

September 2024



# LAKE VICTORIA BASIN DIGEST

A NEWSLETTER OF THE LAKE VICTORIA BASIN COMMISSION

# THE MARA EDITION



Flowing Forward Together: Conserving the Mara Basin Ecosystem for  
Sustainable Biodiversity & Climate Resilience



EAST AFRICAN COMMUNITY  
LAKE VICTORIA  
BASIN COMMISSION



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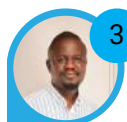
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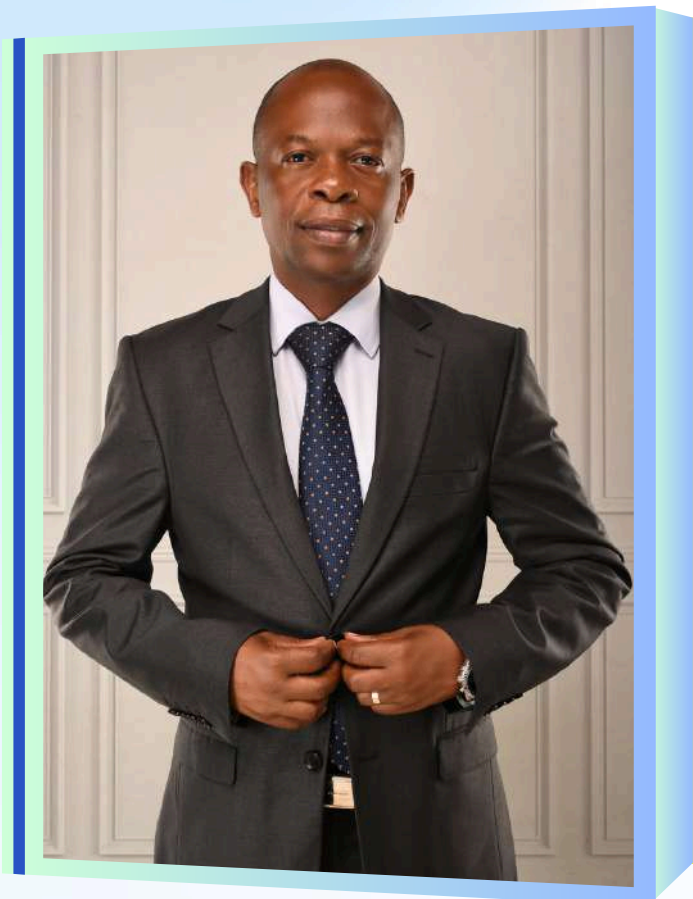
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# Message from the Executive Secretary



## Dear Esteemed Readers

As we gather for the 13th Mara Day Celebration in Narok County, Republic of Kenya, a region renowned for its stunning landscapes and rich cultural heritage, I am pleased to present this special edition of our newsletter, the **Mara Edition**. This edition highlights the incredible Mara Ecosystem and the recent successes of our commission's projects and programs. Since the first Mara Day in 2012, we have made significant strides in conserving this vital ecosystem.

During last year's 12th Mara Day in Mugumu Serengeti, stakeholders from the Republic of Kenya and the United Republic of Tanzania agreed on crucial collaborative actions to address the threats to the Mara-Serengeti Ecosystem. They emphasized the need to strengthen cooperative management by revitalizing the structures and agreements outlined in the 2015 MOU. This year's celebration aligns with the spectacular wildebeest migration, where over a million wildebeest make their way from Serengeti National Park in the United Republic of Tanzania to Masai Mara Game Reserve in the Republic of Kenya—an event often called the "seventh wonder of the world."

In this edition, you will also find updates on the commission's key projects and programs over the past two years since I became Executive Secretary. Noteworthy achievements include the construction of the regional Maritime Rescue and Coordination Centre (MRCC) in Mwanza, Tanzania, supported by the African Development Bank, and the ongoing progress of our new Headquarters, supported by EAC Partner States, now nearing completion.

With the unwavering support of my capable deputy, Eng. Coletha Ruhamyia, and our dedicated staff, we have worked tirelessly to guide the Commission towards fulfilling its core mandate. I extend my heartfelt gratitude to our partners, the World Bank, African Development Bank, GIZ, European Union, KfW, Adaptation Fund, and UNEP for their relentless support. I also thank WWF Kenya and Tanzania, KCB Tanzania and Kenya, and Maasai Mara University for their support for hosting the Scientific Conference for the 13th Mara Day Celebration.

Finally, I appreciate the joint efforts of the Ministries of East African Community from Kenya and Tanzania, as well as the valuable guidance and support from the Sectoral Council of Ministers for the Lake Victoria Basin and EAC Partner States.

I hope you find this edition engaging and informative.

**Dr Masinde Bwire,**  
**Executive Secretary, LVBC**



# Message from the Deputy Executive Secretary



## Dear Esteemed Readers

The Lake Victoria Basin Commission (LVBC) has diligently worked to fulfil its mandate through the successful implementation of projects and programs within the Lake Victoria Basin (LVB).

Through Lake Victoria Basin Integrated Water Resources Management Programme (LVB IWRMP) co-funded by EU and German Government through Kfw, the Commission has been making efforts to implement projects aiming in improving water quality and social well-being of communities in the LVB through four high priority investments projects which will increase access to improved sanitation for approximately 1.9 million people.

During the Financial Year (FY) 2023-24, the Commission concluded two Project and Financing Agreements for investments in the Cities of Kisumu/Kenya and Kampala/Uganda, and for the projects in Mwanza/Tanzania and Kigali/Rwanda for which related agreements were executed in the FY 2022-2023, the technical designs have been completed and the procurement process for construction works is being finalized.

Furthermore, the Commission has also developed Lake-wide Inclusive Sanitation Strategy (LWIS) for LVB aimed at preventing and controlling pollution through the adoption of a LWIS approach to sanitation service planning and implementation.

It has also analyzed and identified opportunities for promoting private sector engagement and job creation in the sanitation sector and appropriated technologies to the LVB that can increase the effectiveness and efficiency of sanitation service delivery, enhance climate resilience and promote the reuse of solid and liquid waste (Circular Economy). The Strategy was adopted by the 22nd Sectoral Council of Ministers for the LVB in February 2024.

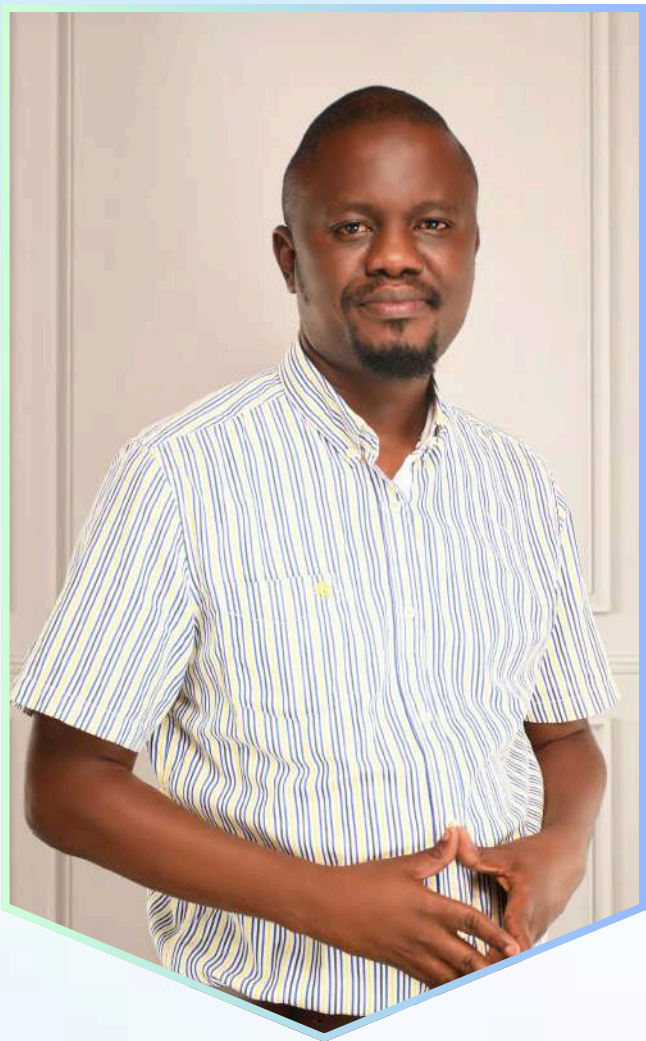
The Adapting to Climate Change in the Lake Victoria Basin (ACC-LVB) project which ended August 2023, also benefited millions of people within the LVB countries (the Republic of Burundi, Republic of Kenya, Republic of Rwanda, Republic of Uganda and the United Republic of Tanzania), where it was implemented. The interventions included but not limited to: land scape restoration, climate adaptation technologies and livelihood improved for vulnerable communities in basin.

Under the leadership of our Executive Secretary, strong commitment of our staff and collaboration with our partners we remain committed to serve the people of the East African Community. .

Thank you and I wish you a good read.

**ENG. COLETHA U. RUHAMYA,**  
**Deputy Executive Secretary, LVBC**

# From the Editor



**Baraka Karama.**  
**Communication Officer, LVBC.**

## Dear Readers,

It is a pleasure to present our special "Mara Day Edition" newsletter, highlighting the stories and significance of the Mara ecosystem.

This edition emphasizes the importance of conserving the Mara, which holds immense value not only for the two East African Community Partner States but for the entire world.

The Mara ecosystem, including the Maasai Mara National Reserve and its surrounding conservancies, is vital for many reasons, particularly its biodiversity, water resources, tourism, cultural heritage, and ecological balance.

The stories featured here underscore these critical aspects and propose solutions to address existing challenges, aiming for long-term preservation.

We also showcase the efforts and contributions of our development partners, stakeholders, and institutions in environmental conservation.

Additionally, this newsletter showcases the achievements of projects and programs undertaken by our commission over the past year. I hope you find this edition insightful and captivating



# PROTECTING A GLOBAL JEWEL: THE ESSENTIAL ROLE OF THE MARA RIVER ECOSYSTEM



*The Mara River Basin, one of the ten major rivers draining into Lake Victoria—the second-largest freshwater lake in the world—spans approximately 13,325 square kilometres, with 65% of the basin in Kenya and 35% in Tanzania.*

*Mara River.*

The Mara River ecosystem is an invaluable natural resource, not just for the Republic of Kenya and the United Republic of Tanzania but for the entire world. The river conjures up the idyllic image of a perfect holiday destination.

Its significance stretches beyond its scenic beauty, offering essential ecological, economic, and cultural benefits that must be preserved at all costs. Firstly, the Mara River is the lifeblood of the Maasai Mara-Serengeti ecosystem, one of the most famous wildlife habitats on the planet.

The river has gained global acclaim as tourists from around the world gather to witness the annual wildebeest migration, often hailed as one of the "Seven Wonders of the World."

Over 1.5 million wildebeest migrate from the Serengeti in Tanzania to the Maasai Mara in Kenya, embarking on

what is widely regarded as a journey in search of greener grazing lands.

The wildebeest migration is not only a spectacular natural wonder but also a critical driver of biodiversity. The predators that follow the herds, such as lions, hyenas, and crocodiles, rely on this migration for survival. The balance of life in this region is delicate, and the Mara River is at its core.

The Mara River Basin, one of the ten major rivers draining into Lake Victoria—the second-largest freshwater lake in the world—spans approximately 13,325 square kilometres, with 65% of the basin in Kenya and 35% in Tanzania.

The river contributes 37.5 cubic meters of water to Lake Victoria, accounting for 4.7% of the lake's total surface water inflow. It originates from the Mau Escarpment in Kenya's Rift Valley and winds its way through the ...

# Lead Story



*Mara River.*

expansive Mau Forest.

Economically, the Mara River ecosystem supports a thriving tourism industry, which is a significant source of revenue for the Republic of Kenya and the United Republic of Tanzania. The Maasai Mara and Serengeti rank among Africa's most popular national parks, attracting tourists from across the globe.

The income generated from tourism not only supports local communities but also funds conservation efforts. Protecting the Mara River ensures that this vital industry continues to flourish, benefiting both the environment and the people who depend on it.

Culturally, the Mara River is deeply significant to the Maasai people, who have coexisted with this ecosystem for centuries. Their traditional knowledge and practices have contributed to the sustainable management of the land.

However, modern challenges such as climate change, deforestation, and over-extraction of water for agriculture are threatening this balance. The loss of the Mara River would not only devastate the wildlife but also erode the cultural heritage of the Maasai and other indigenous communities.

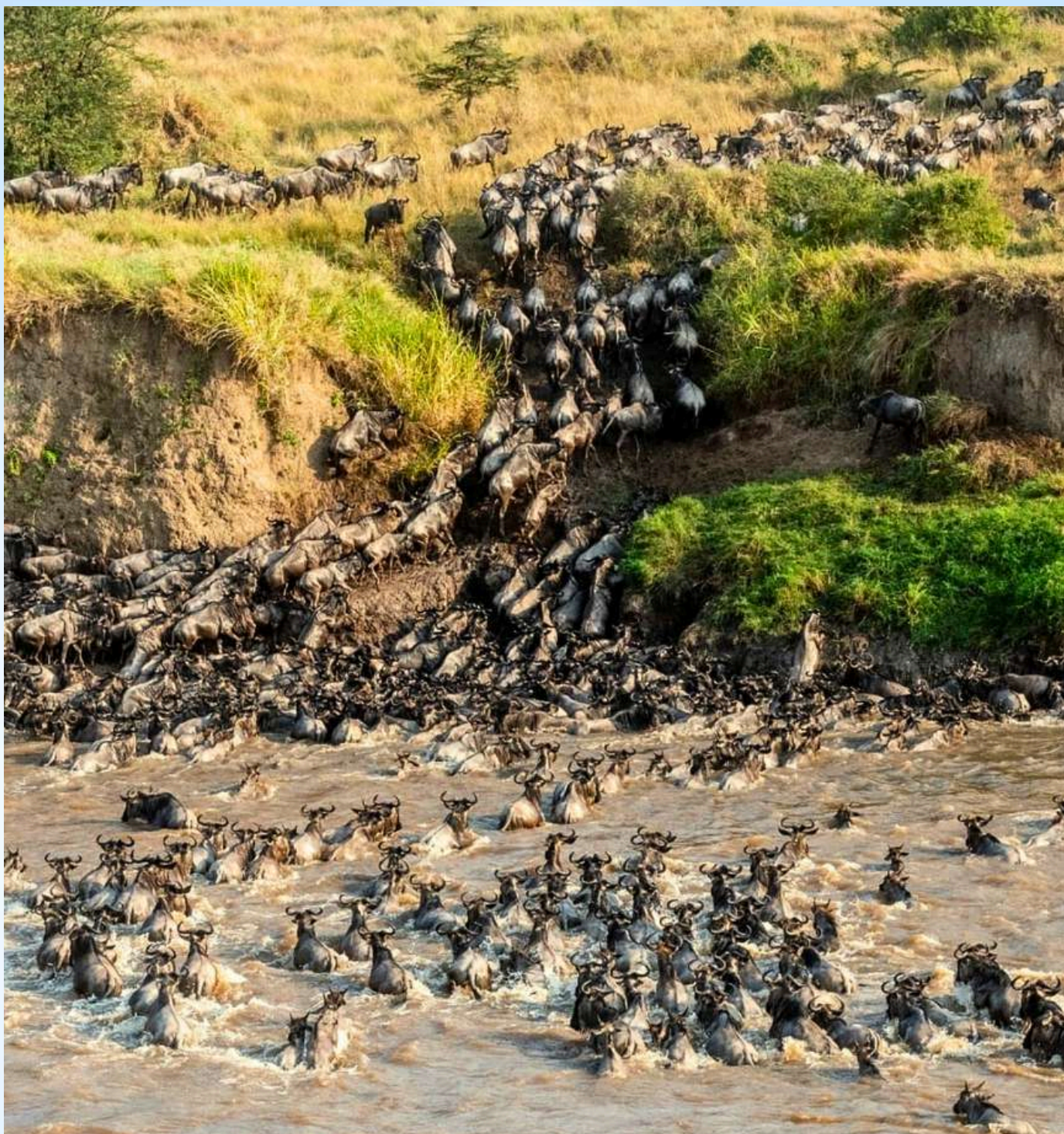
The importance of the Mara River ecosystem extends to global environmental health. Wetlands, forests, and rivers like the Mara play a crucial role in carbon sequestration, helping to mitigate climate change.

Additionally, the river's health impacts the larger Nile Basin, as it eventually feeds into Lake Victoria, the source of the White Nile.

Therefore, protecting the Mara River is not just a local issue; it is a global imperative. In conclusion, the Mara River ecosystem is irreplaceable.



## Lead Story



*Wildebeest crossing The Mara River.*

It supports biodiversity, sustains economic livelihoods, preserves cultural heritage, and contributes to global environmental stability. The challenges it faces require concerted efforts from governments, conservation organizations, and local communities.

Protecting the Mara River is not just about preserving a river; it is about safeguarding a legacy for future generations. The world cannot afford to lose this treasure.



# CONSERVATION EFFORTS OF THE MARA RIVER BASIN AND ITS ECOSYSTEM BY THE UNITED REPUBLIC OF TANZANIA



*Former Tanzanian Deputy Minister of Water Eng Mary Prisca Maundi plants a tree during the 12th Mara Day celebration in Mugumu Serengeti*

The United Republic of Tanzania has undertaken a series of concerted efforts to conserve the Mara River Basin and its critical ecosystem, which forms a transboundary ecosystem shared with Kenya.

This unique ecosystem, home to the famous Mara-Serengeti landscape, is renowned for the great wildebeest migration and is a habitat for various wildlife species, including big cats.

However, this crucial environment faces significant threats from habitat fragmentation, human-wildlife conflict, and the overexploitation of its resources due to the pressures of a rapidly growing human population.

One of the key initiatives by Tanzania has been the development and implementation of the Mara Wetlands Integrated Management Plan. This plan is a comprehensive strategy aimed at addressing both conservation and sustainable development needs.

It emphasizes a collaborative approach, bringing together various stakeholders, including central and local government agencies, non-governmental organizations (NGOs), civil society, and local communities. Its primary goal is to promote the sustainable management of the Mara River Basin's resources while improving community livelihoods and enhancing resilience to climate change.

Recognizing the importance of a multisectoral approach, Tanzania has actively engaged a broad array of stakeholders who depend on and manage the land and resources of the Mara River Basin. This collaborative effort is crucial in promoting conservation as it aligns the interests of different groups, ensuring that both conservation and economic activities can coexist sustainably.

The inclusion of local communities is particularly vital, as it empowers them to take an active role in conserving





*Trees grown along the Mara River Catchment*

the natural resources that are crucial to their livelihoods.

Tanzania has also focused on managing the pressures of land use and resource exploitation, which are among the significant threats to the Mara River Basin. The government has identified the overexploitation of forest and wetland products such as fuelwood, timber, construction materials, fish, and bushmeat as critical issues.

To mitigate these pressures, efforts have been made to regulate resource extraction and promote alternative livelihoods that are less damaging to the environment. For example, community-based initiatives have been encouraged to develop sustainable practices in agriculture, fishing, and forestry.

Agricultural encroachment into wetland areas and overgrazing of grasslands are recurrent problems that t

hreaten the integrity of the Mara River Basin ecosystem.

The Tanzanian government, in collaboration with its partners, has been working to curb these practices through land-use planning and enforcement of regulations that protect sensitive areas.

Additionally, initiatives to improve pasture management and promote sustainable agricultural practices are being implemented to reduce the impact on the ecosystem.

The health of the Mara River Basin is heavily dependent on the quality, timing, and flow of water from the Mara River. To protect this vital water source, Tanzania has been actively involved in managing upstream land use to prevent degradation and deforestation.

This includes efforts to reduce agricultural intensification and the expansion of human settlements in critical areas.





*Aerial View of Wildebeest crossing The Mara River.*

The government is also addressing the issue of water extraction for irrigation, energy, and industrial uses, which has reduced the flow of water into the wetlands and disrupted natural flooding patterns.

Climate change poses a significant threat to the Mara River Basin, with expected changes in weather patterns, including increased rainfall intensity and more frequent floods. Tanzania has recognized the need to enhance the resilience of both natural and human systems to cope with these changes.

This includes implementing climate-smart agricultural practices, improving flood management, and restoring degraded landscapes to reduce the impact of climate change on the ecosystem.

To secure the necessary funding for these conservation efforts, Tanzania has developed the Conservation Investment Plan (CIP) for the Mara River Basin.

The CIP serves as a strategic document that outlines the most critical conservation funding priorities and

presents a value proposition for potential donors and investors. It harmonizes various conservation strategies and plans into a cohesive framework, ensuring that efforts are coordinated and resources are used efficiently.

The CIP also identifies bankable investment packages that target key areas of intervention, such as wetland restoration, sustainable agriculture, and community-based conservation initiatives.

The United Republic of Tanzania's efforts to conserve the Mara River Basin reflect a comprehensive and integrated approach that addresses both environmental and socioeconomic challenges. Through strategic planning, stakeholder engagement, and targeted interventions, Tanzania is working to ensure the long-term sustainability of this critical ecosystem. These efforts not only protect the natural heritage of the Mara-Serengeti landscape but also support the livelihoods of the communities that depend on it.



# THE GREAT MARA WILDEBEEST MIGRATION: LESSONS WE CAN DRAW FROM CLIMATE CHANGE



- The Mara River, a vital lifeline for both wildlife and humans, is under increasing pressure due to climate change.
- As temperatures rise and rainfall patterns become erratic, the river's flow is diminishing, impacting the availability of water for the migrating herds and local communities alike.

*Aerial View of the Wildebeest in Serengeti*

The Serengeti-Mara ecosystem, a vast expanse of savanna teeming with life, is a stage for one of nature's most spectacular shows: the Great Migration. Each year, millions of wildebeest, zebra and other herbivores, followed by predators, embark on a perilous journey in search of greener pastures and water. This epic journey, a delicate quest for survival, is intricately tied to the region's weather patterns and is now facing unprecedented challenges due to climate change.

The migration's timing is a complex mix of factors, including rainfall, vegetation growth, and predator-prey dynamics. Traditionally, the herds follow the rains, seeking out the lush, nutrient-rich grasslands that sustain them. However, climate change is disrupting these patterns, leading to more frequent and severe droughts, as well as unpredictable rainfall. These shifts can disorient the animals, causing them to deviate from their traditional migration routes and face increased risks of predation and starvation.

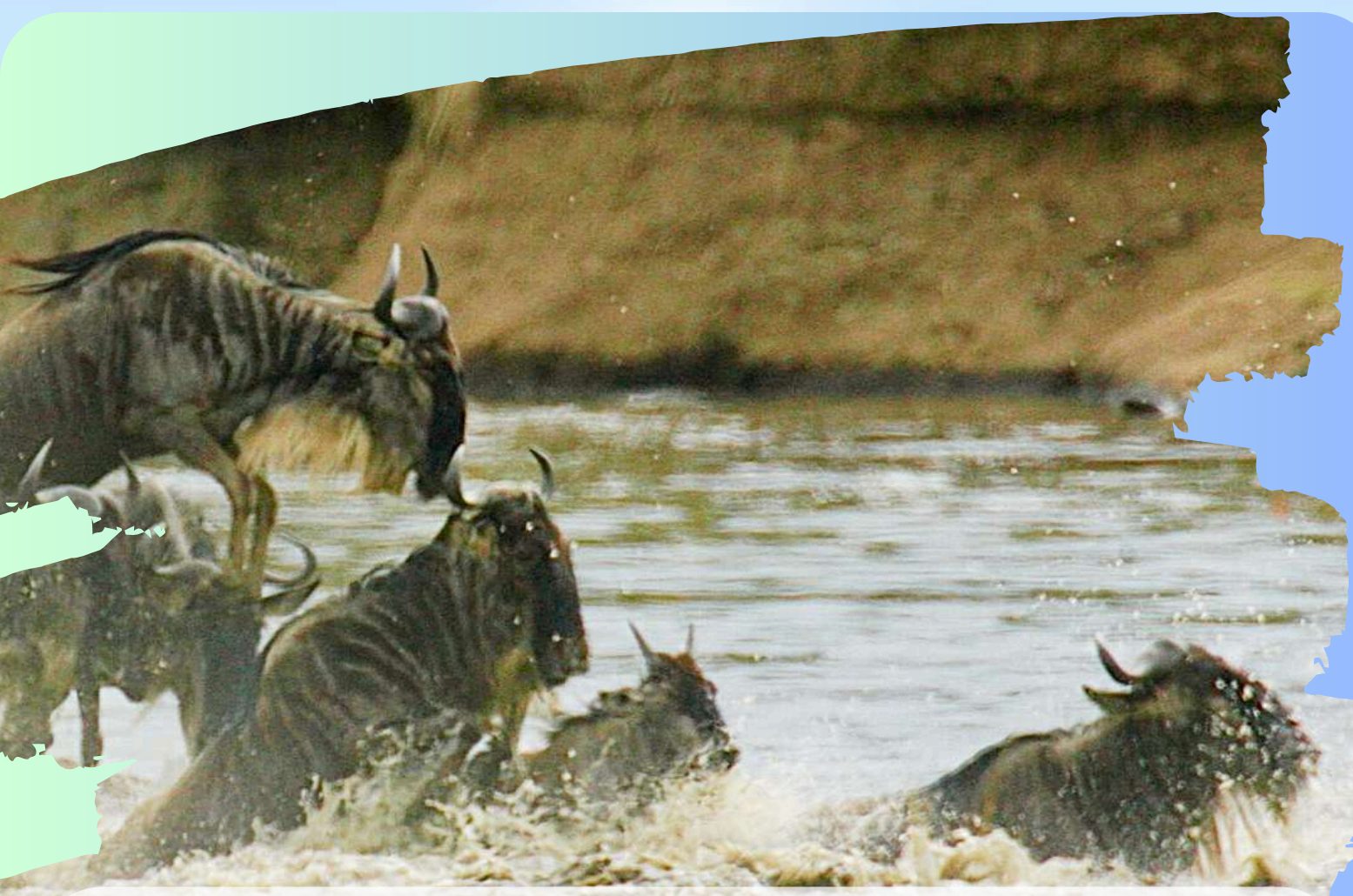
The Mara River, a vital lifeline for both wildlife and humans, is under increasing pressure due to climate change. As temperatures rise and rainfall patterns

become erratic, the river's flow is diminishing, impacting the availability of water for the migrating herds and local communities alike. The delicate balance of the grassland ecosystem is being disrupted, threatening the survival of countless species. This environmental crisis has far-reaching consequences, affecting not only wildlife but also the livelihoods of people who depend on the ecosystem for their sustenance.

By looking at the challenges at the Mara, and to address similar challenges, innovative solutions are urgently needed globally. The Lake Victoria Basin Commission (LVBC) Integrated Water Resources Management (IWRM) Programme is considering the effects of climate change and how this affects the Lake Victoria Basin.

The IWRM Programme, based on long-term cooperation between the East African Community (EAC), KfW Development Bank from Germany and the European Union (EU), is consistently working to protect and restore the region's ecosystems. One of the key initiatives is the development of the Lake Victoria Basin Water Information System (LVB-WIS).





This state-of-the-art system will provide historic, real-time- and forecasted data on critical matters such as precipitation, temperature, water levels, -quality, and flow, enabling policymakers and stakeholders to make informed decisions. By monitoring changes in water resources, the LVB-WIS will help to predict and mitigate the impacts of climate change in the Lake Basin as a result of some lessons also learned from the Mara-Serengeti ecosystem.

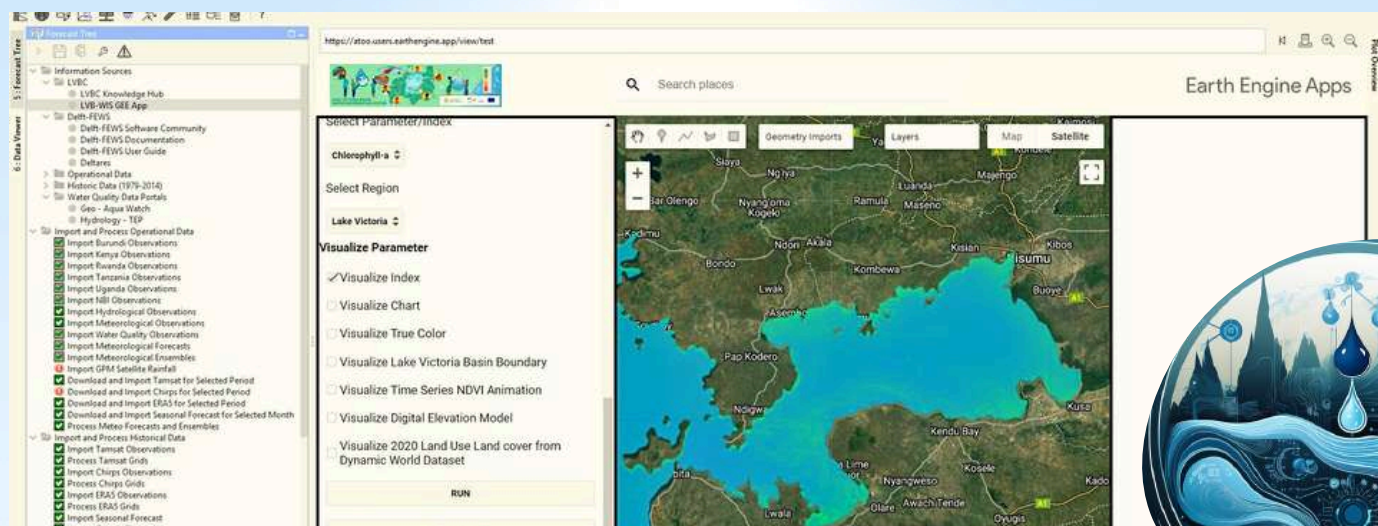
This Mara Day celebrations, offers a platform to raise awareness about the challenges facing the ecosystem and to showcase LVBC's work. With the theme **"Flowing Forward Together: Conserving Mara Basin Ecosystem for Sustainable Biodiversity and Climate Resilience,"** the event has attracted scientists, policymakers, and community representatives to discuss solutions and foster collaboration.

LVBC's participation in Mara Day is a significant step towards building a shared vision for the future of the Mara-Serengeti ecosystem, supported for instance by new tools such as the LVB-WIS. The event will be an opportunity to brainstorm on effective developments and strategies to protect this iconic landscape.

*Wildebeest crossing The Mara River.*



# THE DEVELOPMENT AND IMPACT OF THE LAKE VICTORIA BASIN WATER INFORMATION SYSTEM (LVB-WIS)



*Illustration of the Water Information System*

The Lake Victoria Basin (LVB) is a critical water resource for the millions of people living in East Africa, providing vital ecological, economic, and social benefits. However, the basin faces significant challenges, including declining water quality, reduced availability, and environmental degradation. These difficulties are worsened by climate change, urbanization, and population growth. In response to these pressing issues, the Lake Victoria Basin Commission (LVBC) embarked on a transformative initiative: the development of the Lake Victoria Basin Water Information System (LVB-WIS).

## Why Was LVB-WIS Developed?

The LVB-WIS was conceived as a strategic tool to address various challenges affecting the Lake Victoria Basin. Recognising the need for informed and coordinated action across the Partner States across East Africa, the LVBC initiated the development of LVB-WIS in early 2020 with support from East African Community (EAC), KfW Development Bank from Germany and the European Union (EU). The primary goal of the system is to support regional policy measures and local investment decisions aimed at the long-term sustainable development of the basin.

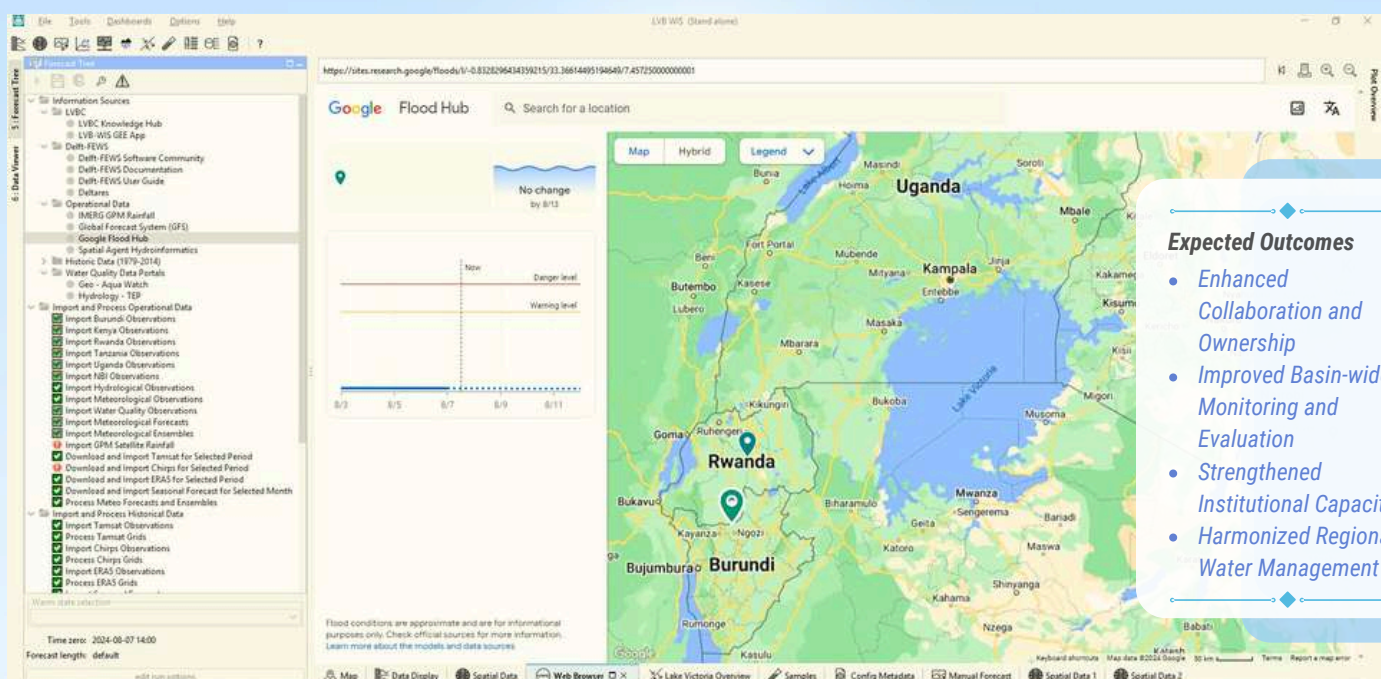
The system is designed to enhance the understanding of Integrated Water Resources Management (IWRM) issues among Partner States, thereby leading to better-informed and more widely supported decision-making processes. This is particularly crucial in a region where water management practices must balance the needs of a growing population with the imperative to protect and restore the natural environment.

## How Does LVB-WIS Work?

The LVB-WIS is a sophisticated database platform integrated with IWRM modeling tools. It combines the functionality of the Nile Basin Decision Support System (NBDSS) and the open-platform software Delft-FEWS, creating a hybrid system that offers comprehensive water management capabilities. The system's foundation lies in the collection, validation, and sharing of regional hydrological and meteorological data, which are then used to generate information products such as interactive maps, bulletins, policy briefs, and reports.

These products serve as critical tools for water management authorities, LVBC, and local communities, offering easy access to reliable information that can guide both policy decisions and practical

## The Development and Impact of the Lake Victoria Basin Water Information System (LVB-WIS)



### Expected Outcomes

- Enhanced Collaboration and Ownership
- Improved Basin-wide Monitoring and Evaluation
- Strengthened Institutional Capacity
- Harmonized Regional Water Management

### Illustration of the Water Information System

interventions. The LVB-WIS is managed by the LVBC, making it a shared resource among the Partner States, with the potential to harmonize water management practices across the region.

### Expected Outcomes

The implementation of the LVB-WIS is expected to yield significant benefits across multiple areas:

- **Enhanced Collaboration and Ownership:** The LVB-WIS fosters collaboration among LVBC, Partner States, and other basin institutions, ensuring that water management efforts are coordinated and that all stakeholders have a sense of ownership over the process.
- **Improved Basin-wide Monitoring and Evaluation:** The system facilitates comprehensive monitoring and evaluation of the entire basin, enabling the generation of detailed reports on the state of the basin. This will improve the understanding of transboundary water management issues and inform long-term responses to challenges such as floods, droughts, pollution, and climate change.
- **Strengthened Institutional Capacity:** By building the capacity of the LVBC-WIS team and partner state institutions, the LVB-WIS contributes to the overall

institutional strengthening necessary for effective water management in the region.

- **Harmonized Regional Water Management:** The LVB-WIS supports the harmonization of water management practices, regulations, and policies among Partner States, creating a more unified approach to managing the basin's resources.

### Conclusion

The Lake Victoria Basin Water Information System (LVB-WIS) is more than just a technological innovation; it is a critical tool for sustainable water management in one of Africa's most vital water basins. By enhancing collaboration, improving monitoring and evaluation, strengthening institutional capacity, and harmonizing regional water management practices, the LVB-WIS is set to play a pivotal role in ensuring the long-term health and viability of the Lake Victoria Basin. As the system continues to evolve and be refined, its impact will resonate throughout the region, contributing to the sustainable development goals championed by the LVBC.



## KFS DRIVES CONSERVATION IN MAU FOREST AND MARA BASIN WITH MAJOR TREE PLANTING EFFORTS



*Trees planted in Kiptaragon technical vocational college.*

The Kenya Forest Service (KFS) has been actively engaged in conserving and rehabilitating the Mau Forest Complex, Kenya's largest indigenous forest and a critical water catchment area.

This forest is vital for the country's water supply, biodiversity, and climate regulation. As part of its efforts, KFS has organized extensive tree planting campaigns aimed at restoring degraded areas and increasing forest cover within the Mau Forest Complex.

KFS also plays a pivotal role in the annual Mara Day event, contributing to the conservation of the Mara River Basin, which is essential for the Maasai Mara and Serengeti ecosystems. This participation aligns with KFS's broader mandate to conserve forest resources and promote sustainable environmental practices. During past Mara Day celebrations in Kenya, KFS has actively led tree planting activities.

Notably, during the 11th Mara Day celebrations in Kiptaragon technical vocational college, the service spearheaded the planting of 3,000 seedlings across various locations.

This included 1,600 bamboo seedlings at the Kiptuga Forest, a key catchment area and the source of the Mara River in the Enapuiyapui swamp. Additionally, 750 Cypress trees were planted at Kiptaragon Primary School, and 800 Cypress trees at Kiptaragon TVC.

Guests at the event ceremonially planted 21 assorted indigenous trees, which have shown a remarkable 100% survival rate.

KFS is a state corporation established under the Forest Conservation and Management Act of 2016, with the primary mandate of conserving, developing, and sustainably managing Kenya's forest resources.

The organization is responsible for protecting forests, promoting afforestation and reforestation programs, and ensuring that forest resources contribute to the country's environmental, economic, and social well-being.

## GIZ ENHANCES CORE PROCESSES AND SERVICES TO STRENGTHEN THE LAKE VICTORIA BASIN COMMISSION



*LVBC Executice Secretary Dr Masinde Bwire gifts Eng Conrad Thombansen, Programme Manager EAC/LVBC-GIZ*

The Lake Victoria Basin Commission (LVBC) in partnership with the German Agency for International Cooperation (GIZ) stripes to improve its core processes in Integrated Water Resources Management (IWRM) through the project ***"Strengthening the capacities of the Lake Victoria Basin Commission of the East African Community in Integrated Management of Transboundary Water Resources"***.

The move is aimed at strengthening the capacity of the commission to deliver its mandate and more so the current strategic plan 2021-2026.

During a technical workshop conducted on 14th-15th June 2024 at Kakamega Golf Club, Kenya, with an objective to review implementation of the Measurable Accountability Plans, LVBC Deputy Executive Secretary, Eng. Coletha Ruhamyra underscored the need for a clear roadmap on key areas necessary to support the Commission in realizing its mandate.

Eng Conrad Thombansen, the Program Manager for the EAC/LVBC IWRM Project underlined on the need for strengthening the water resources management function (IWRM unit) to ensure sustainability of the products being generated by the two cooperating projects i.e., LVB IWRM and EAC IWRM implemented through KfW and the GIZ, respectively.

Four core process identified and under Implementation to strengthen the Commission include i) enhancing capacities including human resources, tools, systems and processes; ii) resource mobilization and financial stability; iii) structural review of the scope and mandate of LVBC; and iv) stakeholder engagement and coordination.

Implementation of the interventions under the core areas are envisaged to positively contribute towards delivering of the Commission mandate.



## GIZ AIDS WATER QUALITY ENHANCEMENT IN LVB BY PREPARING THE INAUGURAL STATE OF THE BASIN REPORT



*Participants of the National Consultative workshops for the generation of information products for the joint development of the Lake Victoria State of the Basin pose for a photo in Mwanza.*

German Agency for International Cooperation (GIZ) strives to improve the Water quality within its basin through the project **"Strengthening the capacities of the Lake Victoria Basin Commission of the East African Community in Integrated Management of Transboundary Water Resources"**.

The move is aimed at the establishment of the baseline situation of the Lake Victoria Basin which will support planning and guide policy and management decisions for sustainable use of the Basin Resources.

Specifically, the report seeks to, provide a framework for the systematic monitoring/measurement of the effectiveness of implementing strategic actions and Support evidence-based decision making at national and regional levels on the management and development of the shared water resources of the basin.

It also seeks to enhance information and data sharing among Partner States and other regional institutions for sound basin management.

The report is also meant to Foster cooperation and ownership among Partner States by building trust and highlighting the inter-dependence of riparian countries. The process entails intensive stakeholder participation and collaboration from all stakeholders including the Partner States, data compilation and development of Indicators, generation of Information products, crafting of key messages and story lines and finally publication and dissemination to the basin inhabitants.

Six National Consultative workshops for the generation of information products for the joint development of the Lake Victoria State of the Basin Report (SoBR) were held in different East African Community partner states including the Republic of Uganda, Republic of Rwanda, Republic Burundi, Republic of Kenya, United Republic of Tanzania.

Two regional meetings were also held Entebbe in the Republic of Uganda and in Nairobi in the Republic of Kenya.

# HOW LAKE VICTORIA BASIN RESIDENTS BENEFITED FROM THE ACC-LVB PROJECT

Millions of people living within the Lake Victoria basin are reaping the immense benefits of the Adapting to climate change project that was successfully implemented by the Lake Victoria Basin Commission (LVBC)

The project which was funded by the Adaptation fund through UNEP to a tune USD 5 million was implemented in the Republic of Kenya, Republic of Uganda, Republic of Burundi, Republic of Rwanda and the United Republic of Tanzania.

In the Republic of Kenya, farmers in Kanyibok Village, West Yimbo ward, Siaya County had a bumper harvest of Capsicum following successful implementation of the project.

The farmers sold several kilograms of the produce they harvested in the green houses which were constructed by the project.

Julius Otieno, a farmer in Kanyibok village youth group in west Yimbo said, "I am happy with the results since I have been able to sell several kilograms in the market. I will use the profit to expand my other businesses".

In Rarieda constituency, farmers were also trained on modern farming methods. Communities in the semi-arid area which is predominantly known for maize farming greatly benefited from huge sales of soya beans which were provided to them by the project.

Emily Odera Chairperson of West, East Central and South



*Julius Otieno, Kenyan farmer display sample of the harvested capsicum.*



## How Lake Victoria Basin Residents Benefited From the ACC-LVB Project



*Members of Kerebuke Co-operative in the Republic of Burundi inspecting bee hives.*

Uyoma (WECESO) CBO said, "We have benefited from this scheme. Many women now have money courtesy of this project".

Lake Victoria Basin Commission (LVBC) also spent USD 30,000 in the restoration of Osipata gully in Teso South Constituency Busia County through Nature Based Solution by Planting over 10,000 bamboos to support natural regeneration of the degraded landscape.

The Osipata gully was a menace in the area with cases of death and injuries reported. Increased sand harvesting and soil erosion has been established as the main cause of the gully. Two ultra-modern weather stations equipped with seven sensors designed to detect crucial metrological parameters including rain, sunshine, wind speed, humidity, atmospheric pressure and temperature which are recorded in a data and transmitted in Nairobi through a website were also set up in Busia and Siaya counties.

In the United Republic of Tanzania, the project was implemented in Ng'ahaya village , Magu district, Mwanza region. The Project drilled four boreholes that are fitted with solar powered water pumping systems to support micro-irrigation for rice intensification and off-season crop farming during dry seasons.

The ACC-LVB project has also supported the community by installing three greenhouse technologies to promote vegetable and horticultural productions. One has been built at Ng'haya secondary school, and two to Kikundi cha Mboga Mboga community group as a learning centre on greenhouse farming.

In the Promotion of Ecosystem based Adaptation interventions tree nursery has been established at Busalanga Primary and Ng'haya Secondary schools and 400 different fruit tree varieties planted at the same institution.

In addition to crop farming, the project has also supported two community groups with 149 beehives to practice bee farming. In the Republic of Uganda, the project was implemented in Masaka and Mubende districts.

In Masaka district the Project piloted construction of modern institutional energy saving stoves in 3 public Schools namely Kijjabwemi Church of Uganda Pri, St. Damian Buyaga and Tekera. "This intervention has reduced the number of firewood that was being used by the School by half" Said Madam Juliet headteacher Buyaga Primary



## How Lake Victoria Basin Residents Benefited From the ACC-LVB Project



In Mubende District two 5,000m<sup>3</sup> capacity Valley tanks have been constructed in Rwobushumi and Kalungi Villages. “We no longer walk for long distance with our cattles to search for water thanks to this project.” Said Fred Ayibishibwe a pastoralist from Rwobushumi Village.

In the Republic of Burundi, thousands of residents in various villages were also among the beneficiaries. Mburikingichi Co-operative is among the beneficiaries of the project. Through the support from the project, they are able to grind maize, rice, millet and cassava after setting up a milling machine.

The group’s chairman Mr Rugenga Mazindejore said, “We are so happy with this project because we are able to generate our daily income that has greatly changed our lives”. LVBC Executive Secretary Dr Masinde Bwire said, “this project had an impact to the lives of many people within the Lake Victoria Basin and it is evident from their testimonies”.

Villagers of Kigarama Village (Gatore Sector), Republic of Rwanda can now have a peaceful sleep and clean water for domestic use. This is after the project supported installation of rooftop rainwater harvesting system to 195vulnerable households to address impacts related to rainfall deficit, recurrent drought episodes and unreliable seasonal and annual precipitation experienced in Gatore and Gahara Sectors of Kirehe District.

Additionally, the 195 vulnerable households also benefited from climate proofing of their houses through plastering with cement to reduce instances of destruction by erratic heavy rains that occurs in the area.

“Our houses were made of mud and whenever it rained water from the hill tops would cause flooding and destruction of properties, houses and farms downhill. During the rainy seasons, we could not sleep at peace for fear of our houses being flooded or collapsing on us.” Recalls Mr. Musabo Isaie one of the beneficiaries.

*Woman molding energy cooking stove in the Republic of Burundi.*



## WWF KENYA'S EFFORTS IN CONSERVING THE MARA ECOSYSTEM



*Members of the Mara Water Resource Users Association conducting river health assessment in River Amala in Bomet County*

The Mara River is crucial for East Africa's biodiversity and economic prosperity. Beyond supporting thousands of livelihoods with water for domestic and agricultural use, it also sustains the iconic Mara-Serengeti Ecosystem and the nearby growing urban areas.

The Mara Ecosystem begins at the source of the Mara River in the Enapuyapui Swamp within the Mau Forest Complex in Nakuru County. From here, water from the wetland joins streams that eventually become the Amala and Nyangores Rivers, flowing through Narok and Bomet Counties. These rivers converge to form the mighty Mara River, flowing southwards into the Maasai Mara National Reserve before crossing into Tanzania, and flowing through the Mara Region, that includes the Serengeti National Park. The River flows through the Mara wetland and finally empties into Lake Victoria at the Musoma Bay.

The Mara River is the only reliable source of freshwater

in the Mara-Serengeti ecosystem- the lifeline for an ecosystem that hosts some of the largest concentrations of large mammals on earth. It is less famous, but no less important for also being a hotspot for freshwater biodiversity.

According to the Freshwater Biodiversity Review conducted by WWF-Kenya and WWF-Tanzania in 2020, the Mara River is home to at least 473 freshwater species including at least 4 mammals, 88 waterbirds, 126 freshwater-associated birds, 4 reptiles, 20 amphibians, 40 fishes, 50 invertebrate species and 141 vascular plants.

As many species are not yet identified or described, especially invertebrates and fishes, there could be hundreds more. Ten of the freshwater species in the Mara river basin are threatened with extinction due to a combination of threats including habitat loss, water pollution, over-abstraction and drought,



the presence of invasive non-native species and over-exploitation.

Today however, the river faces numerous threats, including catchment degradation, pollution mostly due to unsustainable agriculture and discharge of effluent from urban centers, illegal/unlicensed/unregulated water abstractions, climate change and variability especially frequent drought, poor resource management among others.

WWF-Kenya, in collaboration with various stakeholders at regional, national and local levels has implemented numerous projects and programmes in the Mara basin over the past 20 years aimed at ensuring that the Mara River has adequate water of sufficient quality for both human and ecosystem needs. These projects have contributed towards improved natural resources management through;

- **Participatory forest management** in the headwaters of the Mara River (the Mau Forest Complex): WWF-Kenya has supported the Kenya Forest Service and Community Forest Associations (CFAs) to develop

and implement Participatory Forest Management Plans (PFMPs) as well as facilitate KFS and CFAs to sign Forest Management Agreements (FMAs) to guide co-management of forest resources. These plans cover the 35,308.44 ha Transmara Forest Reserve (that has 3 blocks) and the 36.947 ha Olpusimoru Forest Reserve. In addition, WWF-Kenya has also supported the implementation of PFMPs in Eastern Mau Forest Reserve (the 10,363.2 Kiptunga block) and the 4,781 ha Chepalungu Forest Reserve, resulting in the rehabilitation of over 400 hectares of degraded forest and improved management effectiveness.

- **Water resources management** across the entire river system. This has focused on reducing threats that have caused deteriorating water quality and quantity. Citizen Led River Health Assessment in particular has been a key initiative; led by the WRUAs themselves in determining the health of the River and recommending and advocating for action from stakeholder across the basin. A River Health Scorecard has been produced for the Financial Year 2023/2024.

*WWF Kenya has supported local communities in Mara Siana and Olusukut Conservancies on rangeland management. This has improved rangeland health, increased wildlife number and improved community livelihoods due to enhanced*







*Predator proof cattle boma is an intervention have has remarkably reduced human-wildlife conflicts*

- **Sustainable agricultural practices** in the cropland/arable zone of the mid and upper catchment of the Mara River basin. This has involved promoting soil and water conservation, protection of riparian areas, agroforestry, and improvement of value chains for sustainably produced commodities (such as avocados).
- **Sustainable rangeland management:** This has entailed working with landowners in the vast wildlife-rich rangelands of the lower catchment to ensure that the rangelands are healthy, with adequate pasture and secure water resources for wildlife and livestock. Critical wildlife corridors and dispersal areas have also been secured adjacent to the Maasai Mara National Reserve. WWF-Kenya has focused on 2 model conservancies to achieve this; Mara Siana Conservancy, and Oloisikut Conservancy (including the larger Transmara Conservation Area). This has led to improved rangeland health, increased wildlife numbers, as well as improved community livelihoods through tourism and livestock enterprises.

In order to enable the implementation of the above, WWF-Kenya has focused on improving the governance

of local natural resources management institutions. These institutions include Community Forest Associations (CFAs), Water Resources Users' Associations (WRUAs), and Community Wildlife Conservancies. These institutions are now able to better implement their mandates and are in a better position to achieve the goal of having communities effectively controlling decisions and receiving full benefits from natural resources, and exercising their responsibility of ensuring that key ecosystems and habitats are sustainably managed.

Over the past 20 years of implementing Integrated Water Resources Management in the Mara River basin, WWF-Kenya has received immense support from development partners including; the Norwegian Agency for Development Cooperation (NORAD), United States Agency for International Development (USAID), Federal Ministry of Economic Cooperation and Development - Germany (BMZ), HSBC Bank, the Embassy of the Kingdom of the Netherlands in Kenya, Swedish International Development Cooperation Agency (Sida), as well as support from the WWF Network (particularly WWF-UK, WWF-Germany and WWF Sweden).

## WWF Kenya's Efforts in Conserving the Mara Ecosystem

In addition, several implementing partners have worked closely with WWF-Kenya. These include the Lake Victoria Basin Commission (LVBC), Water Resources Authority (WRA), Kenya Forest Service (KFS), Kenya Wildlife Service (KWS), Wildlife Research and Training Institute (WRTI), Water Resources Users' Associations (WRUAs), Community Forest Associations (CFAs), County Governments of Narok, Bomet and Nakuru, and several wildlife conservancies including the umbrella Maasai Mara Wildlife Conservancies Association (MMWCA).



*A member of Mara water resource users association (WRUA) conducts river health assessment in River Amala. The WRUAs are trained by WWF-Kenya to conduct periodic assessment tests on their rivers to assess their water*

These collaborative efforts by WWF-Kenya and its partners are essential in ensuring the long-term sustainability and health of the Mara Ecosystem, benefiting both biodiversity and the communities that rely on it, as well as the economies of Kenya and Tanzania.



## "MAASAI MARA UNIVERSITY: A LEADER IN CONSERVATION AND ACADEMIC EXCELLENCE IN THE MARA-MAU ECOSYSTEM"



*Maasai Mara University, Narok County in the Republic of Kenya*

Maasai Mara University was chartered as a public university on February 11th, 2013. The University is driven by its vision to become an excellent university committed to academic excellence for sustainable development.

The University seeks to provide quality University education through innovative teaching, research and consultancy services for sustainable development. Its 2019-2024 Strategic Plan focuses on being: a center of Excellence in environmental resource management and conservation, increasing University visibility and community and outreach service,.

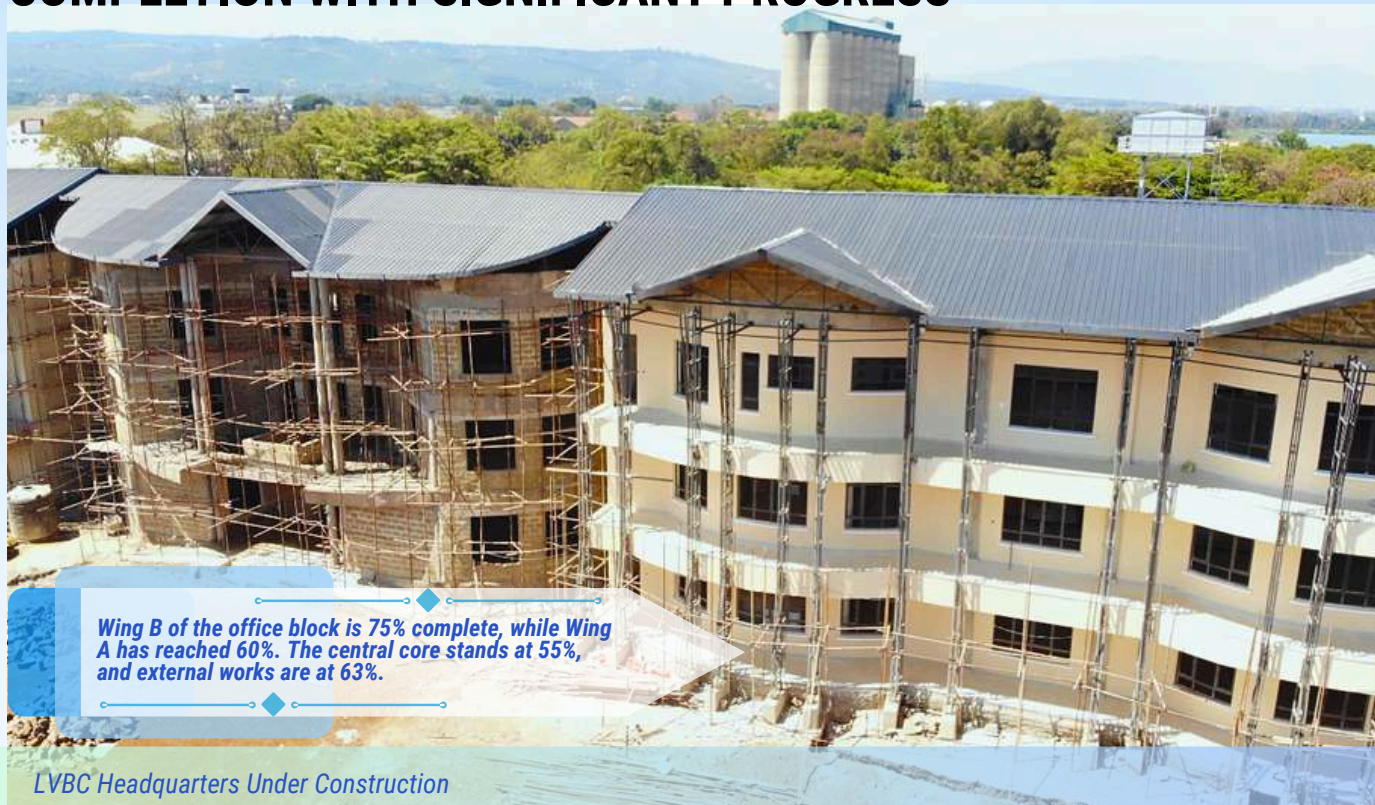
It also seeks to promote quality teaching, learning and training, fostering a culture of research, innovation and technology development, expanding institutional infrastructure, improving the productivity of the human resources, enhancing financial stability, and maintaining and enhancing ICT infrastructure.

Located in Narok County, the university operates seven Schools namely: Pure and Applied Sciences, School of Health Sciences, School of Tourism and Hospitality and School of Arts Humanities Social Sciences. and Creative Industries.

Others are School of Business and Economics, School of Education and School of Natural Resources, Environmental Studies, Geography and Planning. It has a student population of 15,000 and is affiliated to Inter University Council for East Africa and Association of Africa Universities.

Maasai Mara University has been making great strides in climate change action and mitigation. It does this as a beacon of hope and centre of excellence in Narok County and the greater Mara - Mau ecosystem.

## LAKE VICTORIA BASIN COMMISSION HEADQUARTERS NEARS COMPLETION WITH SIGNIFICANT PROGRESS



The construction of the state-of-the-art Lake Victoria Basin Commission Headquarters is making significant progress. As of the status report dated August 29, 2024, Wing B of the office block is 75% complete, while Wing A has reached 60%.

The central core stands at 55%, and external works are at 63%. The boundary wall construction is 80% complete, and work on the parking, driveways, and walkways are at 48%. Additionally, the generator, pump, and gate houses are 60% complete.

The second phase of construction commenced on August 7, 2023, following the official handover to a new contractor on July 25. This phase, which is fully funded by the East African Community Partner States, is projected to cost approximately USD \$2,560,718.68.

Dr. Masinde Bwire, the Executive Secretary of the Lake Victoria Basin Commission, reaffirmed his commitment

to ensuring the project is delivered on schedule.

He emphasized that both he and his team are fully dedicated to its completion, with the East African Partner States closely monitoring the project to ensure timely delivery.

The new headquarters, which is being supervised by the State Department of Public Works under Kenya's Ministry of Lands, Public Works, Housing, and Urban Development, will accommodate several departments responsible for managing various projects of the Lake Victoria Basin Commission.

The headquarters is being constructed on a 2.8-acre plot of land along the shores of Lake Victoria, donated by the Republic of Kenya government in 2016. Once completed, the headquarters will strengthen regional integration by enhancing the coordination of the commission's activities across the Great Lakes region.



## MARITIME RESCUE COORDINATION CENTRE IN TANZANIA NEARS HALFWAY MARK IN CONSTRUCTION



*The foundation of the guard house is 70% complete, while the boundary wall construction stands at 30%. The project, which officially commenced on December 13, 2023, is expected to cost USD 1,870,000.*

*MRCC under Construction*

The construction of the ultra modern Maritime Rescue Coordination Centre (MRCC) in Ilemela, Mwanza City, United Republic of Tanzania, is currently at 49% completion. The ground floor has been fully constructed, and work on the first floor is progressing well, with the columns and walls completed.

The foundation of the guard house is 70% complete, while the boundary wall construction stands at 30%. The project, which officially commenced on December 13, 2023, is expected to cost USD 1,870,000. It is being undertaken by a contractor procured by the Government of Uganda (GoU) and the United Republic of Tanzania (URT), through the Lake Victoria Basin Commission (LVBC), with support from the African Development Bank (AfDB).

LVBC Executive Secretary, Dr. Masinde Bwire, said, " the team is working tirelessly with utmost professionalism to ensure that it beats the deadline".

Upon completion, the rescue centre will significantly enhance maritime safety within the East African Community.



# Pictorial



LVBC staff pose for a photo during a staff retreat at the great rift valley lodge in Naivasha.



LVBC Executive Secretary Dr Masinde Bwire with Mrs. Eva Birnfeld, the Head of Division at KfW after signing the report of commitment of EUR 45 million towards the implementation of a new program within the Lake Victoria Basin.



Ministers from the Lake Victoria Basin display the signed report after the 22nd sectoral council of ministers for lake victoria basin meeting in Kisumu



World bank team pose for a photo at the LVBC headquarters.



# Pictorial

## 10<sup>TH</sup> WORLD WATER FORUM

WATER FOR SHARED PROSPERITY

10<sup>th</sup> World Water Forum  
Bali 2024



LVBC's Deputy executive secretary Eng Coletha Ruhanya makes her submission during the 10th world water forum in Bali, Indonesia.



Executive Secretary Dr Masinde Bwire receives a gift from 1st Deputy Prime Minister and Minister for EAC-Uganda Rt Hon Rebecca Kadaga during her visit at the LVBC headquarters.



Executive secretary Dr Masinde Bwire presents a gift to World Bank's Director for Regional Integration for Sub-Saharan Africa, the Middle East and North Africa Ms Boutheina Guermazi.



Participants at the regional review workshop for draft harmonized policy on water quality management held in Entebbe, in the Republic of Uganda.



## Pictorial (Ongoing Projects)



*LVBC Headquarter under construction*



*Ultra-modern Maritime Training Facility in Entebbe- Uganda*



*LVBC Headquarters' Interior of Wing A under construction*



*Maritime Rescue and Coordination Centre under construction in Ilimela, Mwanza in the United Republic of Tanzania.*





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# **EAST AFRICAN COMMUNITY LAKE VICTORIA BASIN COMMISSION**

**One People, One Destiny**

## **VISION**

**A prosperous population living in a healthy and sustainably managed environment providing equitable opportunities and benefits**

## **MISSION**

**To promote, facilitate and coordinate activities of different actors towards sustainable development and poverty eradication of the Lake Victoria Basin**

## **CORE VALUES**

**Maintain integrity; practice equity; be result-oriented; be responsive.**

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