NILE BASIN INITIATIVE
INITIATIVE DU BASSIN DU NIL

CORPORATE REPORT

2022 - 2025

Front cover: Switchyard of the Regional Rusumo Falls Hydroelectric Project, financed by the African Development Bank

CONTENTS

THE NILE BASIN

The Nile Basin, its Member States and sub-basins: Lake Victoria, Victoria Nile, Lake Albert, Bahr el Jebel, Bahr el Ghazal, Baro-Akobo-Sobat, White Nile, Blue Nile, Tekeze Atbara and Main Nile

13 NEW DEVELOPMENTS

i. **The Regional Rusumo Falls Hydroelectric Project began transmitting clean energy** to the national grids of Burundi, Rwanda and Tanzania. The three countries began trading power together, which enhanced regional integration and socio-economic development. The project directly benefits more than one million people in the three countries, and the annual reduction on carbon dioxide emissions is approximately 250,000 tonnes.

ii. **NBI established a robust basin monitoring system to advance Nile cooperation**, water security and climate resilience. As a first step, 43 hydrological monitoring stations and associated national and regional data centres were upgraded, enabling Member States to share near-real-time data on water quantity and quality. A Data Analytics Services (DAS) platform was initiated to expand leverage of NBI and global datasets in water resources analytics for informed decision and policy making.

iii. Leveraging the hydrological monitoring system, **NBI pioneered a water quality monitoring system in nine riparian countries to** strengthen water security and promote environmental sustainability. As part of this effort, NBI procured monitoring equipment, upgraded national laboratories, trained water quality professionals, and established a regional database, enhancing the Basin's capacity for water quality management. In addition, NBI launched a regional intervention to support Member States in addressing macro-plastic pollution.

iv. **Dam safety was institutionalised to strengthen water security, good governance and climate change** adaptation. NBI produced its first geo-referenced inventory of more than 800 dams, developed a regional database and plans for a virtual training centre, and supported three Member States to establish national dam safety units. Regulatory policies and frameworks were also developed.

v. In response to a directive from the first Nile Basin Heads of State and Government Summit (Uganda, 2017), **NBI and collaborating regional agencies developed the Nile River Basin Investment Programme**. The Programme is a regionally led flagship platform for identifying, prioritising, marketing, mobilising resources for and monitoring investment projects. The Programme aims to drive climate-resilient socio-economic development while reversing environmental degradation.

vi. **The Secretariat finalised NBI's draft Climate Change Policy (2025–2035)**, designed to strengthen regional action against one of the greatest challenges facing the Basin. The policy provides a shared framework for the 10 riparian countries to tackle climate risks, while unlocking opportunities for resilience and sustainable growth. A climate proofing manual that NBI adopted in 2023 for climate resilient water infrastructure investments was incorporated into the new draft policy framework.

vii. **NBI identified flood hotspots across the Basin and introduced web-based early warning systems** in both the Eastern Nile and the Nile Equatorial Lakes sub-basins. The **Nile Basin Seasonal Hydrological Outlook** that NBI develops quarterly in partnership with the Regional Expert Working Group on Hydrology, IGAD's Climate Prediction and Applications Centre (ICPAC) and the World Meteorological Organization, further supported Member States' efforts to plan and adapt to climate extremes, majorly flooding.

viii. **NBI contributed to the global body of knowledge on wetlands** through its publication of an Atlas and a policy document for South Sudan. In addition, a memorandum of understanding was signed with RAMCEA, the East African regional initiative under the Ramsar Convention on Wetlands.

ix. **NBI expanded its internship and young professionals' programme**, including female-only intakes. ENTRO, for instance, hosted 12 cohorts during the reporting period. The initiative is part of broader efforts to build Member States' capacity to sustain NBI's interventions and strengthen water management and investment planning across the Nile Basin.

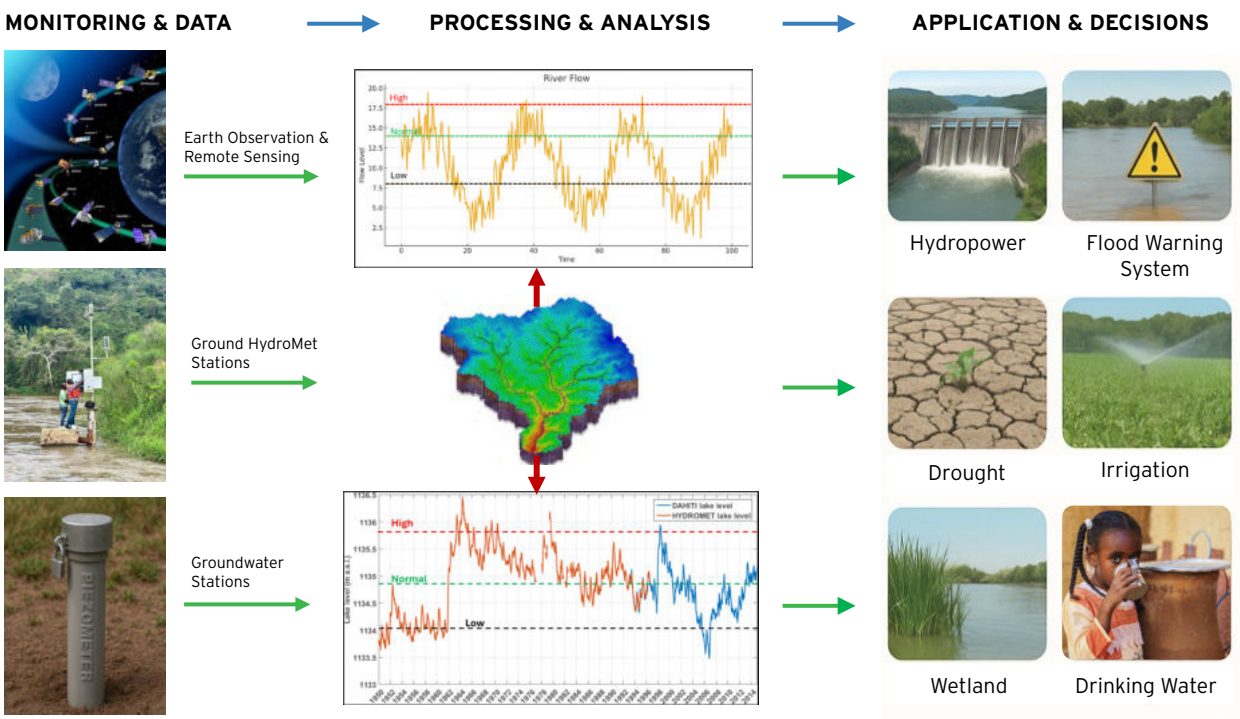
x. To strengthen the news media's capacity to report the Nile Basin, **NBI developed a journalists' sourcebook** – the first of its kind in the Nile Basin. This marked the second such publication by NBI during the reporting period, the other being a sourcebook on water quality. The latter was complemented by the development of eight e-learning courses to enhance knowledge and capacity building in the Nile Basin.

xi. **Ugandan Dr Florence Grace Adongo assumed office as the 11th Executive Director** of the Nile Basin Initiative on 1 November 2023, succeeding Eng. Sylvester Matemu of Tanzania. She became the second woman to lead the institution. In addition, Ethiopian national Dr Abraha Adugna took office as Deputy Executive Director and Head of the Basin-wide Programme on May 2, 2025.

xii. **NBI marked its 25th anniversary on February 22, 2024**. The milestone was commemorated during the regional Nile Day celebration held in Bujumbura, Burundi. During the 25 years, NBI mobilised US$650million to leverage investments worth US$6.5billion. This represents a ratio of 1:10.

xiii. **The Agreement on the Nile River Basin Cooperative Framework, popularly referred to as the Cooperative Framework Agreement (CFA), entered into force on October 13, 2024**. This paved the way for the establishment of the Nile River Basin Commission.

WHO WE ARE



The Nile Basin Initiative (NBI) is a regional intergovernmental partnership of ten countries in the Nile Basin. It seeks to cooperatively develop water resources of the Basin in a sustainable manner, leading to prosperity and peace. The Member States are Burundi, the Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda. Eritrea participates as an observer.

NBI is governed by a Shared Vision Objective:

<< to achieve sustainable socio-economic development through equitable utilization of, and benefit from, the shared/common Nile Basin water resources.>>

Our Core Functions

To achieve the Shared Vision Objective, NBI implements three core functions:

Facilitating Basin Cooperation

This function provides a common platform for countries to engage, consult and deliberate with each other and other Nile stakeholders on a regular basis. It aims to build broad political and civic support for transboundary water cooperation in the Basin.

Water Resource Management

This function provides critical services in building basin-wide technical competencies and capabilities and supporting science/knowledge-based decision making to monitor, protect and sustain the Nile water resources.

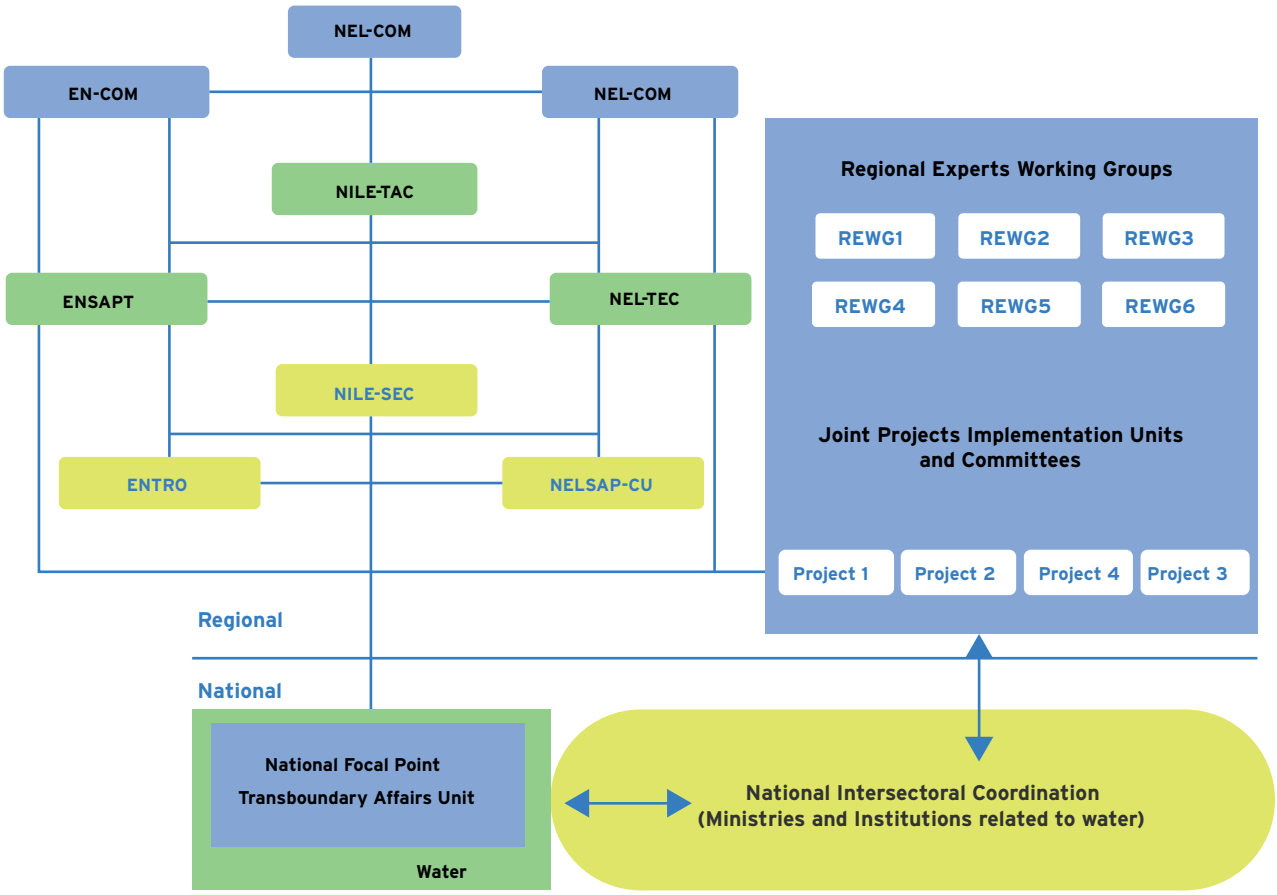
Water Resource Development

This function focuses on identifying and preparing climate resilient cooperative water resources investments that demonstrate to the Basin population the benefits accruing from cooperation.

The Nile Council of Ministers is NBI's highest governing body. It takes strategic decisions that guide operations of the institution.

Our Institutional Setup

NBI maintains a Secretariat based in Entebbe, Uganda. In addition, the riparian states established two Subsidiary Action Programmes to jointly identify and implement investment projects that deliver mutual benefits. These are the Eastern Nile Subsidiary Action Programme (ENSAP) in the Eastern Nile sub-basin, and the Nile Equatorial Lakes Subsidiary Action Programme (NELSAP) in the Nile Equatorial Lakes sub-basin. The Eastern Nile Technical Regional Office (ENTRO), located in Addis Ababa, Ethiopia, facilitates cooperative development in the Eastern Nile sub-basin, while the Nile Equatorial Lakes Subsidiary Action Programme Coordination Unit (NELSAP-CU), based in Kigali, Rwanda, plays a similar role for the Nile Equatorial Lakes sub-basin.



NELSAP	Nile Equatorial Lakes Subsidiary Action Programme
ENSAP	Eastern Nile Subsidiary Action Programme
Nile-COM	Nile Council of Ministers
EN-COM	Eastern Nile Council of Ministers
NEL-COM	Nile Equatorial Lakes Council of Ministers
Nile-TAC	Nile Technical Advisory Committee

ENSAPT	Eastern Nile Subsidiary Action Programme Team
NELTAC	Nile Equatorial Lakes Technical Advisory Committee
Nile-SEC	NBI Secretariat
ENTRO	Eastern Nile Technical Regional Office
NELSAP-CU	Nile Equatorial Lakes Subsidiary Action Programme Coordination Unit

OUR GOALS 2017 - 2027

GOAL 1: WATER SECURITY

MEETING RISING WATER DEMAND

Our actions: Increase storage capacity in the basin; support the improvement of water use efficiency in major water-use sectors; strengthen river basin monitoring and analysis of data from monitoring networks; promote conjunctive use of surface and ground water resources; and improve preparedness to flood and drought risks in the Nile sub-basins.

GOAL 2: ENERGY SECURITY

UNLOCKING AND OPTIMISING HYDROPOWER POTENTIAL

Our actions: Identify and prepare bankable investment projects in power infrastructure; in special cases such as the 80 MW Regional Rusumo Falls Hydro-electric Project, extend implementation support to the countries; identify and prepare bankable projects in power transmission, interconnection and trade with the aim of increasing availability, accessibility and stability of power, minimising losses and reducing costs.

GOAL 3: FOOD SECURITY

INCREASING AGRICULTURAL PRODUCTIVITY

Our actions: Undertake analytical work to introduce and promote an approach that examines and proposes options for addressing the water-food nexus in the Nile Basin; identify and prepare investment projects for enhancing agricultural irrigation and promoting fisheries and aquaculture production as well as promote trading of food across the basin.

GOAL 4: ENVIRONMENTAL SUSTAINABILITY

PROTECTING AND RESTORING DEGRADED ECOSYSTEMS

Our actions: Conduct diagnostic studies and prepare inventories to promote the wise use and sustainable management of wetlands of transboundary significance; Support environmental flow assessments for critical river and lake ecosystems; support Member States in establishing and operating a strategic network of water quality monitoring stations; identify and prepare projects for restoration of degraded watersheds and wetlands.

GOAL 5: CLIMATE CHANGE ADAPTATION

PREPARING FOR CLIMATE CHANGE IMPACTS

Our actions: Carry out climate vulnerability assessment for major water systems and water use sectors; generate scenarios of water availability under different climate change scenarios; prepare short-term to seasonal river flow forecasts; support harmonisation of climate change policies of the Member States; build capacity of NBI centres and Member States in areas of global climate finance.

GOAL 6: TRANSBOUNDARY WATER GOVERNANCE

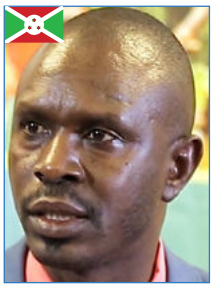
BRINGING PEOPLE TOGETHER TO BUILD A COMMON GROUND FOR WIN-WIN BENEFITS

Our actions: Build the capacity and efficient operation of NBI Centres; facilitate meetings and other activities of NBI's governance bodies; raise funds for Nile cooperation; build the capacity of Member States' transboundary water units; organise multi-stakeholder dialogue events to deliberate on issues of Nile cooperation; disseminate NBI information and knowledge products; Forge strategic partnerships with other regional inter-governmental institutions.

NILE COUNCIL OF MINISTERS

Hon. Sam Cheptoris

Minister of Water and Environment, Uganda
CHAIRPERSON, NILE COUNCIL OF MINISTERS



Eng. Prosper Dodiko

Former Minister of Environment, Agriculture and Livestock, Burundi

Dr. Eve Bazaiba Masudi

Former Minister of Environment, Sustainable Development, and New Climate Economy, D.R Congo

H.E. Prof. Dr. Hani Sewilam

Minister of Water Resources and Irrigation, Egypt

H.E. Dr. Eng. Habtamu Itefa

Minister of Water and Energy, Ethiopia

Hon. Eric Murithi Mugaa

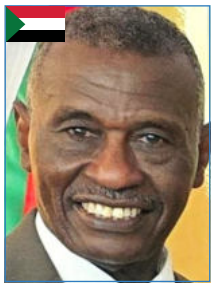
Cabinet Secretary for Water, Sanitation and Irrigation, Kenya

Dr. Valentine Uwamariya

Former Minister of Environment, Rwanda

Mr. Pal Mai Deng

Former Minister of Water Resources and Irrigation, South Sudan



Eng. Daw Albait Abdulrahman

Former Minister of Agriculture and Irrigation, Sudan

Hon. Jumaa Hamidu Aweso

Minister of Water, Tanzania

MESSAGE FROM CHAIRPERSON, NILE COUNCIL OF MINISTERS

My tenure as Chairperson of the Nile Council of Ministers, since October 2023, has been both rewarding and instructive, despite the persistent challenges facing Nile cooperation and the Nile Basin.

During the reporting period, Uganda had the honour of hosting the 7th Nile Basin Development Forum in Kampala. The event was officiated by H.E. The Vice President of Uganda, Rtd Maj. Jessica Alupo, representing H.E. the President of the Republic of Uganda, Yoweri Museveni. This important triennial forum strengthened linkages between policymakers and practitioners in the water resources management and development sector.

The Nile Basin Initiative convened two high-level policy dialogues – on February 23, 2024, in Bujumbura, Burundi, and February 21, 2025, in Addis Ababa, Ethiopia. These engagements reflected both goodwill and incremental progress in regional cooperation. They reaffirmed the enduring commitment of Member States and development partners to NBI. Looking ahead, open dialogue, fulfilment of financial obligations, and deepening collaboration will be essential to advancing sustainable development in the Nile Basin.

We have been undertaking strategic diplomatic engagements with key development partners, including the World Bank, whose support has been instrumental to the NBI over the past 26 years. These engagements aimed to demonstrate the institution's achievements, shape public perceptions of Nile cooperation, and ensure continued technical and financial support. A notable meeting took place between the Nile Council of Ministers and the World Bank Vice President, Ms Victoria Kwakwa in 2024, during which we provided an update on the state of Nile cooperation. Additionally, I held discussions with BMZ in Bonn, Germany, and the European Union in Brussels. I participated in the World Water Forum in Bali, Indonesia, and Stockholm World Water Week in 2024, further exploring opportunities for strategic partnerships to support Nile cooperation.

A historic milestone was reached on October 13, 2024, when the Agreement on the Nile River Basin Cooperative Framework/Cooperative Framework Agreement entered into force, triggering the automatic succession of NBI by the Nile River Basin Commission. I commend those countries that completed the ratification process, thereby paving the way for the Commission. However, it is regrettable that only six of the ten founding NBI Member States have transitioned at this stage. It is vital that we allow the necessary time and space for all Member States to advance together in pursuit of our Shared Vision Objective:

"To achieve sustainable socio-economic development through the equitable utilisation of, and benefit from, the common Nile Basin water resources".

In November 2024, the Nile Council of Ministers convened to develop a roadmap for the succession of the Nile River Basin Commission. In line with this roadmap, we have actively engaged with the non-ratifying countries to address

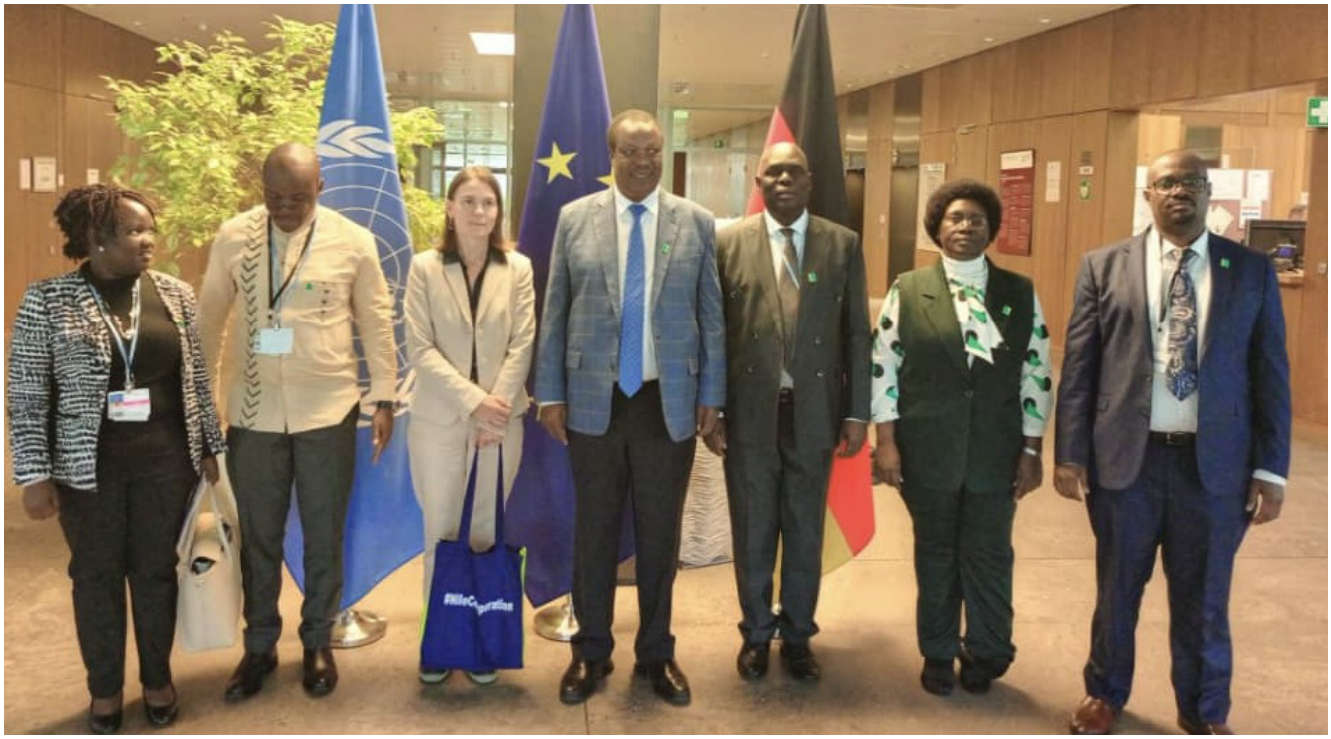
outstanding concerns. While these discussions have yet to yield the desired outcomes, we remain committed to inclusive dialogue. I will continue to lead diplomatic efforts aimed at achieving consensus throughout my tenure.

Inadequate funding remains the NBI's greatest challenge, now and into the foreseeable future. Sustainable financing is critical not only for advancing the CFA and the Nile River Basin Commission transition, but also for maintaining the operations of the Secretariat. I extend my sincere appreciation to those countries that have honoured their financial commitments.

Establishing the Nile River Basin Commission requires collective effort at both national and regional levels. It is only through such cooperation that the full benefits of NBI's programmes and projects can be realised. To our development partners, I appeal: do not disengage at this pivotal moment. The Nile Basin continues to face significant challenges including water scarcity driven by population growth, pollution, flooding, limited access to electricity, underdeveloped irrigation infrastructure, and widespread environmental degradation. I am grateful for your steadfast financial and technical support to date. I also extend my appreciation to all NBI's strategic partners for your valuable collaboration.

I thank my fellow Ministers on the Nile Council of Ministers for their continued cooperation and commitment. I also offer my sincere thanks to the experts of the Nile Technical Advisory Committee (TAC), whose diligence and technical capacity are central to our continued progress. Furthermore, I commend all staff of the NBI and express appreciation for the achievements presented in this Corporate Report.

Hon. Sam Cheptoris
Minister of Water and Environment, Republic of Uganda



Hon. Cheptoris during a mission to Bonn, Germany, undertaken to strengthen partnerships for Nile cooperation.

MESSAGE FROM EXECUTIVE DIRECTOR

Dear Reader,

It is my honour to present to you our latest Corporate Report, produced as part of NBI's commitment to accountability and its core values, which include transparency and innovation.

The report outlines NBI's progress over the past three financial years towards the six goals of our 10-year Strategy (2017-2027). This Strategy was developed with guidance from the Nile Technical Advisory Committee (TAC) and approved by the Nile-Council of Ministers (COM) in 2017. These two highest Governance bodies of the NBI – the TAC and COM – continue to provide the strategic direction that has sustained NBI.

It has been a privilege for me to be part of NBI's evolution, to witness the shared benefits delivered to Member States, and to reinforce NBI's relevance not only to its Shared Vision Objective, but to the African Union's Water Vision 2025 and the Sustainable Development Goals (SDGs).

In March 2017, when men fitted their helmets and set out to construct the Rusumo Falls hydroelectric plant, NBI aspired to facilitate Member States in cooperating to access energy in one of the least electrified regions of the world. Yet limited access to electricity is just one of many challenges facing Nile Basin countries. The Basin has also long suffered from scarce hydrological data, unreliable river and lake information, and limited knowledge on water quality, floods and droughts, as well as key shared assets such as aquifers, cascade dams, and wetlands. Additionally, information systems and policy frameworks have been inadequate, and young professionals, journalists, and water officials have had few learning opportunities. These gaps continue to hinder climate-resilient investments, optimal water management, and effective transboundary water governance.

The reporting period, however, has seen tangible progress. A key highlight was that NBI facilitated the completion of the Rusumo project, jointly owned and financed by Burundi, Rwanda and Tanzania and directly aligned with the African Union's aspirations to light up the continent.

Today, the Nile Basin has a robust mechanism in place for modelling and monitoring water quantity, quality, use and demand. NBI is generating high volumes of real-time data, which it uses to produce seasonal hydrological forecasts and other updates that inform water planners and decision-makers. Flood and water pollution hotspots have been mapped, and modern flood early warning systems are operational, strengthening climate resilience across the Basin.

NBI's integrated knowledge platform has been reinforced with new content: geo-referenced databases on groundwater and 800 water storage dams; maps and e-learning courses on water quality in the Nile Basin; and a wetlands atlas. Peer-to-peer learning, internships, and media training are now fully embedded in the basin-wide programme and further enhanced through gender mainstreaming.

NBI's Goal 6 – transboundary water governance – delivered the most significant reward of the reporting period: a silver jubilee and a groundbreaking treaty. NBI's 25th anniversary marked our collective resilience and unwavering commitment to the vision established by the 10 Member States on February 22, 1999. The completion of the CFA, on the other hand, represents hope for a future in which every Nile Basin country can invest and prosper without depriving others of the same opportunity. Crucially, all riparian states will now have a voice in the management of Nile's resources.

NBI's strong leadership and Governance has been core to every achievement in this Report. In addition, our development partners have played a vital role, collaborating with NBI to shape projects and generate "water wisdom". Strategic partners, including the Nile Basin Discourse, as well as NBI's dedicated staff in Entebbe, Kigali and Addis Ababa, have remained steadfast pillars of support – as have the founders and negotiators whose work culminated in the completion of the CFA. I am grateful to all who have contributed to NBI's story.

The achievements captured in this Corporate Report demonstrate the even greater benefits NBI will deliver for Member States once the transition to the Commission is complete. However, our ability to address the immense shared challenges of the Nile Basin hinges on sustainable financing.

Dr Florence Grace Adongo also served as President of the African Network of River Basin Organisations (ANBO)

During the reporting period, NBI welcomed Egypt back to its technical meetings after 15 years of the country freezing its participation. This marks a full representation of all 10 countries that founded the Nile Basin Initiative.

MESSAGE FROM ENCOM CHAIRPERSON

The Eastern Nile Technical Regional Office (ENTRO), in its pursuit of sustainable water resources development and regional cooperation, is dedicated to fostering collaboration among Member States, and stands as a shining example of such dedication, operating as a vital centre under the Nile Basin Initiative. ENTRO's mandate is clear: to champion and implement the Eastern Nile Subsidiary Action Programme (ENSAP), which is designed to promote and solidify cooperation among Eastern Nile nations in the sustainable development and management of our shared transboundary water resources.

Despite the inherent complexities of the region, ENTRO has made commendable progress in establishing robust regulatory frameworks and building specialised capacities. Its strategic priorities – including risk management, information sharing, professional development, resource assessment, safeguard implementation, stakeholder engagement, media empowerment, and knowledge dissemination – directly contribute to strengthening regional resilience and collective advancement.

During the reporting period, ENTRO achieved significant milestones. These include the development of a basin-wide regulatory framework and implementation strategy, progress on the dam safety training centre plan, proactive engagement in flood and drought risk management, training programmes for young professionals across the Eastern Nile, irrigation performance assessments, the integration of environmental and social safeguards, the strengthening of stakeholder platforms, impactful media training initiatives, and the production of valuable knowledge resources. These achievements underscore ENTRO's effectiveness and dedication.

Looking ahead, we are confident that ENTRO will continue to evolve sustainably, further consolidating its role as a strong regional institution. With renewed commitment to its mandate, ENTRO is well-positioned to adapt to the dynamic challenges of its operating environment and to promote cooperation across the Eastern Nile region.

The tangible progress achieved through its integrated management programme, underpinned by strong and enduring partnerships, is delivering demonstrable benefits across our region. In alignment with the Nile Basin Initiative's long-term strategic vision, ENTRO is concentrating its efforts on bolstering water, energy, and food security, enhancing environmental resilience, strengthening its adaptive capacity to climate change, and reinforcing cooperative water governance. These are critical priorities that demand continued attention and support.

I extend my appreciation to ENTRO for its steadfast dedication to its mission. Its work is instrumental in securing a future of shared prosperity and sustainable development for the Eastern Nile region. I, as Chair of the Eastern Nile Council of Ministers, remain committed to supporting ENTRO in its vital endeavours.

H.E. Dr. Eng. Habtamu Itefa
Minister for Water and Energy, Ethiopia

MESSAGE FROM ACTING EXECUTIVE DIRECTOR, ENTRO

Dear Reader,

The complex socio-economic and environmental challenges facing Nile Basin countries cannot be addressed without effective cooperation in the development and management of our common Nile resources. ENTRO has successfully sustained collaboration among the Eastern Nile countries – Ethiopia, South Sudan, and Sudan – through implementation of the jointly agreed Eastern Nile Subsidiary Action Programme.

During the reporting period, ENTRO continued implementing its third strategic plan (2022-2027), aligned with the NBI's 10-year basin-wide strategy (2017-2027). We also advanced key development initiatives, including the World Bank's Nile Cooperation for Climate Resilience and Regional Climate Resilience Programme for Eastern and Southern Africa projects, as well as the GIZ-funded support to Transboundary Water Cooperation in the Nile Basin project.

ENTRO made considerable progress across key thematic areas within the Nile Basin. In dam safety, basin-wide reference guidelines were finalised and endorsed, and foundational steps were taken towards establishing a dedicated dam safety training centre. The Nile Basin Water-Smart Irrigation Study was completed and validated, resulting in practical guidelines aimed at enhancing food security. In flood and drought management, the Eastern Nile Flood Forecasting and Early Warning System (FFEWS) was expanded to cover more catchments and strengthened for climate resilience, while the Nile Drought Early Warning System (DEWS) dashboard was fully developed to support proactive decision-making.

Further achievements include the generation of good practices in watershed management through a regional cooperative assessment, and the preparation of investment-ready national projects. Advances in digital systems included the implementation of an electronic archives system and enhanced reporting tools. Earth observation data was made more accessible for disaster risk reduction and water resource planning across Eastern Nile. Capacity development was bolstered through an expanded Young Professionals programme, while stakeholder engagement efforts reached more than 750 individuals (24 percent females) through workshops, consultations, and technical training.

A major constraint during the reporting period was the delay in Member State contributions, which significantly affected ENTRO's ability to meet operational and administrative costs. We remain hopeful that, with continued support from Eastern Nile governance structures, the situation will improve. Once funding stabilises, we aim to complete outstanding activities and initiate new programmes.

I extend my sincere appreciation to our governance bodies for their strategic guidance and to our development partners for their ongoing financial and technical support.

Mr Teshome Atnafie

MESSAGE FROM REGIONAL COORDINATOR, NELSAP-CU

Dear Esteemed Stakeholders,

Over the past three years of my tenure as the third Regional Coordinator, NELSAP-CU has made significant strides in its mission to contribute to poverty eradication, economic growth, and reversing environmental degradation in the Nile Equatorial Lakes region. By supporting national and regional initiatives of a transboundary nature, this NBI centre has been focusing on two key investment areas: water resources management and development, and power development and trade.

Among NELSAP-CU's most notable accomplishments during this period are the cooperative projects it has prepared and/or implemented. One such achievement is the 80MW Regional Rusumo Falls Hydroelectric Project, implemented under the coordination of NELSAP-CU. Since December 2023, this project has been generating and supplying power to the national grids of Burundi, Rwanda, and Tanzania.

Other projects that NELSAP-CU coordinated include:

- **The Nile Cooperation for Climate Resilience Project (NCCR) and Regional Climate Resilience Programme (RCRP 1) for Eastern and Southern Africa, both funded by the World Bank.**
- **The Ruvyironza Multipurpose Water Resources Development and Uganda-South Sudan 400kV Power Interconnection projects.**
- **The multi-faceted DYNOBA project (Dynamizing Support to African Transboundary Basin Organizations for Improved Water Resources Management in a Context of Climate Change).**
- **The Uganda-DRC Power Interconnection project.**

These projects are expected to drive industrialization, enhance the delivery of clean water, health services, and education, and improve the quality of life for the people in the region through access to more affordable electricity.

We remain deeply grateful to our partners – including the World Bank, the African Development Bank, the European Union, and the governments of Canada, France, Germany (GIZ), Japan, the Netherlands, Norway, and Sweden – for believing in the socio-economic potential of the Nile Equatorial Lakes region and recognizing the critical importance of cooperation around the Nile River.

Dr Isaac Alukwe

MESSAGE FROM NELCOM CHAIR

Dear Reader,

Since its establishment in 1999, NELSAP-CU has gained regional experience, strengthened its capacity and expanded its regional scope of mandates. In addition, it has emerged as a reliable regional institution for facilitating key in-country and regional investment projects in the Nile Equatorial Lakes region and beyond. Its key institutional strength lies in project pre-investment feasibility studies, coordination support for regional projects, regional strategic analysis, environmental aspects, social economic development, and stakeholder engagement.

To achieve its mission, NELSAP-CU oversees the implementation of jointly agreed projects and promotes cooperative inter-country and in-country investments related to the common use of the Nile Basin's water resources. Key among these investments are power development and trade.

The Nile Equatorial Lakes is a region of immense potential even with its shared challenges, not least climate extremes and low access to energy. Cooperation, collective action and sustainable approaches are essential for unlocking this potential and creating resilient energy networks. Moreover, the three factors can ensure equity, environmental stewardship and long-term stability.

To our development partners, thank you for your active engagement. Your financial contributions have advanced our projects on water, wetlands, climate resilience, and energy interconnection. Together, we are creating a foundation for sustainable development and regional integration.

Going forward, let us explore how we can build trust and align our priorities to benefit citizens across the Nile Basin equally.

Dr. Valentine Uwamariya
Former Minister of Environment, Rwanda

INTRODUCTION

This Corporate Report covers the period from July 2022 to June 2025. It highlights key achievements that, through NBI, have strengthened the Nile Basin's capacity to effectively manage its transboundary water resources through cooperation.

The report outlines the institutional health at the same time progress made towards achieving the six goals of NBI's 10-Year Strategy. Strategy (2017–2027), as well as corresponding strategic plans of its two investment arms: ENSAP, managed through ENTRO in Addis Ababa, Ethiopia, and NELSAP, managed through a Coordination Unit based in Kigali, Rwanda.

Structured goal by goal, the Report shows how NBI's three centres collectively delivered benefits to Member States while remaining relevant to regional, continental and global development agendas. The Report demonstrates how NBI promoted an integrative/nexus/nature-based approach to achieve holistic and sustainable management of the Nile's resources.

Goal 1, Water Security, illustrates NBI breakthroughs including knowledge generation, and the establishment of a fully functional regional hydrological and water quality monitoring network. Other important developments were in dam safety, the integrated use of ground and surface water, earth observation, the Integrated Basin Management Plan and the Nile River Basin Investment Programme.

Goal 2, Energy Security, focuses on NBI achievements through NELSAP-CU's power and trade programme, including its interconnection projects between Uganda and South Sudan, and Uganda and the DR Congo. The Corporate Report shows NBI's alignment with SDG 7 and continental ambitions including Mission 300, which aims to supply electricity to 300 million people in Africa by 2030.

Goal 3, Food Security, highlights NBI's progress on advancing smart irrigation. The "Water-Smart Irrigation Study in the Nile Basin" was completed along with practical guidelines and a dashboard.

Goal 4, Environmental Sustainability, shows NBI's notable progress on generating knowledge and recommendations, as well as advocacy around wetlands and peatlands. In addition, NBI supported Member States in positioning wetlands within nationally determined contributions (NDCs) and mobilizing resources for climate adaptation. This section of the Corporate Report also covers the baseline study and draft Action Plan that NBI completed for Member States to strengthen macro-plastic pollution monitoring basin-wide.

Goal 5, Climate Chage Adaptation, shows NBI's new evidence-based approach to strengthening flood and drought management. NBI identified flood-prone areas across the Basin, developed early warning systems, issued targeted alerts to high-risk areas and provided recommendations for flood risk management. Both ENTRO and NELSAP-CU advanced NBI's early warning capacities.

Goal 6, Transboundary Water Governance, highlights outcomes from the trust and favourable environment that NBI created over the last two and a half decades, not least the finalisation of the first-ever treaty and cooperative framework among Member States of the Nile Basin. The Corporate Report also touches on NBI's results under capacity building, resource mobilisation, science-based discourse among Member States, institutional strengthening and finalization of the draft Gender Mainstreaming Policy and Implementation Strategy.

The Financial section presents an overview of revenue and expenditure across the NBI centres for the fiscal years 2022/2023 to 2024/2025 detailing sources and types of funding. Corporate Services, on the other hand, showcases efforts NBI made to engage staff, strengthen accountability of systems, and improve office facilities.

The report highlights the way forward, including NBI plans for establishing a Centre of Excellence and the Nile River Basin Commission, while strengthening strategic partnerships for advancing action on the ground.

KEY ACHIEVEMENTS IN NUMBERS

3,360
People engaged directly

75
Interns and young professionals trained through NBI

1500+
Knowledge products disseminated

6
Online courses administered

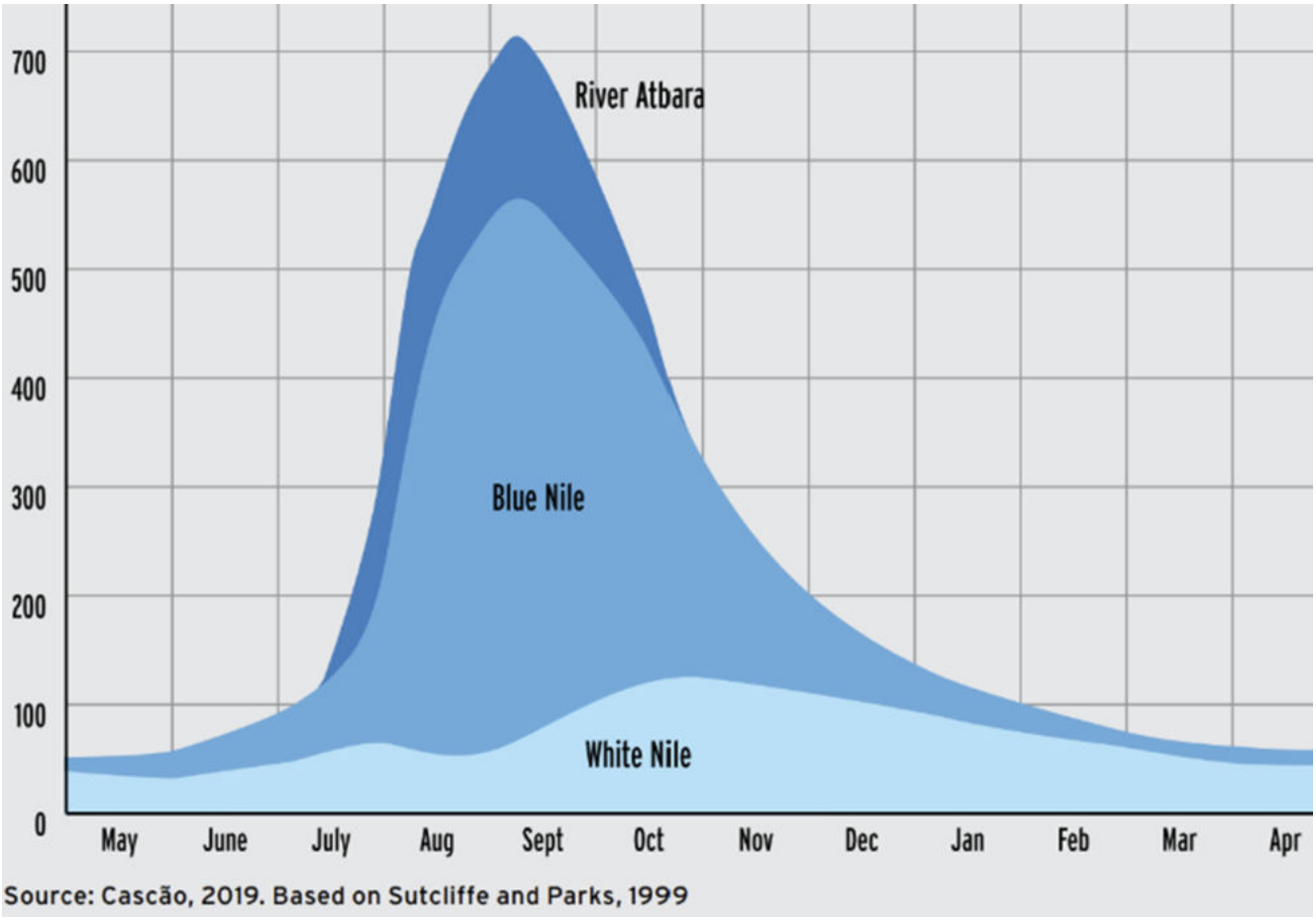
18
Policies and strategies approved

8
Journalist training events held

47
NBI investment projects at feasibility and/or detailed design stages

59
Nile River Investment Programme projects

STATUS OF IMPLEMENTATION OF NBI's 10-YEAR STRATEGY (2017-2027)



Annual Flow Pattern of the Nile

GOAL 1: WATER SECURITY

Water resources in the Nile Basin are unevenly distributed and characterised by highly seasonal river flows. As a result, many communities lack reliable access to sufficient water when and where it is most needed. In response, and in support of SDGs 6 (Clean Water and Sanitation) and 13 (Climate Action), NBI works to increase the availability, sustainable use and cooperative management of transboundary water resources across the Basin. The following highlights reflect progress achieved during the reporting period:

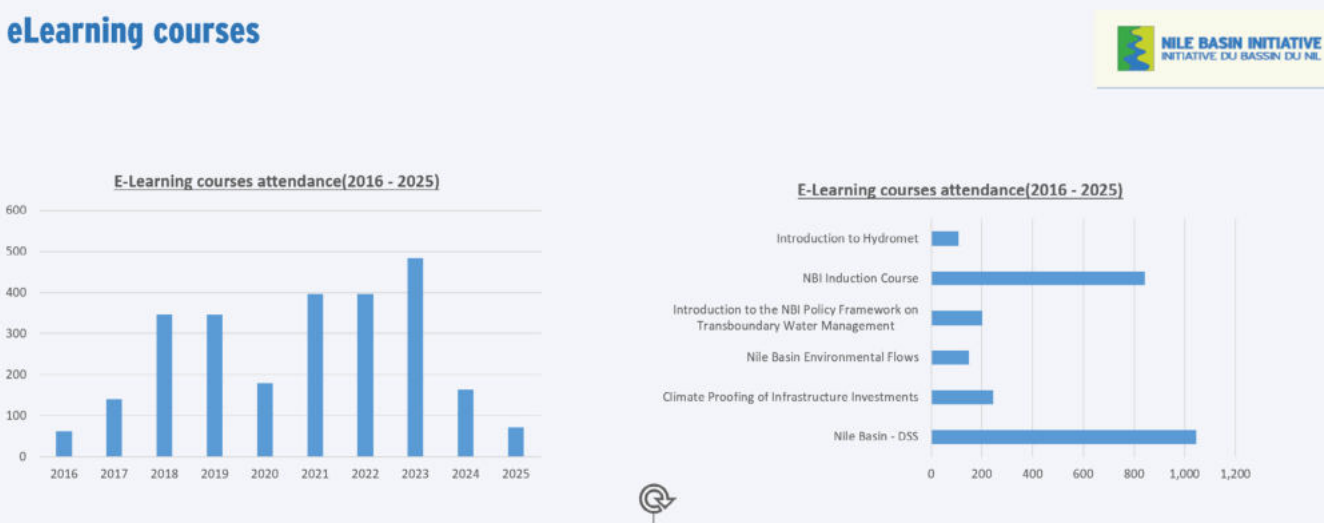
A SHARED KNOWLEDGE BASE AND ANALYTICAL TOOLS

The Nile Basin Initiative maintained and continuously updated the Integrated Knowledge Portal (IKP), providing users with access to its knowledge resources in a unified and user-friendly format. The platform hosts a wide range of integrated tools, including an e-library, policy portal, online courses, flood and drought early warning systems, databases, and analytical tools such as the Nile Basin Data and Analytical Services (NB-DAS) and the web-based Nile Basin Decision Support System (NB-DSS).

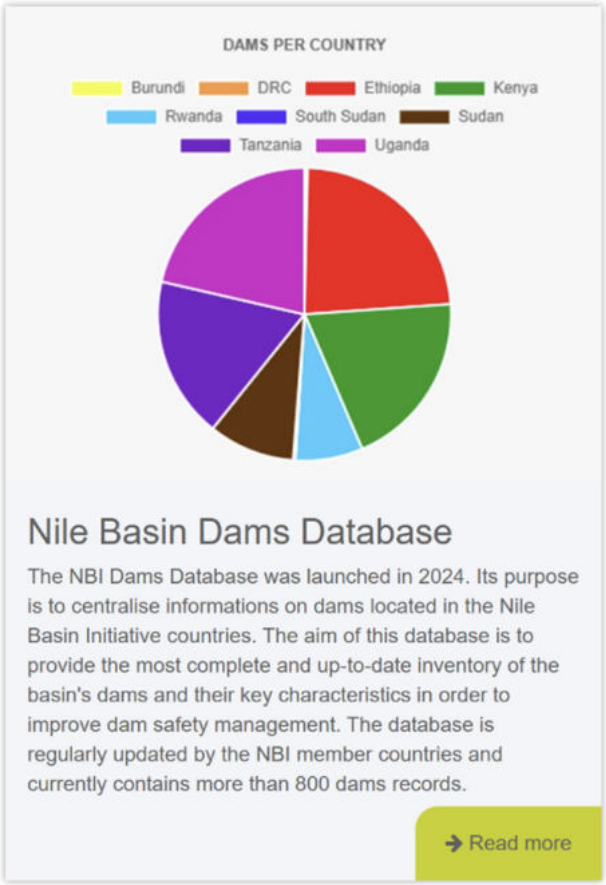
The system offers a scalable and flexible framework that supports the development of new components and integration with both internal and external information systems. It includes a help desk.

New Databases and Online Courses

During the reporting period, NBI launched three new geo-referenced databases on groundwater, dams, and water quality, the latter including risk maps, alongside NBI's investments portfolio dashboard, the Atlas of Wetlands of Transboundary Significance, and awareness-raising magazines on groundwater. In addition, the infrastructure database was updated. Furthermore, in 2022/2023, NBI introduced four new e-learning courses, bringing the number of its online courses to six: The NBI Induction Course, the Nile Basin Decision Support System, Environmental Flows, Introduction to Hydromet, Climate Proofing of Infrastructure Investments (CSI), and the Introduction to the NBI Policy Framework on Transboundary Water Management.



To expand its audience, NBI intensified content marketing on its social media channels.



Further regular updates issued by NBI included:

i. River flow forecasting
ii. Regional seasonal hydrological outlooks and advisories
iii. Earth observation bulletins
iv. Near real-time Eastern Nile flood early warning system
v. Nile Basin flash flood early warning system (see Goal 5)

Strengthening Dissemination and Capacity

In 2024/2025, communications and knowledge management staff from all three NBI centres received training in editing and publishing content on the IKP, enhancing the quality and consistency of outputs.

10,000 Knowledge Products

In total, more than 10,000 knowledge products were available on the IKP during the reporting period, including a climate change database. In addition, NBI continued to distribute key publications in print, including the Nile Basin Water Resources Atlas and the State of the River Nile Basin Report, which remain widely used by policymakers, researchers, and students across the region.

Expanding Adoption of the Decision Support System

The Decision Support System serves as a shared platform for communication, data management, and advanced analysis of complex water systems. It facilitates knowledge exchange, enables simulation of river system behaviour, and supports planning and evaluation of alternative development strategies.

In 2023/2024, use of the Decision Support System grew significantly:

i. Fifty new online licence users joined the platform, reflecting increased uptake of digital licensing
ii. Interns at ENTRO received hands-on training.
iii. NBI issued new licences to users across multiple Member States

Capacity Gaps and the Need for Investment

Despite its value, wider adoption of the Decision Support System remains constrained by limited training opportunities. The tool is highly customised and requires dedicated instruction before it can be effectively used. However, funding for such capacity-building remains scarce.

More broadly, the application of scientific knowledge in decision-making across the Basin remains limited. Strengthening institutional and technical capacity – including expanded Decision Support System training – is essential for realising the full potential of the system and supporting cooperative, evidence-based water management across the Nile Basin.

ENHANCED WATER STORAGE CAPACITY FOR IMPROVED WATER SUPPLY FOR MULTIPLE PURPOSES

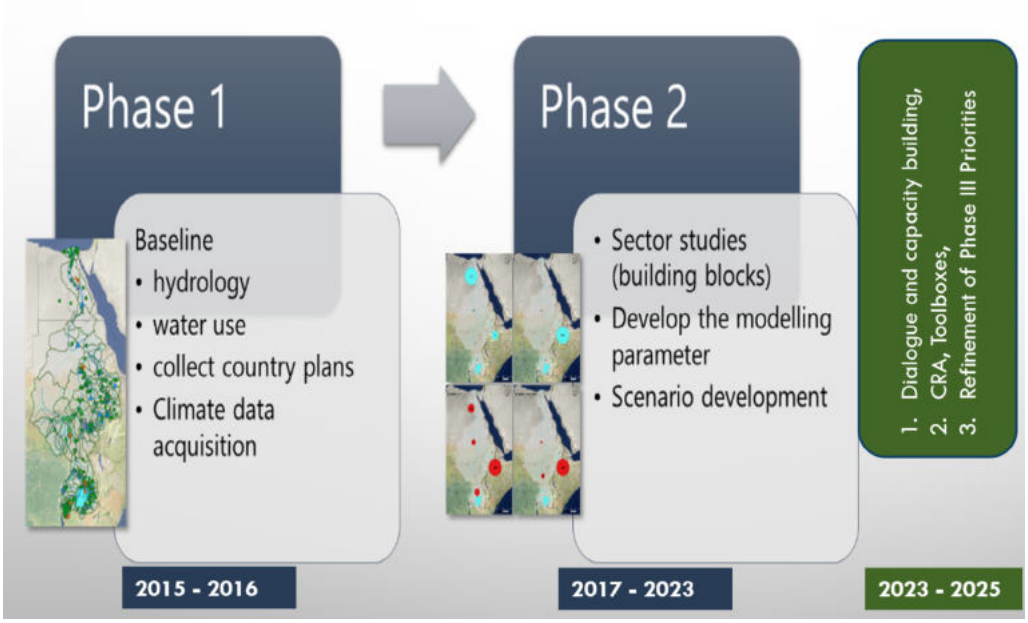
The Strategic Water Resource Analysis (SWRA)

The SWRA is one of NBI's most important knowledge products. It informs riparian dialogue on current and emerging challenges of transboundary water resources management at basin and sub-basin levels through scenario and trade-off analyses. The strategic options identified by Member States inform the Nile Basin countries in the pursuit of development projects on options that put less stress on the water resources system and have more mutual benefits.

The reporting period coincided with the second phase of the SWRA in which experts i) quantified water demands, availability and the likely deficit in the medium and long term, (ii) quantified the contributions of various options identified by Member States towards alleviating the likely imbalance between water availability and demand, and (iii) identified options with high returns in terms of filling the gap between water demand and supply. NBI also undertook a climate risk assessment to ensure that the options selected were robust.

A modelling toolbox for strategic analyses was compiled. Relatedly, 18 professionals (two from each active Nile Basin country) were trained to strengthen capacity for the riparian countries in using SWRA and other modelling approaches.

Strategic Water Resources Analysis



CRA = Climate Risk Assessment

However, NBI found that even though the appropriate tools are in place, the Nile Basin countries are yet to agree on a standard modelling framework for policy development. This results in delays in arriving at conclusions as professionals have different ideas on the most appropriate modelling approaches, resolutions and processes.

Updating NBI's Water Baseline and Database

Prior to the reporting period, while developing the Nile Basin Decision Support System, the NBI Secretariat compiled data on existing water infrastructure such as dams, hydropower stations, lakes, wetlands, and irrigation schemes, capturing key characteristics including reservoir capacity, crop types, and cropping patterns.

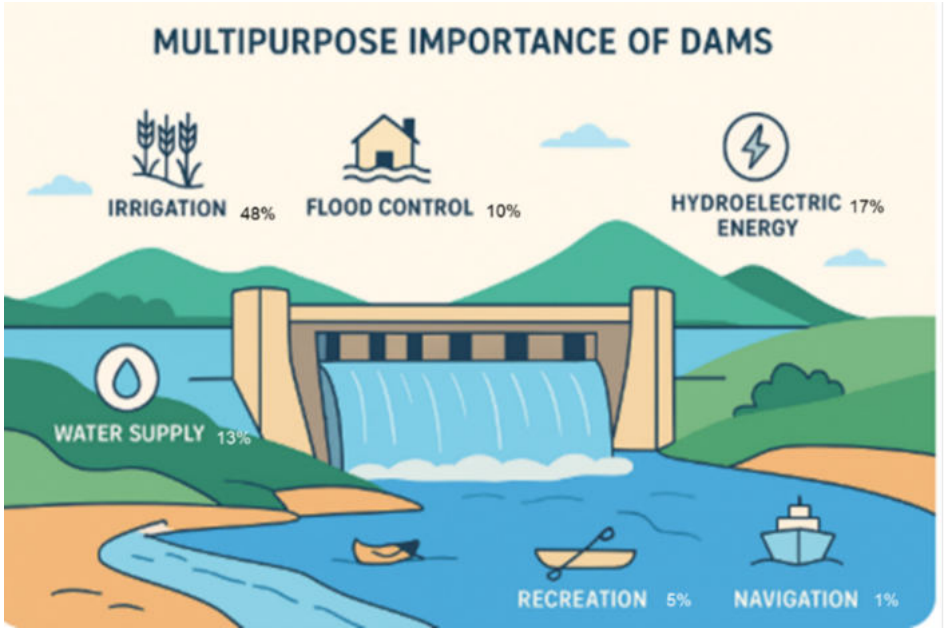
Between 2022/2023 and 2023/2024, NBI completed the infrastructure database and populated it with this information. NBI then progressed to maintaining the database, integrating it into its Integrated Knowledge Portal, and promoting its use across Member States. Data was regularly updated in close collaboration with ENTRO, NELSAP-CU, and Regional Economic Communities, including the Intergovernmental Authority on Development (IGAD), the Common Market for Eastern and Southern Africa (COMESA) through the Eastern Africa Power Pool, and the East African Community through the Lake Victoria Basin Commission. The final model description was shared with technical modelers following the Integrated Knowledge Portal integration in 2023/2024.

Using the database, NBI and the regional modelling working group – comprising two scientists from each Member State, along with representatives from LVBC and the three NBI centres – developed a basin-wide model using TALSIM software. NBI conducted capacity-building sessions for the working group to strengthen their skills in using the database for planning and analysis.

The water infrastructure database has become a critical resource for water modelling, policy analysis, and informed transboundary dialogue across the Nile Basin.

ENHANCED COORDINATED MANAGEMENT OF DAMS

The Nile Basin is home to 828 interdependent dams, which play a critical role in regulating river flows. However, dam safety risks are increasing due to uncertainties and hazards on the dams. Effective and cooperative management of these assets is essential to ensuring water security, strengthening resilience, and maximising shared benefits. During the reporting period, the NBI made notable progress in supporting Member States to enhance dam safety, strengthen institutional capacity, and improve coordinated regulation. Below are highlights:



A Tool for South Sudan and Uganda

NBI collaborated with the Uganda Electricity Generation Company Ltd to enhance a tool developed by the latter to optimise the operation of cascade dams along the Nile in Uganda. Recognising that the tool was built on the same technology as NBI's own Decision Support System, NBI finalised plans to extend this technology to Bor town in South Sudan in 2025/2026 to generate transboundary benefits.

Once completed, dam operators in Uganda will be able to determine the optimal volume of water to release. Using this information, they will be able to inform counterparts in South Sudan about expected water levels at different times of the year once the tool is implemented in Bor. The project will include capacity building for technicians in both countries to ensure effective use of the system.

Establishing a Basin-wide Framework for Dam Safety

In 2022/2023, NBI undertook a comprehensive regulatory review and institutional assessment of dam management practices across the Basin. Working with national dam safety specialists, NBI developed a reference framework, implementation strategy,

NBI's dams database contains 828 dams within the Nile Basin.

and guidelines for coordinated dam safety planning, regulation, and monitoring. These instruments were finalised in 2024 and later approved by the Eastern Nile Council of Ministers, providing Member States with a harmonised toolset to strengthen national oversight while aligning with basin-wide standards.

Building Regional Capacity through a Dedicated Training Centre

To institutionalise capacity development, NBI launched the process of establishing a Dam Safety Training Centre in 2022/2023. Following a regional training needs assessment, NBI developed an institutional framework and an engagement structure to guide its operation. Both were finalised in 2024. By year-end, a draft training module and curriculum were under review.

The centre targets technical personnel in Ethiopia, South Sudan, and Sudan, aiming to enhance professional competencies and improve water infrastructure safety across the Eastern Nile.

First Geo-referenced Inventory and Dam Safety Database

NBI conducted a Basin-wide survey to produce the first geo-referenced inventory of over 800 dams. Using this data, it developed the Nile Basin Dams Database in 2024 – now the most comprehensive and up-to-date source of dam asset information in the region. This database serves national regulators and policymakers as a foundational tool for informed decision-making and improved asset management.

Risk-based Framework for Prioritising Dam Safety Interventions

In 2024, NBI developed a tiered dam safety management framework, including a classification system based on dam size and hazard potential, and a risk index. This allows countries to systematically prioritise dams for further assessment, monitoring, or rehabilitation, based on their risk profile – enabling more effective allocation of resources and targeted interventions.

Establishing and Strengthening of National Dam Safety Units

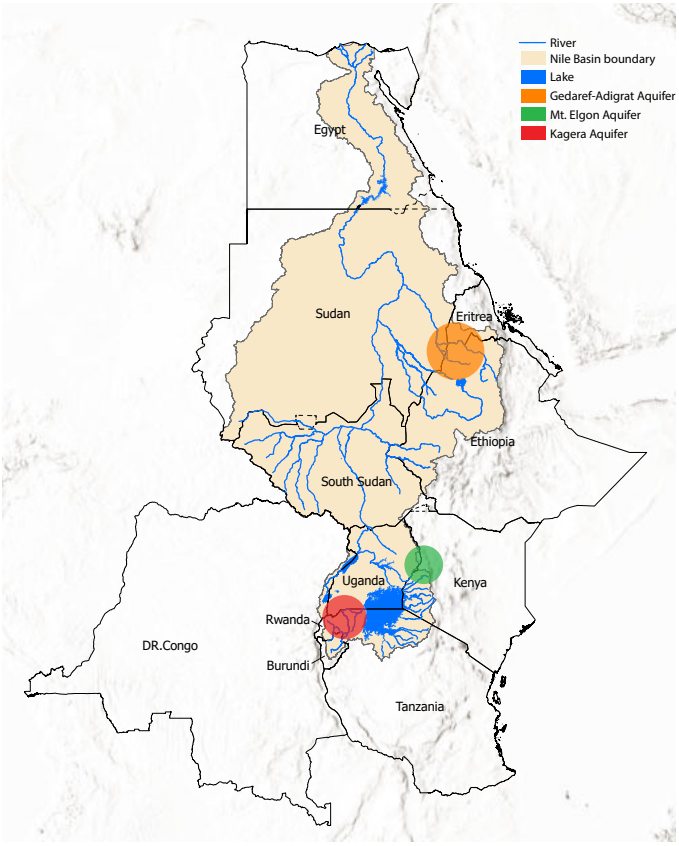
Prior to this initiative, most Nile Basin countries lacked formal regulations or institutional mechanisms for dam safety oversight. In 2023/2024, NBI assessed the status of national oversight systems and developed implementation guides and operational frameworks to support Member States in establishing or strengthening dam safety units.

As a result, Burundi, DR Congo, and South Sudan established national dam safety units within the reporting period. In parallel, NBI supported Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda to reinforce their existing structures, ensuring broader institutional resilience and safer dam operations across the Basin.

ENHANCED CONJUCTIVE USE OF SURFACE AND GROUNDWATER

In the Nile Basin, the wet season provides abundant surface water through rivers, streams, ponds, and wetlands. During the dry season, however, water availability often falls short of the rapidly growing demand for domestic and other essential uses.

Groundwater plays a vital role in bridging this gap, yet there is growing evidence that its recharge is under serious threat. The interaction between groundwater and surface water systems remains insufficiently



understood and largely overlooked in planning. The situation is more acute for transboundary aquifers, which lack common governance and management mechanisms.

With funding from the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP), NBI implements a project titled "Enhancing conjunctive management of surface and groundwater resources in selected transboundary aquifers: Case study for selected shared groundwater bodies in the Nile Basin". The project is designed to provide information and knowledge for climate proofing water resources management of the Nile Basin.

Advancing Knowledge of Shared Aquifers

In 2022/2023, using suitability mapping, NBI selected three transboundary aquifers for pilot interventions:

i. Kagera Aquifer – shared by Burundi, Rwanda, Tanzania, and Uganda
ii. Mt. Elgon Aquifer – shared by Kenya and Uganda
iii. Gedaref-Adigrat Aquifer – shared by Ethiopia and Sudan

That same year, NBI completed a Shared Aquifer Diagnostic Analysis, delivering foundational knowledge to riparian countries. NBI addressed a long-standing information gap that had hindered the development of joint management strategies for shared aquifers.

Guidelines, Capacity Building and Groundbreaking Technologies

In 2023/2024, following an assessment, five specific sites – three in Kagera and two in Mt. Elgon – were identified as suitable for Managed Aquifer Recharge (MAR). This innovative technology uses water from rivers, lakes, and rainfall to replenish groundwater, improving aquifer resilience to drought and climate change while enhancing water quality through natural filtration. MAR makes more water available in communities for domestic use, agriculture, and industry.

To support technical capacity, NBI developed regional guidelines for shared aquifer monitoring and conducted four training sessions on data collection and Geographic Information System tools in 2024/2025. These interventions strengthened the foundation for transboundary groundwater governance.

Design, Impact Assessment and Monitoring Infrastructure

NBI completed technical designs for two pilot MAR installations in Kagera and Mt. Elgon and undertook environmental and social impact assessments (ESIAs) for both. In Gedaref-Adigrat, NBI designed a regional groundwater monitoring network for Sudan and Ethiopia. Security and access discussions began to enable the installation of monitoring stations, a critical step in addressing the lack of a standardised monitoring system and database for this aquifer.

Modelling, Policy and Knowledge Dissemination

To inform policy and planning, NBI developed three modelling reports that characterise the aquifers and project water security scenarios up to 50 years. In addition, NBI published and directly shared three policy briefs with national experts, in addition to creating a regional knowledge base.

A geo-data online system was finalised and published on the Integrated Knowledge Portal, complete with a user manual. Four training workshops were conducted using the platform, which offers online access to geospatial data and maps. By the end of 2024, users across the Basin had begun uploading and accessing data.

Action Plans and Public Engagement

In 2022/2023, NBI developed and shared three regional action plans with the seven participating countries, alongside manuals on transboundary water monitoring.

Public awareness and community engagement formed a key component of the project. In 2022, national radio broadcasts in the Kagera countries highlighted the benefits of the conjunctive use of water. Four educational videos were produced and disseminated online in Burundi, Uganda, and Rwanda, with printed materials published on the IKP and the UNDP/GEF websites.

In 2024, NBI produced two regional magazines – one each for Mt. Elgon and Kagera – featuring 32 stories and testimonials from people interacting with groundwater. These stories captured the human dimension of improved water governance and helped build momentum for future transboundary cooperation.

The Nile in the South Sudan capital, Juba, around 2009/2010.

COLLABORATIVE MONITORING BASIN-WIDE

Effective water management starts with the ability to accurately measure, monitor, and understand both its availability and quality. However, countries across the Nile Basin have long faced challenges, including limited hydrological and water quality data, weak monitoring networks, and insufficient information on surface water systems, factors that are increasingly critical in the context of climate variability. These gaps have constrained evidence-based decision-making, undermining effective water planning, transboundary cooperation, and disaster risk management. Quantitative and qualitative data monitoring in the Nile Basin is achieved through in-situ and remote sensing systems.

Hydrological Monitoring: Building a Basin-wide System

Upgrading Stations and National Capacity

To close these critical gaps, NBI established a basin-wide hydrological monitoring system to support collaborative water surveillance, planning, capacity building, and disaster preparedness. NBI in collaboration with Member States upgraded 43 regional hydrological monitoring stations (table below).

Upgrades in DR Congo (1), Ethiopia (2), and Sudan (7) were halted or delayed due to insecurity and logistical constraints.

Country	No. of Refurbished Stations
Burundi	2
Kenya	6
Rwanda	6
South Sudan	5
Sudan	2
Tanzania	8
Uganda	14

In parallel, NBI upgraded and re-configured national data centres in nine Member States: Burundi, DR Congo, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda. Regional centres at the NBI Secretariat and the LVBC office in Kisumu were also enhanced to process and analyse incoming data.

Real-Time Data Transmission and Decision Support

The revitalised system operates with high efficiency and low operational cost, delivering real-time data on river flow, lake levels, and water quality. Data from the stations are transmitted via GSM and satellite technologies to national and regional centres, where experts use the information to guide decisions on water allocation, flood risk management, and drought preparedness.

Handover for Sustainability

To ensure sustainability and national ownership, NBI handed over fully operational monitoring stations to Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda between 2023/2024 and 2024/2025. These handovers included data transmission systems and management protocols. NBI strongly encouraged Member States to allocate dedicated funding and formally integrate these assets into national hydrological monitoring frameworks.

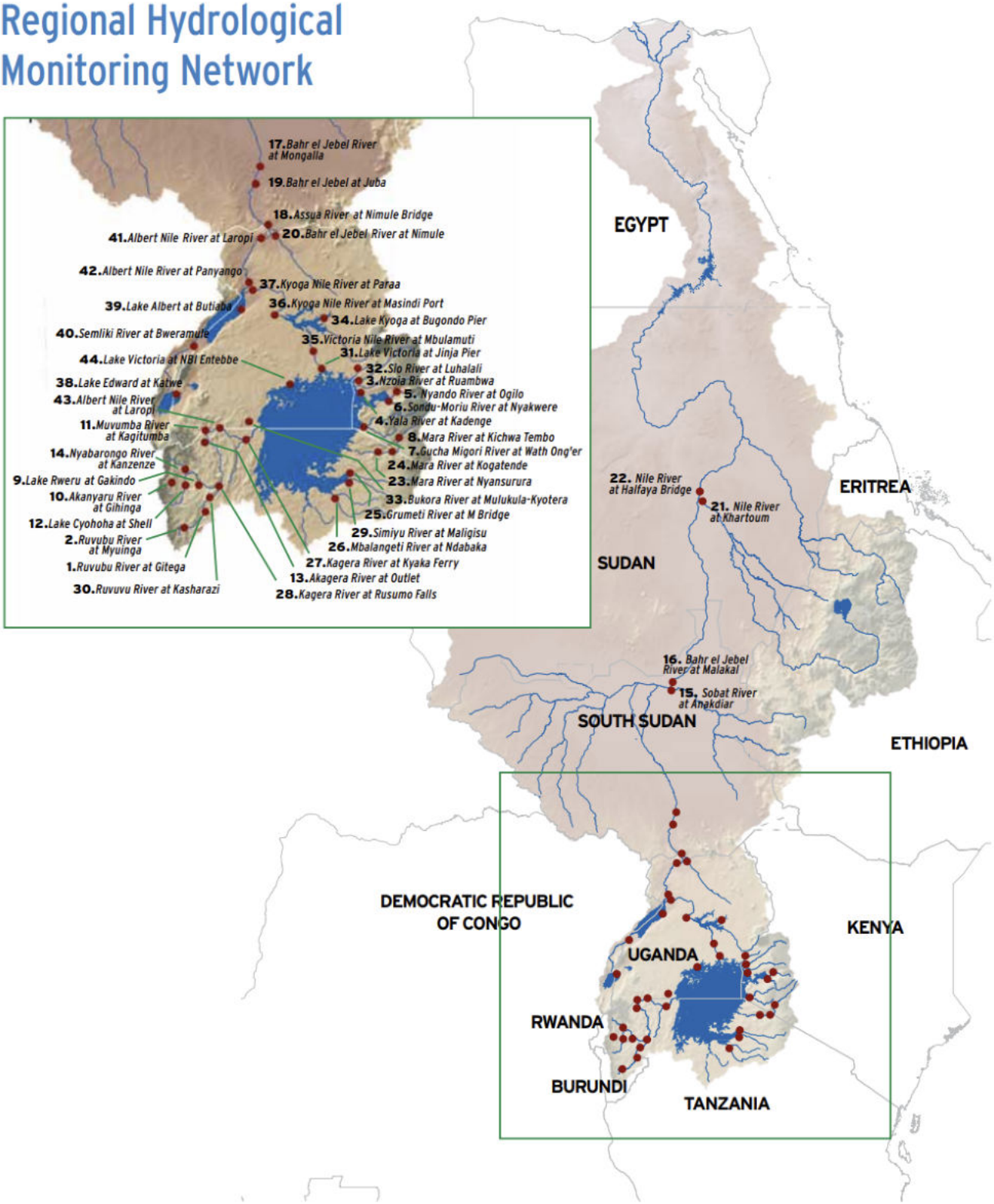
Institutional Capacity and Regional Coordination

In 2023/2024, NBI conducted training programmes for national experts on system installation, operations, and maintenance. It also established a help desk at the Secretariat to support Member States and facilitate the transition.

A regional expert working group on hydrology was established to drive long-term sustainability and innovation. The group comprises three experts per country: the head of national hydrological services, a senior hydrologist, and a hydro-met specialist. The group is tasked with overseeing system operations and maintenance, producing regular hydrological information products including flood advisories, advancing the use of data, and promoting adaptive water management across the Nile Basin. These applications demonstrate the value of investing in the regional monitoring system.

To further enhance accuracy and reliability, NBI updated river station rating curves and information – a critical process that links water level to discharge – through training workshops and field campaigns in Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda. In addition, NBI worked with national teams to restore functionality at key stations and systems in Burundi (Muyinga), Kenya (Yala and Gucha Migori) Rwanda (Kanzenze, Kagitumba and Akagera outlet), South Sudan (Nimule, Aswa, Mangalla and Anakdiar), and Tanzania (Mara at Kogatende and Nyansurura) and Uganda (Jinja, Butiaba, Entebbe and Songezi).

Regional Hydrological Monitoring Network



Peer-to-Peer Learning Strengthens Cooperation over the White Nile

The NBI continued to promote peer-to-peer learning as a means of strengthening hydrological capacity in flood and drought response, environmental protection, and knowledge exchange among Member States. In February 2025, for example, the NBI—working in collaboration with Uganda's Ministry of Water and Environment and the World Meteorological Organization—organised a practical learning exchange between South Sudan and Uganda. The objective was to support South Sudan in improving its hydrological monitoring, data management, and policy development, drawing on Uganda's more advanced systems and experience.

The Ugandan team and five participants from South Sudan visited key sites, including the Uganda Electricity Generation Company Ltd in Jinja, where real-time hydrological data is used to manage the Nalubaale and Kiira hydropower plants. With shared water bodies such as the White Nile, both countries depend heavily on accurate hydrological data from each side to ensure mutual benefit and coordinated water resource management.

The experiential tour is expected to enhance capacity in hydrometry practices in South Sudan, contributing to basin-wide improvements. The lessons learned offered a practical roadmap for future cooperation and for strengthening hydrological data collection and management to support evidence-based decision-making. Building on this momentum, the South Sudanese experts conducted a follow-up training in Juba in March 2025, reaching 18 regional and national water managers.

10 Lessons Learned from the Experiential Tour

1. *Strong institutional partnerships drive success.*
2. *System development demands long-term support.*
3. *Reliable internet and power remain critical challenges.*
4. *Building local capacity is essential.*
5. *Data protocols must be standardised.*
6. *Flexible technology enhances effectiveness.*
7. *Real-time data improves decision-making.*
8. *Community engagement supports better data collection.*
9. *Financial sustainability needs more attention.*
10. *Regional cooperation delivers shared benefits.*

Enabling Practical Impact

The regional monitoring system supported:

i. Enhanced transboundary cooperation through shared data (e.g., Uganda–South Sudan);

ii. Operational planning and optimisation at the Rusumo hydropower plant (see more under Goal 2);

iii. River navigation and humanitarian logistics in Sudan and South Sudan; and

iv. Evidence-based water allocation and risk-informed decision-making.

v. Flood forecasting and enhanced preparedness to hydrological extremes in the Nile Basin (see more on this activity under Goal 5: Climate Change Adaptation)

Enhancing Surveillance and Knowledge Products through Earth Observation

The Nile Basin Initiative significantly strengthened its remote sensing and earth observation capacities. With the installation of an EUMETCast receiver at its Secretariat, NBI gained access to high-volume satellite datasets, including near real-time information provided free of charge by EUMETSAT, and other publicly available earth observation sources.

Leveraging these datasets, NBI developed an online information product accessible via its website. In addition, earth observation data was applied in the production of seasonal outlooks, advisories, and technical bulletins, enriching the Basin's knowledge base. Key deliverables during the reporting period included NBI's Atlas of Transboundary Wetlands in the Nile Basin, and mapping of water quality hotspots basin-wide, both of which provided actionable insights to support planning and decision-making.

Towards an Integrated Data Analytics Platform

To enhance accessibility and integration, NBI initiated development of the Data Analytics Services platform in collaboration with the Lake Victoria Basin Commission, the Nile Basin Discourse, with financing support of the World Bank. Once operational, the Data Analytics Services will centralize NBI and global datasets while providing advanced analytical tools tailored to the needs of water managers, researchers, and policymakers.

In 2023/2024, NBI further invested in capacity building by delivering regional training on earth observation tools such as DAS, Python, and QGIS. It also hosted three cohorts of young professionals, contributing to the next generation of experts in data-driven water governance. These efforts fostered a collaborative technical community, advancing the use of earth observation technology to support integrated water resources management across the Basin.

Water Quality: Establishing a Regional Monitoring Mechanism

Building Capacity and Infrastructure

Under its 10-Year Strategy, NBI committed to establishing a water quality monitoring mechanism across the Nile Basin by

i. supplying laboratory kits, field toolkits, and water quality sensors for real-time data gathering;

ii. establishing national task teams;

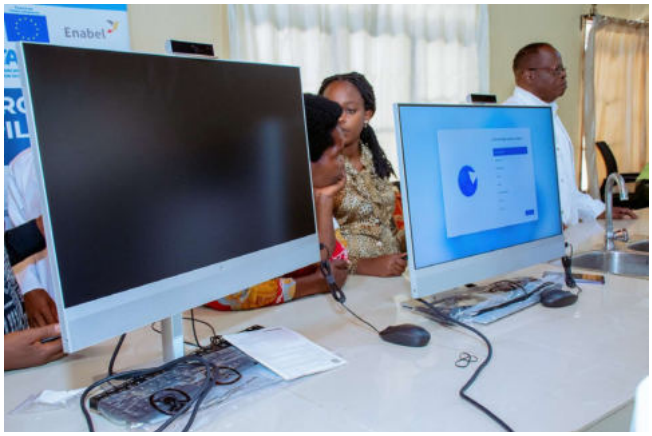
iii. strengthening modelling and data collection, including from data centres; and

iv. creating a centralised water quality database.

Following a needs assessment and consultations across nine countries in 2023/2024 in Burundi, DR Congo, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda, NBI began procuring modern water quality monitoring equipment and setting up national task teams for sustainable management of its project initiatives.

A peer-to-peer learning mission to the Zambezi Watercourse Commission enriched design approaches and standards for the project. In addition, it enhanced understanding in water quality management and conservation at both national and regional levels for post-project sustainability in respect to pollution control and water quality management systems in the Nile Basin.

By the end of the reporting period, shipping of the kits and sensors had been completed for all the nine countries, and installations had taken place in Burundi and Rwanda along with bench testing, and training of national task teams on environmental and social



Rwanda and Burundi's were the first national laboratories that NBI upgraded for water quality monitoring. Among the tools provided were sediment samplers (top left) and microbiological kits (above right).

safeguard standards and policies. Preparations were underway for installations and training in Ethiopia, Kenya, South Sudan, Tanzania and Uganda and, later, DR Congo and Sudan once the security situation improves in the two countries.

Database, Maps and Modelling: Breaking a Knowledge Barrier

In 2023/2024, NBI updated the design of its water quality monitoring network and completed data collection from the riparian countries and other sources. It then released the first cycle of its regional water quality database, along with pollution risk maps covering the Nile Basin. By the end of the reporting period, the database had been completed and linked to NBI's Integrated Knowledge Portal off its website to enable basin-wide access by national task teams, policy and decision makers and academics. Updates and data collection from national sources continued throughout the reporting period as NBI trained Member State experts on water quality modelling, as well as operation and maintenance of the database.

NBI modelled water quality in six key transboundary hotspots, covering Burundi, Kenya, Rwanda, South Sudan, Sudan, Tanzania and Uganda. The modelling effort produced a ranking of 50 pollution hotspots and investment options to reduce contamination. Four priority sites were selected for investment through a criterion NBI developed, and baseline surveys were conducted at the four sites to inform action. Furthermore, NBI produced a knowledge product, the Water Quality Multi-Criteria Analysis Project Brief (September 2023).

Prior to this modelling, limited scientific data on water quality constrained planning and investments in the Nile Basin.

Eight e-learning courses and a Sourcebook

NBI began developing eight e-learning courses covering water quality monitoring and assessment. In addition, NBI finalised a water quality sourcebook and trained its staff in environmental and social safety measures.

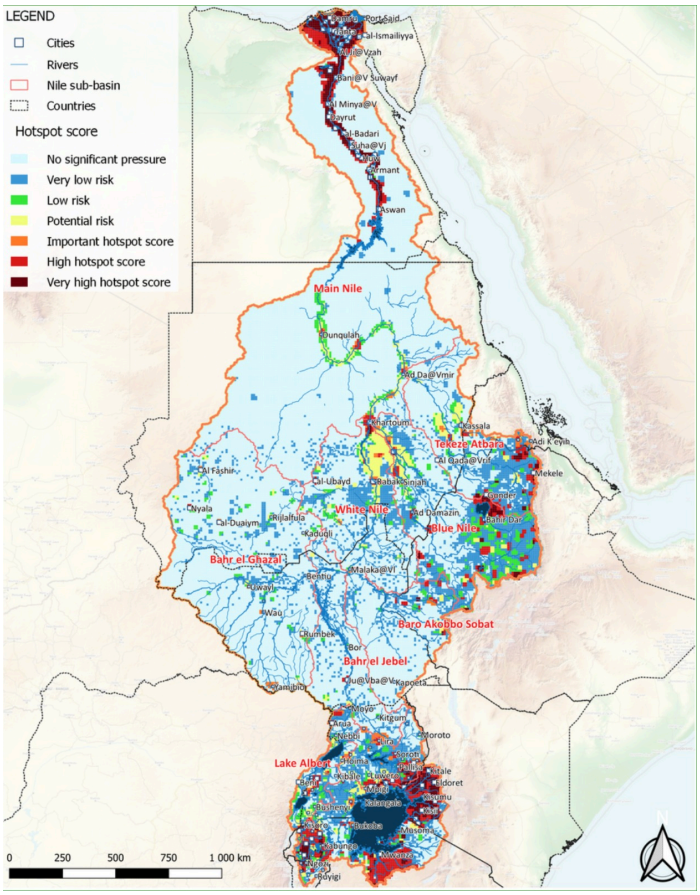
National and regional water quality technical working groups were established to support implementation of the project activities.

See more on NBI's water quality interventions under Goal 4 (Environmental Sustainability).

AN INTEGRATED BASIN MANAGEMENT PLAN

Following the Nile Council of Ministers' official launch of the Nile River Basin Management Plan during NBI's 25th anniversary celebrations in Bujumbura in 2024, the Plan was finalised and published in 2024/2025. Dissemination was on course by the close of the reporting period.

The intention of this Plan is to guide coordinated water resources management and infrastructure development across the Nile Basin. The Plan is the unifying framework, designed to support action at national, sub-regional, and regional levels, thus enabling Member States, Regional Economic Communities, and NBI to respond collectively to emerging water management priorities. The objectives of the Plan will be realised through the 14 Nile Basin sustainability targets and 63 strategic actions, aligned with the six goals of NBI's 10-year strategy.



Water quality risk map.

EFFORT TO ENHANCE TRANSBOUNDARY POLICY FRAMEWORKS

Inconsistencies between national and regional water policies continue to hamper effective transboundary water management. To address this, NBI has established a mechanism for the joint review and monitoring of national policies related to cooperation within the Nile Basin. This strategic initiative promotes policy alignment with NBI objectives, strengthens national and regional governance frameworks, and fosters joint learning to build institutional and individual capacities. It also contributes to enhanced trust and confidence in basin-wide cooperation.

Despite challenges during the reporting period – including data gaps and limited funding for policy framework development – NBI monitored key indicators across the Basin. The insights gathered will feed into the upcoming "State of the River Nile Basin" report in 2026.

Through the Nile Cooperation for Climate Resilience (NCCR) project, which the NBI Secretariat implements among five partner entities, NBI developed a tool to support monitoring and evaluation of transboundary policy efforts. Notably, NBI also supported South Sudan in developing its national transboundary Water Policy, marking a significant step forward in harmonising national and regional water governance.

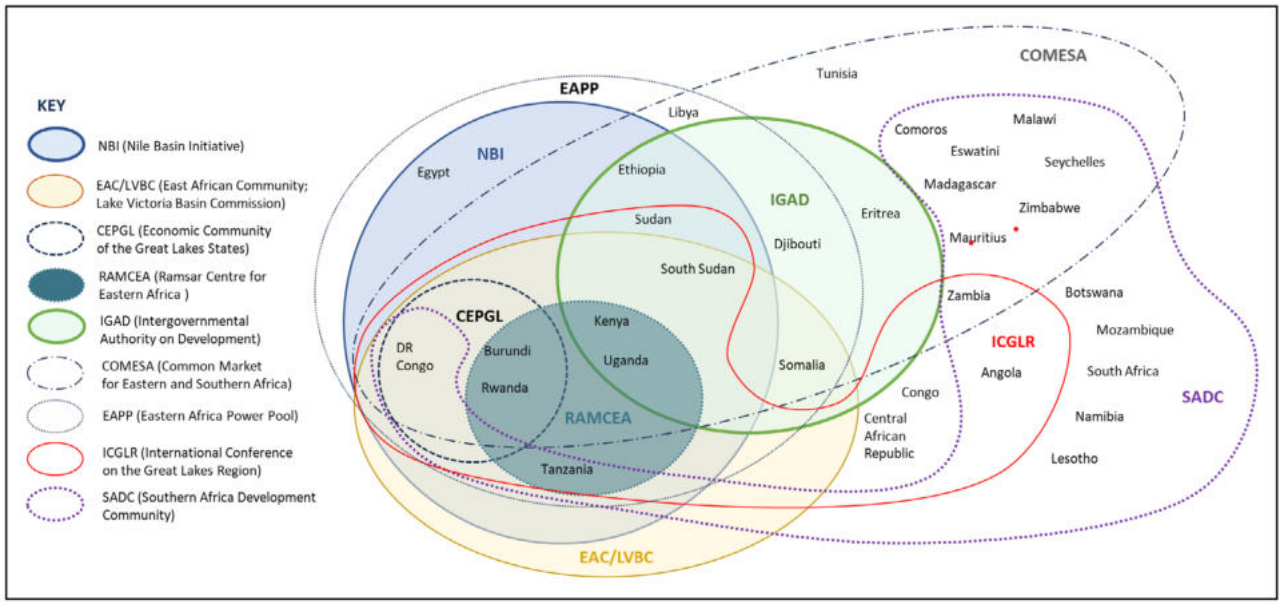
NILE RIVER BASIN INVESTMENT PROGRAMME

Limited development of water resources continues to constrain sustainable growth across the Nile Basin. At the same time, fragile ecosystems face increasing pressure, underscoring the urgent need for their protection and restoration.

In response, the NBI Secretariat assumed a facilitative role in creating the Nile River Basin Investment Programme, based on a directive from the 2017 inaugural Nile Basin Heads of State and Government Summit. The Nile River Basin Programme is a regionally led platform that brings together countries that share the Nile, Regional Economic Communities, and development partners to jointly develop a list of high priority water-related projects that they then promote to secure investment financing to support individual states' progress towards middle- and high-income status. The Programme targets five strategic outcomes: water, energy, and food security; the protection of watersheds and ecosystems; and enhanced climate resilience.

The collaborating organisations are: the NBI Secretariat and its two investment arms – NELSAP-CU and ENTRO – as well as the East African Community through the Lake Victoria Basin Commission, the Intergovernmental

Overlap in memberships



The Nile River Basin Investment Programme addresses issues of overlap in membership, geographical coverage, and intervention areas of regional organisations within the Nile Basin.

Authority on Development (IGAD), the Common Market for Eastern and Southern Africa (COMESA)/East African Power Pool, and the African Union Development Agency – New Partnership for Africa's Development (AUDA-NEPAD).

In 2023/2024, the NBI Secretariat updated the Programme's investment portfolio database, using the AUDA-NEPAD Africa Infrastructure Database tool to increase project visibility among potential financiers. The long list comprised 452 projects submitted by ENTRO (63), NELSAP-CU (138), the Lake Victoria Basin Commission (34), the East African Power Pool (13), and IGAD (204). A clear set of criteria was introduced to screen and prioritise projects.

By the end of the reporting period, 59 projects at the feasibility or financial structuring stage had been shortlisted for the Programme's first intake. Of these, 25 were submitted by NELSAP-CU and 22 by ENTRO.

Regional consultations supported the review and refinement of these candidate projects, which were subsequently incorporated into the investment portfolios of the respective regional institutions.

In addition, NBI and the collaborating agencies jointly finalised four key documents that lay the groundwork for coordinated, climate-resilient growth across the Basin. These were: the overall Programme document, the project portfolio, the integrated assessment results, and the strategy paper titled ***"Cooperative Investments to Advance the Nile Development Agenda."***

Summary of investment-ready BIP projects, requiring a total investment of US$15.7 million

v. **Water Supply & Sanitation 7**

vi. **Hydropower Generation 9**

vii. **Regional Power Interconnection 6**

viii. **Agriculture/Irrigation and Drainage 3**

ix. **Watershed 11**

x. **TB Lakes/Environment and Fisheries 1**

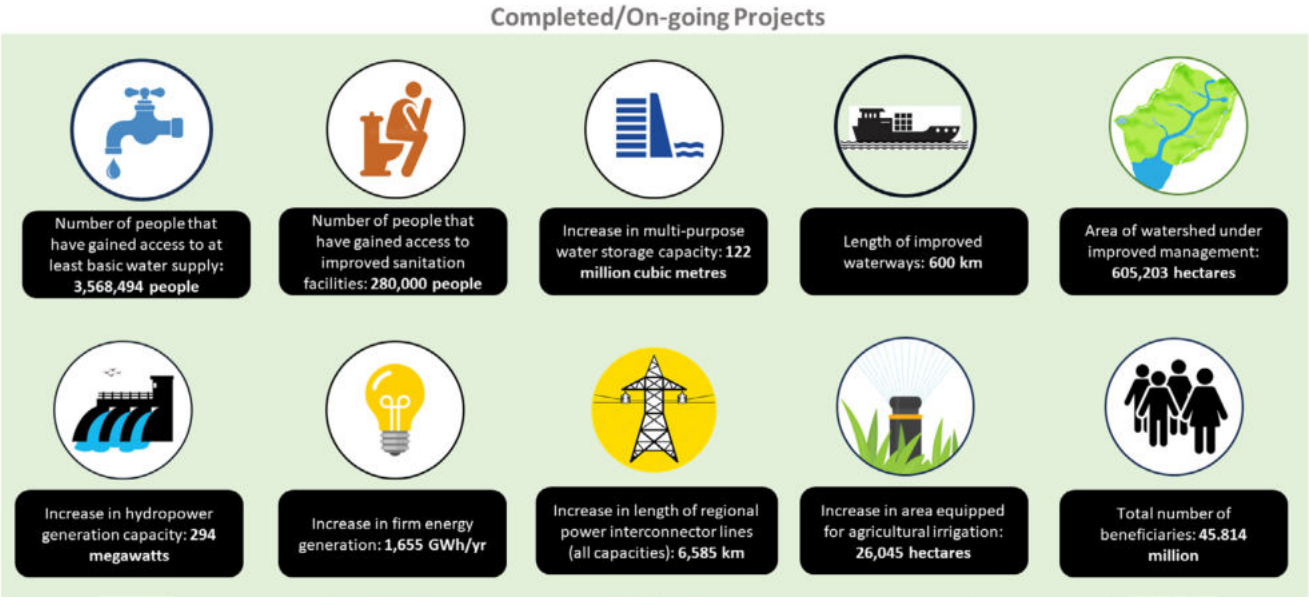
xi. **Ecosystem Protection 2**

xii. **Multipurpose Development 18**

xiii. **Navigation, Inland Water Transport & Trade 2**

Total: 59 projects

Potential Impacts of Candidate Projects



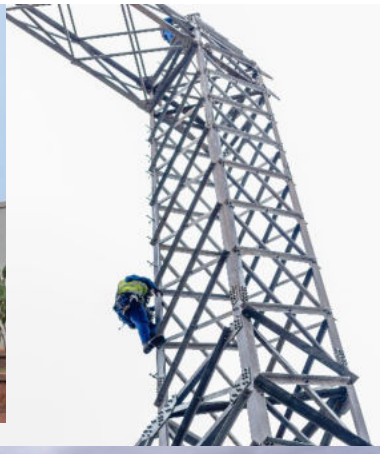
Key Challenges under Goal 1

Insecurity impacted both the management and implementation timelines of NBI's basin-wide monitoring projects, as well as groundwater and dam safety operations across the Nile Basin. Monitoring installations were compromised by vandalism, prompting NBI to strengthen its collaboration with Member States to safeguard critical assets for hydrological and water quality monitoring.

Sub-optimal data-sharing remained a persistent challenge under this Goal, affecting information systems, dam safety, and basin-wide monitoring efforts, including at the Regional Rusumo Falls Hydroelectric Project. The sustainability of information systems was further hindered by high infrastructure fees and maintenance costs.

Furthermore, important pioneering efforts to build the Nile Basin's capacity for water quality data collection and utilisation encountered difficulties partly due to inconsistent import procedures across the nine recipient countries. Low budget allocations for water resources at national level was another challenge.

Furthermore, a lack of funding delayed the start of phase 3 of the SWRA process. Differences in capacities of Member States also affected the SWRA, in which systematic training and capacity building are integral elements. In addition, Egypt's non-participation affected the representativeness of the model. Egypt's return to NBI is an opportunity to address this under SWRA phase 3.



Local Area Development Projects include the Kahaza Strategic Market and a tailoring school at Ngara Folk Development College in Tanzania, and Kagina Health Centre in Rwanda

GOAL 2: ENERGY SECURITY

The Basin's natural topography offers significant opportunity: an estimated hydropower potential exceeding 20 gigawatts, much of which remains undeveloped.

Across the Nile Basin, rapid economic growth is driving up demand for water, energy, and food. Yet, except for Egypt, energy supply in most countries remains inadequate, unreliable, and costly. Most rural populations still rely on biomass for energy, posing risks to both people's health and the environment.

Parallel to the Nile River Basin Investment Programme, NBI supports Member States in identifying and preparing bankable investments in power infrastructure. Coordinating with regional actors, NBI facilitates investments in generation, transmission, interconnection, and power trade, aiming to make clean energy more available, accessible, and stable, in line with SDG 7 on affordable and clean energy. These investments are designed not only to reduce energy losses and costs, but also to deliver socio-economic benefits to local communities where infrastructure is developed.

Regional Rusumo Hydroelectric Project: Clean Energy, Local Benefits

NBI, completed all major works on this 80MW flagship project jointly owned and financed by Burundi, Rwanda, and Tanzania. Funded by the World Bank (the power plant and Local Area Development Programme), and the African Development Bank (sub-station and transmission lines), the project enabled access to clean, affordable, and reliable electricity for citizens and businesses across the three countries. With its transmission system fully synchronised for power exchange, cross-border electricity trade began in October 2023.

Rusumo's success also yielded environmental benefits. Because of it and other clean energy sources, Rwanda decommissioned five diesel-fired power plants, significantly reducing its carbon emissions. This contributed to the Nationally Determined Contributions for Burundi, Rwanda and Tanzania.

NBI Addresses Costly Problem of Sediment & Water Weed

The Rusumo plant's performance is highly dependent on the quantity, quality, timing, and distribution of the water flowing through it. Although a run-of-river scheme, the watershed loses about one percent of its storage volume annually to sedimentation (as seen in the brown water below).

Vegetation build-up at the intake averages 0.6 tonnes per hour – 15 tonnes daily or over 5,000 tonnes annually – and surges during floods, threatening efficiency. Despite having a trash rack cleaning machine, high sediment/soil erosion and water hyacinth levels have caused:

- 15-30 percent reduction in generation efficiency
- Blocked turbine intakes and reduced flow
- Maintenance costs higher by 50 percent
- Frequent equipment damage and costly repairs
- Rapid hyacinth growth (doubling every seven to 14 days)

Required Interventions

1. Water Hyacinth Management

- Manual removal: Best for small infestations; labour-intensive.
- Mechanical removal: Effective for large areas; requires capital and skilled staff. (This is the direct control mechanism the company is applying at the moment).
- Biological control: Eco-friendly but slower, with risks to non-target species. It requires strict testing and compliance with safety standards.

Environmental safeguards must protect integrity of the ecosystem, avoid collateral damage, and ensure machinery does not harm native flora or fauna (plants and animals).

2. Sediment/Soil Erosion Control

- Resilient landscapes: Promote sustainable land use in mining and agriculture, restore wetlands, manage stormwater, expand afforestation, and protect riparian buffers.
- Community engagement: Involve locals in restoration, raise awareness, and promote practices that protect watersheds.
- Institutional and transboundary cooperation: Strengthen basin institutions and coordination between Burundi, Rwanda, and Tanzania through frameworks such as NBI to secure long-term climate resilience and operational sustainability.

The company also took action during the reporting period to mitigate upstream soil erosion and sediment inflow by establishing buffer zones on both the Rwanda and Tanzania sides of the intake, where tree planting and restriction of human activities are also in place. A catchment area management feasibility study is planned in collaboration International Union for the Conservation of Nature.

Peer-to-peer Learning Supports Sustainability

NBI arranged a peer-learning visit by Permanent/Principal Secretaries/Under Secretaries from the Ministries of Water, Finance, and Foreign Affairs across the Nile Basin to Rusumo in 2023. The visit informed national-level technocrats about the hyacinth and soil erosion challenges for their decision-taking.

NBI Provides Platform for Sustainability

The Nile Basin Initiative continued to provide a platform for cooperation to safeguard and sustain the investment of Burundi, Rwanda and Tanzania around the Rusumo project. In May 2025, for example, it convened key stakeholders in Uganda, to address operational challenges at the plant, following a hydrological needs assessment earlier in the year. Besides the water hyacinth and high sediment load, the assessment identified inadequate hydrological data on the Ruvubu and Akagera rivers, key tributaries that feed the hydropower station. Participants included representatives from NBI governance, regional hydrology and water quality experts, Rusumo Power Company Ltd, and the Lake Victoria Basin Commission, and the International Union for Conservation of Nature. The dialogue aimed to enhance awareness, promote data sharing, and identify collaborative actions to improve monitoring and optimise operations while safeguarding river ecosystems.

As a result, authorities from Rwanda, Burundi, and Tanzania agreed to work with NBI to strengthen river monitoring systems essential for hydropower generation. A new monitoring station will be installed on the Akagera River, while Rwanda's Water Resources Board proposed upgrading the Gatore station, with support from GIZ. Rusumo Power Company Ltd will explore ways to maintain seven key monitoring stations across Burundi, Rwanda, and Tanzania. Working together with NBI and International Union for Conservation of Nature, the three countries will develop a joint funding proposal addressing river data sharing, sediment control, and water hyacinth management.

Benefits for Local Communities around Power Plant

The Rusumo project continued generating direct socio-economic benefits for local communities through the Local Area Development Programme. Most of the projects had wound up by the end of the reporting period, having achieved their targets. Here are some of the progress areas:

PROGRESS ON RUSUMO COMMUNITY BENEFITS IN BURUNDI, RWANDA, TANZANIA

BURUNDI

as of 31 December 2024

District	Project	Project Phase	Progress	Status	Estimated Number of Beneficiaries
Giteranyi	Water supply rehabilitation and extension works in Giteranyi Communes	Phase I	90%	Ongoing	10,204 people in the Gihuzu-Ngomo community
	The construction of fence at **Gihuzu and Rubenga** Pump station	Phase I	100%	Completed	10,204 people in the Gihuzu-Ngomo will have protection at the Gihuzu and Rubenga pump station.
	Construction and equipping of Giteranyi District headquarters	Phase I	100%	Completed	285,312 Giteranyi population
	Construction and equipping of Bugoma Health Centre	Phase I	100%	Completed	111,195 outpatients (39,766 males and 71,429 females) so far attended to
	Construction and equipping of Ruzo Youth Centre	Phase I	100%	Completed	153 people trained so far. Four new teachers hired.
	Construction and equipping of Kinanira crops hangar	Phase I	100%	Completed	186 people are using the hangar.
	Construction and equipping of fundamental school of Ngomo Zone Masaka (9 classrooms, administrative rooms, and washroom)	Phase II	100%	Completed	Some 2,285 inhabitants (1,062 men, 1,223 women). School has 450 pupils.

District	Project	Project Phase	Progress	Status	Estimated Number of Beneficiaries
Giteranyi	Construction and equipping of Kagugo Fundamental School (9 classroom, administrative office, and toilets)	Phase II	100%	Completed	5,234 people of Kagugo sector (2,601 men, 2,633 women). School population is estimated at 450 pupils
	Construction and equipping of Kabira Fundamental School, Ruzo Zone (9 classrooms, administrative office washroom)	Phase II	100%	Completed	School population is estimated at 450 pupils from Kabira sector
	Construction and equipping of Community training room in Mugano	Phase II	100%	Completed	Population of the whole commune is estimated at 222,615 inhabitants (108,528 men, 114,087 women)
	Construction and equipping of **Karugunda** Fundamental School, Giteranyi Zone (6 classrooms, administrative office, washroom)	Phase II	100%	Ongoing	At least 300 pupils will be enrolled from Bugoma, Rukungere and Karugunda sectors
	Construction and equipping of Ruzo court of justice	Phase II	100%	Completed	Population of Ruzo and Ngomo administrative zones in 12,631 households (25,202 men, 24,261 women).

District	Project	Project Phase	Progress	Status	Estimated Number of Beneficiaries
Busoni	Water treatment Plant/BISHISHA	Phase I	100%	Completed	62,035 people of Murore-Kabanga drinking water network will benefit from the Gacamihigo pump station protection
	Water supply rehabilitation and extension work in Busoni Communes	Phase I	95%	Ongoing	86,035 people of Murore-Kabanga and Marembo-Gasenyi networks will benefit from drinking water.
	Construction and equipping of Rugando Health Centre	Phase I	100%	Completed	14,833 inhabitants will have access to health services
	Construction and equipping of Murore Youth Centre	Phase I	100%	Completed	109 youth trained so far in various skills.
	Construction and equipping of Busoni Headquarter	Phase II	100%	Completed	5 administrative zones spread over 41 sectors with a population of 256,609 inhabitants.
	Construction and equipping of Gitete Health Centre	Phase II	100%	Completed	Population of Gitete and surrounding sectors (Gitete, Sigu and Muvyuko) (more than 15,000 people).
	Construction and equipping Rurende Health Centre:	Phase II	100%	Completed	Populations from Rurende (1,834), Buhimba (4,855), Buringa (3,743) and Ruyaga (5,182).

District	Project	Project Phase	Progress	Status	Estimated Number of Beneficiaries
Busoni	Construction and equipping of **Gatete** fundamental school (6 classrooms, 2 blocks of latrines for students, 1 block of latrines for teachers.	Phase II	99%	Ongoing	Population of Gatete Sector organized in 2,806 households is estimated at 13,188 inhabitants (6,330 men, 6,858 women). School population is estimated at 300 pupils. Construction Completed and equipping ongoing
	Construction and equipping of Runyinya fundamental school (6 classrooms, 2 blocks of latrines for students, administrative office, 1 block of latrines for teachers)	Phase II	98%	Ongoing	Population of Runyinya Hill, 2,793 inhabitants (1,341 men, 1,452 women). School population is estimated at 300 pupils. Construction Completed and equipping ongoing
	Construction and equipping of Buhimba High School (5 classrooms, 2 washrooms, administrative office, washroom for teachers	Phase II	100%	Completed	The population of Buhimba Hill – 594 households with 2,793 inhabitants (1,341 men and 1,452 women). School population is estimated at 250 pupils.
	Construction and equipping of Buringa High School (3 classrooms, bloc of latrines for students, administrative block, latrines for teachers	Phase II	100%	Completed	Population of Buringa Hill organized in 540 households with 2,623 inhabitants (1,097 men and 1,526 women). School population is estimated at 150 pupils.

RWANDA

As of 31 March 2025

District	Project	Project Phase	Completion Status	Estimated Number of Beneficiaries
Kirehe	Construction of Kirehe complex youth centre	Phase II	Ongoing	District population of 480,000
Rusumo	The New Village	Phase II	Ongoing	400 people
Kirehe	Construction of Kigina Health Centre	Phase I	Completed	800-1500 people per month receive medical services
Kirehe	Rehabilitation (30km of feeder road in Kigarama and Musaza sectors: Cyagasenyi-Gasarabwayi-Nganda Road)	Phase I	Completed	Population of Kigarama and Musaza Sectors - 68,827

As of February 2025

NGOMA District	Project	Project Phase	Completion Status	Estimated Number of Beneficiaries
1	Construction and rehabilitation of Gafunzo modern markets	Phase II	Completed	62,803
2	Construction of Hazo Health Centre	Phase II	Completed	32,450
3	Construction of Karembo Health Centre	Phase II	Completed	17,726
4	Rehabilitation of Cyasemakamba Youth Development Centre (Yego centre), and fencing	Phase II	Completed	6,042
5	Rehabilitation of Karembo and Rukira modern markets	Phase II	Completed	48,619
6	Rehabilitation and construction at Kigabiro-Rurenge-Gatore feeder road	Phase I	Completed	40,925
7	Construction of Gasoko Gituku-Rukira-Murama water pipelines	Phase I	Completed	62,595
8	Construction of Gatonde-Gahima water pipeline	Phase I	Completed	10,500

TANZANIA

As of 31 December 2024

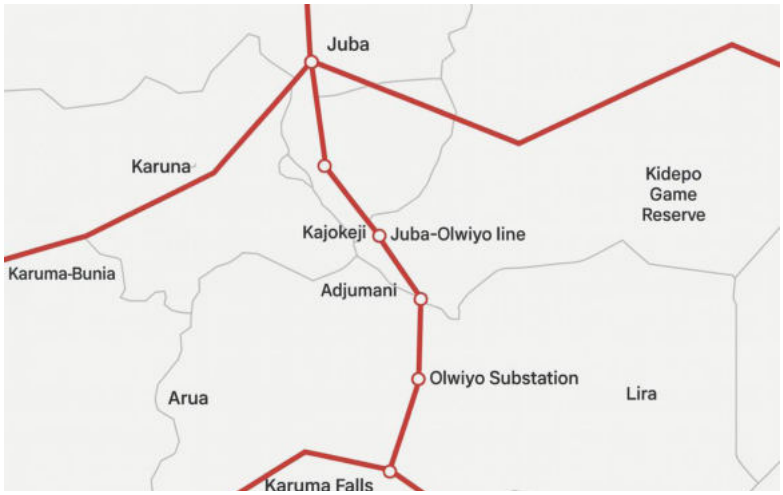
District	Project	Project Phase	Progress status	Completion status
	LADP II			
NGARA	Construction of administration block, dining hall and dormitory at Ngara High School	Phase II	97%	Ongoing
	Construction of Ngara District headquarters	Phase II	97%	Ongoing
	Construction of Kahaza strategic market	Phase II	94%	Ongoing
	Construction of a perimeter wall and ramps and installation of water supply system, and rehabilitation of access road at Rusumo Health Centre	Phase II	48%	Ongoing
	LADP I			
1	Construction of Makugwa Primary School	Phase I	100%	Completed
2	Construction of Bukiriro Secondary School	Phase I	100%	Completed
3	Construction of Mumiterama Secondary School	Phase I	100%	Completed
4	Construction of Kyenda village dispensary	Phase I	100%	Completed
5	Construction of building at Rusumo Primary School	Phase I	100%	Completed
6	Construction of Lukole Health Centre	Phase I	100%	Completed
7	Construction and Rehabilitation of Rusumo Secondary School buildings	Phase I	100%	Completed
8	Construction of Ngoma Primary School	Phase I	100%	Completed
9	Rehabilitation and expansion of water projects in four villages of Rwakalemela, Kasharazi, Mshikamano and Kasulo	Phase I	100%	Completed

District	Project	Project Phase	Progress status	Completion status
10	Rehabilitation of two playing grounds for Remela Community Development College	Phase I	97%	Ongoing
11	Purchase of training equipment and tools for Remela community development college	Phase I	98%	Ongoing
12	Construction of Rusumo Health Centre	Phase I	100%	Completed
13	Construction of new water project for Rusumo	Phase I	100%	Completed
14	Green house project in Chivu village	Phase I	100%	Completed
15	Beekeeping project at Ntobeye, Chivu, Kasharazi and Rusumo	Phase I	100%	Completed
16	Cow Artificial Insemination in the villages of Kagari, Keza Mwivuzana, Muruku-kumbo and Mubuhenge	Phase I	100%	Completed

400 kV Interconnection: South Sudan-Uganda

This US$262 million Olwiyo (Uganda)-Juba (South Sudan) stretches over a length of 300.5km. The project will allow Uganda to export power from the Karuma, Ayago, Kiba, Oriang and Uhuru hydropower plants along the Nile. Benefits are enormous, not only to Uganda and South Sudan, but to other neighbouring countries as interconnection increases. The project will promote regional integration and development.

During 2024/2025, a Protocol of Agreements was signed between South Sudan and the NBI, the project coordinator. The African Development Bank evaluated the Expressions of Interest, and the NBI organised stakeholder engagement sessions in Uganda's Amuru and Lamwo districts, as well as in Magwi County, South Sudan, to raise awareness ahead of the project's planned construction in 2026. Ugandan communities granted NBI access to a 16 km corridor, enabling the finalisation of the Resettlement Action Plan components on the Ugandan side.



400 kV Interconnection: DRC-Uganda

The Beni-Bunia-Butembo (DR Congo) to Nkenda (Uganda) 400 kV interconnection project faced security challenges near the eastern DR Congo border. Nevertheless, by the end of the reporting period, an Environmental and Social Impact Assessment had been finalised and approved by both the DR Congo and Uganda, the Resettlement Action Plan was 65 percent completed in Uganda while it stalled in DR Congo. Construction of this project is expected to begin in 2027.

Projects in Pipeline

NBI continued consultations with development partners on a series of upcoming energy investments, including:

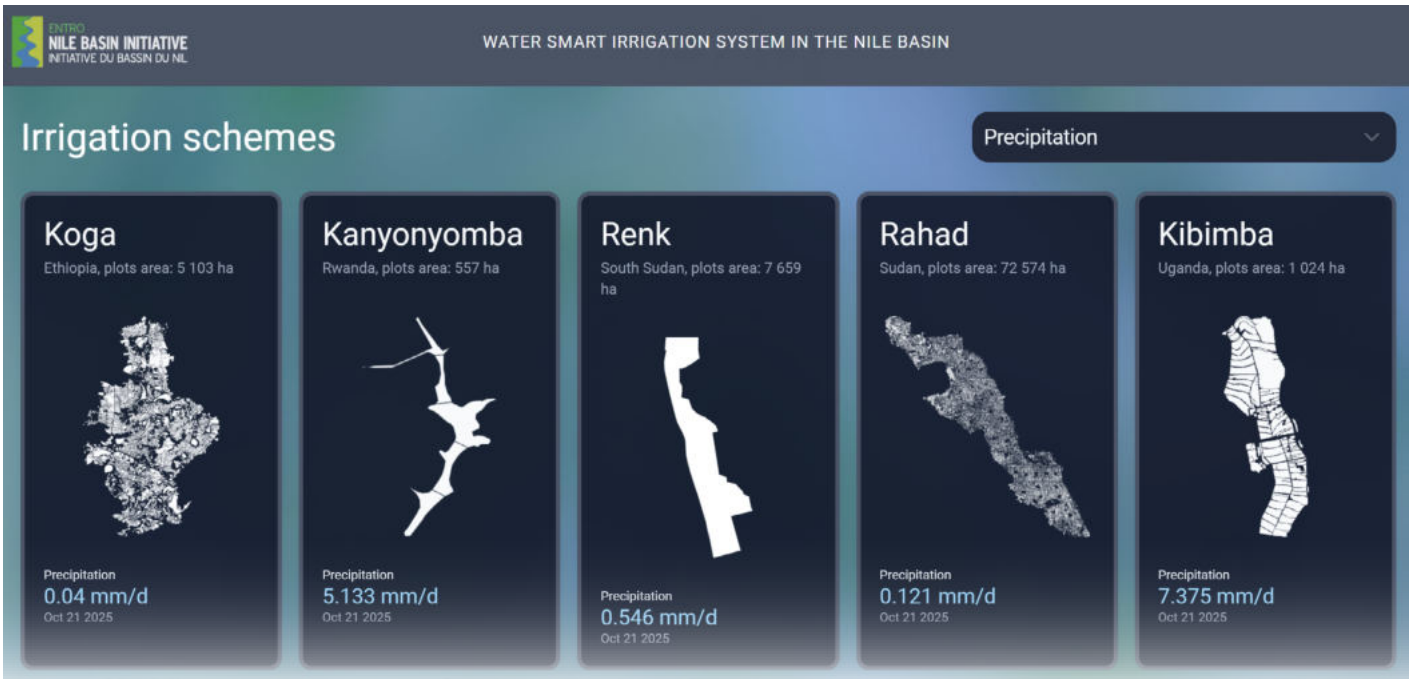
- 40MW Nsongezi Hydropower Project, approved for funding by the Board of the African Development Bank. NBI through NELSAP-CU together with the East African Community mobilised resources jointly.
- 2MW Soono Hydropower Project, for which feasibility studies were completed.
- Regional Power System Harmonisation and Enhancement Project, approved for funding by the Board of the African Development Bank.

The Regional Rusumo Falls Hydro-electric Project, located between Rwanda and Tanzania, is expected to enhance regional integration

Potential and Key Challenges under Goal 2

The NBI power infrastructure development programme has strengthened the capacity of the Basin States to trade electricity and expand opportunities for sustainable development through clean energy. This progress highlights the potential for regional integration and the complementarity of the riparian countries in pursuing their development agendas.

However, a major challenge under Goal 2 remains the infrastructure gap, which limits access to clean energy for the Basin's population. Energy access in the Nile Basin countries is among the lowest in the world. Additionally, siltation in hydropower facilities is compromising the efficiency and functionality of power generation.



The dashboard for water-smart irrigation for Eastern Nile

GOAL 3: FOOD SECURITY

None of the Nile riparian countries is self-sufficient in food production; each produces less than is needed to meet the demands of its growing population, despite the Basin's significant potential to become a continental food basket. Irrigation remains underdeveloped–particularly in upstream regions where rain-fed agriculture prevails–leaving the sector highly vulnerable to climate variability. In response, countries are increasing investment in irrigated agriculture to enhance productivity and resilience. The NBI supports these efforts through a basin-wide irrigation planning approach that optimises national initiatives while ensuring alignment with the sustainable use of shared water resources.

ADVANCING MODERN IRRIGATED AGRICULTURE

NBI deepened its collaboration with regional institutions including the International Water Management Institute, IGAD, COMESA, AUDA-NEPAD and the Lake Victoria Basin Commission to align irrigation development under the Nile River Basin Investment Programme with broader regional goals. These partnerships, strengthened throughout 2024/2025, directly support the objective of achieving sustainable food security. In addition, NBI partnered with the Nile Basin Discourse to engage civil society in shaping and monitoring agricultural and water management interventions.

WATER-SMART IRRIGATION STUDY

The Eastern Nile sub-basin hosts some of the Basin's largest irrigation schemes, yet water use efficiency remains low and agricultural productivity limited. Recognising these challenges, NBI completed the "***Water-Smart Irrigation Study in the Nile Basin***" and produced practical guidelines and an interactive dashboard. The dashboard equips policymakers, planners and practitioners with real-time data, analytical tools and visualisations to support evidence-based decisions. Leveraging NBI's earth observation technology, the tool enables more efficient allocation of water, strengthens climate-resilient irrigation planning, and helps countries align national practices with regional water availability.

To build capacity, NBI organised a training workshop in Nairobi Kenya in June 2025, focusing on applying the dashboard and guidelines to the Eastern Nile context. At the closure of the reporting period, NBI was developing knowledge products out of the study process and products.

Key Challenge under Goal 3

NBI's greatest challenge under Goal 3 is insufficient funding to carry out key activities, such as creating an inventory of good practices in rain-fed and irrigated agriculture and facilitating the exchange of experiences among practitioners. Another challenge to intra-basin trade in agricultural produce arises from both structural and non-structural barriers.

A journalist during an NBI-sponsored training covers plastic pollution

GOAL 4: ENVIRONMENTAL SUSTAINABILITY

The Nile Basin is endowed with environmental resources and harbours high levels of biodiversity. However, numerous water-related ecosystems are in decline, a trend that has intensified since 2012. Wetlands – critical for regulating river flows – are particularly affected, with many severely degraded due to both direct land use and shifts in river flow patterns. These hydrological changes are accelerating the loss of ecosystem services on which millions of Basin inhabitants depend for their livelihoods.

Elsewhere, the exponential growth of plastic production since the 1950s and inadequate waste management have resulted in the accumulation of plastic debris in the environment. The marine environment is a major sink for plastic debris, most of which is generated on land and transported from coasts and by rivers, including the Nile. The widespread occurrence of plastics in soils, lakes, rivers and the marine environment, combined with its longevity, makes it a global threat to the environment both globally and in the Nile Basin.

NBI supports its Member States through a transboundary platform for joint policy development and capacity building. It also ensures that water resource investments in the Basin adhere to the highest environmental standards. Through this, NBI contributes to the protection and restoration of water-dependent ecosystems, such as wetlands and peatlands, while promoting the sustainable use of natural resources across the Nile watershed. Below is the progress NBI made under this Goal:

SUSTAINABLE MANAGEMENT OF WETLANDS

In 2022/2023 and 2023/2024, NBI produced and disseminated two landmark publications: the first-ever atlas on wetlands of transboundary significance and the Sudd Management Strategy for South Sudan. NBI aimed to promote sustainable use and conservation of the Basin's wetlands, safeguarding their ecological integrity while supporting vital socio-economic functions at both national and transboundary levels.

To further strengthen technical and institutional capacity for wetlands management, NBI signed a memorandum of understanding in 2024 with the Ramsar Centre for East Africa (RAMCEA). This collaboration focuses on joint development and implementation of wetlands management plans, knowledge sharing, multi-stakeholder dialogue, training and capacity building, and resource mobilisation.

NBI produced the Atlas of Wetlands of Transboundary Significance to generate knowledge on the Nile Basin.

NBI continued to integrate wetlands considerations across its programme portfolio. Wetland ecosystems were incorporated into the water availably and demand studies in 2022/2023, while ecosystem services were factored into the Nile River Basin Investment Programme.

IMPROVING UNDERSTANDING AROUND PLASTIC POLLUTION

In 2023/2024, NBI and GIZ, in partnership with Media in Cooperation and Transition (MICT), Nile Basin Discourse, and the Helmholtz Centre for Environmental Research, launched the second phase of a regional project aimed at deepening understanding of plastic pollution in the Nile and its transport downstream to the Mediterranean Sea.

This phase focused on strengthening the capacity of Member States to monitor macro-plastic pollution across the Basin. In September 2024, a joint scoping mission was undertaken in Jinja, Uganda, and Kisumu, Kenya. Kisumu was selected as a pilot site for training water specialists in macro-plastic monitoring techniques and for testing practical approaches to tackle plastic pollution in river systems.

In 2024/2025, NBI completed a baseline study on macroplastic pollution monitoring in Nile Basin and a training workshop for the members of the technical working group on water quality was organized on macroplastic monitoring methods and on citizen science tools for water resource management.

Action Plan on Macroplastic Pollution Monitoring

In addition, NBI developed a draft Action Plan on Macroplastic Pollution Monitoring in the Nile Basin, focusing on macroplastics, which are more visible, easier to monitor, and more actionable than microplastics. The draft Action Plan provides a practical framework for establishing a basin-wide microplastic monitoring programme over a five-year period, aligned with NBI's strategic objectives. It advocates for the integration of citizen science approaches, leveraging public awareness and engagement in addressing plastic pollution. The Action Plan also proposes clear protocols for data ownership, access, and sharing, to ensure transparency and the effective use of monitoring data.

East African Community Water Quality Management Policy Guideline, Strategy and Action Plan

In collaboration with NBI, and the Nile Basin Discourse, the Lake Victoria Basin Commission under the Nile Cooperation for Climate Resilience project finalised the East African Community Water Quality Management Policy Guideline and the Water Quality Management Strategy and Action Plan. The two products were developed in consultation with Nile Equatorial Lakes riparian countries that also double as members of the East African Community – Burundi, DR Congo, Kenya, Rwanda, South Sudan, Tanzania and Uganda. The documents were adopted by the sectoral Council of Ministers for the Lake Victoria Basin and adopted for use to synchronise and strengthen sustainable control

of environmental degradation, safeguard public health, and guarantee water of good quality to support social economic activities and job creation through effective transboundary water cooperation.

The two documents were published online along with a policy brief.

Going forward, the Lake Victoria Basin Commission is working to secure approval of the draft final East African Community Water Quality Management Policy, along with the draft final Nile Equatorial Lakes Water Quality Management Strategy and Action Plan, to enhance coordinated regional efforts in managing and safeguarding water quality across the basin.

NBI established an environmental task team. In addition, it developed and publicly disclosed an Environmental Social Management Plan that provides mitigation measures from the NCCR project's impacts and includes a Grievance Redress Mechanism.

Empowering Communities through citizen science/nature-based solutions

Journalists from 10 countries in the Nile Basin benefited from an NBI-sponsored training on plastic pollution in 2024.

Citizen science plays a critical role in closing water quality data gaps and enabling local participation in the protection of water resources. It enhances data collection and transparency, fosters community awareness of water quality challenges, and supports progress toward Sustainable Development Goal 6 on clean water and sanitation.

In 2024, with NBI's support, MICT convened a regional workshop on plastic pollution, with a particular focus on the role of citizen science. The workshop brought together radio journalists from all ten Nile Basin countries, strengthening regional media engagement and amplifying public awareness around plastic waste and water protection.

These efforts illustrate NBI's commitment to integrated, science-based and regionally coordinated action for the sustainable management of wetlands and water resources across the Nile Basin.

See more on NBI's water quality interventions under Goal 1.

RAISING AWARENESS AND ADVANCING DIALOGUE

In 2023/2024, NBI launched a targeted awareness campaign to promote sustainable wetland management while mobilising Member States to act on recommendations from its wetlands-related knowledge products. As part of this effort, NBI engaged local media during the launch of the Sudd Management Strategy in South Sudan. Further engagement took place when 21 journalists underwent training in Juba in 2024.

SUPPORTING RESEARCH AND CROSS-BORDER COOPERATION

Through the Dynamic Management of Wetland Ecosystems (DYNOBA) research initiative – funded by the French Development Agency – NBI strengthened its capacity to support climate-resilient water and wetlands governance. The project facilitates learning and experience exchange among transboundary basin organisations.

NBI collaborated with the International Office for Water (OiEau) to contract and oversee consultancies during 2023/2024 under DYNOBA. These focused on:

i. conducting a pre-feasibility study for the Soono Mini-hydropower Project on the shared Lwakhakha River between Kenya and Uganda, and

ii. supporting cross-border cooperation and conservation of the Sango Bay-Minziro wetland ecosystem within the Akagera River Basin.

Key Challenges under Goal 4

This Goal is underfunded and NBI's intervention level is low. Activities are fragmented and country efforts – including restoration of catchments – are not captured. Most of the environmental efforts are at national level. Going forward, NBI would like to design a basin-wide framework to coordinate efforts at national and regional level to improve integrity of water-related ecosystems.

Water resources across the Nile Basin are, in general, threatened by land degradation and declining quality, which exacerbates scarcity.

GOAL 5: CLIMATE CHANGE ADAPTATION

The impact of climate change is already manifesting in the Nile Basin in form of floods, drought and other extremes. Droughts, floods, and temperature increases are predicted to negatively affect the water cycle, which means wetlands, rivers, lakes, forests, and other ecosystems throughout the Basin, including snow-capped mountain peaks of the Rwenzori and Kilimanjaro.

Climate change impacts have had significant effects on economic and social systems, with people dying and losing livelihoods. Subsistence agricultural sector is also particularly vulnerable with the irrigated sector unprepared for a scenario in which Nile water decreases.

At the same time, countries across the Basin continue to invest billions of dollars in water infrastructure – dams, irrigation systems, and wells – to secure essential services. Yet, planners and policymakers often do not adequately account for climate variability and climate change. This exposes critical infrastructure to heightened risk, potentially undermining service reliability, damaging assets, and leading to serious socio-economic, and political consequences.

Contributing to SDG 13 (climate action), NBI's Goal 5 seeks to strengthen regional climate resilience and disaster preparedness. Progress during the reporting period is summarised below:

PROMOTING CLIMATE-RESILIENT PLANNING AND IMPLEMENTATION

NBI developed, published and disseminated climate-smart investment (CSI) guidelines along with an e-learning course hosted on the Integrated Knowledge Platform.

PROMOTING REGIONAL POLICY AND PLANNING FRAMEWORKS

NBI realised major advances in its Climate Finance Readiness, with the finalisation of its draft Climate Action Strategy (2025-2035), Climate Proofing Policy, and Environmental Social Safeguard Checklist. This positions NBI for Global Climate Finance accreditation, and climate finance mobilisation once the documents are approved by NBI's Nile Council of Ministers in 2025/2026.

The new policy positions NBI as a hub for coordinated response, building on its achievements in hydrological monitoring, forecasting systems and partnerships with the IGAD Climate Prediction and Applications Centre

and the World Meteorological Organization. The Strategy aligns with global and continental frameworks, including the Paris Agreement, the Sustainable Development Goals and the African Union's Agenda 2063, ensuring the Basin's efforts resonate beyond its borders.

INVESTING IN REAL-TIME DATA AND INFORMATION SERVICES BASIN-WIDE

The NBI Secretariat together with Member States operate a regional hydrological monitoring system that relays real-time data to Member States and regional centres. Using the information from this system, in May 2024, NBI began producing quarterly hydrological outlooks and advisories which are issued to Member States quarterly. In addition, Burundi, Kenya, and Tanzania developed national outlooks and advisories, while Tanzania's Lake Victoria Basin compiled a national hydrological yearbook using data from the regional hydrological monitoring system.

NBI and the Member States strengthened their collaboration with IGAD/ICPAC in developing both meteorological and hydrological seasonal forecasts. These forecasts provided early warning information to Member States, reinforcing preparedness and response to extreme events.

Testimony:

In South Sudan, the flood advisory has become a vital tool for Communities

The June-July-August- September to October (JJAS) flood advisory forecast above-normal rainfall for much of eastern and south-eastern South Sudan. On the ground, this projection has proved accurate, with areas such as Jonglei and Eastern Equatoria now experiencing heavy rain. The advisory also indicated high rainfall for the north-east and western regions. Warrap State is the only area expected to receive below-normal levels of rainfall.

We develop the JJAS together with the Nile Basin Initiative, benefiting from cyber applications of the IGAD-ICPAC. Once finalised, the JJAS is shared with communities and disseminated through awareness campaigns, enabling farmers and households in flood-prone lowlands to relocate before the peak of the rainy season. Already, in August 2025, many people are moving to higher ground in anticipation of flooding.

South Sudan faces two main types of flooding: runoff flowing from highlands into lowlands, and river overflows that inundate towns.

Our communities are benefiting tremendously from the JJAS especially the chronically low funding annually for relocating people during rainy seasons. Those with access to television and radio receive timely information and are rarely affected by the floods, while isolated communities remain more vulnerable because the rainy seasons are long. A further challenge lies in language. Although English and Arabic are more commonly spoken, South Sudan is home to 64 tribes with distinct languages. Staff from the Ministry of Humanitarian Affairs and Disaster Management often translate the JJAS so that local chiefs can pass on the information in the local languages.

JJAS is an important seasonal forecast. We need it translated into local languages so that rural communities can benefit from it. While the Government provided forecasts before the JJAS was introduced, the JJAS goes further in enhancing community awareness.

Emmanuel Wani Rajab, Head of South Sudan Government Weather Forecast Section

August 2025

River Flow Forecasting System Upgraded

To support decision-making, NBI upgraded its seasonal river flow forecasting system, which predicts short-to-medium-term flow volumes across the Nile network. The web-based platform disseminates operational forecasts through the Integrated Knowledge Portal on NBI's website, enabling Member States to better manage dam operations, plan cropping cycles, ensure infrastructure safety, and harness local flow peaks. Furthermore, NBI issued online monthly drought monitoring bulletins.

Enhancing Flood and Drought Protection in the Eastern Nile

At sub-basin level, NBI expanded flood forecasting and early warning systems to cover previously unmodelled flood-prone areas in the Eastern Nile, including the catchments of Tekeze-Setit-Atbara in Ethiopia and Sudan and Baro-Akobo-Sobat in South Sudan. Forecasting capacity was strengthened through three-day rainfall predictions using a numerical weather model. Integrated into NBI's cloud-based flash flood early warning system, these advances provided near real-time data to water resource managers, dam operators, planners and local leaders. By the end of the reporting period, the enhanced system was delivering forecasts at 35 locations, and monitoring rainfall across 55 catchments. In addition, NBI developed hazard risk and vulnerability maps in 16 flood-prone areas.

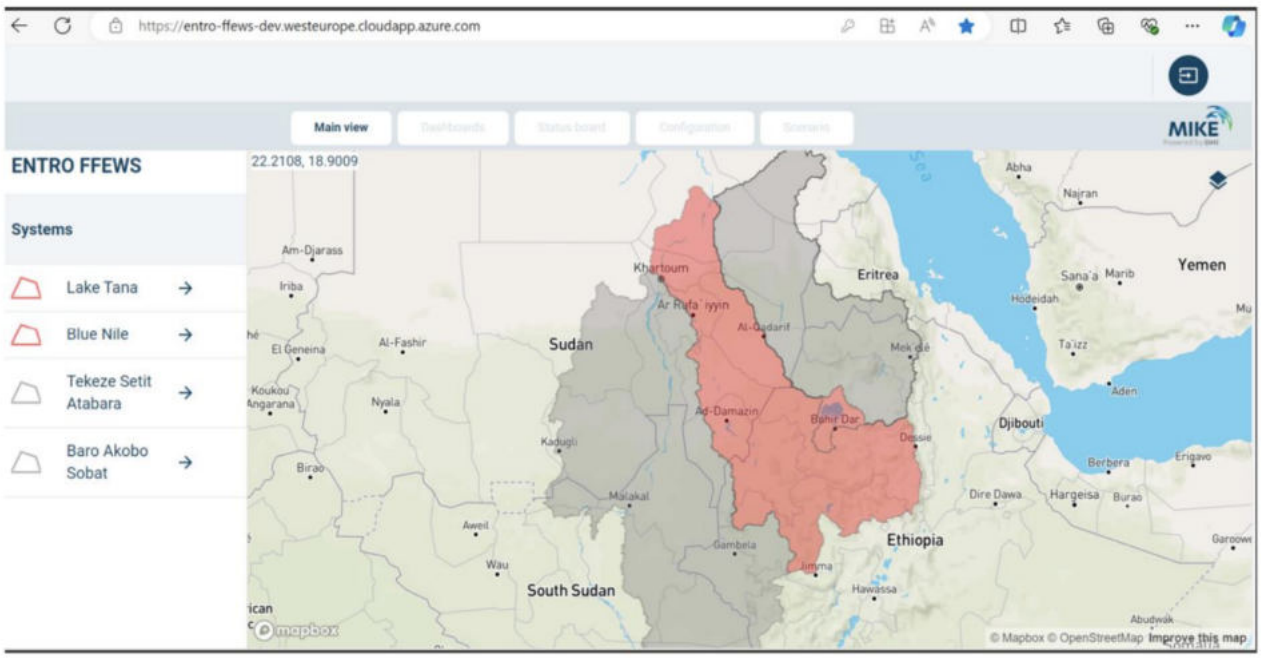
In 2025, validation exercises by the Eastern Nile Flood and Drought Technical Working Group, together with NBI experts and regional specialists, confirmed the accuracy and efficiency of the system and its hazard maps.

Daily Flood Forecasts

Throughout the reporting period, the NBI issued daily flood forecasts during the flood season (July to September) for the Lake Tana, Blue Nile, and Baro-Akobo-Sobat sub-basins. This initiative initially involved collaboration with national flood forecasting centres in Ethiopia, South Sudan, and Sudan. In 2024/2025, it became part of NBI's upgraded Eastern Nile flood forecasting and early warning system (FFEWS).

In 2023/2024, NBI conducted hands-on training for young professionals from the national centres, equipping them with scientific tools such as flash flood early warning systems, rainfall forecasting techniques, and MIKE hydrological models. As a result, they were able to generate and distribute daily forecasts

Enhancement of EN-FFEWS, developed and can be accessed in public domain



independently from their respective national centres. Between July and September 2024, interns shared these forecasts with over 200 users via email, supporting more timely and localised flood preparedness.

Furthermore, NBI trained experts and community leaders annually in flood early warning systems. In 2023, a targeted training in Juba brought together 83 specialists from Sudan and South Sudan, 16 of them female – ensuring continuity despite insecurity in Sudan.

Further, topographic surveys and community flood awareness assessments in Ethiopia, Sudan and South Sudan informed the upgraded forecasting system. In Lake Tana, Ethiopia, local authorities reported using NBI models to manage flood risks effectively.

Draft Design Flood Analysis, the Region's First

NBI in Eastern Nile strengthened the Basin's capacity in design flood analysis. This process involves estimating the potential size of future floods, enabling countries and communities to design infrastructure – such as bridges, dams, and drainage systems – that can safely withstand such events. With dam failures increasing in the Nile Basin – mainly due to technical and institutional capacity and climate change impacts (overtopping) – flood safety has become a priority at NBI.

Design flood analysis plays a vital role in preventing the flooding of roads, buildings, and agricultural land; protecting lives and property; ensuring the safety and resilience of dams, bridges, and stormwater systems; and supporting planning for the impacts of climate change and extreme weather.

The NBI developed and disseminated design flood guidelines across all Eastern Nile Member States. These guidelines – the first of their kind in the Basin – serve as a practical reference tool for planners, engineers, and decision-makers. Countries in the Nile Equatorial Lakes region have expressed interest in scaling up the guidelines for basin-wide application, enabling all Member States to benefit from this innovation.

Advancing Drought Forecasting Basin-wide

In October 2023, NBI began developing a drought early warning system (DEWS) that uses satellite data on rainfall and moisture stress to track drought conditions. By the end of the reporting period, the drought early warning system dashboard had been completed, providing NBI Member States with a comprehensive tool to strengthen regional preparedness.

The dashboard brings together key functions such as hydrological modelling, surface water monitoring, and the forecasting of both meteorological and agricultural

drought. Built on strong data systems, it supports timely information sharing and active engagement with users across the region.

The dashboard underwent rigorous reviews and validation including by regional drought experts and the Nile TAC. Version 2 of the tool is available on NBI's website.

Flash Flood Hotspots Mapping and Early Warning Systems in Nile Equatorial Lakes

In 2024/2025, NBI identified and mapped flash flood hotspots across Burundi, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda. Based on this information, a basin-wide web-based flash flood early warning system was developed. The tool issues real-time alerts daily via email to water ministries basin-wide, providing notifications for a period of 48 hours (lead time). With high accuracy, the web-based system shows locations and numbers of people at risk and additional, critical information on the time and magnitude of the forecasted flash flood event. The water ministries are then tasked to interpret the alerts and disseminate them further via national networks for preparedness.

NBI trained 55 national experts in the use of flood monitoring tools such as HEC-RAS and data visualisation platforms (ArcGIS Pro). The national experts are now able to process flood extent maps using globally available datasets. Flood extent maps are useful for disaster risk management, water resources planning, and environmental protection. They show the spatial coverage of areas affected (or likely to be affected) by floods.

These efforts gave national meteorological and hydrological services regular access to accurate, timely flood information – enhancing local, national, and regional disaster response and preparedness

Furthermore, NBI assessed previously undocumented national flood risks and needs and published them in July 2024 for nine Member States. In addition, detailed flood risk assessments were completed for ten priority sites, forming the foundation of an investment plan for improved flood risk management.

To ensure sustainability, NBI emphasises the need for continuous flood and drought forecasting, jointly undertaken by Member States through a regional approach.

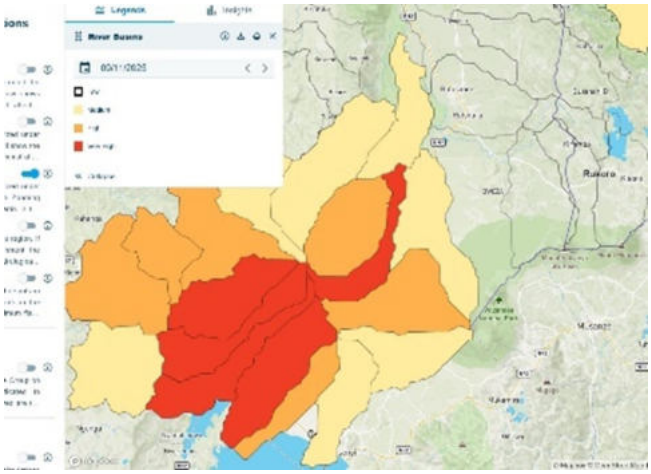
Flash Flood Forecast and Early Warning for the Nile Basin countries

Time of Forecast: 09-11-2025 00:00

Forecast Period: 09-11-2025 00:00 - 11-11-2025 00:00

Summary of Flash Flood Forecast and Early Warning for Nile Basin Countries

		Number of impacted locations			Population at risk in the affected areas		
Severity	Administrative unit	Medium	High	Very High	Medium	High	Very High
	Burundi	2			269,016		
	Democratic Republic of the Congo	7	6	5	922,544	382,271	236,225
	Ethiopia						
	Kenya						
	Rwanda	11	3		567,628	3,112	
	South Sudan						
	Sudan						
	Tanzania	11	1		237,641	10,419	
	Uganda	11			443,244		



The messages NBI issues for flash flood preparedness across the Nile Basin indicate time, location and degree of severity.

ENABLING CLIMATE FINANCE ACCESS AND PROJECT DEVELOPMENT

In 2023/2024, NBI collaborated with GIZ and the Michael Succow Foundation under the DIAPOL-CE project to enhance knowledge of the socio-economic potential of transboundary peatlands in the Kagera sub-basin. The project focused on Lakes Cyohoha, Rweru, and the Akanyaru marshlands (Burundi and Rwanda), and the Sango Bay-Minziro wetlands (Tanzania and Uganda). These efforts aim to unlock climate financing for ecosystem protection, economic development, and green growth.

With funding from the German Federal Ministry of Environment, NBI supported stakeholder engagement across the four countries and contributed to the development of a project proposal titled "Strengthening Climate Resilience of Peatland Ecosystems and Dependent Communities in the Kagera Sub-basin", targeting the Green Climate Fund.

ADVANCING REGIONAL CLIMATE RESILIENCE

Since 2023, the Nile Basin Initiative has been contributing to the World Bank-funded **Regional Climate Resilience Programme for Eastern and Southern Africa**. The project focuses on enhancing regional preparedness for the increasing frequency, intensity, and impact of water-related climate shocks on people, livelihoods, infrastructure, and ecosystems.

Currently, the participating countries include Comoros, Madagascar, Malawi, Mozambique, and South Sudan, supported by the Nile Basin Initiative, the African Union, and the Southern African Development Community (SADC). A future phase will involve Ethiopia, Tanzania, Uganda, and Zambia.

Under the first Series of Projects, NBI activities included:

- support for integrated transboundary flood management of the Unyama River at the Nimule–Elegu border between South Sudan and Uganda, implemented through NELSAP-CU;
- flood risk mapping for selected areas in the Baro-Akobo–Sobat sub-basin, covering Ethiopia and South Sudan, implemented through ENTRO; and
- a feasibility study for flood management interventions in the Yabus area, involving Ethiopia, South Sudan, and Sudan, also implemented through ENTRO.

NBI conducted field visits and stakeholder engagement in the Unyama and Baro-Akobo-Sobat areas in 2024 and 2025 respectively. These efforts culminated in the completion of inception phases and the launch of hydrological modelling and flood risk assessments. The findings will inform joint flood management plans and future investment decisions aimed at mitigating the local impacts of flooding. Additionally, NBI launched a dedicated human capacity development programme for South Sudan by enrolling interns in the field of flood forecasting between July and September in 2024.

Key Challenge under Regional Climate Resilience Programme for Eastern and Southern Africa

Insecurity in catchment areas in rural South Sudan, Sudan, and Ethiopia hampered ground activities such as physical surveys, community engagement, data collection, local capacity building, and the installation and safeguarding of equipment.

To address these challenges, NBI made use of its earth observation data while collaborating with humanitarian organisations, leveraging their logistical infrastructure. In addition, NBI unlocked locally led solutions by engaging the Nile Basin Discourse to mobilise community-based organisations and non-governmental organisations in stakeholder consultations at the grassroots level. Furthermore, NBI liaised closely with, and maintained consistent follow-up among, authorities at all levels.

Overall under Goal 5, to ensure sustainability, NBI emphasises the need for continuous flood and drought forecasting, jointly undertaken by Member States through a regional approach.

During NBI's silver jubilee in Bujumbura, Burundi in 2024, the Vice President, Prosper Bazombanza, endorsed the Nile River Bain Management Plan to enhance coordinated water management and investments. Looking on is the Nile COM chair, Hon. Sam Cheptoris

GOAL 6: TRANSBOUNDARY WATER GOVERNANCE

NBI continues to serve as the primary platform for transboundary dialogue and cooperation among Nile Basin countries. The Secretariat facilitates strategic engagements by convening the institution's governing bodies to deliberate on key matters affecting the Basin and the sustainability of NBI. These engagements include regular meetings of the Nile Council of Ministers and the Nile Technical Advisory Committee, where Member States provide policy guidance, reaffirm their commitment to cooperation, and steer the institution's strategic direction. The Secretariat also coordinates preparations for high-level summits of Heads of State and Government and maintains active engagement with diplomatic missions of Member States.

REGULAR GOVERNANCE MEETINGS AND STRATEGIC DECISIONS

During the reporting period, NBI maintained a regular schedule of governance meetings, including extraordinary sessions. These fora enabled timely decision-making, alignment on strategic priorities, and approval of institutional workplans.

Governance structures across the institution benefited from dedicated training on the NBI Governance Charter (2022/2023), reinforcing shared understanding of roles, responsibilities, and operating principles.

Stakeholder confidence in NBI governance remained high, with satisfaction levels consistently above 90 percent, a strong indicator of institutional credibility, responsiveness, and effectiveness in facilitating cooperation and managing shared resources.

Audit and Risk Management function for Supporting Corporate Management

NBI's internal audit function plays a critical role in promoting accountability and institutional integrity. It provides independent assurance and advisory support to NBI management and governance structures, focusing on the effectiveness of internal controls. Key activities include risk analysis and assessment, provision of advisory and assurance services, and periodic reviews of transactions and operational activities across the Secretariat. This function helps safeguard institutional resources and enhances the overall efficiency and transparency of NBI operations.

The table below summarizes the institutional external audits undertaken between the period July 2022-June 2024:

External Auditor	Nature of Audit	Financial year	Audit opinion
Ernest & Young	Nile-SEC organizational Annual Audit	July 2022 - June 2023	Unqualified opinion
Ernest & Young	Nile-SEC organizational Annual Audit	July 2023 - June 2024	Unqualified opinion

*Unqualified opinion implies a clean report free from material misstatements, and compliant with the accounting principles and applicable laws.

Robust risk management for continued cooperation

In 2023/2024, NBI updated its enterprise-wide risk register, focusing on key risk areas that influence transboundary cooperation and institutional performance. One of the risk areas was financial sustainability risk: With three among the ongoing projects ending in 2025 and the challenging global funding environment, financial sustainability emerged as a major concern. NBI member States committed to honour their obligations. In addition, NBI refocused its financing strategy to explore innovative and diversified funding options.

PROGRESS ON COOPERATIVE FRAMEWORK AGREEMENT

The Cooperative Framework Agreement (CFA) entered into force on 13 October 2024 following ratifications by Burundi, Ethiopia, Rwanda, Tanzania, and Uganda – between 2013 and 2023 – and the accession by a sixth country, South Sudan, in August 2024. Four countries – the Democratic Republic of Congo, Egypt, Kenya and Sudan – are yet to accede to the CFA.

The status of deposition of instruments of ratification or accession to the CFA and the date of entry into force of the CFA was formally confirmed and communicated by the African Union (the Depositary of the CFA) on 4 September 2024, in line with Articles 43 and 45 of the CFA.

In an extraordinary meeting on 28 November 2024 in Kampala, Uganda, the Nile Council of Ministers agreed to a nine-month engagement period with NBI Member States that had not ratified the CFA in the spirit of moving forward together. If need arose, the period could be extended. A sub-committee comprising Uganda as Nile-COM Chair, South Sudan, and Rwanda was established to lead these diplomatic engagements. At closure of the reporting period, the Special Committee had held successful engagements with all the non-ratifying countries.

LIST OF COUNTRIES WHICH HAVE SIGNED, RATIFIED/ACCEDED TO THE

AGREEMENT ON THE NILE BASIN COOPERATIVE FRAMEWORK

.....

LISTE DES PAYS QUI ONT SIGNE, RATIFIE/ADHERE

ACCORD CADRE SUR LA COOPERATION DANS LE BASSIN DU FLEUVE NIL

31/08/2024

No	COUNTRY/PAYS	DATE OF/DE SIGNATURE	DATE OF/DE RATIFICATION/ ACCESSION	DATE DEPOSITED/ DATE DE DEPOT
1	Ethiopia	14/05/2010	25/06/2013	02/09/2013
2	Rwanda	14/05/2010	21/05/2014	26/05/2014
3	Tanzania	14/05/2010	23/05/2016	28/06/2016
4	Uganda	14/05/2010	15/08/2019	08/10/2019
5	Burundi	28/02/2011	25/09/2023	19/10/2023
6	South Sudan		01/08/2024	14/08/2024
7	Democratic Rep. of Congo			
8	Egypt			
9	Eritrea			
10	Kenya	19/05/2010		
11	Sudan			
	Total countries : 11	**of signature : 6**	**of ratification : 6**	**of deposit : 6**

ENHANCING CAPACITIES OF NATIONAL ACTORS FOR TRANSBOUNDARY COOPERATION

Continuous capacity development of national actors remains central to implementing NBI's mandate at the country level and fostering constructive stakeholder engagement. By promoting a shared understanding of best practices and standards in transboundary water management, NBI strengthens regional collaboration and supports joint decision-making.

As part of this commitment, both the NBI Secretariat and ENTRO continued to engage interns and young professionals, with a strong focus on gender inclusion. These placements provided valuable opportunities for knowledge exchange, allowing participants to contribute insights from their national contexts while gaining hands-on experience with NBI's regional planning and analytical tools (see more under Goals 1 and 5).

During the reporting period, NBI hosted 75 interns and young professionals – 60 at ENTRO across 12 cohorts, and 15 at the NBI Secretariat across five cohorts. Nominated by all 10 Member States, participants contributed to key areas such as near-real-time flood forecasting, drought assessment, and land use change analysis. Of those hosted at ENTRO, 22 (37 percent) were female, while the Secretariat's two last cohorts in 2024/2025 were exclusively female.

This programme continues to strengthen regional capacity, promote technical skills for transboundary water cooperation, and foster professional networks – helping to build the next generation of water leaders in the Nile Basin. To measure its long-term impact, NBI is developing a tracking mechanism to monitor the progress and contributions of former participants.

	Burundi	DR Congo	Egypt	Ethiopia	Kenya	Rwanda	S. Sudan	Sudan	Tanzania	Uganda
Secretariat	1	1		2	2	1	2	2	2	2
ENTRO			2	22			16	20		

Peer-to-peer Learning at Rusumo and Zambezi

To promote experiential learning, the NBI organised study visits for Permanent, Principal/Under Secretaries from the Ministries of Water, Finance, and Foreign Affairs across the Nile Basin. In 2023, these senior government officials visited the Regional Rusumo Falls Hydroelectric Project, followed by a coaching session in Kigali, Rwanda, focused on hydro-diplomacy and negotiation skills to strengthen transboundary cooperation. A total of 51 participants, including 13 women, took part in the mission.

In July 2024, the NBI conducted a similar experiential learning mission to the Zambezi Watercourse Commission. As part of efforts to enhance hydro-diplomacy capacity, Permanent, Principal/Under Secretaries from the Ministries of Water, Finance, and Foreign Affairs visited the Kariba Dam, jointly owned by Zambia and Zimbabwe and managed by the Zambezi River Authority. The visit was followed by a coaching session in Zimbabwe, modelled on the previous year's engagement in Kigali. A total of 55 participants, including 13 women, took part in the mission.

The engagements resulted in increased awareness, appreciation, and high visibility of NBI at national levels among the decision makers.

The Rusumo Falls experiential learning tour included a training in hydro-diplomacy, and a visit to the formerly degraded wetland Nyandungu Eco-Park in Kigali, Rwanda. A year later, in 2024, the same group visitted the Zambezi Watercourse Commission/Kariba Dam before the Permanent Secretaries visited the hydro power project.

Enhancing Staff Expertise through Hydro-diplomacy and Technical Training

Beyond access to e-learning modules via the Integrated Knowledge Portal, NBI's professional staff underwent targeted training in hydro-diplomacy and technical fields including groundwater management, dam safety, the Data Analytics Services, water resource modelling, and early warning systems for floods and droughts. This ongoing capacity building equips staff to effectively support the basin-wide programme and its diverse technical demands.

Advancing Gender Equality and Social Inclusion Across the Nile Basin

NBI finalised its draft Gender Mainstreaming Policy and Implementation Strategy 2025, which aims to consolidate previous achievements while systematically addressing gender imbalances and promoting gender equity and equality across the Nile Basin. The Policy and Strategy seek to establish an enabling environment that supports targeted approaches to transforming gender dynamics within NBI activities, ultimately contributing to poverty reduction and improved well-being for all people in the Basin.

Prior to the policy development, NBI prioritised gender equality and social inclusion as essential components of sustainable cooperation and effective stakeholder engagement. Through targeted training and institutional mainstreaming, NBI worked to embed these principles across its operations and engagements with Member States.

The NBI Secretariat prioritised females for its Young Professionals programme.

A series of gender awareness sessions were delivered to NBI staff, interns, and Member State representatives to build shared understanding and strengthen institutional capacity. These included four dedicated training courses involving staff and gender focal points from the Eastern Nile countries. One of the sessions took place during the Innovative Stakeholders Forum in Juba, South Sudan, in March 2023. In total, 91 individuals participated in these sessions, of which 37 (41 percent) were female.

In parallel, NBI advanced gender and social inclusion in project implementation. This included integrating environmental and social safeguards into its activities, guided by global good practices. Staff received training in the World Bank's environmental and social standards, stakeholder engagement, and information disclosure to enhance their capacity in inclusive project design and delivery.

These efforts collectively underscore NBI's commitment to equitable development outcomes, recognising that inclusive participation strengthens basin cooperation and contributes to more resilient and responsive water governance.

STRENGTHENING NBI TO DELIVER AS ONE

NBI continued to reinforce the One NBI Philosophy, focusing on strengthening institutional identity, visibility, cohesion, and complementarity across its three centres. A unified approach enabled the institution to more effectively deliver on its mandate and engage strategically at regional and global levels.

To this end, NBI hosted three side events during the 2024 Stockholm World Water Week, each attracting an average of 15 development partners. These meetings served as platforms for knowledge exchange, dialogue, and sharing of good practices on sustainable management of the Nile's shared water resources.

NBI also took part in the 10th World Water Forum in Bali, Indonesia, with the Executive Director participating in high-level panels on transboundary water cooperation. She highlighted the institution's 25-year journey, its achievements, lessons learned, and enduring relevance as a regional platform for dialogue and action.

The Forum offered a strategic opportunity for NBI to:

i. Strengthen relationships with technical and financial partners, while exploring new collaboration prospects,

ii. enhance institutional visibility through targeted communications, and

iii. showcase the NBI's impact as part of its 25th anniversary celebrations.

Through these high-profile engagements, NBI deepened its global presence and reaffirmed its role as a key actor in transboundary water cooperation.

Sustaining Cooperation through Strategic Resource Mobilisation

In 2023/2024, NBI intensified efforts to mobilise resources in support of both core operations and programme delivery. The focus remained on deepening cooperation among Member States while broadening engagement with traditional and emerging development partners.

During Stockholm World Water Weeks annually since 2022/2023, NBI's Executive Director and Governance representatives held high-level dialogues with partners to underscore the strategic importance of sustained collaboration in the Nile Basin. With support from the Stockholm International Water Institute (SIWI) in 2024, NBI hosted a formal briefing, during which its Governance reaffirmed its commitment to transboundary cooperation and presented progress on key initiatives.

Reaffirming Member State Commitment

Country contributions remain central to the functioning of NBI and the implementation of its core programmes. However, contributions continued to fluctuate. By 31 December 2024, NBI's expectation that at least two countries would significantly reduce their arrears had not been met. Irregular contributions affect planning, disrupt operations – including Governance meetings – and limit the scope of interventions.

At each Governance meeting, Member States were urged to fulfil their financial obligations as a demonstration of ownership and political commitment. In response, States reaffirmed their intention to clear outstanding arrears (see financial report on page 79).

Strategic dialogues held in February 2023 (Nairobi) and February 2024 (Bujumbura) and a high-level policy dialogue in February 2025 (Addis Ababa) further reinforced this momentum. Development partners reiterated their long-term support for Nile cooperation and encouraged Member States to resolve outstanding issues through diplomacy rooted in shared goals of peace and sustainable development. Partner contributions continue to supplement Member State funding, forming an essential pillar of NBI's financial sustainability.

Advancing Joint Investments: Angololo Marks a Milestone

NBI reached a major milestone on 16 April 2025, when representatives from the Nile Council of Ministers of Kenya and Uganda signed a bilateral agreement in the Kenya-Uganda border town of Busia. This agreement marks a critical step towards the implementation of the Angololo Multipurpose Water Resources Project, 15 years after the project was first identified.

This US$137million joint initiative between Kenya and Uganda will be implemented on the transboundary Malaba River, located within the Sio-Malaba-Malakisi sub-basin, itself part of the Lake Victoria sub-basin of the Nile Basin.

Members of Nile Council of Ministers, Hon. Eng Eric M. Mugaa and Hon. Beatrice Atim Anywar (representing Hon. Sam Chaptoris), upon signing the Bilateral Agreement on 16 April 2025 in Busia, Kenya.

Earlier, in 2023/2024, NBI successfully completed a comprehensive feasibility study for the project, addressing a long-standing information gap that had previously constrained investment decisions by the two countries and development partners. In addition, NBI finalised an environmental and social impact assessment, a resettlement and compensation action plan, a detailed project design, and preparation of tender documentation.

Recognised as a national priority by both Kenya and Uganda, the project has to date received funding from AUDA-NEPAD amounting to US$1.5million. The proposed development includes the construction of a 40-metre-high dam with a reservoir capacity of 31 million cubic meters. Once operational, it will provide potable water to an estimated 270,000 people, irrigate 4,000 hectares of agricultural land, and generate 1.75 MW of hydroelectric power.

Situated within a 430 km^2 catchment area, the project is expected to directly benefit approximately 300,000 people across Tororo, Manafwa, and Namisindwa districts in Uganda, and Busia and Bungoma counties in Kenya. Anticipated outcomes include increased agricultural productivity, enhanced access to water, job creation, improved fisheries, and livestock development.

Expanding Development Partner Engagement

NBI broadened its engagement with regional and international stakeholders including the World Bank, African Development Bank, UN agencies, AMCOW, and the African Water Facility. Several project proposals were submitted, with four accepted into the Facility's rolling pipeline.

The Angololo project was showcased at multiple high-level events in 2024, including the 8th Programme for Infrastructure Development in Africa (PIDA) Week in Addis Ababa, and the Africa Infrastructure Forum in Rabat. These platforms enhanced the project's visibility and generated additional interest from potential investors.

Strengthening Institutional Capacity and Sustainability

To sustain basin-wide cooperation, NBI invested in strengthening institutional capacity and financial resilience. Diplomatic outreach efforts resulted in €90,000 in support from BMZ for the Second Nile Basin Heads of State and Government Summit, and a further €125,000 for completing upgrades to hydrological monitoring systems – critical for data-driven water management.

STRENGTHENED NATIONAL WATER UNITS AND INTER-SECTORAL COORDINATION

In line with its memoranda of understanding with the Intergovernmental Authority on Development (IGAD) in Eastern Africa and the Lake Victoria Basin Commission, NBI during the reporting period set out to i) facilitate effective participation of Lake Victoria Basin Commission in the Nile Cooperation and Climate Resilience project implementation, ii) develop joint operational and implementation plans with partner agencies iii) develop collaborative plans with IGAD, and iv) participate in at least two regional events organized by either Lake Victoria Basin Commission or IGAD.

In 2022/2023, a draft joint operational plan was developed on the NBI- Lake Victoria Basin Commission collaboration. In the same year, on 15 September 2022, NBI participated in the Mara Day celebration led by the Lake Victoria Basin Commission. Mara Day is celebrated annually on 15 September to promote the protection of the shared Mara-Serengeti ecosystem between Kenya and Tanzania.

In 2023/2024, a joint operational plan was agreed on among NBI, the Lake Victoria Basin Commission, the EAPP (Eastern African Power Pool) and the Nile Basin Discourse. The Discourse continues to play a key role in mobilising grassroots stakeholders, raising awareness, and supporting preparedness and response efforts to address Nile Basin challenges, particularly those related to climate hazards

BUILDING CONSENSUS AMONG THE PUBLIC AND STAKEHOLDERS ON COOPERATION PROCESS

The Nile Basin Development Forum

NBI convenes this Forum every three years in partnership with its Member States and development partners. Ahead of the 7th NBDF held in October-November 2023, NBI led a comprehensive regional preparation process. This included the establishment of regional organising committees, the launch of youth competitions, and the evaluation of 166 submitted abstracts. These efforts culminated in 25 webinars, attracting over 1,000 participants from 58 countries.

In total, 110 applications were received to participate in the Forum, and citizens from nine Nile Basin countries took part in the event, which Uganda hosted. Centred on the theme "Deepening Nile Cooperation: Accelerating the Achievement of SDGs in a Changing Climate", the Forum took place in a hybrid format.

Since its evolution from the Nile 2002 Conferences, the Nile Basin Development Forum has become a cornerstone for fostering trust and confidence among riparian countries, enabling them to engage more openly and constructively on shared development goals. The Forum has played a catalytic role in advancing transboundary cooperation, which has increasingly been institutionalised, laying the foundation for joint action to close development gaps across the Basin in a sustainable and equitable manner.

In addition, the NBDF has raised international awareness of the Nile Basin as a global asset of critical importance. It has helped frame Nile cooperation not just as a regional imperative, but as a shared global responsibility to steward one of the world's most vital transboundary water systems.

H.E. Maj (Rtd) Jessica Alupo, Vice President of Uganda, was Guest of Honour at the 32nd Nile Council of Ministers' meeting in Kampala, Uganda in 2024. A year earlier, she officiated at the opening of the 7th Nile Basin Development Forum in the same city, on behalf of H.E. President Yoweri Museveni.

Top, the German Ambassador, H.E. Matthias Schauer, and representatives of development partners from the Cooperation in International Waters in Uganda (CIWA), Dr Anders Jägerskog, and GIZ, Dr. Malte Grossmann at the NBDF 7.

Representatives of Member States at the NBDF 7 in Kampala.

Ms. Rebecca Kadaga, the First Deputy Prime Minister of Uganda, officiates at the NBDF closure (third left), next to Hon. Sam Cheptoris (to her left) together with Dr Florence Grace Adongo. Others are Commissioner Eng. Sowed Sewagudde of the Ministry of Water and Environment in Uganda and member Nile Technical Advisory Committee (third right), Dr Callist Tindimugaya, Nile Technical Advisory Committee Chairperson and Mr. Tom Waako, NBI's Programme Officer. Right of the First Deputy Prime Minister is Eng. Sylvester Matemu. Far left is Dr Alfred Okot Okidi, Permanent Secretary, Ministry of Water and Environment in Uganda.

Nile Media Awards 2023

NBI sponsored the Nile Basin Media Awards back-to-back with the NBDF 7 to recognise outstanding journalists and hackathon participants in the region. NBI regularly hosts the Nile Media Awards on the sidelines of the NBDF to encourage increased factual and balanced reporting.

Mohamed El Said (bottom left, Egypt, Print Media Category) and Aida Nakuti (Uganda, Television Category) were some of the winners. Others were:

i. Eman Mounir (Egypt)
ii. Ayele Addis Ambelu (Ethiopia)
iii. Curity Ogada and Allis Okoji (Kenya)
iv. Cynthia Gichir (Kenya)
v. Dan Kaburu (Kenya)
vi. Mactilda Mbenywe (Kenya)
vii. Akuot Chol Mayak (South Sudan)
viii. Deng Ghai Deng (South Sudan)
ix. Diing Ajuoi Magot Chol (South Sudan)
x. Adiah Nakuti (Uganda)
xi. Davis Buyondo (Uganda)
xii. Sarah Natoolo (Uganda)
xiii. Sarah Mawerere (Uganda)
xiv. Juliet Kasirye and Pius Sawa (Uganda, Kenya)

Nile Day, 22 February

NBI continued to mark Nile Day on 22 February, its founding date, as a flagship platform for promoting public awareness and reinforcing the value of Nile cooperation. Kenya and Burundi hosted the 2022/2023 and 2023/2024 commemorations respectively, the latter coinciding with NBI's 25th anniversary. Celebrations for the 19th regional Nile Day took place in Addis Ababa, Ethiopia.

More than 1,000 citizens and partners across the Basin are estimated to have participated in the three events combined. The celebrations provided a space to highlight the tangible socio-economic benefits of cooperation realised through NBI's work, while reaffirming regional commitment to a shared vision for the Nile.

NBI's 25th Anniversary and 18th Nile Day Regional Commemoration, 2024

Top and above, the Vice President of Burundi, H.E. Prosper Bazombanza (centre in white t-shirt), the Chairperson, Nile Council of Ministers, Hon. Sam Cheptoris, NBI's Executive Director, Dr Florence Grace Adongo, during celebrations to mark NBI's 25th anniversary, in Bujumbura, Burundi.

During the 18th Nile Day regional commemoration, former Minister Mr. Pal Mai Deng (South Sudan, second left) and H.E. Dr. Eng. Habtamu Itefa (Ethiopia, second right) with Dr. Abraha Adugna (first right), currently NBI's Deputy Executive Director and Head, Basinwide Programme, then Minister of State in the Ministry of Water and Energy in Ethiopia. Behind them is Chairperson of the Nile Technical Advisory Committee, Dr Callist Tindimugaya.

Youths arrive to march, others perform a dance at the silver jubilee and the 18th regional commemoration of Nile Day.

Strengthening Strategic Communication and Engagement

NBI revitalised its communication and stakeholder engagement strategy to broaden its outreach and strengthen engagement across the Basin. The revised strategy includes a media action plan aimed at improving awareness of the benefits of Nile cooperation and enhancing institutional visibility.

NBI developed a wide range of corporate communication materials and conducted extensive media engagement during the reporting period. By August 2024, NBI had published 28 corporate products and generated 56 media articles through regular collaboration with national, regional, and international media outlets – including the BBC (English, French, and Swahili), Voice of America and Al Jazeera.

Strengthening Media Capacity for Hydro-diplomacy

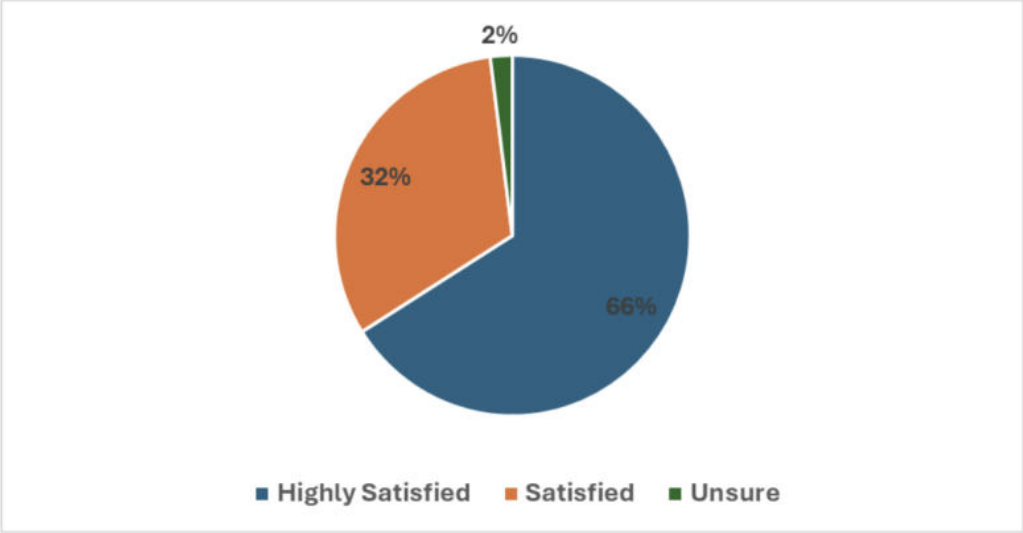
Recognising the influential role of media in shaping public understanding and discourse, NBI signed a cooperation agreement with GIZ and MICT (Media in Cooperation and Transition) in 2023. This partnership facilitated four media trainings for covering water resources, biodiversity, data journalism, the history and context of Nile cooperation, plastic pollution, and citizen science. Some 76 journalists benefitted from these trainings. Separately, NBI trained more than 20 journalists through NELSAP-CU and ENTRO.

Media trainings aim to foster factual, constructive, and solution-oriented journalism, thereby supporting an informed public dialogue for Nile cooperation.

Stakeholder Satisfaction with ENTRO

During workshops, training sessions, and consultation meetings, ENTRO routinely conducts surveys to assess stakeholder satisfaction with each specific event. The evaluation criteria include the relevance of the content, level of participation, quality of presenters, presentation methods, and overall facilitation.

In the 2024/2025 period, a total of 187 participants engaged in ENTRO-led activities. The feedback collected from these events yielded the following results:



Stakeholders 'Overall level of Satisfuction

FINANCIAL REPORT

The 2022/2023 financial year marked the start of the second half of NBI's ten-year Strategy (2017–2027). The projected budget for this five-year period stands at US$335.8 million, allocated across the three NBI Centres as follows:

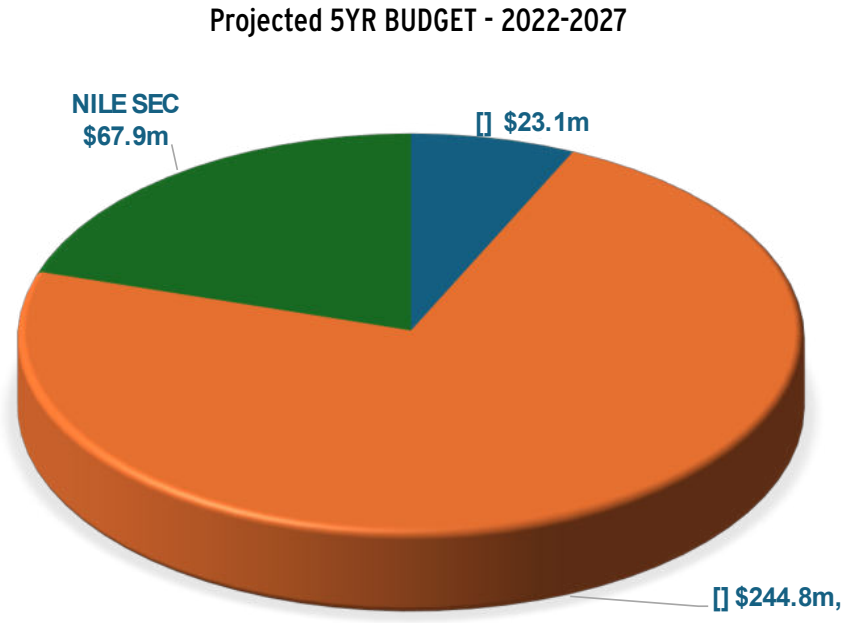


Fig 1: NBI 5-year (Second phase) strategy summary budget cost classification

The cumulative income and expenditures of NBI Secretariat, ENTRO and NELSAP between the financial years 2022/2023 and 2023/2024 were as follows:

NBI's main sources of income included contributions from Member States (country contributions), grants from Development Partners and management fees. By the end of financial year 2023/2024, a total of US$125.5m representing 37 percent of the total budget of US$335.8 million had been committed towards financing of the latter five years of the NBI Strategy. This resourcing comprised US$21.8 million and US$103.7 million from Member States and Development Partners respectively. This compared favourably with US$7.8 million NBI received from Member States and US$85.3 million from Development Partners for the first phase of the Strategy, between 2017 to 2022.

Annual Income and Expenditure

The cumulative income and expenditures of NBI Secretariat, ENTRO and NELSAP between the financial years 2022/2023 and 2023/2024 were as follows:

FINANCIAL YEAR 2022/2023 (US$)

Details	Receipts	Expenditure
NILE-SEC	7,292,067	5,570,146
ENTRO	3,305,914	2,170,390
NELSAP-CU	3,630,456	3,970,581
TOTAL	14,228,437	11,711,117

FINANCIAL YEAR 2023/2024

Details	Receipts	Expenditure
NILE-SEC	4,825,072	5,610,048
ENTRO	2,166,604	3,128,604
NELSAP-CU	3,566,230	3,621,387
TOTAL	10,557,906	12,360,039

FINANCIAL YEAR 2024/2025

Details	Receipts	Expenditure
NILE-SEC	4,741,148	6,056,670
ENTRO	4,846,997	4,961,084
NELSAP-CU	3,860,910	3,674,007
TOTAL	13,449,055	14,691,761

Member Country Contributions

The main source of income for NBI's core support was from Member States. The minimum functionality cost coverage target per annum was USD 3.8m (divided among the Secretariat, ENTRO and NELSAP-CU at US$1.8 million, 1 million and 1 million respectively). During the 2022/2023 financial year, NBI realized US$1.36 million from Member States against a total of US$1.6 million contributed the previous financial year.

Nile SEC and NELSAP-CU combined received US$834,327 while ENTRO received US$528,223 with cumulative arrears of US$14,028,143 and US$6,529,369 respectively. Kenya and Tanzania paid their contributions in full while Ethiopia, DR Congo, Sudan and Uganda made partial payments.

During the 2023/2024 financial year, NBI realized a total of US$2.7 million from Member States against US$1.36 million received in the previous financial year. Kenya, Tanzania and Uganda paid their contributions in full to Nile SEC/NELSAP-CU while Burundi paid partial contributions. Included in the total contributions were US$522,435 and US$961,214 remitted by the Ethiopia and Uganda respectively to their outstanding arrears in full. The improved contributions by Member States reduced overall cumulative arrears by 11.2 percent at US$14.4 million and US$7.7 million at Nile SEC/NELSAP-CU and ENTRO respectively.

In financial year 2024/2025, NBI received a total of US$1.04 million with US$ 879,061.58 shared between NBI Secretariat and NELSAP proportionally as approved by Governance and USD$ 161,279 received by ENTRO. These amounts were received from the Governments of Ethiopia, Rwanda and Uganda who remitted partial payments in respect of current year and reduction of arrears.

The chart below illustrates the status of contributions against the set minimum targets over the last five financial years up to June 30, 2025.

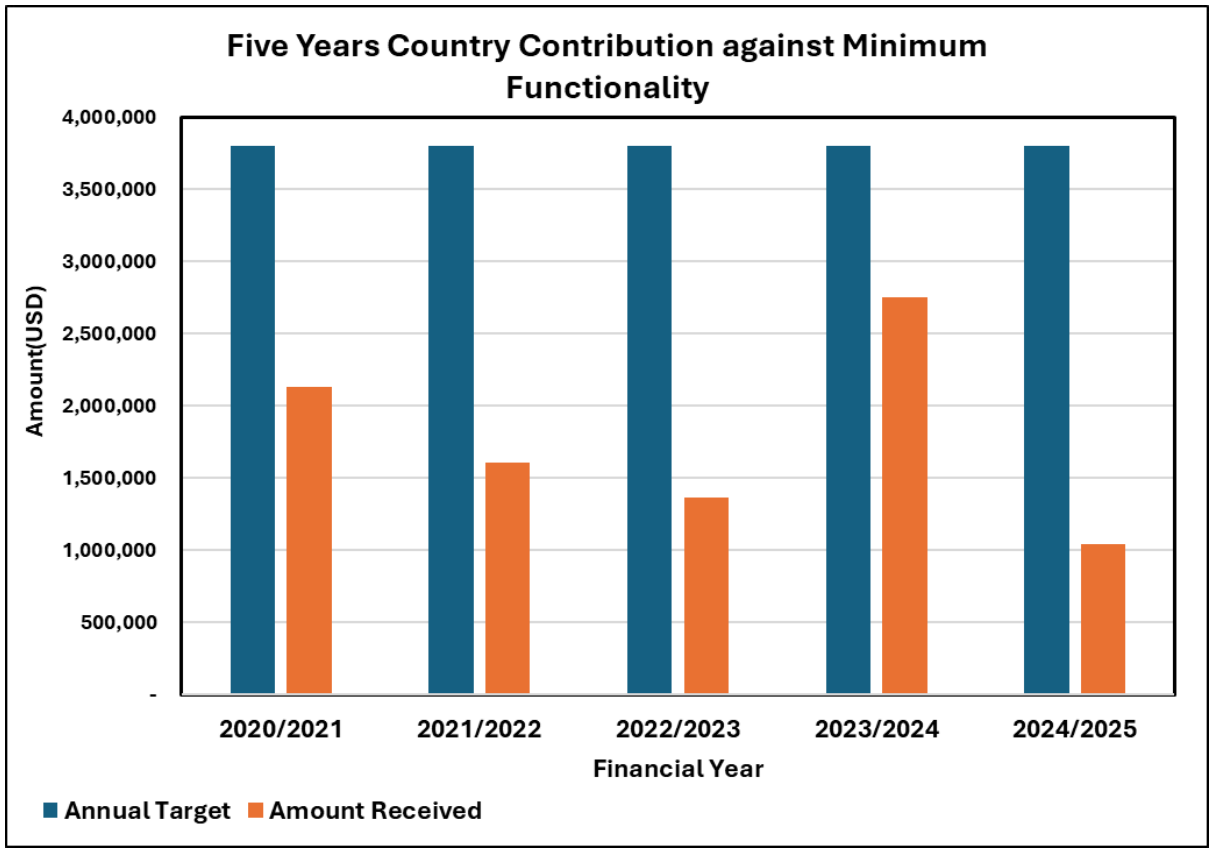


Fig 2: Country Contribution status against the minimum annual target of $ 3.8m

In-kind Contributions

The Member States continued to extend in-kind support to NBI, including land and office space provided by the host Governments of Uganda, Rwanda and Ethiopia to Nile SEC, NELSAP and ENTRO respectively. The three NBI Centres enjoyed indirect tax exemptions such as Value Added Taxes (VAT).

The following in-kind support was extended to NBI during the 2022/2023 and 2023/2024 financial years:

i. Kenya extended indirect support totalling US$60,473 to host the regional Nile Day celebration and Governance meetings in 2023.

ii. VAT exemptions for ENTRO, NELSAP and Nile SEC in Ethiopia, Rwanda and Uganda amounted to US$17,300, US$14,842 and US$53,215 respectively.

iii. Uganda spent US$98,800 to host the 7th Nile Basin Development Forum (NBDF) and back-to-back Governance meetings in October 2023.

iv. Burundi hosted Nile Day 2024, Governance meetings and NBI's silver jubilee celebrations at a cost of US$35,000.

v. Uganda spent US$32,000 on hosting of NBI Governance meetings in July and November 2024.

vi. Ethiopia spent USD 162,345 in hosting Nile Day 2025 and Extra Ordinary Nile COM Meetings in February 2025 held in Addis Ababa.

vii. VAT exemptions extended to ENTRO, NELSAP and Nile SEC by the Governments of Ethiopia, Rwanda and Uganda to USD$, 16,601, USD$ 8,239 and USD 75,376 respectively in final year 2024/2025.

Development Partner Support

NBI is grateful to its development partners for their continued cooperation and support towards its Shared Vision Objective. The cumulative status grants portfolio (as of 30th June 2025) across NBI is as follows:

Development partner/ Project	Grant Amount	Grant Period	NILE SEC	ENTRO	NELSAP	Disbursed	Balances	% Disbursed
GEF-UNDP- (Groundwater)	USD 5.3 m	2020-2025	5.3m			3.1 m	2.2 m	58%
World Bank/CIWA- (NCCR Project)	USD 28.5 m	2021-2025	9.5m	9.5m	9.5m	26.5 m	2 m	93%
World Bank-IDA- (Regional Climate Resilience Program-RCRP)	USD 4.0 m	2024-2027		2.25m	1.75m	1.55 m	2.45m	39%
BMZ/GIZ- (Transboundary water cooperation project)	USD 3.64 m	2022-2025	3.36 m	0.29m		2.29 m	1.35	63%
AfDB/NEPAD-UGANDA-DRC (220KV) Power Interconnection Project.	USD 0.93 m	2020-2024			0.93m	0.74 m	0.19m	79%
Ruvyironza Multipurpose Water development project (PRODERER).	USD 2.0 m	2024-2026			2.0 m	-	2.0m	100%
Stakeholder Dialogues for Transboundary Peatland Management in the Akagera Basin	USD 0.12 m	2023-2025			0.12m	0.12m	0	100%
Uganda South Sudan power interconnection	USD 1.99 m	2025-2030			1.99m	0.28m	1.71m	15%
Totals in USD	USD 46.48 m		18.16 m	12.04m	16.29m	34.58m	11.9m	74%

Table1. Listing of NBI Development Partners and projects on-going in phase 2 of the NBI 10 -year strategy

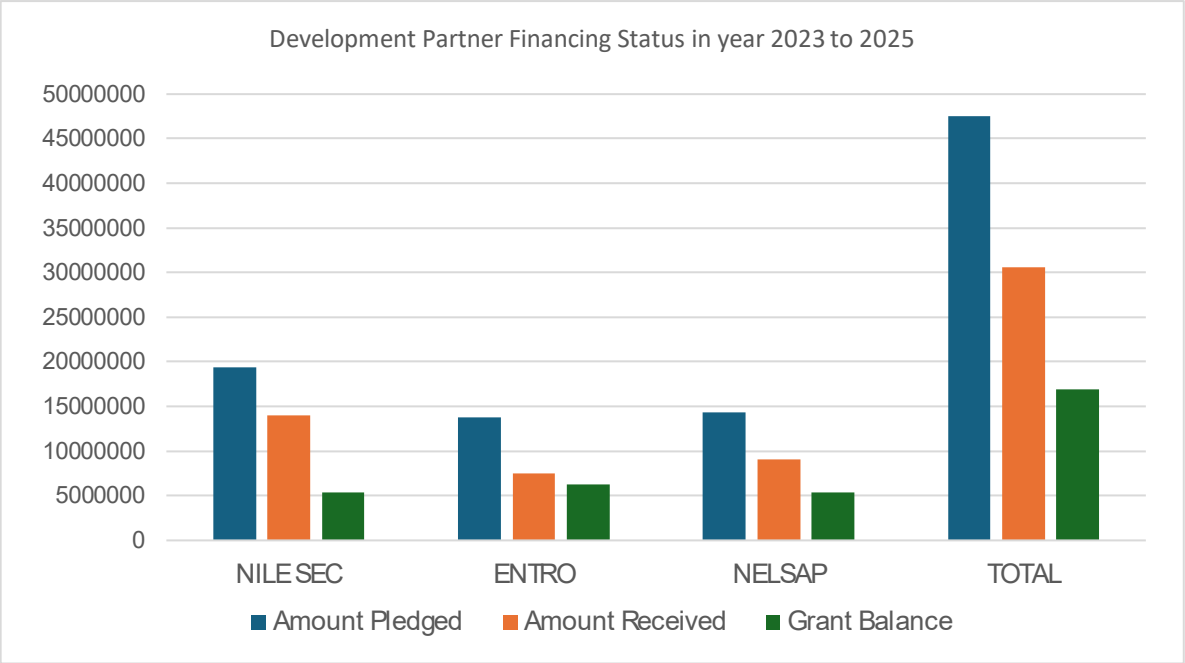


Fig 3: Status of Cumulative grants and disbursements of the three NBI Centres

The level of disbursements received from development partners in financial years 2023/2024 and 2024/205 for each NBI Centre is illustrated below:

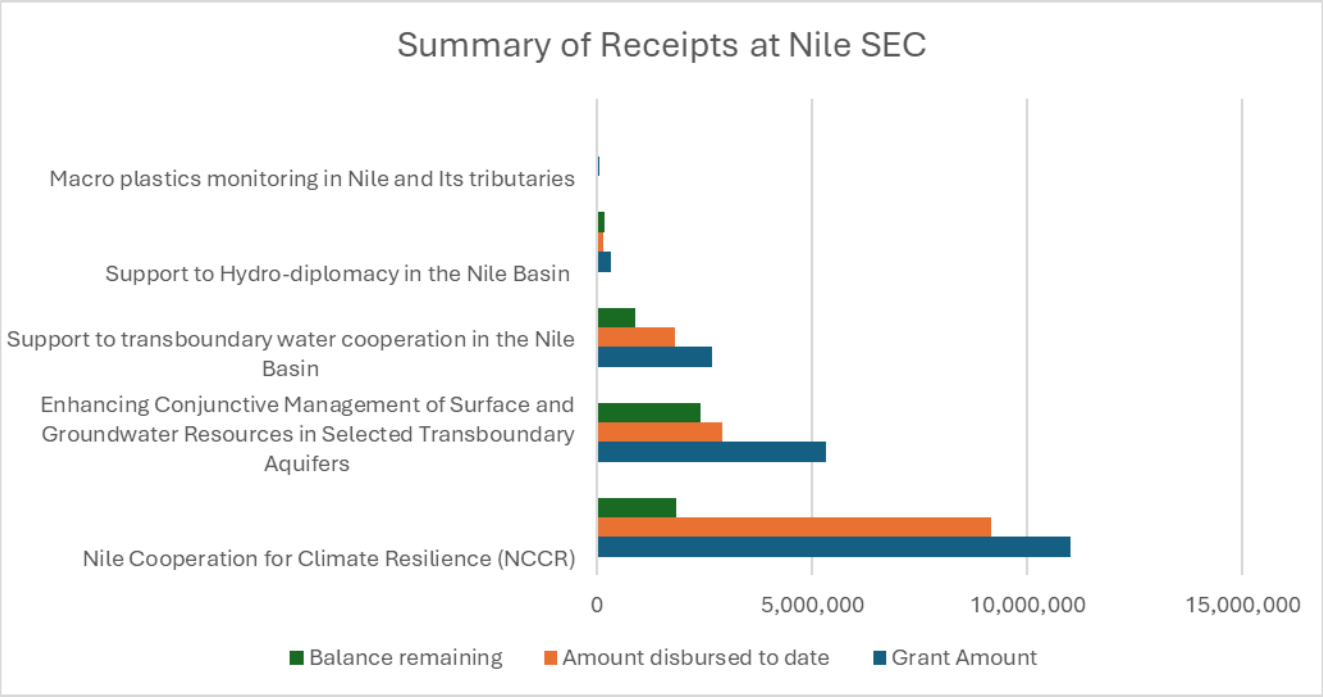


Fig 4: Summary of Development partner disbursements at Nile SEC as of 30th June 2025

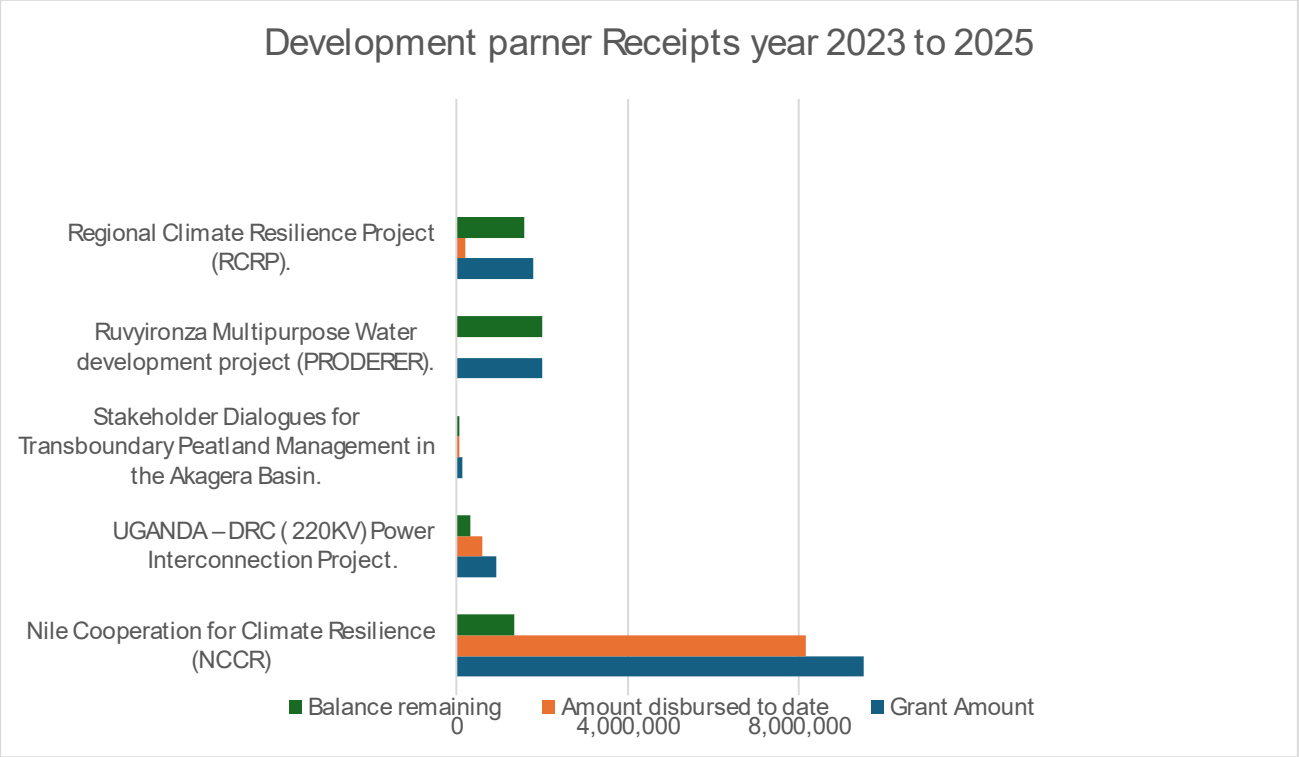


Fig 5: Summary of Development partner disbursements at NELSAP as of 30th June 2025

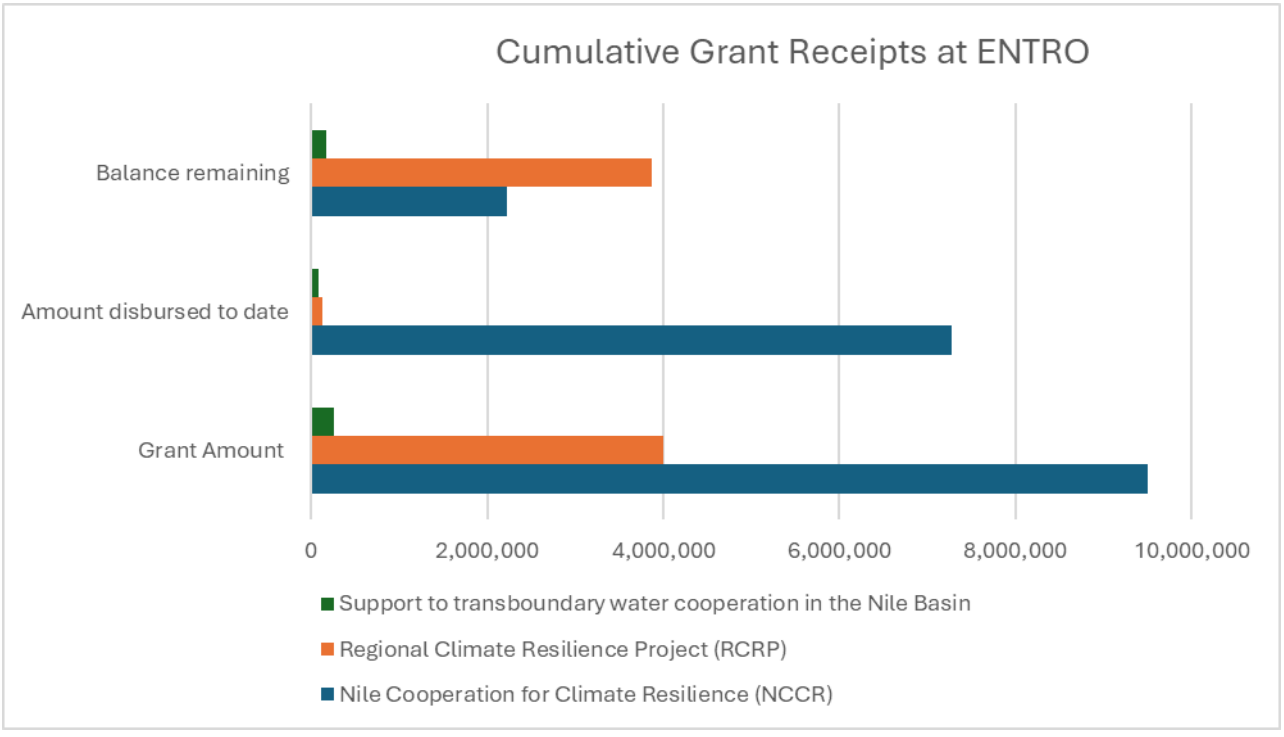


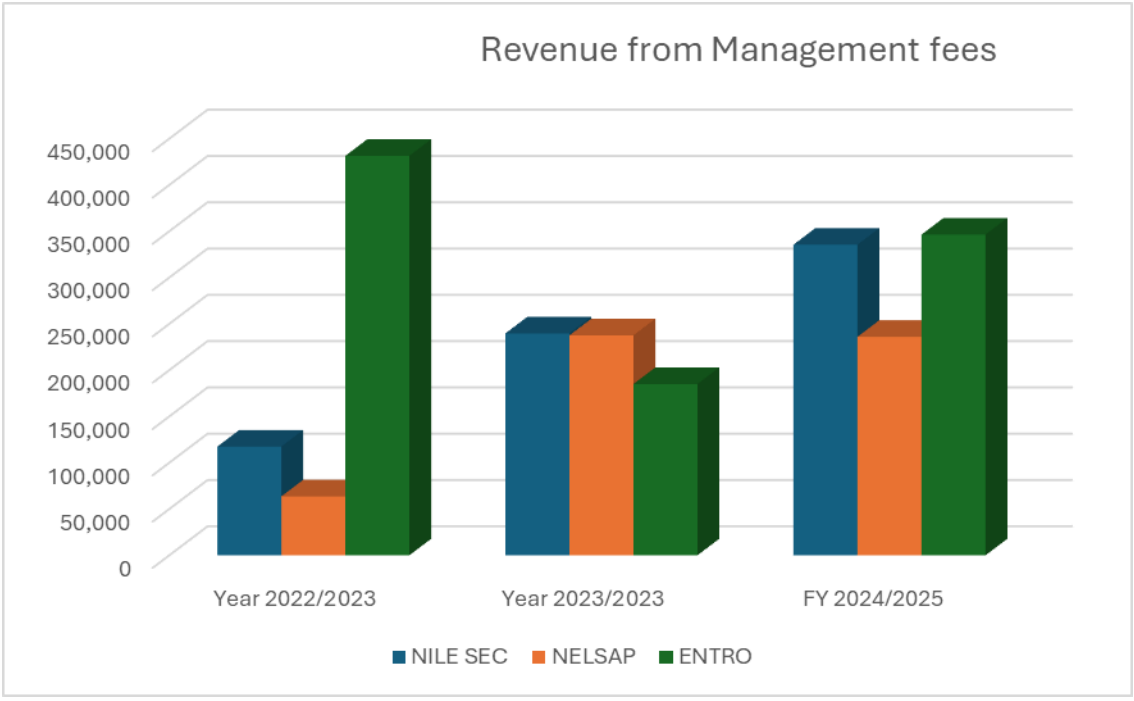
Fig 6: Summary of Development partner disbursements at ENTRO as of 30th June 2025

Management Fees

NBI accrues management fees from grants on an annual basis. The amounts are used to meet the cost of overheads incurred to support project implementation.

Detail	Year 2022/2023	Year 2023/2023	FY 2024/2025
	USD	USD	USD
NILE SEC	117,395	239,684	335,532
NELSAP	63,615	237,554	236,011
ENTRO	431,472	185,000	346,420
Total	612,482	662,238	917,963

Table 2: Summary of Revenue from Management fees 2022-2025



CORPORATE SERVICES

Eng. Sylvester Matemu announces her successor as NBI Executive Director Dr Florence Grace Adongo, during the NBDF 7

NBI remains committed to maintaining a skilled, motivated, and high-performing workforce to deliver on its regional mandate. During the reporting period, the Secretariat enhanced its human resource capacity, workplace infrastructure, systems, and financial management to support effective programme delivery and stakeholder engagement.

Strategic Staffing to Support Regional Cooperation

To bolster implementation of the "Transboundary Water Cooperation in the Nile Basin" project, supported by BMZ/GIZ, the Secretariat welcomed three technical experts: Eng. Vincent Ssebuggwawo (Strategic Water Resources Analysis), Eng. Calvince Owara (hydrological monitoring coordination), and Dr. Adanech Jillo (Nile River Basin Investment Programme). The new team worked closely with NBI's leadership to steer the current project phase, which runs until 2025.

In November 2023, Dr. Florence Grace Adongo, a veteran water resources management expert with over three decades of experience, was appointed as NBI's 11th Executive Director. She previously served as Uganda's Director of Water Resources Management and Development and as Principal Nile-TAC Representative. Under her leadership, the Secretariat registered significant institutional progress.

In August 2024, NBI further reinforced its communication and outreach capacity by appointing Ms. Lydia Wamala as Communication and Stakeholder Engagement Specialist.

Dr Abraha Adugna, who joined Nile SEC in the capacity of Deputy Executive Director and Head of the Basin-wide Programme, on 1st May 2025 brought over 33 years of international experience in water resources development, planning, and management. His expertise encompasses groundwater investigation, hydrogeological mapping, river basin monitoring, resource mobilization, and project management at both national and regional levels. Prior to joining NBI, Dr Abraha served as State Minister at Ethiopia's Ministry of Water and Energy.

Investing in Staff Development and Welfare

Recognising that staff are central to its success, NBI prioritised capacity development and staff welfare. With support from the World Bank/CIWA, a staff capacity improvement strategy was finalised in 2023 to align learning and development with institutional needs. The Secretariat conducted team-building sessions and training on work-life balance, managing change, mental health, and fostering a positive work environment. In addition, NBI staff were trained on World Bank procurement procedures in April 2025.

To support staff mobility, NBI acquired a new bus, enhancing access to and from the workplace.

Enhancing the Work Environment and ICT Systems

To foster a productive and enabling work environment, the Secretariat upgraded office infrastructure during 2023/2024 and into 2024/2025. Improvements included refurbished meeting spaces, new air conditioning systems, upgraded ICT equipment, and modern office furniture. Trees were planted including during diplomatic visits, to support environmental sustainability.

UNDP supported the Groundwater project with a seven-seater field vehicle valued at US$ 44,539. In parallel, NBI strengthened its institutional ICT systems, enhancing connectivity, cybersecurity, data backup, and recovery infrastructure. The NCCR project enabled NBI improve physical security through new surveillance systems and digital access controls at the head office in Entebbe.

Modernising Financial Management Systems

The Corporate Services function ensured robust financial management, budget administration, and timely project resource reporting. Regular audits were supported to maintain financial accountability.

The Integrated Financial Information Management System (IFMIS) was upgraded through the installation of the latest version of Navision 365. Staff received training in its expanded modules, which now support enhanced financial reporting, procurement, inventory, and human resource management.

Supporting Partnerships and Hosting Functions

The Secretariat continued to host the Global Water Partnership Eastern Africa (GWPEA) at Entebbe, providing financial and procurement support under a hosting arrangement.

Ms. Nwanne Vwede-Obahor, Resident Representative, United Nations Development Programme with Dr Florence Grace Adongo during the car handover ceremony at the NBI Secretariat in Entebbe.

Dr Florence Grace Adongo plants a tree with the South Sudan ambassador to Uganda, H.E. Paul Akaro Molong, at the Secretariat.

In 2024, the Secretariat signed a grant agreement on behalf of GWPEA for US$266,184 from the Green Climate Fund. This funding supports the "Readiness Support for the African Union Multi-Country Programme to Accelerate Water and Climate Resilience Investments through the Africa Water Investment Programme (AU AIP Multi-Country GCF Readiness Project)" for the period August 2024 to July 2026.

PARTNERSHIPS

Since its inception, NBI has actively fostered strategic partnerships with regional institutions that hold complementary mandates. These collaborations are primarily formalised through memoranda of understanding and are designed to strengthen synergies, promote regionally coordinated initiatives, and maximise benefits for Member States.

NBI's partnerships included collaboration with the Common Market for Eastern and Southern Africa (COMESA)/Eastern Africa Power Pool, East African Community/Lake Victoria Basin Commission, IGAD/IGAD Climate Prediction and Applications Centre, Ramsar Centre for Eastern Africa (RAMCEA), the United Nations Development Programme (UNDP), and the Nile Basin Discourse, among others referenced throughout this report. Notably, NBI worked with the International Water Management Institute (IWMI) to advance knowledge and practices in wetlands management. In addition, it revived its collaboration with the United Nations Environment Programme (UNEP) for monitoring and addressing plastic pollution in the Nile River system.

At the continental level, NBI chaired ANBO (African Network of Basin Organizations), a key platform for promoting cooperation, knowledge exchange, and capacity building among Africa's river and lake basin institutions. Through ANBO, NBI actively contributed to continental water initiatives including DYNOBA and AMCOW (the African Ministers' Council on Water), reinforcing its leadership role in transboundary water governance across the continent.

WAY FORWARD

Centre of Excellence

With support from Uganda's Ministry of Water and Environment, the NBI developed a masterplan to guide the sustainable development of two government-allocated land parcels: Plot 6A-8 (4.477 hectares) and Plot 12-16 (3.363 hectares). These were designated for the Water Resources Institute and the NBI Secretariat, respectively, with the aim of fostering integrated development aligned with the mandates of both institutions.

Building on the completed masterplan, the NBI Secretariat finalised architectural designs and a bill of quantities in 2024/2025 for a Centre of Excellence that NBI will establish at Plot 12-16. Envisioned as a regional knowledge hub, the Centre will support applied research and innovation to address the pressing challenges facing the Nile Basin. The total investment required for its development is estimated at US$20.4 million.

Impression of the planned Centre of Excellence

Other Strategic Priorities

In the coming years, as funding becomes available, NBI will prioritise maintaining the full participation of all Member States through inclusive dialogue and a shared focus on transboundary risks. A key objective will be to strengthen the organisational structure in a way that reflects Member State ownership and long-term commitment to Nile cooperation.

NBI will also work to consolidate programmatic achievements made during the reporting period – including under the NCCR project, which concludes in 2025/2026 – while shifting investment projects towards implementation and accelerating support for a coordinated, basin-wide climate change response.

At the same time, NBI will deepen collaboration with existing partners and build new alliances with like-minded organisations and champions of the Nile Basin.

NBI will continue to engage development partners whose financial and technical contributions remain essential to supplementing country support. The Nile Basin, one of the most densely populated regions in the world, holds vast potential to transform the lives and livelihoods of millions. However, this must be matched by action to reduce the River's contribution to ocean pollution and protect critical ecosystems such as wetlands, which serve as vital stopovers for millions of migratory birds.

Looking ahead, NBI will continue to leverage regional and global platforms to build strategic partnerships, mobilise investment for priority projects, and safeguard the financial sustainability of basin-wide cooperation. Most importantly, NBI will work toward the succession to a permanent body, the Nile River Basin Commission.

DONORS


BANQUE AFRICAINE DE DÉVELOPPEMENT
AFRICAN DEVELOPMENT BANK
AFRICAN DEVELOPMENT FUND
FONDS AFRICAIN DE DÉVELOPPEMENT


NEPAD-IPPF
INFRASTRUCTURE
PROJECT PREPARATION
FACILITY


AFD
AGENCE FRANÇAISE
DE DÉVELOPPEMENT


CIWA

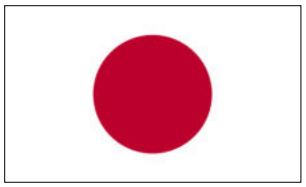

WORLD BANK GROUP


gef


UNDP
Empowered lives.
Resilient nations.


german
cooperation
DEUTSCHE ZUSAMMENARBEIT


giz
Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH




Norad


Sida

ONE RIVER ONE PEOPLE ONE VISION

NILE BASIN INITIATIVE
INITIATIVE DU BASSIN DU NIL

NBI Member States

Nile Basin Initiative Secretariat

P.O. Box 192
Entebbe – Uganda
Tel: +256 417 705 000
+256 417 705 117
+256 414 321 424
+256 414 321 329
Email: nbisec@nilebasin.org
Website www.nilesec.nilebasin.org

Eastern Nile Technical Regional Office

Dessie Road
P.O. Box 27173-1000
Addis Ababa – Ethiopia
Tel: +251 116 461 130/32
Fax: +251 116 459 407
Email: entro@nilebasin.org
Website: www.entro.nilebasin.org

Nile Equatorial Lakes Subsidiary Action Program

Program Coordination Unit
Kigali City Tower
KCT, KN 2 St, Kigali
P.O. Box 6759, Kigali Rwanda
Tel: +250 788 307 334
Fax: +250 252 580 100
Email: nelcu@nilebasin.org
Website: www.nelsap.nilebasin.org

/Nile Basin Initiative @nbiweb

#NileCooperation; #NileBasin; #OneNile