributed directly or indirectly to **human activity** that **alters** the composition of global atmosphere, in addition to **natural climate variability**
- ❑ Climate variability-seasonal **shifts** in mean climatic conditions such as temperature and precipitation
- ❑ Indicators of CC- rainfall, temperature, sea level
- ❑ Impacts of CC- extreme events and their associated impacts

Scientific Evidence: IPCC's AR4

- Coastal systems & low-lying areas in mega deltas of Africa: coastal erosion, loss of habitats due to CC and SLR, coastal inundation
- Marine: Warmer ocean temperature may result to changes in composition, abundance and distribution of flora and fauna species
- Wetlands: SLR and human development will result to the loss of coastal wetlands and mangroves
- Freshwater: Riverine and lake flooding due to increased frequency and intensity of rainfall
- Mountainous: glacial retreat
- Entire ecosystem may undergo an imbalance due to disruption of food chain

Climate Change

- Global warming of 2-3°C above pre-industrial levels is catastrophic
- Climatic variability and extreme events associated with ENSO (El-Nino and La Nina)- floods and droughts
- Ecosystem's resilience has been overstretched leading to multiple impacts such as biodiversity (20-30%) and ecosystem/habitat loss, natural resource based conflict (human and human-wildlife) etc



Sensitivity Factors

- Overreliance on natural resource
- Poverty
- Disease burden
- Population pressure

Policy, Legal and Institutional Frameworks

- Lack of harmonized CC policies, laws and regulations & guidelines/ inconsistency in sectoral policies
- Uncoordinated institutional efforts/ conflicting institutional mandates, roles and responsibilities, administrative and bureaucratic procedures
- Weak institutional capacities (technical and financial) at both national and regional level
- Weak public awareness and participation in decision making

Implementation and Management

- Inadequate financial and technical resources at national authorities
- Tendency towards top-down management leading to exclusion of communities resulting to conflicts
- Poor implementation culture and weak enforcement of laws
- Limited policy implementation authority and capacities for regional organizations

Regional Management Efforts

Policy, Legal and Institutional Interventions

- Protocol on Environment and Natural Resources Management (2006) -17 Articles-trans-boundary resources, biological diversity, forests, wildlife, tourism, water, wetlands, coastal and marine, fisheries, genetic, biosafety, mountains, land, Env. Impact Assessment, desertification, climate change
- Regional Climate Change Policy (2011), Strategy and Master Plan under preparation

Policy and Institutional Interventions

- In view of regional and international conventions/treaties
 - Treaty for Establishment of the EAC (1999);
-(Articles: 111; 112; 114; 115; and 116)
 - Convention on Biological Diversity (CBD)
 - Convention on International Trade on Endangered Species (CITIES)
 - Ramsar Convention on Wetlands of Int. Importance for Water Fowl Habitats

Policy and Institutional Interventions

- UN Framework Convention on Climate Change (UNFCCC)-Article 2
- UN Convention on Combating Desertification (UNCCD)
- Lusaka Agreement on Cooperative Enforcement Operations-illegal trade in wild fauna and flora;

Policy, Legal and Institutional Interventions

- Development of Trans-boundary Environmental Impact Assessment Guidelines for Shared Ecosystems in EAC (2005)
- Development of the Protocol on Sustainable Development of Lake Victoria (2004)
 - 14 areas (water, fisheries, wetlands, forests, wildlife, tourism)
 - establishment of Lake Victoria Basin Commission (LVBC)

Policy, Legal and Institutional Interventions

- Shared Vision and Strategy Framework for LVB and Operational Strategy for LVBC- 5 thematic themes including ecosystems
- Establishment of Lake Tanganyika Basin Authority
- Establishment of the Nile Basin Initiative

Programmes and Projects

- Lake Victoria Environmental Management Project (LVEMP II)-rehabilitation of Lake Victoria Ecosystem
- Mount Elgon Regional Ecosystem Conservation Programme (MERECP)-conservation and development needs in Mt. Elgon ecosystem
- Trans-boundary Water for Biodiversity in the Mara River Basin- promote harmonization of sustainable management practices in the of Mara River Basin

Programmes and Projects

- The Lake Victoria Basin Biodiversity Informatics (LAVIBI) Project;
- Strategy and Action Plan for the Control of Water Hyacinth and Other Invasive Aquatic Weeds (1998)
- Addressing climate change challenges in Lake Victoria

Recommendations

- Foster regional cooperation in implementation of regional and international conventions and treaties
- Harmonization of policy, legal and regulatory frameworks
- Enhancing public awareness through communication and public participation in decision making
- Development of joint trans-boundary ecosystem conservation & management programmes and projects;
- Conducting climatic risk assessment

Recommendations

- Integrated Trans-boundary Ecosystem Management (ITEM)- land use planning, payment for ecosystem services
- Integrated Water Resources Management (IWRM)
- Climate Change Adaptation and Disaster Risk Reduction (Ecosystem Based Adaptation)
- Climate change mitigation potential (afforestation, reforestation, REDD+)
- Consideration of principles of sustainable development; equitable utilization of NR in shared ecosystems; and precautionary principle and EIA and Audits in programme and project development and implementation

Recommendations

- Promoting sustainable economic development e. g ecotourism
- Institutional capacity building
- Enhancing public awareness through communication and community participation
- Increased investment by development partners, donors and national governments

Thank You!

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politically united East Africa