Rwanda Investment Benefits from the Nile Basin Cooperation

Ongoing work at the 80MW Regional Rusumo Falls Hydroelectric Project

Shango Sub-Station in Rwanda

New Kagina Dispensary, a Local Area Development Project by NELSAP

ONE RIVER ONE PEOPLE ONE VISION

NBI/NELSAP-CU, FEBRUARY 2019
The Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU) headquartered in Kigali, Rwanda, is one of the two investment programs of the Nile Basin Initiative (NBI), the other being the Eastern Nile Subsidiary Action Program (ENSAP), headquartered in Addis Ababa, Ethiopia known as Eastern Nile Technical Regional Office (ENTRO).

NELSAP-CU was established in December 1999 by the Council of Ministers for Water Affairs with a mission to “contribute to the eradication of poverty, promote economic growth, and reverse environmental degradation in the Nile Equatorial Lakes (NEL) region, within the overall NBI’s shared Vision of sustainable socioeconomic development and the equitable use of and benefit from Nile Basin water resources”. NELSAP-CU is governed and reports to the Council of Water Ministers from 10 Nile Basin membership states of Burundi, DR Congo, Kenya, Rwanda, Tanzania, Uganda, Egypt, Ethiopia, South Sudan and Sudan.

NELSAP-CU within its mandate facilitates jointly agreed transformative in-country projects with regional impact/significance and trans-boundary cooperative investment projects related to the common use of the Nile Basin water resources. It also builds regional capacity of countries and provides a platform for implementation coordination of trans-boundary investment projects. NELSAP-CU renders support to national initiatives and focuses on two investment areas of: (i) power development and trade; and (ii) natural resources management and development.

NELSAP-CU has prepared a number of cooperative in-country and regional trans-boundary projects, which are at various levels of preparation and implementation. NELSAP-CU mobilized US$90Million cumulative finance to-date for pre-investment programs of and additional US$930Million for investment projects. Since 2004, NELSAP-CU has gained regional experience, strengthened its capacity and 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, regional projects coordination support, regional strategic analysis, environmental aspects, social economic development, stakeholders’ engagement and development communication, financial and procurement management as well as results based monitoring and evaluation.

NELSAP-CU, in delivering on its mandate, is supported bilaterally and multilaterally by different development partners including, but not limited to, the World Bank, the African Development Bank (AfDB), the Canadian International Development Agency (CIDA), the Governments of Norway (NORAD), Swedish International Development
In-take tunnel at the Regional Rusumo Fall Hydroelectric Project

The rationale of the project was to ensure reliable access
to water, strengthened market linkages and active
promotion of private sector as options that can have a
dramatic impact on agriculture growth, food security and
poverty reduction across the NEL countries. The project
was implemented in collaboration with regional economic
communities COMESA and EAC. Under the project, the
following studies were completed: (i) development of the
Nile Basin agricultural model, (ii) assessing the irrigation
potential in 7 NEL Countries (Burundi, DRC, Rwanda,
Kenya, Sudan, Uganda, Tanzania), (iii) promotion of best
practices on water harvesting and irrigation practices,
(iv) cross border agricultural trade studies focusing on
trans-boundary grain/pulses trade, livestock trade in the
Nile Basin region (v) virtual water/water footprint analysis,
documentation and awareness creation as well as (vi)
definition of the NBI agricultural role, based on study of
River Basin Organization lessons, national and regional
consultation

Integrated Management of Trans-boundary Water
Resources of Lakes Cyohoha, Rweru and Akanyaru
Marshland Project (2010 – 2012)
The Integrated Management of Trans-boundary Water
Resources of Lakes Cyohoha and Rweru and Akanyaru
Marshland project (abbreviated in French as GIRET Project)
was financed by the Bank through African Water Facility of
the African Development Bank to the tune of Euro770,000.
Project results are: i) Integrated Management and
Development Plans (IMDP) for the three water resources
and Investments Profiles (IP); ii) a Diagnostic Analysis
with an environmental screening of the water-resources;
iii) three hydro-meteorological stations operational and
mechanisms for data collection and sharing of the shared
water resources established; iv) 40 local key actors trained
in fishery management and policy, environment and IWRM
principles and law implementation.

Completed Projects With Direct Benefits to Rwanda

Regional Agricultural Trade and Productivity Project
(RATP 2009–2012) USD7.0 Million
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Energy Ministers of Burundi, Rwanda and Tanzania visit the Rusumo Project

The Kagera River Basin Management (RBM) Project
This was implemented in partnership of four countries (Burundi, Rwanda, Tanzania and Uganda), facilitated the installation of hydromet stations in Burundi as follows: (i) 5 Automatic Weather Stations have been installed at Muyinga, Cankuzo, Karuzi, Gitega, Ruyigi. (ii) 6 River Gauge stations were installed at Kibaya (Ruviryonza River), Gitongo (Ruvuvu River), Shombo (Ndurumu River), Murongwe (Mubarazi River) Mubuga (Nyabaha River) and Nyankanda (Kayongozi River). (ii) 5 Rain gauge stations were installed at Burasira, Ngozi, Matana, Kabuyenze and Nyakararo. All these enhanced the water resources monitoring in the country.

ongoing projects with direct benefits to Rwanda

Interconnection of Electric Grids of the Nile Equatorial Lakes Countries Project
The project’s total transmission line is 927km at 220kV and 400kV with associated 17 sub-stations. The project involves five countries of the NEL region; Burundi, DR Congo, Kenya Rwanda and Uganda aims at strengthening the interconnections between NEL region countries and other regional electric grids at the total cost of US$415Million from different financiers (AfDB, Government of Japan JICA, Government of Germany (KfW), the Government of the Netherlands and the European Union and Sida. Project implementation is on-going in all the five countries with the following scope involving Rwanda:

1. Mirama – Shango Transmission Line in Rwanda was completed in December 2015 and ready for commissioning.
2. Birembo – Shango Transmission Line in Rwanda was completed in August 2015 and line is in operation.
3. Shango – Rubavu – Karongi Transmission Line in Rwanda was completed in March 2016 and commissioned at 110kV in the interim and maintained operation at 110kV before commissioning at 220kV
4. Kigoma (Rwanda)-Gitega (Burundi) Transmission Line - Procurement for Rwanda scope was completed contract signed and design work commenced.
5. Construction of Kigoma and Gisagara substations is ongoing and work is at design stage and will be completed in February 2020.

Muvumba and Akanyaru Multipurpose Water Resources Development Project
NELSAP completed the pre-feasibility studies for Akanyaru Multipurpose Water Resources Development Project (between Burundi and Rwanda) and is now seeking funds from development partners for detailed feasibility, ESIA/ RAP studies.). The proposed project is envisaged to include a 52 m high dam with storage capacity of 333 Mm3, which
will expand irrigation by 12,474 ha (provide food for about 124,740 people), and enable hydropower generation of 14.5 MW (supply power to 846,00 people), water supply, and restoration of degraded watersheds upstream of the dam. On the other side NELSAP completed the pre-feasibility study for Muvumba Multipurpose Water Resources Development project. The project includes a dam and a reservoir for mainly irrigation up to 12 ha. Given the prime importance of the project to Rwanda as a nation, the GoU has sourced funding from KOREA and advanced the project to feasibility and detailed design phase. A part of the financing has been secured from KOICA and another part is being sourced from other development partners for implementation. 15 masonry water tanks in Nyagatare schools were constructed to harvest water from roof tops in September, 2007.

**Regional Rusumo Falls Hydroelectric Project (RRFHP)**

The Regional Rusumo Falls Hydroelectric Project, under implementation with an installed capacity of 80 MW (Run of River Scheme at 1320masl) that will be shared equally among Burundi, Rwanda and Tanzania. The power generation infrastructure will be located at Rusumo Falls at the border of Tanzania and Rwanda. The transmission lines will extend from the power generation plant to Gitega in Burundi, Kigali in Rwanda, and Nyakanazi in Tanzania. The project will develop renewable hydropower as part of a broader program to support sustainable management of the Kagera River Basin and promote growth and poverty reduction. NELSAP-CU is implementing the construction of dam and installation of electromechanical equipment for generation of the expected electricity on behalf of the three countries.

The project has three components: i) A hydropower generation plant at the Rusumo Falls of 80MW capacity to be shared among the three countries, ii) Transmission lines connecting the hydropower generation plant at Rusumo Falls to the national grids of Burundi, Rwanda and Tanzania, and the related project area development and iii) A jointly owned utility/institutional mechanism for the co-management of the power generation plant and transmission lines to national utilities. The joint institution will be responsible for environmental and social safeguards.

The setting up of the Special Purpose Vehicle (SPV) the Rusumo Power Company Limited is complete. US$340Million and US$128Million have been advanced to the countries as loan/grant from the World Bank and African Development Bank for the implementation of the Regional Rusumo Falls Hydropower project and the Power transmission lines respectively, which commenced in 2014. The contractors for both dam construction and installation of electromechanical equipment were procured and activities are on-going. The Dam construction contractor has completed site mobilization while the electromechanical equipment contractor is designing the equipment.

**Progress**

The project is under implementation having concluded all preparatory activities which included Environmental Baseline Studies on Water Quality, Fish Survey and Spray Zone Biodiversity.

Compensation of persons affected by the project has been completed on both sides of Rwanda and Tanzania with 60 households and 1 commercial group in Rwanda and 108 households and 3 commercial groups in Tanzania respectively. A total USD 3.1 million were paid out to the PAPs
Madina Karere, a beneficiery of the compensation and Livelihood Restoration Program at Rusumo as compensation in the two Districts Ngara in Tanzania and Kirehe in Rwanda.

Civil works/supply and installation of hydromechanical equipment begun in 2016 and is ongoing.

The dam will be commissioned in 2020 and it will provide 26MW of electricity to the Government of Rwanda. In addition the construction has created job opportunities to 200 Rwandans.

As part of bringing quick benefits to the community around the project site, NELSAP supports the Local Area Development Plan (LADP) as a benefit-sharing program worth 15 Million US Dollars designed to enhance regional economic and social development in the Rusumo area as an extended program related to the construction of the project. LADP is expected to improve community livelihoods and promote socially sustainable outcomes of the riparian citizens of the affected districts.

Implementation of the Livelihood Restoration Program (LRP) started in February 2017 and is on-going. USD 711,000 has been earmarked for program in Kirehe and Ngara districts of Rwanda and Tanzania. The Project has allocated USD 5million to the people through Ngoma and Kirehe Districts to implement different community development projects (agriculture (crops and livestock) through irrigation, construction of a new health centre, and roads rehabilitation.

In Kirehe District rehabilitation of 30 km of feeder road in Kigarama and Musaza (Cyagasenyi-Gasarabwayi-Nganda Road) is ongoing. Construction of the Kigina Health Center is completed. In Ngoma District it is constructing 28.7 km of mixed water pipeline supplying 10,500 populations of Gatonde-Gahima cells and 33km of Gituku-Murama water supply system and construction of 9,54km of Kigabiro-Rureenge-Gatore Feeder Road is starting soon.

**Beneficiaries Stories: Regional Rusumo Hydroelectric Project**

It is early morning at Kirehe District of Rwanda at the Rusumo border between Uganda and Tanzania. Karere Madina, a mother of five is attending to close to 1,000 layers chicken (exotic chicken kept for eggs). Madina is one of 53 people displaced by the Regional Rusumo Hydroelectric Power project on the Rwanda side of the trans-boundary project. Madina and nine other people started this poultry project 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. "I am now able to give my children eggs to eat, I sell the eggs and get money to pay school fees, buy household items and improve my well-being," she explains.

"My neighbours also benefit a lot from this poultry project because they get fertilizer from me to improve yield from their farms."

Madina, is a widow, but because of her projects, she is able to support herself and her children, two of whom are in secondary school while the others are still in primary level.

She explains that her old home in Rusumo, was very near the project area and that before the project started, the District and NELSAP informed them that due to the proposed project,
Karimunda Nasoro (L) beneficary of the livelihood restoration program at Rusumo

they would be relocated after receiving compensation. Madina was resettled at Kiyanzí, a small shopping centre that is a few kilometers from Rusumo. 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 and increase employment. She says she doesn’t see any negative side of the project because all of them were given money through their bank accounts and were given free hand to choose a project of their desire as long as it would improve their livelihoods. She says they were trained on various income generating ventures and then advised to form groups and start joint projects if they so wished.

“We are happy and we thank NELSAP and our District for being close to us and our projects and for their support since we were settled at Kiyanzí,” Madina says. Karimunda Nasoro is another beneficiary of the resettlement. 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 respective cows and provide food and supplements to them. Karimunda says that he has benefited from trainings by NELSAP on how to run their dairy project and specific trainings on how to take care of cows in a manner that will result to optimum milk production and good health.

“As a result of the trainings by NELSAP, we get enough milk for our families and even for sale at the local market,” says Karimunda. Asked what he expects from the Rusumo Hydropower project, Mr. Karimunda says he hopes the project will create jobs for his community and also connect their homes with electricity.
Hon Prof. Sospeter Muhongo the Minister of Energy-Tanzania, Hon. Come Manirakiza, the Minister of Energy-Burundi and Hon. James Musoni the Minister of Infrastructure-Rwanda, meet the press after Rusumo Falls Hydroelectric Project construction launch.

Underground Tunnels at Rusumo Hydroelectric Project.