



Water Resources Management in the Congo Basin in Zambia: Challenges and Opportunities

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The Congo Basin



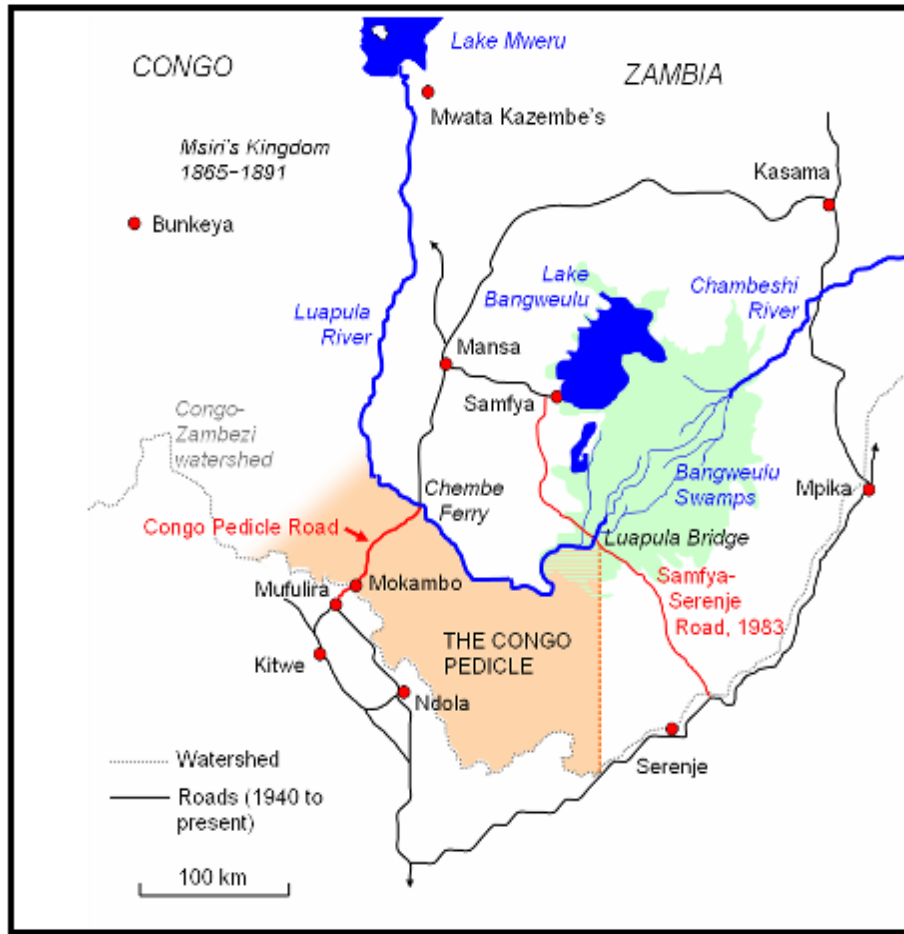
- **Drainage Area: 4,014,500 km²** (Wikipedia.org)
- **It is also the world's deepest recorded river, with measured depths around 219.5 m** (Wikipedia.org)
- total length of 4,370 km
- Average Discharge : 41,000 m³/s (3.5Billion m³/day)

ZAMBIA'S SURFACE

- 75 % belongs to the Zambezi River Basin
 - Angola, Botswana, Namibia, Zimbabwe, Mozambique, Malawi, Tanzania, Zambia
- 25 % belongs to the Congo River Basin
 - Angola, Burundi, Cameroon, Central African Republic, Democratic Republic of the

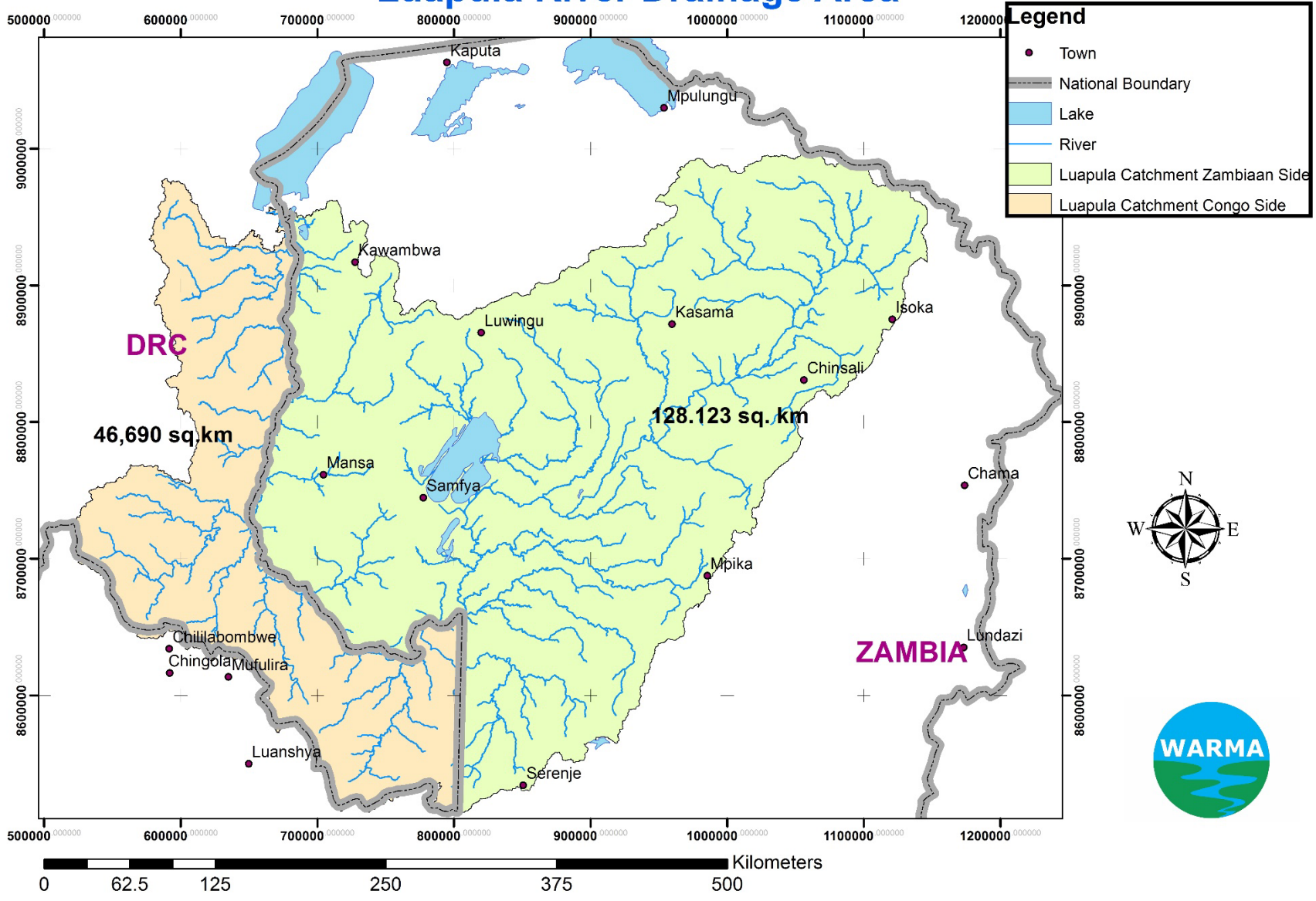
Congo, Republic of the Congo, Rwanda, South Sudan, Tanzania, Zambia

Luapula River Basin



- The Luapula River is a section of Africa's second-longest river, the Congo.
- The river drains Lake Bangweulu and its swamps into which flows the Chambeshi River, the source of the Congo.
- Over 560-kilometre course forms part of the boundary between Zambia and Congo DRC.
- The is located in the the Agro-ecological zone III which receives an annual average rainfall range of between 1,200mm and 1500mm (Mukanda, 1998).
- 73.3% of Luapula River basin is located within while the other 26.7% in Congo DRC

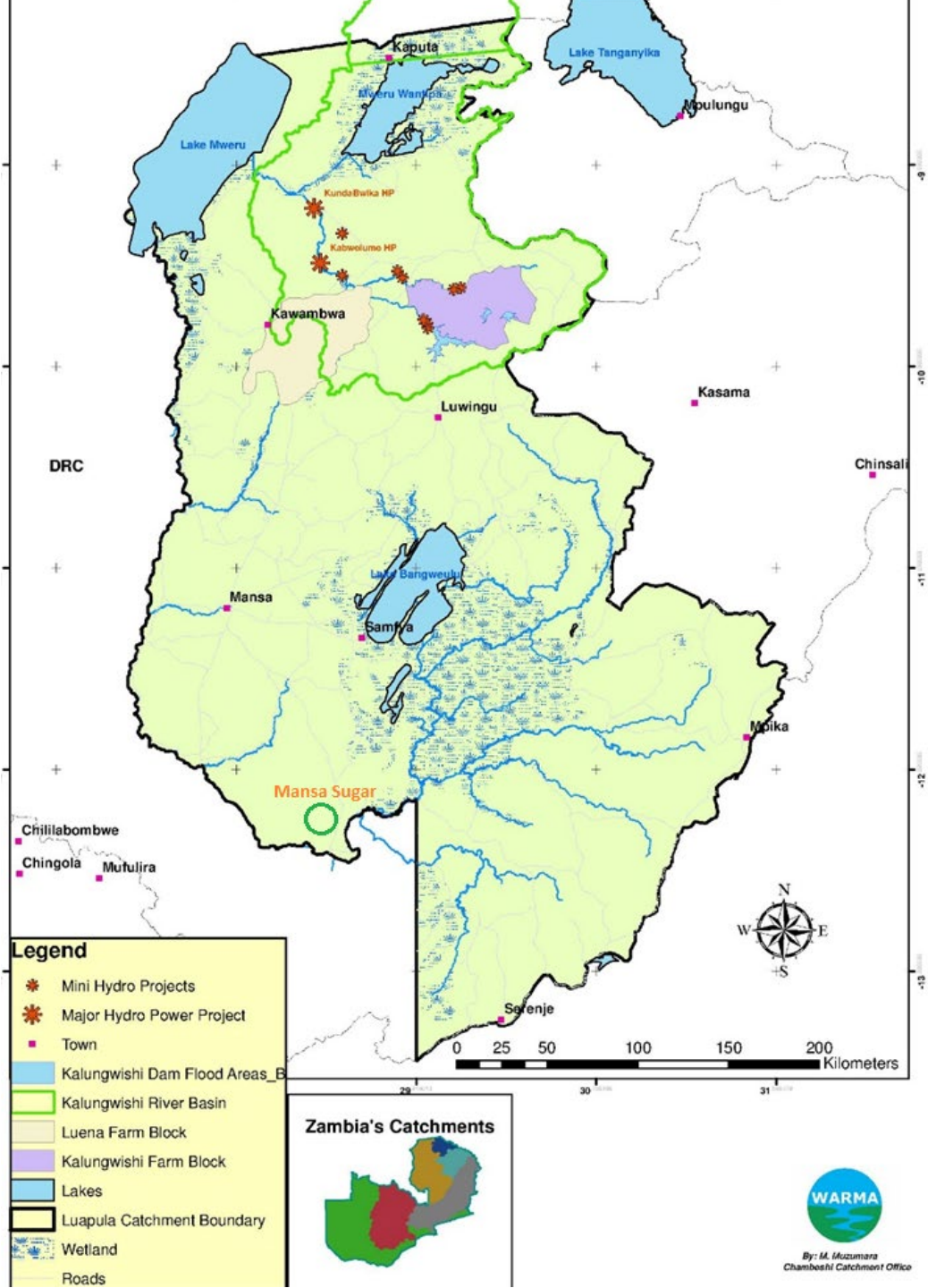
Luapula River Drainage Area



Investment Opportunities

Key Areas

- Agriculture
- Energy
- Mining
- Tourism
- Industry



The Water Resources Management Authority (WARMA)'s mandate

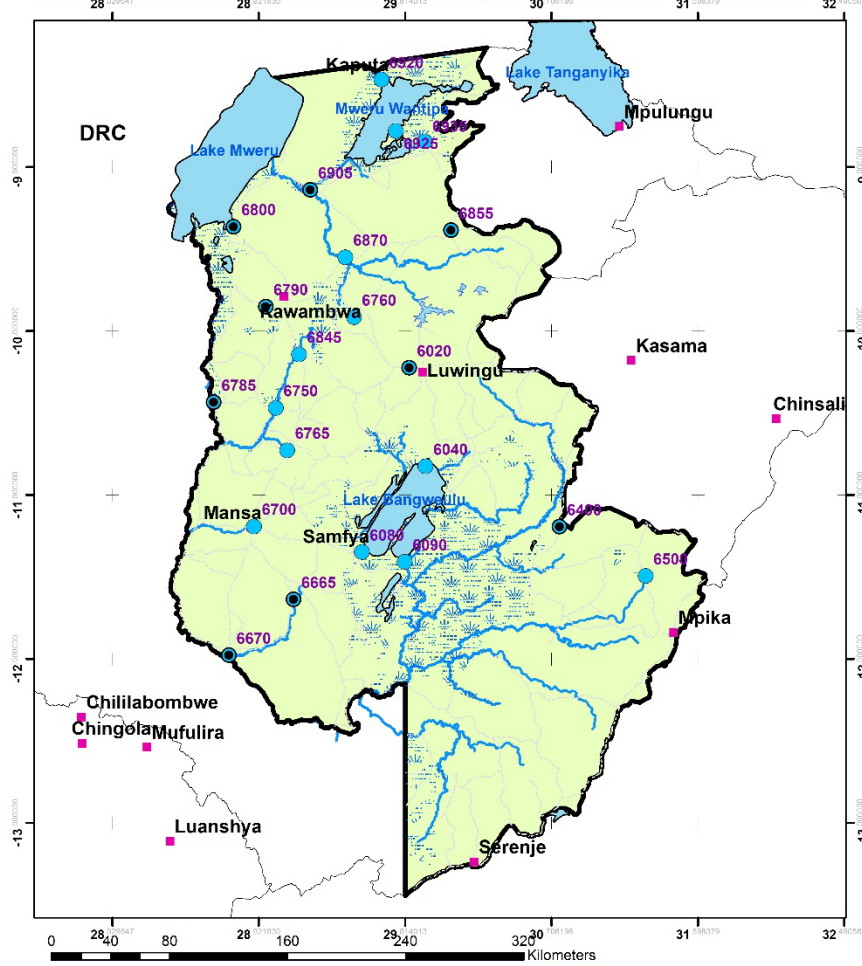
Zambia's Catchments



- exercise control over all water resources in Zambia
- monitor & regulate water use to ensure equitable allocation.
- define Water Resources Management Regulations and disseminate them to the public.
- plan, review and approve water use plans in catchments and sub-catchments.
- allocate water entitlements and apportion water to the various users of the water resource after a decentralised decision-making process has been undertaken.

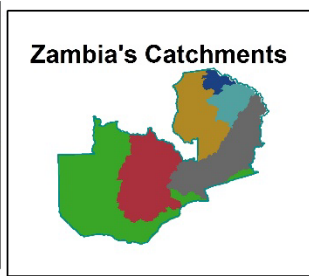


Luapula River Catchment Hydrometric Stations



Legend

- Automated Station
- Manual Station
- Town
- Kalungwishi Dam Flood Areas_B
- Lakes
- Luapula Catchment Boundary
- Wetland
- Roads




 By: M. Muzumara
 Chambeshi Catchment Office



Monitoring Station Activities includes: Water levels , Discharge and Water quality Monitoring

Key Challenges

- Inadequate investment in Managing headwaters of the Congo River
- Water Resources Governance structures not yet operationalized (WUAs, CC, SCC)
- Inadequate resources to conduct comprehensive Water Resource Assessment
- Regulations and Compliance Levels – very low in most part of the Congo basin (Zambian Side (Luapula, Chambeshi and Tanganyika Catchment))
- Effects of Climate Change - has had negative effect on the Water resources, various economic activities and the environment
- Water Body encroachments

Opportunity for WARMA

- **Harmonised legal framework for Water Resources Management**
 - (e.g. Joining CICOS and formation of the Luapula River Authority)
- **Opportunity to Effectively manage the headwaters of the Congo River Basin (Resource Pool)**
 - ✓ (Support for Comprehensive Water Resource Assessment – includes assessment of quality, quantity , water utilization and environmental management)
 - ✓ Community Engagement and sensitization on best IWRM practices- Engagement of traditional leaders, Local authorities , communities and other stakeholders to promote IWRM- multi sector participation
 - ✓ Establishment of early Warning systems
 - ✓ Sustainability of the headwaters of the Congo River



End of presentation
Thank you