

Climate Adaptation at Basin Level

*Building Climate Resilience in the Lake Victoria Basin;
Integrated, Basin-wide Solutions for Sustainable
Development.*

Eng. Coletha U. RUHAMYA

Deputy Executive Secretary, Lake Victoria Basin Commission

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Climate Challenges in Lake Victoria Basin



Intensifying Extremes

Climate change is amplifying both floods and droughts across Lake Victoria Basin.

Seasonal & year to year variability in rainfall patterns- coupled with unsustainable management of land and water resource worsen the impacts



Multi-Sector Impacts

Agriculture , critical Infrastructures, Hydropower , water scarcity all these affect economic development and fuel poverty in the region.

Basin-Level Vulnerabilities

45M+

people depend on the
Lake Victoria Basin



Floods

Displacement of
communities
Infrastructure damage
Crop and livestock loss



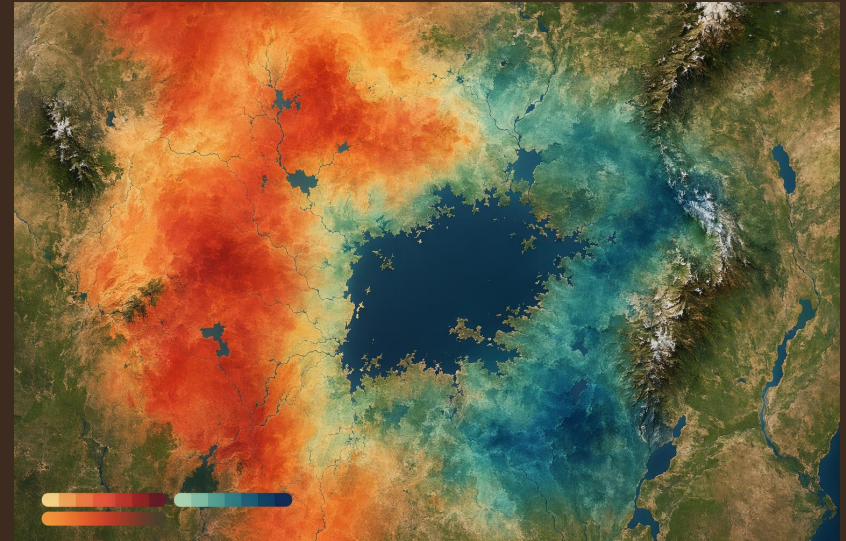
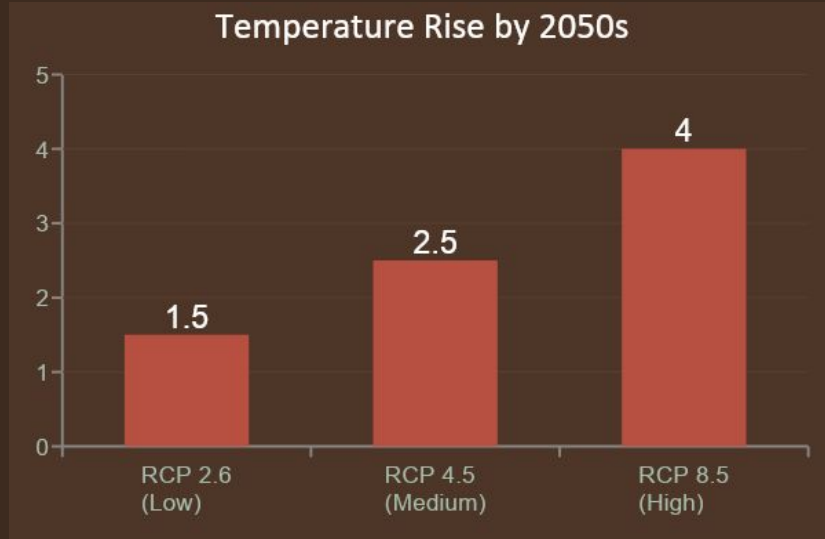
Droughts

Acute water scarcity
Food insecurity
Conflict over resources

SoBR 2025: *“Escalating pressures from climate change, population growth, and environmental degradation are undermining resilience.”*

Projected Climate Changes: Lake Victoria Basin

Near-Term Projections (2030s–2050s) | Based on CMIP5/CMIP6 & CORDEX Downscaling



+1.5–2.0°C

Warming by
2030s
(all scenarios)



**+5% Annual
Precipitation
increase
by mid-century**



**+16–29%
Heavier rainfall
events
(SDII & RX5Day)**



OND Rains
Short rains
intensifying
most
significantly

The Role of LVBC



Transboundary Coordination

LVBC coordinates multi-country responses to shared water resource challenges across the basin



Policy Harmonization

Aligning regulatory frameworks and standards across Partner States for effective basin governance



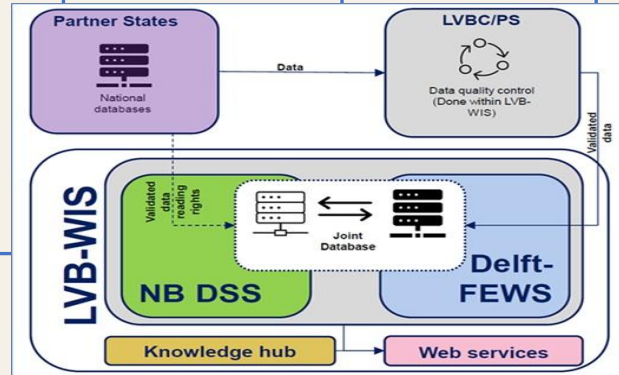
Capacity Building & Knowledge management

Technical training, data sharing platforms, and regional knowledge exchange networks

LVBC INTEGRATED PLANNING & INVESTMENT FRAMEWORK

- EAC Climate Change Policy & Strategy
 - 7th Development Strategy 2026 -2031
- (All our interventions are anchored in the EAC planning documents)*

- LVB - IWRM strategy
- Lake-wide Inclusive Sanitation strategy
- EAC Drought Management Strategy (draft)



- State of the Basin Report 2025
- Regional Basin Development Plan (Draft) (for Spatial & Investment Planning)

Water | Agriculture | Energy |
Urbanization | Private Sector *(across all sectors - moving from silo approaches to real impact)*

Adaptation Strategies

Integrated Water Resources Management



IWRM frameworks coordinating water allocation, quality monitoring, and ecosystem protection across the basin

Climate proofing infrastructure for ports and landing sites in the inland water ways
(Project supported by AfDB)

Community-Based Adaptation



Local initiatives empowering communities with climate-smart agriculture and livelihood diversification

Nature-Based Solutions



Wetland restoration, watershed management, and reforestation to strengthen natural buffers

Take away messages

- Climate resilience requires integrated, basin – wide approaches; combining policies, natural ecosystems management, infrastructure, and community actions focusing on connecting upstream and downstream communities.
- There is a strong call for mainstreaming climate adaptation and mitigation in all climate sensitive sector's policies, plans and projects for climate proofing measures.
- Strong a need to invest and promote the generation, uptake and use of relevant climate change products and services. Information and data must be downscaled for basin specific sites and sectors to help appropriate and timely decisions.
- Nature based solutions (NbS) must be promoted in all sectors to improve the land cover and water availability, flood control and drought management.

