

# **WATER RESOURCES MANAGEMENT IN PANGANI BASIN**

**Training on International Water Law (IWL) in Africa**

By  
**Pangani Basin Water Board**

**Old Moshi Road  
P.O. Box 7617 Moshi, Tanzania  
Email: [pbwo@panganibasin.com](mailto:pbwo@panganibasin.com)  
Website: [www.panganibasin.com](http://www.panganibasin.com)**

**Imperial Botanical Beach Hotel, Entebbe – Uganda**

**3<sup>rd</sup> – 5<sup>th</sup> August 2015**

# Presentation Outline

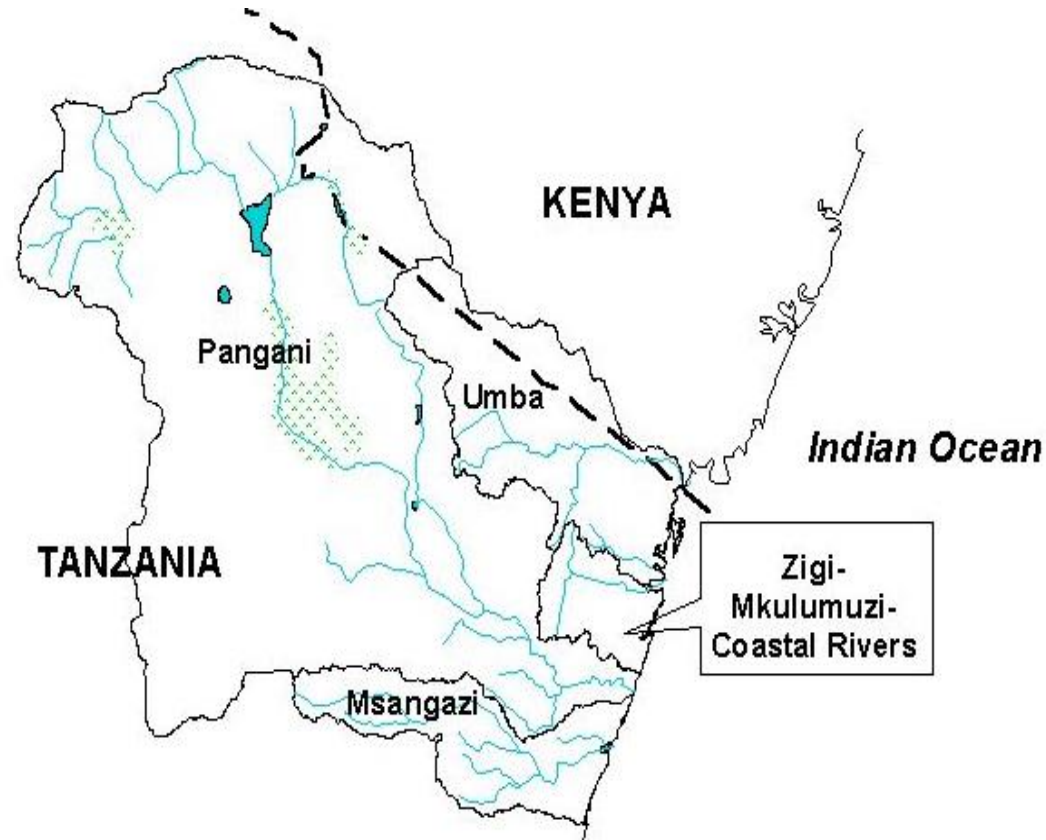
- ❖ Background
- ❖ Characteristics
- ❖ Roles and Responsibilities of Pangani Basin
- ❖ Transboundary Basin (Lake Chala – Jipe & Uмба River
  - ✓ Importance/Opportunities of Ecosystem
  - ✓ Challenges of Transboundary Water
  - ✓ Existing Legal Documents
  - ✓ Joint Efforts Implemented so far

# Background



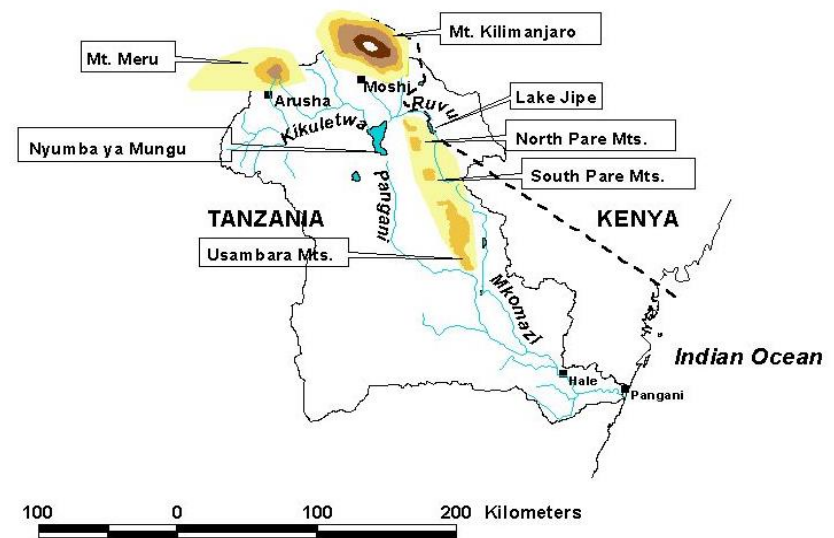
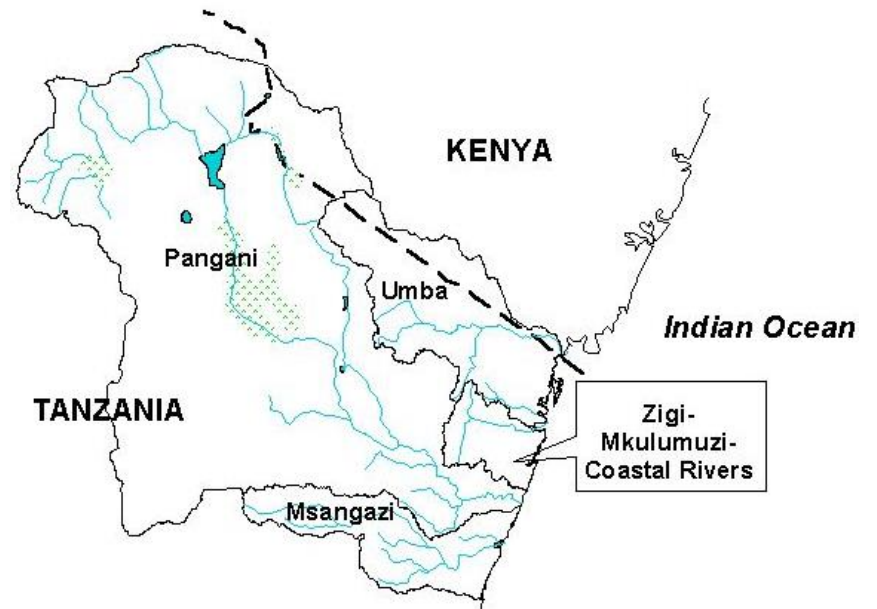
- Rivers
- River Basin Boundary
- Water Bodies

- I Pangani Basin
- II Wami und Ruvu Basin
- III Rufiji Basin
- IV Ruvuma and the Southern Coast Basin
- V Lake Nyasa Basin
- VI Internal Drainage
- VII Lake Rukwa Basin
- VIII Lake Tanganyika Basin
- IX Lake Victoria Basin



# Characteristics/Features

- Pangani Basin established in 1991; Led by a Board
- Administratively: Arusha, Kilimanjaro, Manyara and Tanga Regions (20 DCs)
- Transboundary Basin (Lake Chala – Jipe & Umba River, shared with Kenya)
- Area: 56,300 Km<sup>2</sup> (5% in Kenya)
- Population: About 4 Millions (census 2012)



# Roles of Pangani Basin

The Basin is led by Pangani Basin Water Board

- Roles and Responsibilities include:
  - Water Resources monitoring and assessment
  - Water Allocation (issuing and management of water permits)
  - Strengthen community participation in WRM
  - Coordinate water resources management and development planning
  - Water quality monitoring and pollution control
  - Water use conflict management
  - Water sources protection and conservation

# **THE JOINT TRANSBOUNDARY MANAGEMENT OF LAKES CHALA AND JIPE; AND UMBA RIVER ECOSYSTEMS**

# Importance of the Ecosystem

## ➤ Biodiversity conservation

Tsavo West National Park in Kenya, Mkomazi Game Reserve and Uimba river game control area in Tanzania. important refuge and breeding sites for local and migrant bird species

## ➤ Livelihood

Socio-economically: tourism, irrigated agriculture, fisheries, domestic water supply, livestock and transport

## ➤ National and regional

Hydrologically: Lake Jipe and Chala are drained by Rivers originating in the slopes of Kilimanjaro; rivers are sources of water to the Ruvu River and Pangani River which produces hydropower.





# Challenges Faced Ecosystem Management

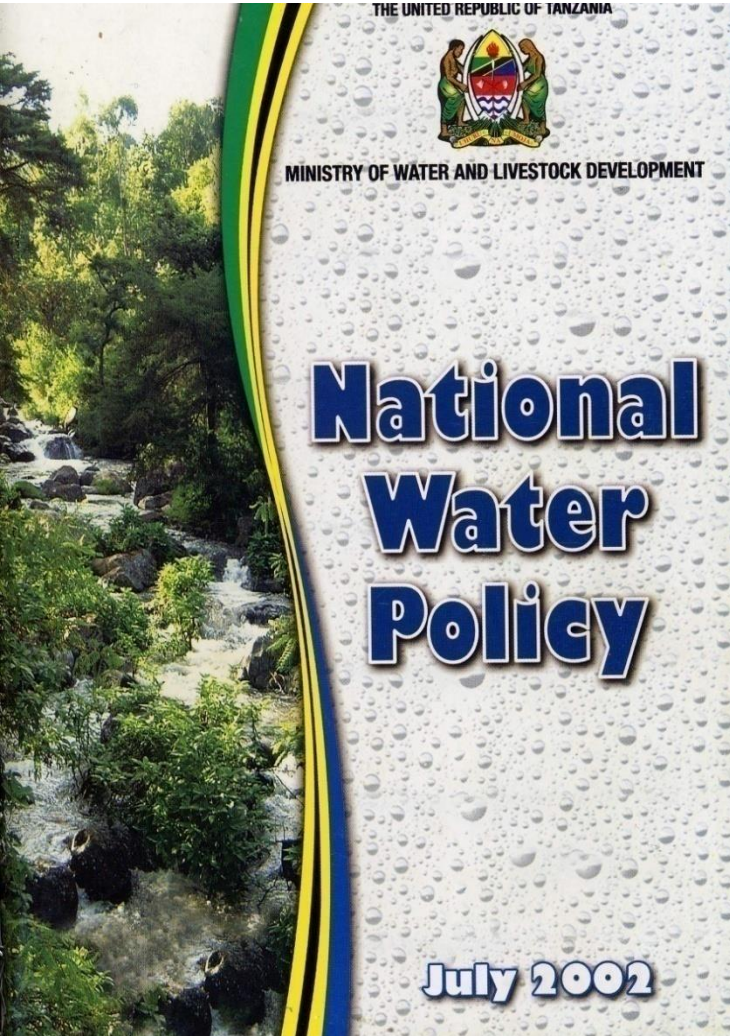
- Wetland degradation;
- Soil erosion and siltation along the banks of the lake;
- Infestation of the lake by water weeds called typha and papyrus;
- Deforestation due to heavy charcoal burning among other wood uses;
- Uncontrolled creation of diversion canals in the irrigation schemes to support irrigation of crops upstream areas;
- Unsustainable land use practices;
- Increased human - wildlife conflicts due to water competition
- Water pollution to Lake Jipe from agro-chemicals through irrigation activities,
- Decline of fishing activities due to water reduction;
- Climate change leading to prolonged dry seasons and more frequent





# Existing Policy, Legal and Institutional Framework

## *United Republic of Tanzania: Ministry Water*



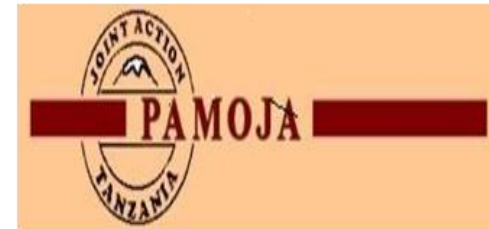
- The Constitution of the United Republic of Tanzania (1977)
- The National Water Policy , 2002 makes explicit provisions for the management of transboundary water resources.
- The National Environmental Policy (NEP, 1997)
- Agricultural and livestock policy, 1997,
- Agricultural Acts 1998 and 2004
- The Water Resources Management Act of 2009
- The Water Supply and Sanitation Act, 2009
- Environmental Management Act (EMA), 2004 Cap. 191
- The Forest Act 2002 (URT, 2002)
- Wildlife Policy of 2007
- Fisheries Act 2003
- Land Act. the Village Land Act Cap. 114.

# Existing Policy, Legal and Institutional Framework

## *Republic of Kenya: Ministry of Environment Water and Natural Resources*

- The constitution of Kenya 2010 gives the prominence to the Environment and natural Resources management
- Paper No. 1 of 1999 on National Water Policy on Water Resources Management and Development sets
- Draft National Water Policy on transboundary water resources
- The Water Act 2002 came into effect in 2003, Section 7 of the Water Act 2002 creates the Water Resources Management Authority (WRMA),
- The Act provides a role for user groups, organized as Water Resources Users Associations (WRUAs), in the management of water resources.
- Environmental Management and Coordination Act, (EMCA) enacted in 1999,
- The Kenya forest Act, 2005,
- Land Act of 2012, and the National Land Commission Act, 2012

# Joint Efforts Implemented by Riparian States



- Joint Cross Border Programme Framework document launched in 2006 by Kenya and Tanzania – **Joint Cross Border IWRM Program Framework Document**
- Linked to the different decisions made by Kenya and Tanzania on the joint management of this ecosystem; and
- Linked to water resources management policies in Kenya and Tanzania

## Meetings Continuation Between Tanzania and Kenya

- Several neighbouring meetings were held in both countries; Tanzania and Kenya.
- High level meeting held in Moshi (October 2010) was a follow-up of the 2009 stakeholders meeting; and comprised of representation from the Government of Kenya and Tanzania
- Objective was to review the progress and to propose workable actions.
- LVBC Secretariat was invited to provide guidance on the cooperation arrangements based on its experience in LVB
- ***Significant milestones realized:*** Signed Memorandum of Understanding (MoU) on 14<sup>th</sup> February 2013 + finalization of the Programme Document



# The objectives of the MoU

- To establish a Joint Cooperative Framework for sustainable development and management of the ecosystems of the Basins.
- To set up institutional arrangement for the management of ongoing projects, programmes and initiatives in the Basins.



Thanks