NELSAP hosts Permanent Secretaries from nine NBI countries for Experiential Learning Tour to the 80MW Regional Rusumo Project

The Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU) hosted Permanent Secretaries from nine Nile basin countries for an experiential tour to its project, the 80MW Regional Rusumo Falls Hydroelectric Project that is shared between Burundi, Rwanda, and Tanzania. While welcoming the guests, Eng. Dr. Isaac Alukwe, the Regional Coordinator of NELSAP-CU, and Eng. Sylvester Matemu, the NBI Executive Director, explained that the tour is part of NBI capacity development strategy and its objective was to benchmark good practices that can be promoted for replication between other Nile Basin member states. The tour was also meant to facilitate learning from flagship projects that have successfully harnessed collective resource mobilization, technical cooperation between neighboring countries in joint management...

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Kenya and Uganda Express Commitment to Full Implementation of Transboundary Angololo Water Resources Project

“Kenya and Uganda have expressed commitment to full implementation of the transboundary Angololo Water Resources Development Project. The Minister responsible for water affairs of Kenya Hon. Alice Muthoni Wahome, and her Ugandan counterpart Hon. Sam Cheptoris expressed the two country’s commitment while jointly co-chairs a Development Partners Roundtable on the project, held on 24th February 2023 in Nairobi Kenya. The project located on Malaba River, envisons a 31.6 million cubic metres dam reservoir that will supply water to over 270,000 people, irrigate 4,000 Ha and generate 1.3MW...

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NELSAP-CU hosts Nile Basin Permanent Secretaries Experiential Learning Tour to the 80MW Regional Rusumo Falls Hydroelectric Project

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and development of transboundary water resources, to demonstrate the benefits of cooperation in transboundary water and in addressing common regional challenges.

“We want the countries to understand that cooperation in management of transboundary international waters is no longer a choice, but a necessity and can greatly benefit the Nile Basin Countries,” said Eng. Dr. Isaac Alukwe. The nine Nile Basin countries were represented by three Permanent Secretaries each, from the ministries responsible for Water Affairs, Finance and Foreign Affairs and senior government officials who are decision makers on transboundary water management.

The tour offered the Permanent Secretaries, who are not part of NBI governance structure, an interactive and practical approach to learn about NBI. The experiential tour by the Permanent Secretaries was facilitated by the World Bank through the Nile Cooperation for Climate Resilience, NCCR project and was coordinated by the Nile Basin Secretariat. The host Permanent Secretary Mr. Patrick Karera, Rwanda PS for Environment while welcoming his counterparts to Rwanda, noted that access to food, clean energy and water is a priority for all basin countries. The PS said that the Nile River basin is transboundary in nature and therefore requires close liaison, coordination, and collective efforts in harnessing its resources for sustainable development. “I appeal to the Nile Basin member states to effectively support the Nile Basin Initiative, which is our common platform, that is helping the basin to advance through cooperation and sustainable investments,” Mr. Karera added.

Speaking at the end of the PS’s site visit to the 80MW Regional Power Project, Hon. Eng. Daw Albdulrahman Mansour, (Acting) Minister of Irrigation and Water Resources, who is also the Sudan Republic / Undersecretary in the Transitional Government of Sudan said, “Many lessons can be learnt from this project, here we have one facility used by more than one country, it shows that if countries work together they can reduce project costs, pool together resources and increase the benefits. This is a great example of transboundary cooperative water investment in the Nile River basin that if emulated and practiced across the basin, can lead to peaceful cross-border coexistence and costs effective projects.” The visits took place in the second week of February 2023.
Kenya and Uganda Express Commitment to Full Implementation of the Transboundary Angololo Water Resources Development Project

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electricity with the option of increasing it through a floating solar system.

“Now that feasibility studies are ready, technical documentations and the environmental impact assessment are complete, and the project has been proved to be viable and bankable, we are ready to jointly go to the next stage of resource mobilizing the required USD 132 million for its full implementation” said Hon Alice Muthoni Wahome, Cabinet Secretary for Water, Irrigation and Sanitation of Kenya and also the chair of the Nile Equatorial Lakes Council of Ministers (NELCOM).

On his part, Hon. Sam Cheptoris, the Uganda Water and Environment Minister said the Angololo project will boost food security since it will enable the region to produce food throughout the year. He added that Uganda is ready to sign the Memorandum of Understanding (MoU) for the project to proceed.

“We want to assure our Development Partners that Uganda is 100% committed to this project and we are ready to compensate project affected persons and mobilize funds for any other activity that will fall within our mandate,” added Hon. Cheptoris.

The Kenyan Minister, Hon. Alice Wahome informed the gathering that her ministry was expediting preparation of a Cabinet Memo to secure funding from the National Treasury to support critical components of the project like land acquisition, and resettlement of people who are likely to be affected by the project while at the same time reviewing MoU with Uganda that will spell out modalities for joint resource mobilization and implementation of this transboundary project.

Hon. Wahome added, “NELSAP-CU has experience in implementing complex transboundary projects in the NEL region such as the 80MW Regional Rusumo Hydropower project, and drawing from their experience, the two countries will request them to undertake implementation of transboundary components of the Angololo project, which include dam infrastructure, hydropower and water treatment.”

Dr. Anders Jägerskog, Senior Water Resources Specialist the World Bank who is also managing the Cooperation in International Waters (CIWA) project expressed the Bank’s delight at the decision of Kenya and Uganda to pick up the Angololo project for full implementation and urged the countries to ensure the project is listed in the respective country’s development strategy papers.

“I am glad to note that Angololo project, as structured, corresponds to all strategic priorities stated in the African Development Bank (AfDB) Water Strategy for Africa 2021-2025,” said Mr. Mtchera Johannes Chirwa, Coordinator of the African Water Facility, at the AfDB. He added that the bank was satisfied with the quality of the feasibility study work and the study management. He noted that the project encourages transboundary cooperation and integration, which is an additional key pillar that motivated the bank to support full feasibility of the project.

The NELSAP-CU Regional Coordinator Eng. Dr. Isaac Alukwe while delivering the keynote address said that Angololo project, which is set to be the third NBI flagship project, demonstrates the strong ties between Kenya and Uganda.

Several Development Partners attended the roundtable meeting including the World Bank, the African Development Bank (AfDB) NEPAD-IPPF, AUDA-NEPAD, the Africa Water Facility, European Investment Bank, Afrexim Bank and GIZ. The Principal Secretary of Water Affairs of Uganda Mr. Alfred Okot Okidi and his Kenyan counterpart Dr. Paul Kipronoh Ronoh were both present at the meeting.

In Kenya the project will principally be in Busia County and parts of Bugoma County while in Uganda it will benefit people from Tororo, Manafwa and Namisindwa Districts. NELSAP and the two countries concluded feasibility of this project, in November 2022.
The Permanent Secretary in the Ministry of Environment for Rwanda Mr. Patrick Karera has said that the soon to be completed 80MW Regional Rusumo Falls Hydroelectric Project will boost Rwanda’s efforts to attain self-sufficiency.

“Rwanda has an ambitious target of attaining 100% energy access within the next two years and the 80MW Rusumo project, will complement in realizing country’s power targets and so we are happy that this project is coming to a close,” Mr. Karera (PS) said. The PS said these while addressing Permanent Secretaries of nine Nile River basin countries who were visiting the Rusumo project for an experiential learning tour.

The Environment Permanent Secretary noted that Energy security is a priority to all Nile basin member states and that Rwanda was doing its best to attain energy. He added that the 80MW Regional Rusumo Falls Hydroelectric Project that is shared between Burundi, Rwanda and Tanzania is one of Rwanda’s valued energy projects that is being looked upon by the government to contribute to and complement the country’s efforts towards realization of its energy goals.

The Permanent Secretary commended NELSAP-CU and the development partners, particularly the World Bank and the African Development Bank (AfDB) for picking up the project and working on it diligently in a relatively short implementation period despite its multidimensional and transboundary nature. He added that overall, the project will contribute to Rwanda’s socio-economic development, industrialization, support reversal of environmental degradation through uptake of clean renewable energy and improve living conditions of the people.

By May 2023 overall project completion had reached 99.5%. Civil works were 99.7 complete while electromechanical works were 99.2% complete.

The World Bank is financing construction of the Rusumo power plant to the tune of USD 340 million while the AfDB has provided USD 120 million for the Rusumo substation and Overhead Transmission Lines (OHTL) that will evacuate power and interconnect the grids of the three nations.

### KEY PROJECT DATES

- 2002 - Project Prefeasibility done by NELSAP-CU
- 2005 - Water Ministers of Burundi, Rwanda and Tanzania issue Joint Communiqué declaring intention to jointly implement the project
- 2006 - Ministers of Water Affairs sign Joint Project Implementation Agreement
- 2012 - Project Tripartite Agreement signed by Ministers giving mandate to NELSAP-CU to fundraise and prepare for the project.
- 2013 - NELSAP completes E.S.I.A and R.A.P studies
- 2013 - Oct. Project Financing Agreements signed
- 2013 - Nov. Rusumo Power Company Limited (RPCL) established
- 2014 - Jul. Project Financing Effectiveness
- 2014 - Jun. Owners Engineer recruited
- 2015 - Compensation, Land Acquisition completed
- 2016 - Nov. Construction Contracts signed
- 2017 - Feb. Construction commenced
- 2023 - Apr. Project 99.5% completed

The 80MW Regional Rusumo Project key to Rwanda attaining its Energy Security Goals - says Rwanda PS
Feasibility of Transboundary Angololo Water Resources Project Complete, Confirmed Viable with 14% Rate of Return

According to full feasibility studies on the Transboundary Angololo Water Resources Development Project, that was concluded in November 2022 by NELSAP-CU, in economic terms, this multipurpose project between Kenya and Uganda is viable and will give an Economic Internal Rate of Return (EIRR) of over 14%.

“The 14% EIRR is higher than what is required for investments in both Kenya and Uganda. For a project to be considered viable in Kenya, its EIRR value must be higher than 11.5% while for Uganda it must be higher than 11%,” said Eng. Dr. Isaac Alukwe, the NELSAP-CU Regional Coordinator ahead of publication of the findings. EIRR measures the additional economic benefits expected from a proposed investment by quantifying the financial and non-financial benefits as well as its expected social impact.

The Angololo feasibility studies included detailed designs, tender documents preparation, environmental social impact assessment (ESIA), and resettlement action plan (RAP) studies. Economic analysis of the project’s Net Present Value (NPV), which details how much a project is worth throughout its lifetime, shows that the Angololo project will have an additional value of USD 24.89 million for Uganda and 19.52 million for Kenya, in addition to the expected human benefits of water, food, and energy. Main components of the Angololo project include a 40 metres high dam with a reservoir capacity of 31.6 million cubic metre to supply water to 270,000 people, irrigation of around 4,000Ha and 1.3MW hydropower that will be boosted by floating solar system, together with catchment management of 447km².

Available Water, Compared to Maximum Water Demand

The environmental social impact assessment (ESIA) report also noted that the project will have minimum negative environmental impacts. River Malaba has 209.4 million cubic metres (MCM) of water per year. The Irrigation component of the project will use 39.2 million cubic metres per year (MCM/yr), water supply component will use 1.7 MCM/yr while livestock will need 0.2MCM/yr. 95MCM/yr will be left for minimum Environmental Flow (E-flow). E-Flow refers to unutilized water within a river, wetland, or coastal zone that is left aside to maintain natural ecosystems and provide benefits to local people upstream and downstream. The 209.4MCM annual available water projection for River Malaba, factors in both climate change and population growth until the year 2050.

Full feasibility studies of the Angololo project begun on 15th July 2020 and were completed after 28 months of research work, on November 15, 2022. The study was carried out by NELSAP-CU through USD 1.5 million funding from the African Development Bank (AfDB) NEPAD-IPPF, with the countries contributing USD 0.15 million.

The project is situated on River Malaba, in Kamachar village, Busia County on the Kenya side and Osimit village in Tororo District on the Ugandan side. The direct beneficiaries of the project are the people of Bungoma and Busia Counties of Kenya and Tororo, Manafwa, and Namisindwa Districts of Uganda.

Socio-Economic Characteristics of the Project Area

According to the study findings, 70% of community members in the project catchment area derive their livelihoods from rainfed subsistence farming. Only 6% are connected to the national power grid with over 90% using firewood for cooking. Below 25% have access to clean water, which is below the national average for rural communities for both countries. The Angololo project aims to address the above challenges, in line with the aspirations of Kenya’s Vision 2030, which among others aims to increase irrigated land from 4% to 10% by 2030 and to Uganda’s Vision 2040 of having “a transformed Ugandan society from a peasant to a modern and prosperous country within 30 years.”
Ministers responsible for water affairs of the Nile basin states have called on countries that are yet to sign and ratify the Cooperative Framework Agreement (CFA) on the Nile, to do so to enable the transition to the Nile River Basin Commission (NRBC) a body with full legal mandate to facilitate cooperation among the Nile Basin States in conservation, management and development of the Nile River Basin and its waters. So far six countries have signed the CFA (Burundi, Ethiopia, Kenya, Rwanda, Tanzania, Uganda) and out of those six, four countries (Ethiopia, Rwanda, Tanzania, and Uganda) have ratified the Treaty.

The Hon. Ministers made the call during 17th Nile Day celebrations that were held in Nairobi Kenya in February 2023. Kenya’s Prime Cabinet Secretary Hon. Musalia Mudavadi who was the chief guest at the event said that the Nile basin waters have great transformative potential for socio-economic development and human prosperity in the region hence the need for a legal mechanism to share the increasingly scarce waters of the Nile equitably among the basin states to minimize potential risks of conflicts.

Kenya’s Cabinet Secretary for Water, Sanitation, and irrigation Hon. Alice Muthoni Wahome who is also the chair of the Council of Minister (NELCOM) said that Kenya is eager to see the establishment of a permanent institutional framework which will take the achievements of NBI to the next level. She added that Kenya, with almost half of its water resources within Lake Victoria basin, considers Nile basin as a region of strategic importance for meeting its water demands and improving livelihoods. She added that the country has not relented on its commitment to the ideals of the CFA. Kenya’s Principal Secretary for Water, Sanitation, and Irrigation Dr. Paul Ronoh had earlier stated, in a media briefing ahead of the Nile Day, that the country is in an advanced stage of ratifying the CFA and that the Treaty had already been approved by Kenya’s Cabinet and Parliament.

Uganda Minister for Water and Environment Hon Sam Cheptoris while delivering his country’s position, stated that Uganda gives priority to transboundary cooperation and firmly adheres and confirms its commitment to Nile Cooperation and urged countries to complete ratification of the CFA. Speaking on behalf of Hon. Jumaa H. Aweso, the Minister of Water, Tanzania, Hon Eng. Maryprisca Winfred Mahundi, the Deputy Minister for Water said that the CFA and the subsequent Nile River Basin Commission (NRBC) will not only allow for more equitable use of the Nile waters but will also deepen cooperation among riparian countries. Similar sentiments were echoed by Hon. Eng. Dr. Habtamu Itefa, Minister for Water and Energy of Ethiopia.
The Cooperative Framework Agreement (CFA) on the Nile River Basin outlines principles, rights and obligations for cooperative management and development of the Nile Basin water resources. Rather than quantifying ‘equitable rights’ or water use allocations, the Treaty intends to establish a framework to promote integrated management, sustainable development, and harmonious utilization of the water resources of the Nile Basin, as well as their conservation and protection for the benefit of present and future generations. The CFA envisions formation of a commission called the Nile River Basin Commission (NRBC) that will promote and facilitate the implementation of the CFA and facilitate cooperation among the Nile Basin States in the conservation, management and development of the Nile River Basin and its waters.

Evolution of the CFA treaty - negotiation process

The text of the Cooperative Framework Agreement (CFA) was developed over more than a decade of intensive work by a Panel of Experts, a Transitional Committee, a Negotiations Committee and Technical Advisory Committee (TAC) members. A draft CFA text was submitted to the Council of Ministers of Water Affairs of the Nile States (CoM) in March 2006. The COM members completed their negotiations of the CFA on June 25, 2007, with all but one reservation lifted (Article 14b). The final decision by the COM was to refer the said reservation to their Heads of State summit for resolution.

May 22nd, 2009, Kinshasa, DRC: 7 member countries agree to annex Article 14b for later resolution by NRBC; with reservation by Egypt.

Jul 3rd, 2009, Nairobi- Kenya: During a Meeting of country negotiators 7 countries agree on a cleaned text; with strong reservations by Egypt and Sudan.

April 13th, 2010, Sharm el Sheikh - Egypt: 7 countries agree to open CFA for signature. Position rejected by Egypt and Sudan.

May 14th, 2010, Entebbe Uganda: CFA opened for signature. Four countries (Ethiopia, Rwanda, Tanzania, and Uganda) sign the opened CFA.
South Sudan Minister Calls for NBI Support Towards Long-Term Solutions for the Raging Floods in the Country

Hon. Pal Mai Deng, the Minister for Water Resources and Irrigation for the Republic of South Sudan, has called for NBI support in getting long-term solutions to floods in South Sudan. The Hon. minister said floods had affected nine of the ten states of South Sudan, with Unity State (Bentiu) the worst affected. The Hon. minister made the appeal during a courtesy call to his office by the Nile Cooperation for Climate Resilience (NCCR) Flood and Drought Risk Mitigation team from the Nile Basin Initiative (NBI). The delegation was led by NELSAP-CU Regional Coordinator Eng. Dr. Isaac Alukwe, Dr. Thomas Jang Kan, the Head of Water Resources Management of South Sudan/NELTAC Member, and NCCR technical staff from NELSAP-CU and the Eastern Nile Technical Regional Office, ENTRO. The delegation visited the Hon. minister on April 24th, 2023.

The NCCR Flood and Drought Risk mitigation thematic area is being implemented in 9 Nile Basin Countries with the aim of enhancing preparedness and resilience of Nile Basin Countries against flood and drought disasters. The project is identifying areas with frequent high flood risks and then developing Flash Flood Early Warning Systems (FFEWS). In addition, the project will build capacities of flood managers in flood emergency response planning and the use of the FFEWS. It will also identify investment options (both structural and non-structural interventions) to manage flood and drought.

NCCR is a 5-year project financed by the World Bank through Cooperation for International Waters in Africa (CIWA) Trust Fund, and is implemented collaboratively by five agencies - NELSAP, ENTRO, Nile Basin Secretariat, The Lake Victoria Basin Commission (LVBC), and the Nile Basin Discourse (NBD).

The meeting with the Hon. Minister further discussed an upcoming project with flood mitigation components called the Regional Climate Resilience Project (RCRP) also financed by the World Bank. It also reviewed progress on the signing of MOU for resource mobilization and implementation of the Nyimur-Limur Multipurpose Water Resources Project located on the Aswa (Achwa) Basin in Eastern Equatoria State of South Sudan. The Nyimur-Limur project comprises of two dams with an irrigation command area of 4,200 ha (1,150 ha in South Sudan and 3,080 ha in Uganda) as well as water supply and flood control components.

NELSAP-CU has previously done identification of four dams in South Sudan that will help control flood and generate approximately 2 GW of hydropower. The four dams, located along the Nile, are Bedden (570MW), Grand Fula (1080MW), Lakki (420MW) and Shukoli (240MW).