Facts about the Nile Basin

What's on? January - March 2013

Quiz

Basin Area 3,176 X 10³ Km²
Location -4° S to 31° N and 24° E to 40° E
Main Tributaries Victoria Nile/Albert Nile, Bahr El Jabel, White Nile, Baro Pibor-Sobat, Blue Nile, Atbara, Bahr El Ghazal
River Length 6,695 Km (one of the world's longest River)
Estimated Navigable Length 4,149 Km
Countries
Burundi DR Congo Rwanda Egypt South Sudan Ethiopia The Sudan Kenya Tanzania Uganda Eritrea
Major Lakes within the Basin Lake Victoria, Lake Tana, Lake Kyoga, Lake Albert
Population (Total in all the Nile Countries)* 437 Million
% Population within the Nile Basin* 54% (238 Million)
Temperature Night Minimum -10° C and daily Maximum in June 47° C
Precipitation Max Annual 2,098 mm/yr in Ethiopia Min Annual 0 mm/yr in Egypt
Mean Annual /low (Discharge) (m³/yr) at Aswan 84 X 10⁹ m³/yr
Discharge/Unit area 28 X 10³ m³/Km²
Main Consumptive Water use Agriculture

Date Activity Venue
Jan NCoRe Project Effectiveness All Centers
Jan NELTAC/NELCOM Meeting Kigali
11 – 12th Feb Regional Meeting for National NBI Desk Officers Entebbe
22nd Feb Nile Day celebrations (Regional and National) Bahr Dar, Ethiopia (for regional celebrations)
April 38th Nile-TAC Meeting Entebbe

Compiled by Tom Waako, Projects Officer, Nile-SEC -Entebbe

Member states
What is the major determinant of population distribution in the Nile Basin?
Send your answer to: editor@nilebasin.org

Answer to the previous quiz question
The single most important intra basin agricultural trade commodity by volume among the Nile Basin riparian states is maize.

Disclaimer: The views expressed in this newsletter do not necessarily represent those of NBI, its Member States or Partners

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The Nile Basin Initiative (NBI) is an intergovernmental partnership established by the Nile Basin States on February 22, 1999. NBI’s mandate is to facilitate the cooperative development and management of the shared Nile Basin water and related resources.
**Organisational structure**

**Our Mandate**

NBI provides services to Member States under three broad areas as follows:

- **Facilitating Basin Cooperation** - Providing the regional platform for multi stakeholder dialogue, information sharing, joint planning and management of shared water and related natural resources in the Nile Basin.
- **Water Resources Management** - Strengthening Member States’ institutional and technical capacities as well as developing and operating a shared knowledgebase to support decision making at basin-wide level and action at lower levels.
- **Water Resources Development** - Assisting Member States to identify and prepare regionally significant investment projects and mobilising financial and technical resources for their implementation.

**Institutional set-up**

The set-up of NBI is informed by the principle of subsidiarity, hence ENSAP and NELSAP, each with a Secretariat.

The NBI Secretariat (Nile-SEC) in Entebbe, Uganda is responsible for the overall corporate direction and it is the lead Center for two core functions – Facilitating Basin Cooperation and Water Resource Management respectively.

The Eastern Nile Technical Regional Office (ENTRO) in Addis Ababa, Ethiopia is responsible for driving the Water Resource Development Programme under ENSAP, comprised of Egypt, Ethiopia, South Sudan and Sudan.

The Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU) in Kigali, Rwanda is responsible for driving the Water Resource Development Programme under NELSAP, comprised of Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania and Uganda.
Effective October 2017, NBI embarked on implementing its Strategy, which will be its key guiding document for the next 10 years, in order to help bring about more optimal and sustainable development of the basin.

The Strategy is inspired by and provides a tool towards achieving the Shared Vision Objective of the Member States. It focuses on six goals addressing the issues of water security, energy security, food security, environmental sustainability, climate change adaptation and strengthening transboundary water governance.
It has been an honor and privilege to serve as Chairman of the Nile Council of Ministers (Nile-COM) for the period October 2017 to August 2018.

It is with gratitude that I recognise my colleagues members of the Nile Council of Ministers for providing strategic guidance to our institution on a number of issues, including formulation of NBI’s 10-year Strategy (2017 – 2027), the Secretariat’s 5-year Basin wide programme as well as on institutionalisation and regularisation of the Nile Basin Heads of State Summit, following the first meeting which was hosted by Uganda in June 2017. The Heads of State Summit is a major platform that NBI should utilise to promote the Basin development agenda.

As we embarked on the implementation of the 10-year Strategy, the Secretariat underwent major reforms aimed at improving its performance as well as financial sustainability. During the first year of implementation NBI expanded its scope of activities to address key transboundary challenges. Among other things, it continued to explore technical solutions for the water security challenge of the Nile Basin, which solutions are envisaged to form the foundation for the planned basin-wide investment programme. Further, NBI Secretariat has successfully mobilised international funding for the first phase of implementation of the Nile Basin Regional HydroMet project.

We also successfully held two key regular regional events, namely the 5th Nile Basin Development Forum hosted by the government of Rwanda in October 2017 and Regional Nile Day 2018 hosted by the government of Ethiopia in February. Both events served to expand the stakeholder engagement forum and enhance awareness of Nile cooperation and Nile Basin issues among the delegates and the general public.

I take this opportunity to congratulate both the Government of Rwanda and that of Ethiopia for offering to host these high level regional events and for ensuring their success through excellent organisation.

As I hand over to my colleague Hon. Dr. Deo-Guide Rurema, Minister of Environment, Agriculture and Livestock of Burundi, I wish to reiterate my appeal to all Nile-COM members to ensure timely remittance of country contributions to NBI so as to enable the smooth operation of our organisation. It is our responsibility and we must do what we have to do, to sustain our common platform.

It is also my hope that the Financing Strategy (2017-2022) approved during the 26th annual Nile-COM meeting will be instrumental in our endeavor to raise more funds for core costs, programme work and implementation of investment projects of regional significance.

I am proud of what NBI has accomplished in the first year of implementation of the 10-year Strategy and I am confident about its successful implementation. Together let us continue our efforts to realise sustainable socio-economic development of the Nile through cooperative development and management of the shared Nile Basin water resources.

H.E. Dr. Eng. Seleshi Bekele
Minister of Water, Irrigation and Energy
Federal Democratic Republic of Ethiopia
July 2017 - June 2018 was a year of remarkable progress and achievements in moving the Nile Basin development agenda forward.

The NBI 10-year Strategy for the period 2017 - 2027 was approved by our Governance, the Nile Council of Ministers (Nile-COM) and implementation of the 5-year basin wide programme derived from the Strategy, immediately embarked upon. The Strategy provides clear linkages between the key development goals of water, energy, food and environment and focusses on win-win harnessing of these natural resources.

Other key strategic documents approved include the Communication and Stakeholder Engagement Strategy (2018 - 2023), as well as the Financing Strategy (2017-2022) whose ambition is to raise more funds for core costs, programme work and implementation of investment projects of regional significance.

Following the first Nile Basin Heads of State (HoS) Summit hosted by Uganda in June 2017, the Nile-COM agreed on how to institutionalise and regularise the Summit. The latter is a major platform that NBI will utilise to promote the Nile Basin development agenda.

Through enormous efforts exerted by management with support from our governance, we secured USD 30.3 million from our development partners, towards implementation of NBI’s program. The Member States on the other hand contributed cash of USD 1.7 million.

We successfully held our two key high level regional events. These are the 5th Nile Basin Development Forum (NBDF) hosted by Rwanda in October 2017 and annual Nile Day 2018 hosted by Ethiopia in February. Both events attracted a cross section of stakeholders and contributed to enhanced awareness of Nile cooperation and Nile Basin issues.

**Challenges**

Against the backdrop of the success story is challenges faced by the Secretariat. Key among them is delays and/or non-remittance of country contributions, thus affecting the smooth operation of the institution. Meanwhile, costs saving measures have been introduced to reduce running costs to a bare minimum.

Non participation of Egypt in most NBI activities continues to be a bone of contention as the governance explores all possible ways of facilitating Egypt to resume full participation. The diplomatic engagement efforts by Member States and the recent elevation of political participation to include the Heads of State are deemed to expedite the resolution of the differences. This is in addition to enhancing the capacity of Nile-TAC members and senior management staff of NBI in hydro-diplomacy, through training and study tours to other basins.

**Appreciation**

I thank the government of Rwanda and Nile-COM members for the opportunity given to me to serve as the Executive Director of the NBI Secretariat for a two-year term. I also thank the European Union, Federal German government, The World Bank and all partners of NBI for the great cooperation as well as the staff for their exemplary passion for the NBI cause - it has been an immense privilege to work alongside everyone.

**Going forward**

I am fully convinced that sustainable cooperation among Nile Basin States will immensely change lives of citizens for the better. This however requires continued commitment of the Member States, support of development partners and effective coordination and collaboration with regional partners. It is also my expectation that the new management structure at the Secretariat, whose aim is to enhance leadership stability, strengthen programme integration and coordination, will soon bear fruit as far as improving service delivery is concerned.

I wish my successor and all the staff of NBI good luck as they continue on the journey of implementing the NBI 10-year Strategy so as to transform lives in the Nile Basin States.

With my best wishes!

Eng. Innocent Ntabana
During the 2017/18 Financial Year, the Eastern Nile Technical Regional Office (ENTRO) has been, as before, striving to monitor and adjust to the dynamic changes in its operating environment – both internal and external. The complexity of the hydro politics of the Eastern Nile persists. Egypt has not yet returned to the NBI and as such to the Eastern Nile Subsidiary Action Programme (ENSAP). In spite of this, the trilateral engagement among Egypt, Ethiopia and Sudan over the Grand Ethiopian Renaissance Dam (GERD) is proceeding. In addition, Egypt still takes part in NBI Regional events such as Nile-COM meetings, annual Nile Day celebrations, Donor consultations and the triennial Nile Basin Development Forum.

The security situation in the Republic of South Sudan though positively evolving in the recent past, has nevertheless not yet stabilised to enable post conflict recovery and kick-starting the economy.

All three currently active ENSAP Member States - Ethiopia, South Sudan and Sudan, continued their commitment to Eastern Nile cooperation. South Sudan has pledged to clear, at least part of its arrears while Ethiopia and Sudan are up-to-date, in addition to shouldering the burden of covering Egypt’s share of country contribution.

Two successive governance meetings, the 30th and 31st Eastern Nile Council of Ministers (ENCOM) meetings along with the 31st and 32nd Eastern Nile Subsidiary Action Programme Team (ENSAPT) meetings have taken place this year. These meetings have provided much needed guidance and addressed outstanding ENTRO management issues, including: filling of senior management positions; approval and adoption of ENTRO’s 2018-2022 Strategic Plan as well as audit reports.

In the domain of cooperative Eastern Nile investment preparation, major accomplishments include a) completion of the two-year Baro-Akobo-Sobat Multipurpose Water Resources Development Study Project; b) finalisation of the stand-alone Eastern Nile MSIOA (Multi-sector Investment Opportunity Analysis); c) initiation of investment studies that will eventually inform, or otherwise create the enabling conditions for and determine future investment trajectories in irrigation system performance; ground water availability and conjunctive use as well as scaling up to catchment level, the most viable piloted watershed management interventions.

We undertook capacity building particularly related to coordinated operation of cascade dams; dam safety, seasonal flood forecasting as well as negotiation and hydro diplomacy, while the 9th and 10th internship batches for young professionals in the water sector from universities and ministries in Ethiopia, South Sudan and Sudan were successfully completed. We have also maintained and strengthened partnership and dialogue with our stakeholders including ICOLD, UNESCO-IHE, IWMI and Eastern Nile Universities, while we signed a new MoU with the University of Manchester (FutureDams).

Our financial performance was by and large as planned. We are increasingly relying on country contributions for core funding, a responsibility the Member States have discharged commendably in the midst of challenging national financial constraints. ENTRO would like to express deep appreciation to ENCOM/ENSAPT for their dedicated financial support, oversight and guidance.

As we go forward into the next budget year, we will focus on supporting the implementation of already identified and prepared projects, particularly in South Sudan and we will strive to scale up proven watershed management interventions. This is not to mention our ongoing work, which includes the internship programme, flood season forecasting, capacity building, outreach and water diplomacy.

We thank the World Bank (CIWA-NCORE), the German government and the European Union for the technical and financial support that has helped us accomplish so much.

Fekahmed Negash Nuru
It is my great pleasure to highlight key NELSAP program achievements during the period of July 2017 - June 2018. The Coordination Unit finalised the development and approval of the NELSAP five year strategic Plan 2017-2022, supported by the communication and resource mobilization strategies. The strategic plan gives the program direction and will guide the core business in the next five years. The strategy focuses on expanding the NELSAP Investment projects portfolio to facilitate cooperation on the Nile waters, regional development and integration, targeting the sectors of (i) Power Development and Trade (ii) Water Resources Management and Development.

The NELSAP program made key achievements and progress over the last one year. Significant progress was registered in the implementation of the following key projects; the Lakes Edward and Albert Fisheries and Water Resources integrated project (LEAF II) being shared between DR Congo and Uganda and the ongoing construction of the 80MW Regional Rusumo Falls Hydroelectric plant, shared by Burundi, Rwanda and Tanzania. This included implementation of the Livelihood Restoration Program (LRP), aimed at developing alternative income generating activities for the project affected persons (PAPs) as well as the Local Area Development Program (LADP), covering the five districts surrounding the Rusumo project Le Ngara District in Tanzania, Kirche and Ngoma districts in Rwanda, and Busoni and Giteranyi Commune in Burundi.

During the period, NELSAP completed and delivered six (6) feasibility and ESIA/RAP studies for the following key projects; Mara Valley and Ngono Multipurpose projects in Tanzania, Sio-Sango water resources development project in Kenya, Kabuyanda water resources development project in Uganda, the Nyimur/Limur multipurpose project shared between South Sudan and Uganda and the Tanzania - Zambia power interconnection line.

NELSAP plans to support the countries in implementation of further investment projects and expand the Nile Equatorial Lakes Investment Portfolio. A road-map has been agreed by the riparian countries on the preparation of Nile Equatorial Investment Program (NELIP) within the guidance of the NELSAP strategic plan (2017 - 2022).

Mobilisation of financial resources to scale up the NELSAP projects was intensified during the period. This included, organising a Donor round table for the Tanzania-Zambia power interconnection project, visiting the headquarters of African Development Bank and meeting World Bank regional heads. This enabled NELSAP to attract funding for additional new projects like Angololo transboundary multi-purpose project among others.

NELSAP remains committed within its mandate to contribute to social economic development and improve the standard of living of the citizens within the Nile Equatorial Lakes countries, and further strengthen cooperation on the equitable utilisation of the shared Nile Basin water resources.

Eng. Elicad Elly Nyabeeya
During the reporting period, NBI made some remarkable progress in the implementation of the different programmes and posted a number of achievements as highlighted in the following pages.

Physical progress and expenditure

- **Nile Secretariat**

The overall physical progress was at 60.3% while the financial at 50.3% of the total approved annual budget of USD 5,231,453.40 spent. The figure below illustrates the progress towards achieving the planned results.

- **Eastern Nile Technical Regional Office (ENTRO)**

ENTRO’s planned budget was 2,391,961. Actual expenditure was a total of 1,800,291 which amounts to 75% utilisation. The variance was mainly due to cost saving from the National Water Diplomacy capacity building workshops; modification of scope of work for Dam Safety activities; and late budget disbursement for media training and Water diplomacy workshop due to delayed signing of contract Agreement with funder.

- **Nile Equatorial Lakes Subsidiary Action Programme Coordination Unit (NELSAP CU)**

During the reporting period, NELSAP CU implemented the approved work plan and budget with an estimate of USD 58,444,7734, which was later revised by de-scoping activities under the Regional Rusumo Falls hydroelectric project leading to a new budget of USD 39,994,488.63.
FACILITATING BASIN COOPERATION

Maintaining dialogue for joint action

We offer a platform for the different stakeholders to come together in many ways to discuss and share information on how to jointly effectively plan and manage the shared Nile Basin water resources.

- All meetings of the Council of Ministers, the highest political and decision making body at NBI, were held as planned, underlining Member States’ commitment to pursue the path of Nile cooperation. These include the 25th Nile-COM, the 31st and 32nd ENCOM as well as the 20th NELCOM meetings respectively. A number of key documents including policies, strategies and guidelines to enable effective and efficient implementation of NBI programmes, were approved.

- A concept note together with a roadmap for the second Nile Basin Heads of State Summit was developed by the Nile-TAC for consideration by the Nile-COM. The Heads of State Summit is a platform that NBI will utilise to promote development in the Nile Basin.

- The 5th Nile Basin Development Forum (NBDF) held in Kigali – Rwanda in October 2017 provided a strategic platform for more than 400 delegates within the Nile Basin countries and beyond to discuss and collectively synthesise issues around the topical theme: “Investing in Nile Cooperation for a Water Secure Future,’ and to jointly forge a way forward.

- Regional Nile Day 2018 event hosted by the government of the Federal Democratic Republic of Ethiopia attracted at least 500 celebrants. The event focused on the theme - The Nile: Shared River, Collective Action. Participants called for embedding Nile cooperation within broader regional integration.

- A total of 54 officials from Ethiopia, South Sudan and Sudan respectively benefitted from capacity building in hydro-diplomacy.
Policies, Strategies and Guidelines approved by NBI governance

- The 10 year Strategy (2017 – 2027), to help bring about more optimal and sustainable development of the Basin
- Financing Strategy 2017 – 2022 to support resource mobilisation for core costs, programme work as well as implementation of investment projects
- Overarching NBI Communication and Stakeholder Engagement Strategy 2018 – 2023, whose goal is to ‘build consensus among the countries’ public and stakeholders for cooperative basin development and management’.
- Secretariat’s 5-year Basin wide programme (2017 – 2022) to implement the 10 year Strategy
- National NBI Coordination Strategy to guide its operations at national level
- Procedures for Investment Project Information Disclosure, which will guide the sharing and exchange of NBI projects information among the Member States
- Strategic Plan 2017 – 2022 aimed at guiding the implementation of the core business at NELSAP CU, contributing to the NBI 10 – Year Strategy.
- Catchment planning manual, aimed at guiding NEL countries on best practices when planning for specific catchment interventions.
- Regional Agricultural and Trade manual, aimed at guiding NEL countries on best-practices planning, design, development, operation and maintenance of irrigation investments.
As part of its mandate of providing a common platform for countries to engage, consult and deliberate with each other and other Nile stakeholders on a regular basis, the NBI in collaboration with the government of Rwanda, organised the 5th Nile Basin Development Forum (NBDF) in October 2017. This high level regional event attracted more than 400 participants from the Nile Basin and beyond to discuss and engage on the topical theme: *Investing in Nile Cooperation for a Water Secure Future.*

The Forum saw robust, insightful and productive conversations between representatives of the ten Nile Basin Initiative (NBI) Member States and other stakeholders. Participants noted that the Nile Basin is a water scarce region and that it is facing and will continue to face unprecedented pressures. They noted that the risk of over-utilisation needs to be considered to ensure the flow of the river for the benefit of current and future generations.

It was also noted that by 2050, the population of the Nile Basin countries is projected to more than double from around 400 million to one billion. This, along with climate change and the desired socio-economic transformation, will put even greater pressure on the shared Nile Basin water resources.

« Member States agreed to ensure water plays its rightful role as a foundation for development in the Nile Basin - as an input for increased food and energy production as well as industrial and domestic use. They also committed to continued cooperation to ensure that all people living in the Basin have water security. »
There was broad consensus that while the challenges faced in the Basin are multifaceted, they can be solved through cooperation and shared solutions.

Member States agreed to ensure water plays its rightful role as a foundation for development in the Nile Basin - as an input for increased food and energy production as well as industrial and domestic use. They also committed to continued cooperation to ensure that all people living in the Basin have water security.

“The recommendations agreed here in Kigali will certainly inform the regional and national agendas for water resources management and development for the coming years. I am also glad that the recommendations mirror the Nile Basin Initiative ten-year strategy and its aspirations” - Hon. Dr Vincent Biruta. Rwanda’s Minister of Environment.
Increased awareness and visibility of Nile cooperation and Nile Basin issues

NBI aims to contribute to consensus-building on cooperative management and development of the Nile by enhancing communication and stakeholder engagement. NBI’s Communication and Stakeholder Engagement Strategy 2018-2023 identifies six strategic approaches each with specific action areas. Key results during the period include the following:

- Various corporate communication products were produced and disseminated. These include Corporate report 2017 (500 copies), periodical newsletters - Nile News, Nile flow and NELSAP news.
- More than 150 reporters and 50 editors from across the Basin were engaged through training, Nile Media Awards and other press events.
- Two Regional Media training workshops were held in October 2017 and February 2018 respectively. A total of 50 journalists from across the Basin benefitted from the training whose over all focus is to build the capacity of Nile journalists on Nile cooperation and Nile Basin issues.
- The second edition of the Nile Media Awards was successfully held in October 2017, within the confines of the 5th NBDF. A total of 12 journalists from across the Basin were recognised for excellent reporting on Nile cooperation and Nile Basin issues.
- Increased presence on social media platforms registered, and both facebook and twitter continued to attract more people. ‘Likes’ on facebook increased by 10% while followers on twitter increased by more than 50%, an indication of the increasing interest in the work of NBI.
- Towards the end of each year, the Secretariat commissions a stakeholder satisfaction survey to find out the level of satisfaction in delivery of its services including knowledge products, scientific tools and communication products. During the reporting period, 96% of the stakeholders rated NBI services as satisfactory, while 62% of users of NBI publically available tools and knowledge rated the services as satisfactory. The information received is used to adjust our way of work, going forward.

Stakeholders’ level of satisfaction

![Stakeholders' level of satisfaction chart]

- Satisfactory
- Highly Satisfactory
- Moderately satisfactory
- Unsatisfactory

Percentage of users of publically available NBI tools, data,or analysis associated with this project who rate services as “satisfactory” or higher

- Satisfactory
- Highly Satisfactory
- Moderately satisfactory
- Unsatisfactory

Percentage of stakeholders who rate NBI services as “satisfactory” or higher
Show case:

Working with journalists to enhance awareness of Nile Basin issues

As part of efforts towards building consensus among the countries’ public and stakeholders for cooperative basin development and management, NBI seeks to better respond to trends in the media landscape and enable factual and constructive reporting. In this context, NBI implements a range of activities, in order to raise awareness of Nile cooperation and Nile Basin issues. This is in addition to enabling more factual and constructive reporting on these issues to inform public opinion, and to stimulate and amplify inputs to the ongoing political and technical cooperation processes among Nile Basin states, to achieve the peaceful and fair sharing of the Nile Basin water resources.

Among other things, two capacity development workshops and one regional media award were organised during the reporting period. The workshop held in October, 2017 focused on explaining to participants the complex scientific and other issues that would be presented and discussed during the 5th NBDF so as to enable them produce more factual, balanced, objective and professional reports as well as facilitate networking of journalists across the region.

The second workshop was held in February 2018 and had the specific focus of strengthening journalists’ multi-media reporting capacities – skills that nine of the journalists immediately put to use by developing the first ever collaborative multi-media story surrounding Nile Day, including written stories, videos, pictures and interactive features.

Winners of the Nile Media Awards 2017 show off their awards
Show case:

Achieving more through strategic partnerships and promoting networking

To avoid fragmented approach to regional water resources management, reduce duplication of interventions and also enhance synergies. NBI identified strategic implementing partners with whom areas of collaboration have been agreed and for some, Memorandum of Understating signed. These include Lake Victoria Basin Commission (LVBC), Inter Governmental Authority on Development (IGAD) and Inter University Council of East Africa (IUCEA), Global Water Partnership Eastern Africa (GWP EnA) and Nile Basin Discourse (NBD).

NBI, together with these partners will deliberate on how to jointly plan, manage and develop the shared Nile as well as enhance synergies, for the benefit of current and future generations.

In the Eastern Nile, ENTRO signed a new MoU with the University of Manchester (FutureDams) while partnership and dialogue was strengthened with the International Commission on Large Dams (ICOLD). The latter is a technical non-governmental international organisation, which provides a forum for the exchange of knowledge and experience in dam engineering. Other partners are UNESCO-IHE; IWMI; Sub-basin Authorities within Ethiopia and Eastern Nile Universities.

National stakeholder databases were completed for six (6) Member States namely DR Congo, Ethiopia, Kenya, Rwanda, South Sudan and Tanzania. This is as part of efforts by the Secretariat to facilitate in-country stakeholder engagement so as to contribute to the successful implementation of the NBI 10-year Strategy as well as enhance awareness of Nile cooperation and Nile Basin issues.

Eng. Innocent Ntabana (R) and Prof. Muawia Hamid Shaddad, NBD Chairperson (L) upon signing an MoU
We generate, develop and share with all, transparent, scientific and impartial knowledge, information and tools, to enable countries make informed decisions on basin-wide water resources management and development. The following was achieved during the reporting progress.

- The second phase of the Nile Basin Strategic Water Analysis with a focus on generating options for addressing the water security challenges of the Nile Basin was launched.
- The inception phase for the preparation of the second State of the River Nile Basin Report 2018 was completed. This report is a key resource for joint monitoring and management of the health of the River Nile and associated natural resources.
- The first baseline assessment of climate services for infrastructure was completed. The baseline assessment report provides current status on availability and use of climate services in Nile Basin countries.
- Two quarterly river basin monitoring bulletins were prepared and disseminated. The bulletins provide data and information on rainfall and other hydro-meteorological variables for the Nile Basin based on data from satellite remote sensing.
- One report on climate change highlighting implications of a global average temperature rise of 2°C on the precipitation and temperature changes in the Nile Basin was issued.
- At least 2.2 million people in the Eastern Nile sub-basin benefitted from early warning messages and alerts disseminated during the flood season.
- Capacity building on potential dam failure analysis, dam surveillance, small dams as well as flood forecast, benefitted 267 participants from the Eastern Nile.

A total of 105 people enrolled for the online Nile Basin Decision Support System course. The NB DSS is an analytical tool jointly developed by NBI and Member States.

- The Catchment Management Planning Manual aimed at guiding countries in specific catchment management planning in the Nile Equatorial Lakes (NEL) region was developed by NELSAP CU.
- A total of 61 experts from Burundi, DR Congo, South Sudan and Sudan benefited from country specific training on water allocation modeling for economic production.
The entire Eastern Nile region, which includes Egypt, Ethiopia, South Sudan and Sudan, is characterised by highly variable river flows, making it prone to extreme flood and drought events. Flooding affects major urban centers such as Khartoum and rural settlements riparian to the Blue Nile and Main Nile particularly during high rainfall periods (July-September). Flooding is also experienced in the tributaries of the Baro-Akobo-Sobat River. This comes with devastating effects on lives and property and with real consequences for poverty and food security.

The flooding problem is transboundary in nature and therefore requires upstream-downstream cooperation to effectively address it.

During the 2017 flood season, the NBI, through its Flood Protection and Early Warning Project implemented by ENTRO, helped reduce the risk of flood devastation for at least 2.2 million people living in flood prone areas.

The early warning messages and alerts sent by ENTRO through its web portal, email and mobile phone were used by the local governments, national flood committees and humanitarian organisations to provide early warning information and to target their response efforts in times of flood.

The main deliverables during the period included the following:

- Numerical Weather Forecast Model (WRF) Rainfall Forecast for Eastern Nile
- Flood forecast for Lake Tana using Hydrologic Modeling System (HEC-HMS)
- Flood forecast for Blue and Main Nile in Sudan with Sudan-FEWS which inputs three days forecast precipitation data as gridded format from different sources
- Flood forecast for Baro-Akobo-Sobat (BAS) sub basin in Ethiopia and South Sudan: The forecast system was developed using GIS Flood Tool to map and compare the characteristic inundation with major historical floods events in the area.

The aim of Flood Protection and Early Warning Project is to reduce human suffering caused by frequent flooding, while preserving the environmental benefits of floods.

The project enhances regional collaboration and national capacity in flood risk management, including flood mitigation, forecasting, early warning systems, emergency preparedness and response.
WATER RESOURCE DEVELOPMENT

Contributing to better livelihoods

We support Member States to prepare investment projects of regional significance that contribute to water, energy and food security, transform lives and advance regional integration

- The Baro-Akobo-Sobat Multipurpose Water Resources Development Study Project was completed during the reporting period. A long term Integrated Water Resources Development (IWRD) Plan for the sub-basin was prepared, for the first-time ever, on the basis of a Strategic Social and Environmental Assessment. The Study identified nine medium and long term projects to be included in the IWRD Plan.

- The standalone Eastern Nile MSIOA (Multisector Investment Opportunity Analysis) summary report was completed and distributed to Member States and other key stakeholders. The Study identifies two sets of no-regret programmes, one on water resources management to deepen sub-basin cooperation and increase basin resiliency and the other on promoting cooperative, win-win water resources investments in the sectors of power/energy security; watershed management to rehabilitate degraded catchments and improve natural resource-dependent livelihoods; efficient irrigated agriculture; water re-use and salinity management.

- Feasibility and ESIA/RAP studies were conducted by NELSAP CU for a number of projects including Sio Sango Water Resources Development project in Kenya, Mara Valley Multipurpose project and Ngono Irrigation and mini hydropower project respectively in Tanzania, Kabuyanda Water Resources Development project in Uganda as well as Nyimur/Limur Multipurpose project in South Sudan and Uganda.

- Feasibility and ESIA/RAP studies, detailed design, and tender documents were prepare for the Tanzania and Zambia power interconnection transmission line project, which is part of the Zambia – Tanzania – Kenya power interconnection. The aim is to interconnect the Eastern Africa Power Pool and the Southern Africa Power Pool.

- Construction of the 80MW capacity Regional Rusumo Falls Hydroelectric power plant by NELSAP CU continued during the reporting period. The hydropower plant will supply affordable and reliable electricity to people of Burundi, Rwanda and Tanzania.

Underground tunnel at the Rusumo project site
Karere Madina, a resident of Kirehe District in Rwanda is one of 53 people displaced by the Regional Rusumo Falls Hydroelectric project. Madina and nine others started a joint poultry project with close to 1000 layers, from the displacement compensation money that they received from NELSAP.

“We benefitted a lot from this Rusumo project because as a result of the compensation money we received, we started poultry farming and this has benefitted me and my family a lot,” says Madina, a mother of five.

Madina was resettled at Kiyanzu, a small shopping centre that is a few kilometers from Rusumo. Though a widow, she is able to support herself and her children, two of whom are in secondary school while the others are still in primary school, thanks to the poultry project.

“I sell the eggs and get money to pay school fees, buy household items and improve my well-being. I am also able to feed my children on eggs,” she explains.

She adds that her neighbours also benefit a lot from this poultry project because they get manure in from of chicken droppings, which helps improve yields from their farms.

When asked what she thinks of the Regional Rusumo Hydroelectric Project, Madina says she believes it is a very good project since it will increase electricity...
production in her country, in addition to the employment created. Currently, the project employs 231 people from Rwanda, 254 from Tanzania and 81 from Burundi.

“We are happy and we thank NELSAP and our District for being close to us and our respective projects and for their support since we were re-settled at Kiyanzi,” Madina says.

Karimunda Nasoro is yet another beneficiary of the resettlement programme. He is a father of six and has invested his compensation money in dairy farming. Together with ten others, they have a large cow shed with over 30 improved dairy cattle. The shed is jointly managed by the group, but individuals tend to their own cows and provide food and supplements.

Karimunda says he benefited from training offered by NELSAP on how to manage their dairy cows project for optimum milk production and good health.

“As a result of the training, we are able to get enough milk to sell at the local market and for our families,” says Karimunda.

Asked what he expects from the Regional Rusumo Falls Hydroelectric project, Karimunda says he hopes it will create jobs for his community and also connect their homes with electricity.

By the end of 2018, NELSAP had compensated Project Affected Persons (PAPS) totaling to 60 households and one commercial group in Rwanda, 135 households and three cooperatives in Ngara District in Tanzania.

NELSAP has paid USD 3.1 million to Project Affected People (PAPs) in Rwanda and Tanzania and is implementing Local Area Development Projects to the tune of USD 15 million.

When asked what she thinks of the Regional Rusumo Hydroelectric Project, Madina says she believes it is a very good project since it will increase electricity production in her country, in addition to the employment created.
Resource Mobilisation

We mobilise funding for core costs, programme work and implementation of investment projects. Below is what the three NBI centers mobilised during the financial year:

- USD 5.23M from Global Environment Facility for a regional project on enhancing conjunctive management of surface and groundwater resources in selected transboundary aquifers.
- USD 415,395 from German Federal Foreign Office for the Hydro-Diplomacy Project.
- USD 275,897 from German Federal Ministry for the Environment, Conservation and Nuclear Safety for the project on ‘Enhancing Climate Services for Infrastructure.
- A total of USD 1,745,837.17 country contributions was received during the Financial Year 2017/2018 (Nile-SEC-USD 729,214; ENTRO - USD 618,122 and NELSAAP CU - USD 398,500)
- The annual NBI Strategic Dialogue 2017 was held October 2017. Development Partners reaffirmed their commitment to support Nile cooperation through technical support and program funding.
- NELSAAP CU mobilised USD 1.5 million from NEPA – IPPF through AfDB for the Angololo project, which is shared between Kenya and Uganda.
- ENTRO secured USD 697,402 from NCORE-World Bank; USD 444,657 from AfDB; and USD 618,122 from Country Contributions. This is in addition to Euros 424,346 from GIZ and Euro 100,000 from EU-GIZ.
The following financial tables provide an overview of the revenue and expenses of the three NBI offices for the fiscal year July 1, 2017 through June 30, 2018.

<table>
<thead>
<tr>
<th>NBI CENTRES BUDGET AND EXPENDITURES (USD) FY 2017-2018</th>
<th>Receipts</th>
<th>Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>NILE-SEC*</td>
<td>1,953,974</td>
<td>2,588,734</td>
</tr>
<tr>
<td>ENTRO</td>
<td>2,073,970</td>
<td>1,809,045</td>
</tr>
<tr>
<td>NELSAP</td>
<td>18,057,480</td>
<td>20,860,636</td>
</tr>
<tr>
<td>TOTAL NBI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: NBI centres budget and expenditures for the financial year 2017/18

*NileSEC excess of expenditures over receipts was a result of lower country contribution receipts than expected. Reserve funds where borrowed to meet planned activities. NELSAP excess of expenditures over receipts was a result of Rusomo Hydropower Project funded by unspent balance of funds brought forward from previous Financial Year.

NBI Total Funding

The NBI's revenues are derived from contributions from the member countries and from grant agreements with development partners. The following chart shows the revenue by funding source for the period from inception of NBI to June, 2018.

The pie chart summarizes the relative contributions to the NBI's budget since its establishment. The Member State cash contributions represent approximately 2% while in-kind contributions represent 12% of total financial resources. In kind contributions include land donated by the government of Uganda to host the Nile-Secretariat in Entebbe, rent paid by host government for NBI Centres offices and for PMU, office space and prime land premises free of charge to ENTRO, and governance members, National Focal Points and other offices and other such contributions. The now completed and closed World Bank managed NBTF grants portfolio accounted for 25% of total funding to NBI while the World Bank managed CIWA trust fund accounts for 3%. Direct funding from NBI's bilateral partners comprises 3% from GIZ, 4% from ADB and 7% from other bilateral partners including SIDA, Norway, GEF, EU, and ADF. The World Bank has contributed 44% to the NBI total resources under the regional Rusumo Hydro power project.

Member Country Contributions

Member States agreed to increase their contributions from 2012 to 2017 financial years to achieve minimum functionality cost coverage of 3.8M. At the end of this period US$1,749,012 has been received against a target of US$4,361,111 (i.e. 40% achievement).

Burundi, Tanzania and Uganda made partial payments while Ethiopia and Rwanda paid fully all their contribution for 2017/2018 for Nile-SEC and NELSAP. The chart below shows the status of outstanding arrears for each country.
At ENTRO, only Ethiopia and Sudan paid their contributions by year end. Management and governance efforts are still ongoing to engage Egypt and bring them back on board. Figure 3 provides a summary of ENTRO contribution status as at 30 June 2018.

Fig. 3 Summary of Eastern Nile Country Contributions Status

**CIWA Trust Fund**

The World Bank has continued its support to NBI by providing an additional funding of US$ 8.5M through the Cooperation in International Waters in Africa (CIWA) trust fund to NileSEC US$ 2M, ENTRO US$ 3.4M, and NELSAP US$ 3.1M under the NCORE project. The Grant closure date has also been extended from 30th April 2017 to 30th November, 2020.

**German Government**

The German Government has increased its support to cooperation on Transboundary waters in the Nile Basin. The 4th phase funding administered by GIZ came to an end in August 2018. Implementation of the 5th phase of funding started in September 2017. Euros 3.5M has been made available under this phase.

The German Government through its foreign affairs ministry has also supported through separate agreement, components under Media engagement, Hydro diplomacy training of NBI governance. Also the German Government is supporting Wetlands and Climate Infrastructure Projects.

**European Union**

The Euro 10 million grant for project prepared with the EU was approved in August 2017. A formal grant agreement stipulating the terms and conditions have been agreed with GIZ and implementation effective from 1st July, 2017.

**African Development Bank**

The African Development Bank group together with GEF approved financing amounting to UA 18 million for implementation of a regional fisheries and water resources project in the Lakes Edward and Albert shared by Uganda and DRC. The funding agreement was signed on the 17th May 2016. The financing will go towards implementation of water resources and fisheries development programs.

**SIDA Sweden and Norway**

Sweden and Norway provided significant financial support bilaterally in support of NEL- RBOs namely Mara, Kagera and Sio- Malaba Malakisi. These projects operations have been significantly reduced during the last two financial years and negotiations are ongoing for respective Member States to takeover these projects.

**The World Bank**

The World Bank provided credit/grant amounting to SDR 229 Million (USD 340 Million) to Burundi, Tanzania and Rwanda for the Regional Rusumo Falls Hydroelectric Project. Implementation of the project is going on smoothly.

**French Development Agency**

The French Development Agency and the Nile Basin Initiative signed a grant agreement amounting to 1,000,000 Euros. The funding is aimed at strengthening the capabilities of NBI Member States in the identification, preparation and implementation of development projects in the Nile Basin. Implementation is on-going and consultations for possible further support are on-going.
Looking ahead

Going forward, NBI attaches great importance to cooperative management and development of the shared Nile water resources. The three NBI Centers will continue to work with Member States, development partners and strategic partners towards attaining the objectives of the NBI 10-year Strategy (2017 – 2027) through Center specific 5-year programmes.

In doing so, greater effort will be made in deepening awareness across the basin on wide-ranging risks and challenges, and seeking to align national interests around common basin wide goals. This is in addition to establishing and or strengthening strategic partnerships with regional inter-governmental organisations with a mandate in the Basin such as Nile Basin Discourse, Global Water Partnership Eastern Africa, East African Community/Lake Victoria Basin Commission, and Inter Governmental Authority on Development as well as East African Power Pool.
What is the major determinant of population distribution in the Nile Basin?

The single most important intra basin agricultural trade commodity by volume among the Nile Basin riparian states is maize.

Quiz

What's on? January - March 2013

Facts about the Nile Basin

- Main Consumptive Water use: Agriculture
- Major Lakes within the Basin: Lake Victoria, Lake Tana, Lake Kyoga, Lake Albert
- Location: -4° S to 31° N and 24° E to 40° E
- Basin Area: 3,176 X 10³ Km²
- % Population within the Nile Basin: 54% (238 Million)
- Population (Total in all the Nile Countries): 437 Million
- Temperature: Night Minimum -10°c and daily Maximum in June 47°c
- Mean Annual /f_low (Discharge) (m³/yr) at Aswan: 84 X 10⁹ m³/yr
- Discharge/Unit area: 28 X 10³ m³/Km²
- Precipitation: Max Annual 2,098 mm/yr in Ethiopia
- Min Annual 0 mm/yr in Egypt
- Main Tributaries: Victoria Nile/Albert Nile, Bahr El Jabel, White Nile, Baro Pibor-Sobat, Blue Nile, Atbara, Bahr El Ghazal
- Estimated Navigable Length: 4,149 Km
- River Length: 6,695 Km (one of the world’s longest River)

Jan NCoRe Project Effectiveness All Centers

Date Activity Venue

Jan 11 – 12th Feb Regional Meeting for National NBI Desk Officers Entebbe

22nd Feb Nile Day celebrations (Regional and National) Bahr Dar, Ethiopia (for regional celebrations)

April 3rd 8th Nile-TAC Meeting Entebbe

Compiled by Tom Waako, Projects Officer, Nile-SEC -Entebbe

Disclaimer: The views expressed in this newsletter do not necessarily represent those of NBI, its Member States or Partners.

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Source: UN Population Division World Population Prospects 2012

Photo: iStock