



Nile Basin Initiative

CORPORATE REPORT

2012





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CHAIR PERSON NILE COUNCIL OF MINISTERS

Let me, on behalf of the Nile Council of Ministers, congratulate the Republic of South Sudan upon its admission as the 10th Member State of the Nile Basin Initiative



Dear members and friends of the Nile Basin Initiative,

This edition of the Corporate Report comes at a time when the Republic of South Sudan recently joined the Nile Basin Initiative (NBI) as the 10th Member State. This was during the 20th Nile Council of Ministers' Meeting held on 5th July, 2012 in Kigali, Rwanda. Let me, on behalf of the Nile Council of Ministers (Nile-COM); welcome and congratulate the Republic of South Sudan upon its admission.

The Report highlights key achievements realized in the last 12 months (July 2011 - June 2012) in each of the three NBI core functions namely; Facilitating Cooperation, Water Resource Management and Water Resource Development.

Sustaining financial stability has put our Institution before one of its greatest challenges ever. The ownership of the NBI by Member States has been highlighted and our solidarity tested like never before.

During our 20th Nile COM meeting, we provided solutions needed - by accepting to scale-up country contributions as well as clearing all outstanding arrears by December 2012. Today, I hold the view that revenue generated from within the Basin presents the best opportunity to sustain NBI and to attain our Shared Vision, with only very limited assistance from outside. The Nile Basin is endowed with enormous water based resources including fisheries, agriculture, hydropower, maritime transport and tourism among others. This should contribute towards the activities of NBI as well as achieving our Shared Vision.

Clearly, uncertainties and risks remain. We should be under no illusions as our work is far from finished. Our common strategic interests should always be and remain promoting transboundary cooperation and exploring more investment opportunities; which will help move our Shared Vision forward. By working together we will build a resilient Institution and ensure a healthy, happy and prosperous future.

Hon. Charity Kaluki Ngilu, EGH, MP
Minister of Water and Irrigation, Kenya

EXECUTIVE DIRECTOR NILE BASIN INITIATIVE SECRETARIAT



Along the last thirteen years of NBI's journey, it has built-on the successes of its Shared Vision Program to further strengthen its human and institutional capacities in shared water resources management and development.

By 2012, NBI's achievements and results have been obvious. NBI has set a constructive and strategic path ahead, with clear programmatic approach that ensures it will continue to realize its Member States' national development agenda. NBI finalized its strategic plans for the period 2012-2016, packed with a number of project proposals that meet the needs of the Nile Basin countries. The estimated pre-investment financing need for these projects is USD 292 million* while investment financing opportunity is about USD 1.3 billion.

The riparian countries, through NBI, have already **secured** more than **USD 719 million** investments financing for implementing trans-boundary investment projects accord-

ing to their national development plans in: hydropower generation and interconnection, agriculture, irrigation, watershed management and river basin management.

Enabling objective dialogue among the Nile Basin countries, the NBI has developed the Decision Support System to facilitate joint development and management of the shared Nile Basin water resources at basin, sub-basin and national levels. I am pleased to announce that the final Nile Basin Decision Support System - Release 3 was recently launched in Kigali, Rwanda during the 20th Nile Council of Ministers' Meeting.

Let me take this opportunity to thank our Development Partners - The Friends of the Nile - who in March 2012 renewed their commitment to continue their support to the NBI's business beyond 2012. This, without doubt, will boost the regional investments in the Nile Basin, as well as contribute to continued dialogue and basin-wide cooperation among the riparians.

Wael Khairy (Ph.D)

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* The USD 292 million is a revised estimate incorporating basin wide power actions

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The added value of ENTRO is in the regional planning perspectives it propagates and the trans-boundary solutions to national problems it identifies and promotes

OFFICER IN CHARGE EASTERN NILE TECHNICAL REGIONAL OFFICE



The Eastern Nile Subsidiary Action Program (ENSAP) of the NBI was launched by Egypt, Ethiopia and Sudan. The Eastern Nile Technical Regional Office (ENTRO) is the technical arm for its implementation. The added value of ENTRO is in the regional planning perspectives it propagates and the trans-boundary solutions to national problems it identifies and promotes.

In 2011-2012, ENSAP continued to face the sustainability test posed by the freeze on regional activities by two Eastern Nile (EN) countries. The countries have throughout continued to reiterate their commitment to cooperation. ENTRO looks forward to the fruits of their ongoing consultations to address the root causes of 'country stands'.

Through varied risk steering and mitigation measures, ENTRO transcended the challenges and advanced ongoing ENSAP projects. The Flood Preparedness and Early Warning Project and the Watershed Management Project are cases in point. Through the former, ENTRO put in place and continues to improve regional and national forecast and early warning systems for riverine flood to save lives and livelihoods. ENTRO also improved the mapping of flood communities.

The Watershed Management Project tackles

the interplay between poverty and environmental degradation, thereby promoting livelihoods and community development. It simultaneously addresses the problem of sediment load and siltation originating in Ethiopia, with considerable downstream benefits (details on pg. 31).

The freeze was particularly adversarial for the Joint Multipurpose Project (JMP) and the Eastern Nile Planning Model (ENPM) Project. The JMP was restructured to adapt to the new realities and ENTRO worked for the successful completion of the Strategic Social and Environmental Assessment. For the ENPM, ENTRO adopted an alternative modality to ensure the successful achievement of the project development objective (details on pg. 26).

Other achievements include finalization of the ENTRO Strategic Plan 2012-2016 whose focus is on building knowledge, understanding and trust; consolidating ongoing projects; and the sustainability of ENTRO, among others. This is in addition to detailing the ENTRO Component in the new Nile Cooperation for Results Project, securing a grant from AfDB for the Baro-Akobo-Sobat Project and broadening the base of Development Partners.

The above achievements, among others are a culmination of contributions from varied circles. ENTRO takes this opportunity to thank all Development Partners for their financial and technical support and looks forward to continued partnership. The combined efforts of EN experts, consultants, interns as well as the staff of ENTRO have been crucial. Special tribute goes to the distinguished contribution of the former Executive Director Dr. Ahmed Khalid Eldaw, who led ENTRO for three years, with his term concluding two months before the end of the reporting period for this Corporate Report.

Dr. Yosif Ibrahim

REGIONAL COORDINATOR NILE EQUATORIAL LAKES SUBSIDIARY ACTION PROGRAM COORDINATION UNIT



It gives me great pleasure and honour to briefly present the progress made by the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) in its two areas of focus: Natural Resources Management and Development; Power Trade and Development.

In enumerating this progress, it is important to note that energy deficits and especially power deficits have become an endemic problem in our region. The NELSAP has undertaken several initiatives to address this problem namely; completion of detailed feasibility and design studies for the Regional Rusumo Falls Hydroelectric Project and setting up, with support from the World Bank, a Special Purpose Vehicle to support its implementation. In addition, the Interconnection Project, connecting the electric grids of the five Eastern Africa countries, is advancing well while preparation of other Interconnectors: Kenya-Tanzania, Iringa-Mbeya and Uganda (Nkenda)-DR Congo (Beni) is progressing well. These interconnectors, once completed, will enhance the power backbone of the Nile Equatorial Lakes countries, improve power reliability and trade and reduce power tariffs.

The three River Basin Management Projects of Mara, Kagera and Sio-Malaba-Malakisi have made gains in the development of institutional frameworks with a harmonized position agreed upon. These projects have advanced feasibility

and detailed design studies for a regional water infrastructure program whose implementation will commence in the foreseeable future. Other interventions include: investments in watershed and wetland management, multipurpose water resources development projects in the: (i) Aswa Basin (South Sudan/Uganda); (ii) Lakes George, Albert, and Semliki Basins; (iii) Lake Kyoga Basin; (iv) Tanzania Irrigation and Watershed Management Project and (v) Bugesera project between Rwanda and Burundi. A Multi Sector Investment Opportunity Analysis is also in advanced stages of implementation and will provide a menu of prioritized “bankable” investment projects for downstream implementation. The Regional Agricultural Trade and Productivity Project advanced well and it is expected that studies under implementation/completed will trigger downstream “bankable” investment opportunities.

In a nutshell, the NELSAP Program has cumulatively managed to leverage investments amounting to approximately USD 800 million by utilizing USD 70 million in pre-investment financing. Projections in the NELSAP Strategic Plan 2012-2016 indicate an investment potential amounting to USD 1.24 billion by 2016. In this regard, NELSAP will continue to address a number of challenges in particular resource mobilization for investment financing and strengthening NELSAP institutionally in order to effectively and efficiently continue to fulfil its mandate.

As I conclude, I take this opportunity to commend NELSAP Member States as well as NELSAP governance for their continued visionary support and commitment to increased country ownership of the Program. I wish to acknowledge the collaboration with all stakeholders including Development Partners and other regional initiatives for their being true partners in development.

Antoine Sendama



The NELSAP Program has cumulatively managed to leverage investments amounting to approximately USD 800 million by utilizing USD 70 million in pre-investment financing

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OUR GOVERNANCE THE NILE COUNCIL OF MINISTERS



Ministers in charge of Water Affairs and Representatives of NBI Member States during the 20th Nile Council of Ministers' meeting held on 5th July 2012 in Kigali - Rwanda

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Roles and Responsibilities of the Nile Council of Ministers

- Provide Policy Guidance and ensure adherence to the NBI transitional arrangements
- Approve programs & projects
- Approve workplans & budgets



Hon. Jean-Marie Nibirantije
Minister of Water, Environment, Land Management and Urban Planning, Burundi



Hon. Bavon N'A Mputu
Minister of Environment, Nature Conservation and Tourism, DR Congo



Hon. Prof. Hesham Kandil
Minister of Water Resources and Irrigation, Egypt



Hon. Alemayehu Tegenu
Minister of Water and Energy, Ethiopia



Hon. Charity Kaluki Ngilu, EGH MP
Minister of Water and Irrigation, Kenya



Hon. Amb. Stanislas Kamanzi
Minister of Natural Resources, Rwanda



Hon. Paul Mayom Akec
Minister of Water Resources and Irrigation, South Sudan



Hon. Prof Saif el-Din Hamad Abdullah
Minister of Water Resources, The Sudan




Hon. Prof. Jumanne A. Maghembe
Minister for Water, Tanzania



Hon. Maria Mutagamba
Minister of Water and Environment, Uganda

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NILE BASIN FACTS

Basin Area	3,173 X 10 ³ Km ²
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
Longest River and its Length	River Nile; 6,695 Km (one of the world's longest Rivers)
Estimated Navigable Length of River Nile	4,149 Km
Countries	 Burundi DR Congo Egypt Eritrea Ethiopia Kenya Rwanda South Sudan The Sudan Tanzania Uganda
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 flow (Discharge) (Km ³ /yr) at Aswan	84 X 10 ⁹ m ³
Discharge/Unit area	28 X 10 ³ m ³ /Km ²
Main Consumptive Water use	Agriculture

Compiled by Milly Mbuliro, GIS/Remote Sensing Specialist (Nile - SEC, Entebbe)
*Source: UN Population Division World Population Prospects 2012

Country	Total Area(GIS)	Area in the Nile Basin	Percentage of total Basin Area	Percentage of Total Country Area	*Country Population 2012	Population in the Nile Basin 2012	Percentage of country population living in the Nile Basin 2012
Burundi	28,062	13,860	0.44	49.39	8,749,387	5,147,477	58.8
DR Congo	2,401,941	21,796	0.69	0.91	69,575,394	2,643,865	3.8
Egypt	996,960	302,452	9.52	30.34	83,958,369	80,377,080	95.7
Eritrea	121,722	25,697	0.81	21.11	5,580,862	2,096,985	37.6
Ethiopia	1,144,035	365,318	11.50	31.93	86,538,534	34,862,524	40.3
Kenya	593,116	51,363	1.62	8.66	42,749,418	16,962,930	39.7
Rwanda	24,550	20,625	0.65	84.01	11,271,786	9,310,974	82.6
South Sudan	635,150	620,626	19.54	97.71	9,614,498	9,516,014	99.0
Sudan	1,864,049	1,396,230	43.95	74.90	36,107,585	31,538,569	87.3
Tanzania	933,566	118,507	3.73	12.69	47,656,367	10,244,308	21.5
Uganda	241,248	240,067	7.56	99.51	35,620,977	35,418,768	99.4

Compiled by Milly Mbuliro, GIS/Remote Sensing Specialist (Nile - SEC, Entebbe)
*UN Population Division; World Population Prospects, 2010 Revision

THE NILE BASIN AND NBI CENTRES



Location of NBI Centres

- Nile-Sec in Entebbe, Uganda
- ENTRO in Addis Ababa, Ethiopia
- NELSAP-CU in Kigali, Rwanda

"I challenge NBI Member States to reflect on the opportunities that the River Nile offers and the extent to which the countries can harness this potential to improve water, energy and food security while mindful of the fact that the River Nile is a shared resource."

H.E. Edward Ssekandi, Vice President of the Republic of Uganda speaking as guest of honor during the 2012 Regional Nile Day celebrations held in Jinja, Uganda



H.E. Edward Ssekandi (left) planting a tree in commemoration of Nile Day 2012

WHO WE ARE



The Nile Basin Initiative (NBI) is an intergovernmental regional organization dedicated to equitable and sustainable management and development of the shared water resources of the Nile Basin.

The NBI was established on 22nd February, 1999 by Ministers responsible for Water Affairs in the Nile Basin countries. These Ministers now comprise the governing body known as the Nile Council of Ministers (Nile-COM). The Ministers are supported by the Nile Technical Advisory Committee (Nile-TAC) that offers technical support and advice on matters related to the management and development of the common Nile Basin water resources and provides oversight for NBI programmatic activities.

NBI Member States are Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, The Sudan, Tanzania and Uganda. Eritrea participates as an observer.

The institutional journey of NBI as it delivers the Shared Vision

1999 - 2008: Establishment and confidence building

2008 - 2012: Institutional strengthening (NBI Core Functions clarified)

2012 - 2016: Consolidating gains and delivering benefits (Strategic Plans 2012-2016 and the new NBI Strategic Action Program II prepared) and approved by the Governance

OUR CORE FUNCTIONS

Facilitating Cooperation

The NBI provides a platform upon which Member States can deliberate issues of trans-boundary water resources management and development.

Water Resource Management

The NBI provides analytic tools and a shared information system that enables Member States to monitor and sustainably manage the Nile Basin's water resources.

Water Resource Development

The NBI assists Member States to identify development opportunities, prepare projects and seek investments. Development programs are focused on power trade and generation, agriculture and river basin management.

OUR SHARED VISION

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

OUR CENTRE

Nile-Secretariat (Nile-Sec) Entebbe, Uganda

Nile-SEC is responsible for the overall corporate direction as delegated by the Nile Council of Ministers and is the lead centre for Facilitating Cooperation and Water Resource Management.

Eastern Nile Technical Regional Office (ENTRO) Addis Ababa, Ethiopia

ENTRO is the lead centre for Water Resource Development in the Eastern Nile sub-basin.

Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU) Kigali, Rwanda

NELSAP-CU is the lead centre for Water Resource Development in the Nile Equatorial Lakes sub-basin.

FACILITATING COOPERATION



Republic of South Sudan admitted to the Nile Basin Initiative

"The decision you took today will be received with cheerful applause by the Government and the people of South Sudan. This is because South Sudan geographically falls wholly within the Nile River Basin and therefore, our growth and prosperity are undoubtedly linked to the developments within the Nile River Basin."

Hon. Paul Mayom Akec South Sudan's Minister of Water Resources & Irrigation

"The project (Regional Rusumo Falls Hydroelectric project) has been awaited for more than 20 years. I congratulate all those who have been working hard to ensure that studies are complete. We are beginning to see light at the end of the tunnel. I call upon Members of Parliament and Development Partners to support the project"

Hon. Jean-Marie Nibirantije, Burundi's Minister of Water, Environment, Land Management and Urban Planning

Basin-wide platform for dialogue maintained with all Member States participating in meetings of Council of Ministers and Technical Advisory Committee. Key agreements and approvals include;

- The NBI Overarching Strategic Plan 2012-2016 and the Nile Secretariat Strategic Plan 2012 - 2016.
- NBI Work Plan and Budget for FY 2012/2013 totaling to USD 8, 350,436 (this excludes SAPs' projects related activities).
- Scaling up of country contributions.
- Admission of the Republic of South Sudan to the Nile Basin Initiative
- The NBI Gender Mainstreaming Policy and Strategy.
- The Nile Basin Decision Support System (Nile Basin-DSS) Sustainability Plan.
- The TIGER Initiative to support the NBI data acquisition.
- Establishment of the NBI Trust Fund.

Nile Basin citizens celebrate and discuss ways of enhancing the Nile cooperation

- The 2012 Regional Nile Day celebrations took place on 22nd February 2012 in Jinja, Uganda under the theme: "Water, Energy, Food - Importance of Nile Cooperation". The event was graced by H.E. Edward Ssekandi, Vice President of the Republic of Uganda. He, together with ministers in charge of Water Affairs, Dr. Hesham Kandil of Egypt, Hon. Alemayehu Tegenu of Ethiopia, Prof. Dr. Seifeldin H. Abdalla of Sudan and Uganda's Minister of State for Water, Hon. Betty Bigombe planted trees as part of activities to commemorate Nile Day.

Forum for technical exchange of ideas and experiences in Power, Agriculture and River Basin Management maintained

- State of the River Nile Basin Report validated by all NBI Member States.
- Comprehensive Basin-Wide Study of Power Development Options and Trade Opportunities completed and disseminated.
- A network of power development and power trade experts established to follow up on the recommendations of the Comprehensive Basin-Wide Study.
- A network of environment and social experts established under the 3rd Nile Basin Development Forum held in October, 2011.

Unique platform to deliberate on issues related to trans-boundary water resource management and development

- The 2nd Nile Basin Parliamentarians' Forum was held from 6th - 7th July, 2012 in Kigali, Rwanda under the theme: 'The Role of Nile Basin Parliamentarians in Nurturing Nile Cooperation.' The Parliamentarians called on their governments to spearhead the establishment of a permanent institutional set up to put the Nile cooperation on a sustainable footing and to consolidate gains made as a result of the cooperation.

Platform for cooperation leads to joint investments

- Investment phase of the Kagera River Basin Management Project is expected to start in January 2013 following completion of the preparation phase. The project will be jointly implemented by four NBI Member States namely Burundi, Rwanda, Tanzania and Uganda.
- A Tripartite Agreement for the Regional Rusumo Falls Hydroelectric Project was signed on 16th February 2012, by Ministers in charge of electricity affairs in Burundi, Rwanda and Tanzania to reaffirm their intention to continue pursuing its financing and implementation (expected to commence in the last quarter of 2013). A Special Purpose Vehicle has been set up to support its implementation of the project.

CATORS – ACHIEVEMENTS

WATER RESOURCE MANAGEMENT

Basin Monitoring

Gathering data and information about the basin

- A river basin monitoring strategy developed and approved.
- State of the River Nile Basin Report validated by all NBI Member States. The report provides baseline data on the health of the Nile Basin.

Knowledge Base

Organizing information for easy access

- Conducted assessment of knowledge needs and knowledge management tools and designed a comprehensive knowledge management system.

Analysis

Using data to answer questions about development

- Release 3 of the Nile Basin Decision Support System (Nile-Basin-DSS) launched during the 20th Nile Council of Ministers' Meeting. It has got three features namely; Multi-criteria analysis; Benefit cost analysis and hydrologic ensemble generator.
- Nile Basin-DSS applied on a number of case studies at national and regional levels.
- A community of DSS users created throughout the NBI countries (core team, national DSS network, regional DSS network).
- Interim procedures for data and information sharing developed, approved and operationalized.
- Nile Basin DSS sustainability plan developed and its implementation launched with the successful set up of the DSS Unit at Nile-SEC.

Policy Support

- Expert support to national water policy framework with a key focus on strengthening the trans-boundary dimension provided so far to Rwanda and Kenya and initiated for Burundi.

Policy Development

- The NBI Gender Mainstreaming Policy and Strategy were endorsed by the Nile Council of Ministers during their 20th meeting held in July 2012 in Kigali, Rwanda. They refer to mainstreaming gender at the institutional, programs and projects level.

WATER RESOURCE DEVELOPMENT

NELSAP-CU and ENTRO continue to implement the 12 NBI active grant-funded projects through the Nile Basin Trust Fund (NBTF).

In-support to multi-country preparation of complex investment projects, the two NBI- Subsidiary Action Programs (SAPs) have cumulatively utilized USD 118.8 million pre-investment funding to generate total investment projects estimated close to USD 1.36 billion, now under implementation or ready for implementation. Of this, USD 719 million has been secured (about 91% of the planned) with a ratio of pre-investment finance to investment finance of USD1 : 9).

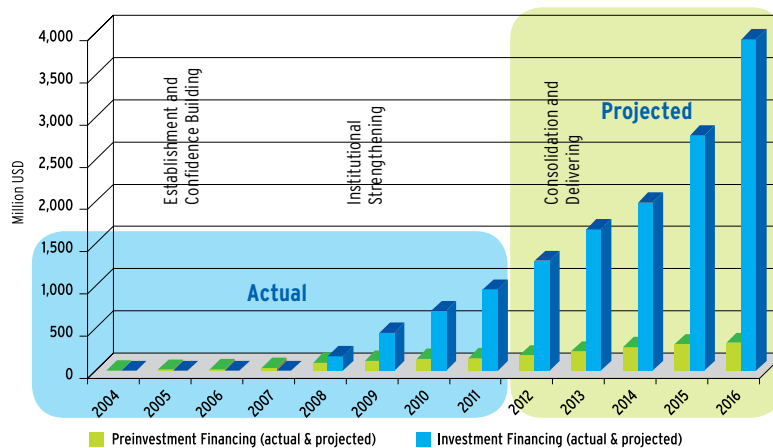
Investments prepared or regionally identified

USD 1.36 billion

Investments committed to/secured by countries

USD 719 million

Total ENSAP & NELSAP Pre - Investment and Investment Financing as at June 2012



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NBI CORPORATE RESULTS CHAIN AND PROGRAMS/PROJECTS LINKAGES

NBI Impact
20 - 30 Years

Sustainable socio-economic development in the Nile Basin through the equitable utilization of, and benefit from, the common Nile Basin water resources

NBI Medium Term Outcomes
10 - 20 Years

1. Increased regional cooperation in the Nile Basin, contributing to peace and security in the region

2. Efficient trans-boundary management and optimal use of Nile Basin water and water-related resources

NBI Short Term Outcomes
5 - 10 Years

1.1 Increased communication, trust, involvement and cooperation among NB governments and populations

1.2 Increased joint and trans-boundary investments in the Nile Basin.

2.1 Enhanced basin-wide capabilities and capacities based on best practices, on trans-boundary issues in power development and trade, agriculture and natural resource management and development

2.2 Increased convergence of legal, regulatory and policy frameworks of NB countries on trans-boundary issues in power development and trade, agriculture and natural resource management and development

2.3 Increased cooperative action in power development and trade, agriculture and natural resource management and development

Programs Impact
10-20 Years

Reduced poverty, increased economic growth, reversed environmental degradation.

ENSAP

Reduced poverty, increased economic growth, reversed environmental degradation.

NELSAP

NBI WRD Program

To facilitate support and nurture cooperation amongst the Nile Basin countries so as to promote timely and efficient joint actions required for securing benefit from the common Nile Basin Water Resources.

Nile-SEC

NBI Cooperation Program

To assess, manage and safeguard the water resource base that supports the peoples of the Nile Basin through applying the principles of knowledge-based IWRM to water development planning and assessment.

Nile-SEC

NBI WRM Program

NBI has strengthened foundation for institutional sustainability, enhanced capacity and harmonized corporate management to more effectively deliver programs and projects.

All NBI Centres

NBI-ISP

Improved enabling environment to realize NBI shared vision through increased awareness and promotion of good practices for socio-economic development and long-term sustainable water resources and environment management.

1. Enhanced analytic capacity from a basin wide perspective.
2. Increased access/use of affordable, efficient, reliable, and environmentally sustainable electric power in the NB

WRPM; RPT

SVP

LOOKING AHEAD: STRATEGIC PLANNING AND PROGRAM FRAMEWORK DEVELOPMENT

Strategic Planning

All three NBI Centers led by their respective governance bodies have been engaged in strategic planning through the good part of 2012. The NBI Overarching Strategic Plan, approved by Nile-COM in July 2012 identified the NBI Overarching Specific Objectives for 2012-2016. These are to be achieved by each NBI Centre in their specific strategic planning, management and operations.

For Nile-Sec, this includes focussing on its lead role in two core programs: Basin Cooperation Program and Water Resources Management Program. For ENTRO and NELSAP-CU, the focus area is in maintaining strong focus on strengthening the lead role in Water Resource Development Program, in addition to supporting Water Resource Management and Basin Cooperation at sub-basin levels.

Program Framework Development

In order to implement the strategic objec-

tives identified in the strategic plans, each NBI Center has identified projects framed around the three program areas: Basin Cooperation, Water Resources Management and Water resources Development. The combined impact is to deliver the NBI results chain and contribute to the achievement of the NBI Shared Vision.

A summary of these projects together with their costs is shown in the table below. The projects are of two categories: Grant type (Track 1) and investments (Track 2) to be implemented by Member States. NBI has developed a financing strategy to secure funding for the projects. The strategy includes increased country contributions, project (grant) financing, investment financing, and other short and medium mechanisms. The 20th Nile-COM meeting resolved to increase country contributions to a level of the minimum functionality within a period of five years thereby demonstrating countries' ownership of the NBI process.

NBI Overarching Specific Objectives - 2012-2016

1. The level and degree of cooperation between Member States raised.
2. The impact, reputation and effectiveness of the Subsidiary Action Programs intensified.
3. National Focal Points reinforced and effective.
4. The architecture of a single NBI integrated knowledge management system established and operational.
5. Member State commitment up scaled.
6. Nile-SEC streamlined into a professional, and highly focussed Secretariat (by end 2012, within ISP).
7. Financial sustainability ensured through formulation and implementation of the financial sustainability plan.

TRACK 1: SUMMARY OF PROJECT COSTS TO IMPLEMENT THE 5-YEAR STRATEGIC PLAN (MILL. USD)

Year	2013	2014	2015	2016	2017	Grand Total
Nile-SEC	10.29	14.83	16.60	20.14	12.69	74.55
NELSAP - CU	41.17	33.3	28.03	7.36	5.19	117.44
ENTRO	7.22	12	27	27	26	99.22
NBI Total	58.68	60.13	71.63	54.50	43.88	291.21

Of this requirement, 8 to 10% is pledged (through NBTf/CIWA, AfDB, GIZ, Country Contribution...). A further opportunity to meet about 10% of the funding needs is being identified. The total includes basin wide power actions.

TRACK 2: FINANCING REQUIREMENTS BY MEMBER STATES FOR IMPLEMENTATION OF INVESTMENT PROJECTS PREPARED BY NBI

	Sub-program	Project	Duration	Budget
Equatorial Lakes	Power	Implementation of Power Projects	5 years	\$904.0 M
	River Basin Management	RBM Projects - Small Dams Storage Infrastructure Development for Multi-purpose use	4 years	\$147.8 M
		Integrated Management of Trans-boundary water resources of Lakes Rweru and Cyohoha and Akanyaru Marshland	3 years	\$50.0 M
		Restoration of watersheds for improved livelihoods	3 years	\$96.5 M
		Multi-national Lakes Edward and Albert integrated fisheries and water resources management project (DR Congo and Uganda)	5 years	\$40.0 M
Total Equatorial Lakes Investment Financing				\$1,238.3 M
Eastern Nile	Water Resources Development	Irrigation and Drainage Investment Project (Ethiopia and Sudan)	5 years	\$130 M
	Total Eastern Nile Investment Financing			
TOTAL INVESTMENT FINANCING - ALL NBI COUNTRIES				\$1,368.3 M

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FACILITATING COOPERATION

“Ten years ago there was an atmosphere of mistrust, suspicion and doubts among Nile Basin countries.....As such, countries were not willing to share data and information on their water resources for planning purposes.”

H.E. Dr. Ali Mohamed Shein, Vice President of the United Republic of Tanzania speaking as Guest of Honour during the opening ceremony of celebrations to mark the 10th anniversary of the Nile Basin Initiative held in Dar es Salaam - December, 2009



Participants during the 2nd Nile Basin Parliamentarians Forum held in July 2012 in Kigali, Rwanda

The NBI is a unique platform for Member States to facilitate, support and nurture cooperation so as to promote timely and efficient joint actions required for securing benefits from the common Nile Basin water resources.

By implementing activities under this core function -Facilitating Cooperation- the NBI contributes towards building trust, capacity as well as an enabling environment

for joint investment. Among other things, trust is essential for practicing cooperation and reaching agreement on core issues; capacity in all riparian states is vital to develop and manage the common Nile Basin water resources on a cooperative basis, while a favorable investment environment is fundamental to moving ahead, particularly with trans- boundary investment projects that will bring the benefits of cooperation to Nile Basin citizens.

SHOWCASE

THIRD NILE BASIN DEVELOPMENT FORUM



Left to right: Dr. Wael Khairy NBI Executive Director; Hon. Charity K. Ngilu, Nile-COM Chair and Kenya's Minister of Water and Irrigation; Hon. Jean Damascene Ntawukuriryayo, President of the Senate of Rwanda and Guest of Honour; Hon. Amb. Stanislas Kamanzi, Minister of Natural Resources Rwanda; Mr. Gustavo Saltiel of the World Bank and Mr. Wesley Chirchir, Vice-Chair of the Nile Basin Discourse

The theme for the Forum was: Climate Change and its implications on Sustainable Development and Cooperation in the Nile Basin, Threats and Opportunities to Nile Basin Cooperation.

The 3rd Nile Basin Development Forum (NBDF) took place in Kigali, Rwanda from 26th to 28th, October 2011.

A declaration issued by participants at the end of the two days highlighted, among other things, the need to enhance cooperation among Nile Basin countries in preserving and managing the Nile Basin environment, by giving due attention to its water and land resources, wetlands and biodiversity, as well as by addressing the

impacts of climate change.

The Forum attracted over 200 participants including policy makers, researchers, environmentalists, water resources engineers and managers, economists, development planners. Others were representatives of river basin organizations, regional and international organizations, civil society, private sector and the media, from within and outside the Nile Basin.

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"I promise this commitment to continue as we collaborate with all stakeholders involved in climate change issues and other development programs in the region".

H.E. Jean Damascene Ntawukuriryayo, President of the Senate of Rwanda, referring to Rwanda and the Nile Cooperation. He was speaking as Guest of Honor during the opening ceremony of the 3rd NBDF

COMPREHENSIVE BASIN WIDE STUDY

The first ever study of power development options and trade opportunities in the Nile Basin region

The Comprehensive Basin-Wide Study (CBWS) was undertaken within the framework of the Regional Power Trade (RPT) Project of the Nile Basin Initiative



Vision of Nile Basin Regional Backbone 2025 and beyond

The Comprehensive Basin-Wide Study (CBWS) was undertaken within the framework of the Regional Power Trade (RPT) Project of the Nile Basin Initiative. The study:

- provides an updated assessment of the status of power supply, interconnectivity, demand and trade opportunities in the Nile riparian countries. As a result, a detailed implementation plan covering a 35 year time horizon (2010 - 2045) was established to translate the Study into concrete actions at sub-basin and basin levels according to different development strategies.
- proposes a robust transmission backbone to ensure adequacy and reliability of power supply as well as maximize the inherent opportunities presented by the

vast energy resource mix in the region.

- provides the priority target actions to address the rapidly growing power demand; actions needed to take at country level and at NBI (basin wide level) to facilitate cross-border power trade; resources the region requires and possible sources of finance as well as the available power potential in the region and what to do when it is exhausted in 2035.

The Study spanned the ten NBI Member States namely Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan (includes South Sudan), Tanzania and Uganda as well as Eritrea, which participates as an observer and Djibouti. Some of the

Power Sector Situation in the Nile Basin Region

The Nile Basin region is characterized by very high levels of poverty and very low access rate to modern energy with most countries below 20% access level. With the exception of Egypt which has per-capita electricity consumption above 1800kWh/year, the estimated average for the remaining NBI countries is only 130kWh/year. This is just a quarter of the minimum required (500kWh/yr) for a reasonable quality of life by UN standards. NBI countries need adequate and reliable power supply to meet their social and economic development objectives.

The region is also characterized by a very disjointed transmission grid system and very low level of power exchange between countries. Furthermore, the present limited development of national power systems does not allow for exploitation of these resources at costs the countries can afford.

The above constraints, among others, can be overcome by expanding the market for these energy resources by trading power among Nile Basin countries. Creation of a regional electricity market can play a key role in furthering cooperation among the basin states and in ensuring that the hydropower resources of the Nile Basin are developed and managed in an integrated and sustainable manner. This is in addition to significant environmental benefits especially with respect to water conservation, land protection, as well as reduced emission of greenhouse gases and other pollutants due to shifting from fossil thermal to hydropower-based generation.

countries include rivers that do not belong to the Nile Basin. The hydroelectric power developments located on these rivers have nevertheless been considered in the Study; this is notably the case for DR Congo, where a significant part of the developments is in the basin of the Congo River.

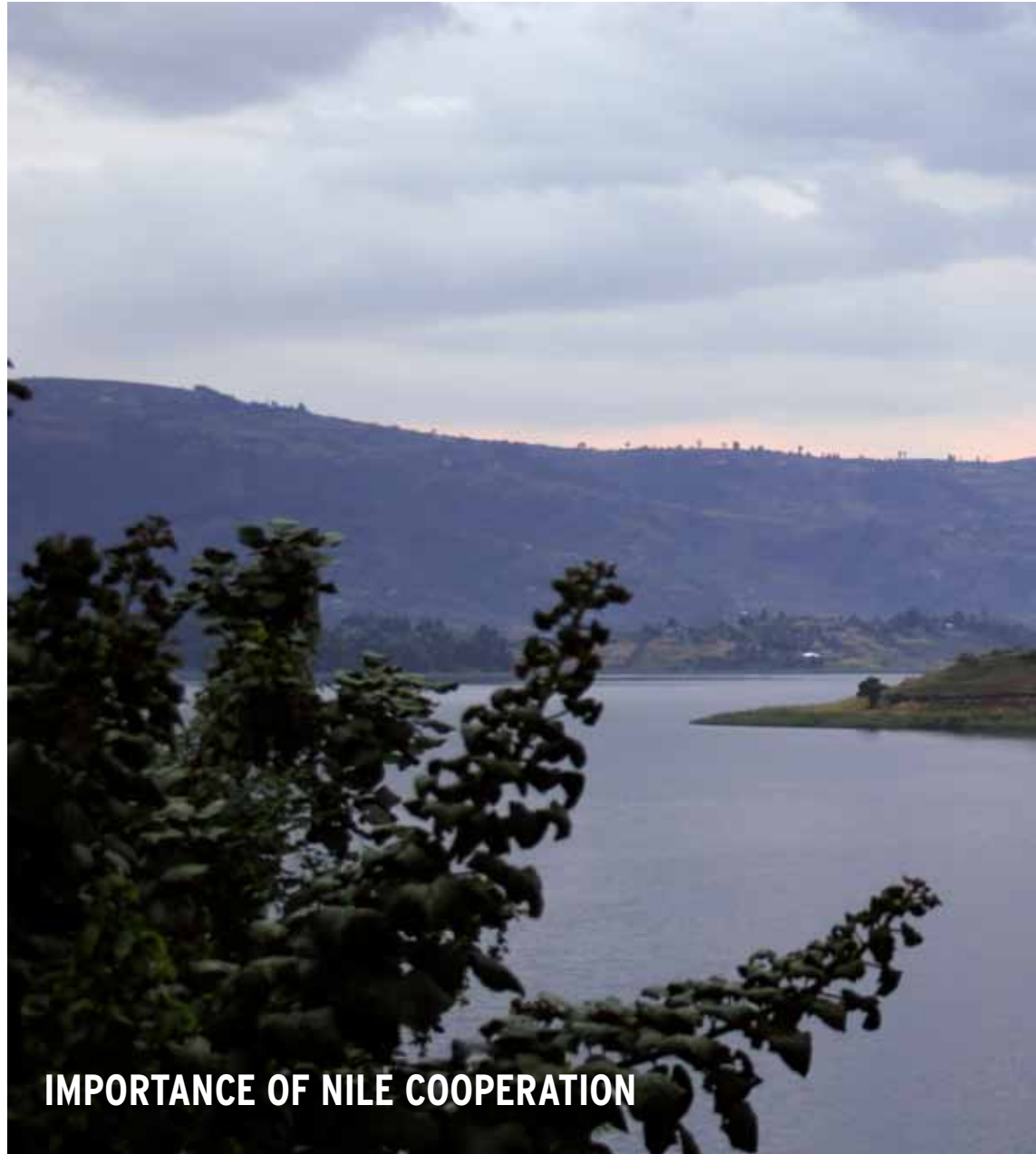
Benefits and opportunities of regional approach to power development

1. Huge overall efficiency gains - financial, economic, environmental, generation and operational.
2. Allows for development of hydro electric projects which are too large for the local demand in some countries (Burundi, DR Congo and Ethiopia).
3. Reduction of local recourse to oil fired thermal power plants (Burundi, Djibouti, Egypt, Eritrea, Rwanda, South Sudan, and The Sudan)
4. Taping on local resources such as geothermal and Lake Kivu gas in larger amounts than what could be justifiable in an isolated system situation (Djibouti, Kenya, Rwanda, and to a lesser extent Uganda).
5. Lowering drastically the need to recourse to nuclear generation in early stages of regional power development strategy.
6. Opportunity to link with Southern Africa Power Pool (SAPP), European grid and Middle East grids.
7. Total system reliability, sharing of generation reserves, better utilization of hydro and renewable generation through energy banking system among others.
8. Regional Integration and Power Trade: Regional power trade serves as a critical entry point for promoting joint planning and implementation of projects enhancing ongoing efforts towards regional economic integration, peace and security. Furthermore, regional integration allows for economies of scale in selected power development options and provides opportunities for optimizing exploitation of renewable energy resources.

The Nile Basin region is characterized by very high levels of poverty and very low access rate to modern energy with most countries below 20% access level

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Nile Basin countries are today home to more than 437 million people and of these 54% (238 million) live within the basin (UN Population Division World Population Prospects 2012) and expect benefits from the management and utilization of its shared water resources



IMPORTANCE OF NILE COOPERATION

The Nile is one of the great rivers of the world, feeding millions and giving birth to entire civilizations. It is one of the world's longest rivers, traversing more than 6,695 kilometers. Its basin includes eleven African countries and extends for more than three million square kilometers.

The Nile Basin countries are today home to more than 437 million people and of these, 54% (238 million) live within the basin (UN Population Division World Population Prospects 2012) and expect benefits from the management and utilization of its

shared water resources.

Notwithstanding the basin's natural and environmental endowments and rich cultural history, its people face considerable challenges including persistent poverty with millions living on less than a dollar a day, climate change, increasing water scarcity and deteriorating water quality.

Despite these seemingly formidable challenges, the River Nile holds tremendous opportunities for growth being one of the least developed rivers in the world. Better management could bring a vast range of



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Recognizing that a framework for cooperation, among others, was a necessity to tackle socio-economic challenges faced by Nile Basin citizens, Nile Basin countries established the NBI in 1999

benefits including increased hydropower and food production, better access to water for domestic use, improved management of watersheds and reduced environmental degradation, reduced pollution and more control over damage from floods and droughts.

Recognizing that a framework for cooperation, among others, was a necessity to tackle the above challenges, Nile Basin countries established the NBI in 1999. The latter is an inter-governmental regional organization dedicated to equitable and

sustainable management and development of the shared water resources of the Nile Basin.

Today, through cooperation, knowledge sharing and investment, NBI Member States are forming a distinct community of interest. Progress continues to be made in three areas considered to be the most critical for livelihoods in the Nile Basin, namely: providing clean, renewable electricity; effective water use for building a modern agricultural sector as well as river basin management.

BENEFITS OF NILE COOPERATION



MPs and other participants to the 2nd Nile Basin Parliamentarians Forum during a visit to the Rusumo Falls located at the border between Rwanda and Tanzania - July 2012

The Nile Basin Initiative...

- Provides a unique platform for Member States to plan joint projects and deliberate on issues related to trans-boundary water resource management and development.
- Supports identification and preparation of investment projects, which contribute to economic growth, poverty reduction and sustainable river basin management.
- Creates scientific tools (e.g. the state-of-the-art Nile Basin Decision Support System) and builds capacity (institutional and technical) for joint planning, management and development of the shared water resources of the Nile Basin.
- Maintains a basin-wide knowledge base on the water resources of the Nile Basin and monitors the Basin's health (e.g. the State of the River Nile Basin Report).
- Serves as an efficient mechanism for basin-wide exchange of experiences, information and prior notification for water resources development (e.g. Nile Basin Interim Procedures for Data and Information Sharing and Exchange as well as the Nile Information System).
- Provides support to national water policy framework with a key focus on strengthening the trans-boundary dimension.
- Contributes towards energy availability and access through support to Member States Power utilities and Power Pools in the form of (a) capacity development (b) Identification of power generation options and resultant trade opportunities, with a plan that most NBI Member States will be interconnected by 2015.
- Supports agriculture water-use efficiency and incorporates agricultural trade into the Nile Basin's water resource planning.
- Contributes to capacity in disaster preparedness through forecasting of extreme climatic events such as floods.
- Facilitates better understanding and cooperative management of climate change consequences.



The benefits of Nile cooperation to each Member State have been elaborated in profiles prepared in collaboration with the Member States.

The profiles can be found on the Nile-Information System (Nile-IS): <http://nileis.nilebasin.org/content/nile-basin-initiative-member-states-benefits-profiles>

WATER RESOURCE MANAGEMENT



To ensure equitable and sustainable use of the common water resources across the basin, the NBI has focused its efforts to provide state-of-the-art water resource management tools and expertise. The NBI also monitors and assesses the water related natural resources of the Nile Basin so as to provide its Member States with a shared knowledge base and an interactive Information system that facilitates choices for planning options. This is in addition to maintaining and operating analytical and scenario evaluation systems that support informed decisions on sustainable management of the basin's water resources.

OUR PROCESS FOR BASIN PLANNING AND MANAGEMENT

Basin Monitoring

Data Acquisition

- Gathering data and information about the basin
- Implementing basin-wide water monitoring and assessment system

Knowledge Base

Organizing data and information for easy access

- Organizing information for management and development of shared water resources

Analysis

Using data to answer key development questions

- Applying the developed analytical framework to support river basin development

Policy

- Providing expert support to Member States to develop own water policies with trans-boundary dimension
- Developing NBI policies

“Integrated planning and management of water resources in the Nile Basin are still limited thereby missing the opportunity to make water a catalyst for larger processes of development. As Uganda, we wish to appreciate the support we have received from NBI in water resources planning and management through the Nile Basin Decision Support System (NB-DSS)”.

**Hon. Maria Mutagamba,
Minister of Water and
Environment of Uganda**

Uncertainties about future climate have added a new dimension to the complexity of water resources planning. Thus, water resources planning is becoming a scientific and multidisciplinary exercise, requiring professionals of different disciplines to collaborate

SHOWCASE

THE NILE BASIN DECISION SUPPORT SYSTEM



Amb. Stanislas Kamanzi, Member of the Nile Council of Ministers and Rwanda's Minister of Natural Resources, launched the Nile Basin Decision Support System - Release 3 in July 2012 in Kigali, Rwanda. Looking on is Dr. Hesham A. Ghany, Regional Project Manager of the NBI Water Resources Planning and Management Project

The Nile Basin Decision Support System (NB-DSS) is a software framework jointly developed by the Nile Riparian states for communication, information management and analysis of water resources. It provides a platform for sharing knowledge, understanding river system behavior, evaluating alternative development and management strategies, and supporting informed and knowledge-based, scientific decision making.

Simulation of river basin hydrologic processes

The NB DSS offers integrated modeling tools for simulating water balance, water allocation, river flow, erosion, sedimentation at varying scales and water quality. Its modeling environment allows investigation of impacts of existing and anticipated different types and scales of water infrastructure investments and water uses (e.g. hydropower, irrigated agriculture). For large river basins, where a range of modeling tools need to be used, the NB DSS provides alternative modeling tools with a built-in model linking/nesting facility. This facility allows users to seamlessly integrate various modeling approaches in relevant parts of a basin thereby capturing complexities of catchment processes in a holistic and integrated manner. Users are no more restricted to use only one modeling tool for a basin.

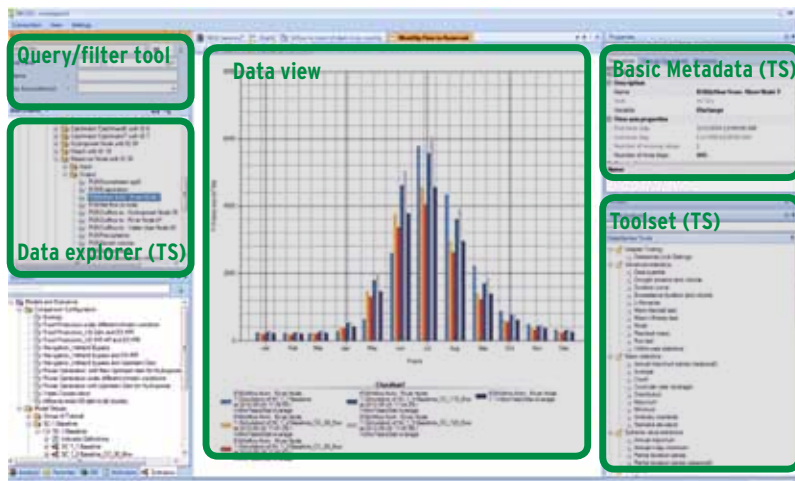
Scenario analysis and management

Water resources planning involves evaluation of a set of scenarios that capture possible future states of the basin. Without the capability to work with scenarios, any water resources planning tool cannot be complete.

The NB DSS provides a versatile facility for creating, editing, simulating and analyzing water resources development and management scenarios. The DSS scenario comparison tool helps users compare different scenarios in terms of parameters selected by the user. The built-in cost-benefit-analysis functions allow the quantification of benefits, impacts and tradeoffs of scenarios.

Multi-objective optimization

The optimization tool the NB DSS provides is versatile. It generates optimal solutions to a range of water resources planning problems.



Nile Basin Decision Support System – Time Series handling

Users can integrate economic, social and environmental parameters in defining the objective functions.

Integration of environmental and socio-economic objectives

The integration of environmental and socio-economic objectives in water resources plans is a key requirement of Integrated Water Resources Management (IWRM). The NBI DSS has a built-in flexible indicator tool for evaluation (quantification) of environmental and socio-economic consequences of water resources development and management scenarios. These quantified indicators, in turn, can be used to rank water resources scenarios using the multi-criteria decision analysis tool.

Multi-criteria Decision Analysis

Water resources decision making is increasingly becoming a multi-stakeholder negotiation process. In such a process, the objectives and preferences of range of stakeholders and decision makers (in a multi-jurisdiction context) have to be taken into account. Thus, the decision for selecting among a set of possible development and

management options is not straight forward. The NB DSS offers a built-in multi-criteria analysis tool that supports informed decision making through evaluation of consequences of various decision options in a transparent and objective manner.

An integrated solution with flexible/scalable architecture

The various components of the NB DSS are interconnected - any component of the NB DSS has access to other data sets used or generated by other components. The DSS can be extended with new toolset without the need for a major change to the program code thereby making it easily expandable to address emerging needs of users.

Comprehensive Information Management

The NB DSS has an integrated comprehensive database coupled with a suite of statistical and other data management tools for analysis, visualization and archiving of diverse types of data. With its integrated metadata, capability data items can be documented, audited and traced. Its GIS functionality enables users to analyze and generate spatial and geo-referenced datasets.

The Nile Basin Decision Support System (NB-DSS) is a software framework jointly developed by the Nile Riparian states for communication, information management and analysis of water resources

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SHOWCASE

EASTERN NILE PLANNING MODEL PROJECT

Project Objective

To Strengthen capacities of ENTRO and Eastern Nile (EN) countries in developing improved analytical tools, knowledge and information systems, to better understand the water resources and other natural resources.

The Eastern Nile Technical Regional Office (ENTRO) has recognized that the Eastern Nile (EN) Universities have many shared objectives and mutual benefits towards establishing a closer technical relationship and contributing to the achievement of project goals and objectives.

In March, 2007 ENTRO signed a Memorandum of Understanding with three EN universities: Addis Ababa University, Cairo University, and Khartoum University as a first step towards building a network of community of modelers/planners in the Eastern Nile. These three universities serve as the main contact point in the respective countries and the focal person in each university liaises with other universities to form the extended regional team for the community of modelers/planners.

Project focus

Strengthening and improving the knowledge base and analytical capacity at ENTRO and the EN to better support water resources planning and management.

Project components:

- a) Development of knowledge Base
- b) Modeling system

- c) Institutional strengthening and human capacity building

Key achievements

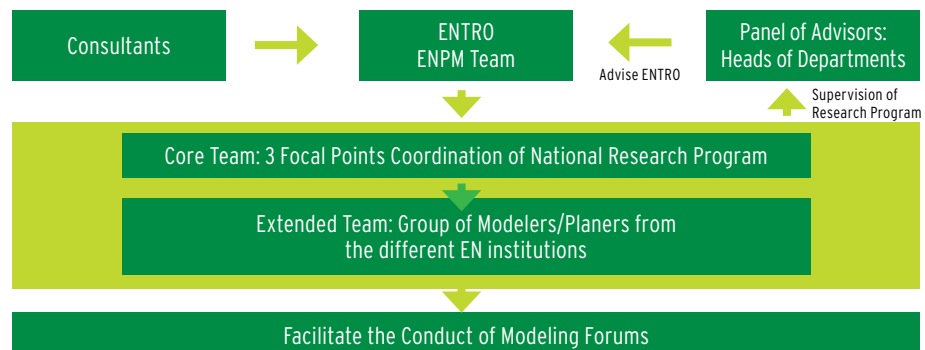
Since December 2011, the Eastern Nile Planning Model Project has been operating under a new working arrangement in which academic institutions in Egypt, Ethiopia and Sudan have played a role through secondment of students currently pursuing their Master of Arts degree and PhDs on water resource planning and modeling areas. The first batch of seconded students (2 Egyptians, 4 Ethiopians, and 3 Sudanese) joined ENTRO in December 2011 and completed their internship in March 2012. The team engaged in various tasks related to the development of knowledge and information systems, modeling and analytical tools. The second batch started in April 2012 until July 2012. It comprised of 13 experts (3 Egyptians; 6 Ethiopians, and 4 Sudanese).

The interns together with ENTRO staff produced several products including tool-kits for Eastern Nile power trade, watershed management as well as irrigation and drainage. The interns also began work on the State of the EN Sub-Basin Report.

The Project has been operational since 2009

Total on-going investment USD 6.5 million

Participating Member States



WATER RESOURCE DEVELOPMENT



The Nile Basin Initiative through its Subsidiary Action Programs (SAPs) promotes investments in three areas of priority identified by Member States namely Power, Agriculture and River Basin Management. The role of NBI is to identify opportunities and prepare investment projects which contribute to economic growth and poverty reduction.

Power

The NBI has built regional capacities and provided a forum for dialogue for countries to promote power trade in the Nile Basin, by bringing together officials from national utilities and ministries in charge of electricity affairs in all Nile Basin countries.

While possible transmission interconnections had been identified prior to the formation of NBI, some even decades earlier, the riparian countries lacked the mechanisms to jointly prepare and advance the infrastructure and policy environment needed for power trade. As a result, Ethiopia and Sudan are now connected by transmission lines and multiple interconnections are underway in the Nile Equatorial Lakes region, with established protocols for sustained regional power trade.

Agriculture

Agriculture plays a significant role in economic development of the Nile Basin countries and accounts for about one quarter of the Gross Domestic Product (GDP). The agricultural sector absorbs 30-92% of

the labor force, reflecting the wide variation in the importance of agriculture in the region. The NBI has so far collected best practices in water harvesting, small scale and large scale irrigation and development of new schemes in the Nile Basin, with the objective of improving water use efficiency and cross-country learning.

River Basin Management

River basin management in the Nile Basin presents challenges that are national, regional and transboundary. Throughout the region, forests, woodlands and wetlands are continuously lost as the population seeks out new areas for grazing, farming or burning charcoal from trees. Joint action generates 'public goods' and reduces costs of extreme water events associated with climate variability and change such as floods and droughts. Joint river basin management enhances watershed management and conservation of the ecosystems thereby enhancing integrated water resources management and ensuring sustainable development.

"Strengthening our cooperation both at the technical and political levels through joint investment projects in three sectors of priority jointly identified by all Member States namely Power, Agriculture and River Basin Management will help to build our mutual understanding and trust and also contribute to poverty reduction and socio-economic development in our respective countries."

Hon. Stanislas Kamanzi,
Minister of Natural Resources,
Rwanda

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BUDGET

Preparation: USD 11.9 million
Implementation: USD 430 million

Participating Member States



Burundi Rwanda Tanzania

Role of NBI in the Project

- Conduct feasibility studies
- Carry out project pre-implementation activities such as setting up a 'Special Purpose Vehicle Company,' an institution which will be responsible for implementing the project. The institution will be owned by the three beneficiary governments; preparing various project agreements; appointing Owners Engineer.
- Initiate dialogue between the three governments and Development Partners for financing the project.
- Support the establishment of environmental and social monitoring guidelines during and after project implementation.
- Train personnel from the three beneficiary Member States with practical 'on-the-job' emphasis during the construction phase.

SHOWCASE

REGIONAL RUSUMO FALLS HYDROELECTRIC PROJECT



The Mayor of Kirehe district in Rwanda, His Lordship Murayire Protais addressing Parliamentarians and representatives from Ministries of Foreign Affairs in the NBI Member States in July, 2012. He said the people of Kirehe district are looking forward to electricity generated through the Regional Rusumo Falls Hydroelectric Project

Project Objectives

- Increase additional generating capacity of 80 MW for meeting the ever rising demand of electricity in Burundi, Rwanda and Tanzania.
- Interconnect the national grids of Burundi, Rwanda and Tanzania.
- Facilitate power trading in the region.

Implementation of the project is expected to begin in the last quarter of 2013, after more than 20 years of waiting, thanks to NBI. Implementation will be jointly undertaken by three NBI Member states, namely Burundi, Rwanda and Tanzania.

The power generation infrastructure will be located at Rusumo Falls on the border between Tanzania and Rwanda. The transmission lines will extend from the power generation plant to Gitega in Burundi, Kigali in Rwanda, and Nyakanazi in Tanzania.

Specific benefits include the following:

Project area benefits: irrigated agriculture; livelihoods diversification through growth of micro, small and medium scale enterprises/industries; improved health and education through electrification of public infrastructure/social amenities; job creation during and after construction; improved access

roads - usually done during construction.

Off taker benefits: Direct power sales to national utilities; renewable energy, no harmful emissions and hence carbon credits and no effects on climate variability.

Downstream benefits: Downstream irrigation; flood protection; impact on water hyacinth in Lake Victoria.

Transmission corridor benefits: Key backbone transmission lines to Burundi, Rwanda and Tanzania linking to the East African Power Pool; rural electrification; indirect investments in agricultural value addition, schools, health centres and other public infrastructures.

Regional benefits: cooperation benefits between utilities; development of common energy and water policies; regional integration; peace and stability.

SHOWCASE

KAGERA RIVER BASIN MANAGEMENT PROJECT

Investment Phase to start in 2013



Project objectives

- Establish a sustainable cooperative framework for joint management of the shared water resources of the Kagera River Basin
- Develop an investment strategy and conclude pre-feasibility studies
- Build capacity at all levels for sustainable management and development of the Kagera River Basin
- Implement small scale investment projects that provide early tangible benefits to the population and promote confidence in the cooperation on the Nile
- Facilitate Lake Victoria Environmental Management Project II (LVEMP II) preparatory activities for Burundi and Rwanda.

The Kagera Basin has insufficient water for household use and for grazing despite the abundant water sources found in the area. Wetlands have been exploited and degraded, and there is cross border migration of pastoralists which causes conflicts. Cooperative water resources management offers unique opportunities as catalysts for greater regional integration both social-economic and political with potential benefits exceeding those derived from the river itself.

Before NBI

- No legal and policy framework between the four Kagera River riparian countries for joint and trans-boundary development and implementation of shared water

resources.

- Inadequate capacity in water resources planning and development.

Role of NBI

- Prepared a policy and legal framework for enhanced cooperation in the basin
- Developed the Kagera Basin Management Strategy.
- Undertook capacity building for, Kagera Basin officers and decision makers, in Integrated Water Resources Management (IWRM).

Benefits accruing from the project

- A framework where joint planning and management of the Kagera River water

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Total Potential Investment
USD 500 million

Project Preparation Cost
USD 10.19 million (Phase 1 & 2)

Expected start date of
implementation phase
January 2013

Participating Member States



Burundi

Rwanda

Tanzania

Uganda

Project operational areas per country

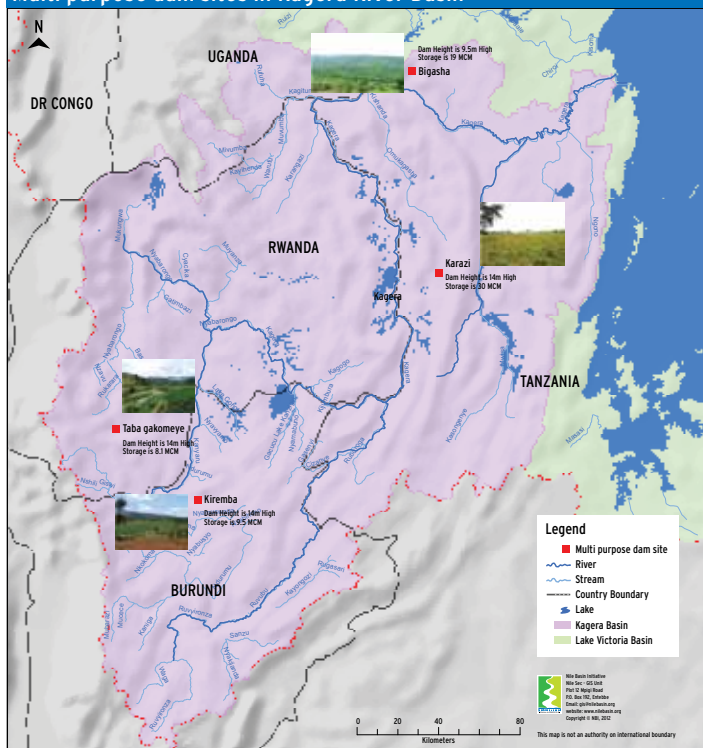
Burundi: 11 provinces of Gitega, Muramvya, Mwaro, Karuzi, Ruyigi, Kayanza, Ngozi, Muyinga, Cankuzo, Rutana, Kirundo.

Rwanda: 25 districts of Rwamagana, Kayanza, Ngoma, Kirehe, Gatsibo, Nyagatare, Bugesera, Muhanga, Kamonyi, Ruhango, Nyanza, Huye, Gisagara, Nyamagabe, Nyaruguru, Gicumbi, Rulindo, Musanze, Gakenke, Burera, Karongi, Ngororero, Kicukiro, Gasabo and Nyarugenge.

Tanzania: 2 districts of Ngara and Kyaka.

Uganda: 4 districts of Kabale, Isingiro, Ntungamo and Rakai.

Multi purpose dam sites in Kagera River Basin



resources will take place for improved socio-economic development of the basin and reduced/minimized potential water related conflicts provided.

- Data and information for basin-wide planning and development made available.
- Provision of IWRM basin wide plan that will facilitate water resources planning for sustainable management of the Kagera Basin.
- Rehabilitation of hydrometric network that will allow better water resources monitoring and planning.
- Increased capacity in water resources planning and development in the Kagera region at all levels.
- Multipurpose dams' feasibility studies prepared. These studies are expected to result in bankable investment projects in watershed management and multipurpose dam infrastructure. Their further development will provide water for food

production through irrigated agriculture; livestock; domestic use and electricity to rural towns thus reducing the consumption of wood and hence deforestation.

- Reduced soil erosion and loss of vegetation cover due to community environmental projects.
- Increased climate change adaptation preparedness through appropriate adaptive mechanisms.
- Better environmental protection of the Lake Victoria Basin through LVEMP II.
- Safe drinking water supplied to communities in Butihinda in Burundi, Nyagatare district in Rwanda, Ngara in Tanzania and Katuna (Kabale district) in Uganda.
- Afforestation carried out in Busoni, Kabarole and Kayanza in Burundi; Kirehe, Gicumbi and Nyamagabe districts in Rwanda; Ngara in Tanzania; as well as the districts of Rakai and Ntungamo in Uganda.

SHOWCASE

EASTERN NILE WATERSHED MANAGEMENT PROJECT



Comparative results, watershed management intervention, Lake Tana Watersheds, Ethiopia

Project Objective

Increase the adoption of sustainable land and water management practices in selected micro-watersheds in the Eastern Nile Basin

The Eastern Nile Watershed Management project is one of the first Eastern Nile Subsidiary Action Program (ENSAP) projects that has advanced from preparation to implementation.

The Project is intended to establish a framework for sustainable management of selected watersheds in the Eastern Nile region. The framework is required to contribute to improved living conditions for the people that depend on these watersheds by providing alternative and/or complimentary livelihood opportunities, decreasing population pressure and increasing land productivity. The framework is also needed to protect the environment, reduce soil erosion, sediment transport and siltation as well as laying the foundation for the future.

Achievements

- Seven of the eight projects prepared under phase I are under implementation since 2009 with a total investment cost of USD 80 million. Encouraging results have been observed in terms of enhancing livelihoods of target communities, improving land productivity, protecting the environment, and reducing in sediment transport in the river system.
- Capacity building through training workshops organized both at national

and regional level, experience exchange visits within the Nile Basin region (Rwanda, Tanzania, Ethiopia) and outside (India, China), and technical support missions.

- A scaling up strategy is under development in order to expedite adoption of community based watershed management practices across the Eastern Nile Region.
- A design document for the establishment of a basin wide sediment and water quality monitoring system has been produced in order to assess the level of erosion and sedimentation rate and determine the impacts (short- and long-term, positive and negative) of the Watershed Management Projects in the basin on erosion, and sedimentation rates, as well as water quality.
- A 30 minute documentary film on implementation of EN watershed pilot projects under the title *"Inheritance to our Descendants"* has been produced and disseminated.
- A total of 13 watershed investment projects (from hotspots identified during the Cooperative Regional assessments study), each with an approximate area of 2,000 km², were delineated, described in terms of specific characteristics, challenges, opportunities and possible interventions, and prioritized based on agreed criteria.

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Total on-going Investment
USD 80.3 million

Project Preparation Cost
USD 6.0 million

Participating Member States



Egypt Ethiopia The Sudan

REGIONAL AGRICULTURAL TRADE AND PRODUCTIVITY PROJECT

Project Duration
2008 -2009 (Preparation)
2010 -2012 (Diagnostics
Implementation)

Budget (Preparation)
Phase I: USD 1 million
Phase II: USD 7 million

Participating Member States:



Drip irrigation in Egypt

Project Objective

Increase knowledge of agriculture in NBI Institutions, promote more efficient and sustainable use of water resources and economically viable investment in agriculture.

A regional NBI approach to agriculture development and trade in the Nile Equatorial Lakes region was stressed by Nile Equatorial Council of Ministers as a priority project to enhance food security and promote pro-poor growth. The rationale is that investments in reliable access to water, strengthened market linkages and active promotion of private sector are options that can have a dramatic impact on agriculture growth, food security and poverty reduction. The Regional Agricultural Trade and Productivity Project is implemented in collaboration with regional economic communities like COMESA and EAC.

Project components

1. Defining NBI core agricultural functions
2. Supporting productive water use in Nile Basin agriculture
3. Incorporating agricultural trade into Basin water resource planning

Consultancy services for a number of studies

are on-going and expected to be complete by 30th December 2012. They include the following:

- i) Defining NBI core agricultural functions.
- ii) Development of the Nile Basin agricultural model.
- iii) Assessing the irrigation potential in seven Nile Equatorial Lakes Countries (Burundi, DR Congo, Rwanda, Kenya, Sudan, Uganda, Tanzania).
- iv) Preparing of training materials on best practices in water harvesting and small scale irrigation.
- v) Analysing of cross border trade in agricultural commodities along selected corridors of the Nile Basin Region.
- vi) Capacity building, analysis, documentation and creation of awareness on agricultural cross border virtual water/ Water footprint for comparative advantage production and trade in the Nile Basin countries.
- vii) Assessing Market potential for Live livestock in the Gulf.

OVERVIEW OF NBI INVESTMENT PROJECTS



I. INVESTMENT PROJECTS UNDER IMPLEMENTATION				
Project Title	Estimated Total Cost (Million USD)	Secured Financing	Source(s) of Secured Financing	Target Start of Implementation (Calendar Year)
A. NBI Project Portfolio				
NEL Regional Transmission Interconnection Projects (agreed regionally, prepared regionally and nationally, implemented nationally) <ul style="list-style-type: none"> ■ Kenya-Uganda Interconnection ■ Burundi-Rwanda Interconnection ■ Burundi-DRC-Rwanda Interconnection ■ Uganda-Rwanda Interconnection 	402.65	350	AfDB, JICA, KFW, Netherlands	2013
Watershed management Projects (Reg., Egypt, Sudan; excluding US\$40 million Ethiopia - Tana Beles) (agreed and prepared regionally, implemented nationally)	52	35	GEF, Finland, Egypt, Sudan	2009
Lakes Edward and Albert Fisheries Project (Uganda-DRC)	170	40	AfDB	2011
Ethiopia Tana-Beles Integrated Water Resources Development (including Ethiopia Watershed Management) (implemented nationally, with some preparation by ENTRO)	70	70	IDA, Finland, Ethiopia, Communities	2008
Ethiopia Irrigation & Drainage (agreed regionally, prepared and implemented nationally)	110	110	IDA, Ethiopia	2007
Ethiopia-Sudan Interconnection (agreed regionally, prepared and implemented nationally with technical assistance from NBI)	70	70	IDA, Sudan, Ethiopia	2008
EN Flood Preparedness and Early Warning-Phase 1 (agreed and prepared regionally, implemented regionally and nationally)	4	4	NBTF, EN countries	2007
TOTAL - NBI Prepared or Regionally agreed	878.65	679		
B. Selected NBI assisted projects				
Lake Victoria Environmental Management Project - Phase 2 for Rwanda and Burundi (prepared by NELSAP)	40	40	IDA, GEF, Sweden	2011
TOTAL - NBI assisted projects	40	40		
GRAND TOTAL- NBI prepared & assisted	918.65	719		

II. INVESTMENT PROJECTS UNDER PREPARATION				
Project Title	Estimated Total Cost (Mill. USD)	Secured Financing	Source(s) of Secured Financing	Target Start of Implementation (Calendar Year)
A. NBI Project Portfolio				
Bugesera Integrat. Water and Irrig. Project (Rwanda-Burundi)	50	0	AfDB AWF	2013
EN Flood Preparedness and Early Warning - Phase 2	42		IDA/Grant	
Regional Rusumo Falls Hydro-electric and Multipurpose Project (RRFP) (Tanzania, Rwanda, Burundi)	430	(Project prep. Fund)	IDA, AfDB, Netherlands	2014
Kagera Basin Small Multipurpose storage reservoirs and water shed management	92			2013

B. Selected NBI Facilitated Projects				
-Egypt Irrigation & Drainage: (West Delta) (agreed regionally through NBI, prepared and implemented nationally)	213	213	Egypt	2007

III. TECHNICAL ASSISTANCE AND PRE-INVESTMENT ACTIVITIES TO IDENTIFY PROJECTS FOR POSSIBLE FUTURE PREPARATION AND FINANCING
Advancing the NEL Water Resources Development Project (TA) Identification and preparation of pre-investment projects for water resources development and management with regional significance.
Baro-Akobo Multipurpose Project (Ethiopia, Sudan) USD 3.5 million from AWF and NEPAD
EN Joint Multipurpose Program Identification Technical Assistance Project (TA) (Egypt, Ethiopia, Sudan). USD7 million NBTF financing secured.
Future investments which may emerge from the EN Planning Model USD 6.5 million from NBTF; and Cooperative Regional Assessments in watershed management, irrigation and drainage, and power trade.
Kagera River Basin Management and Development (Burundi, Rwanda, Tanzania, Uganda)
Kenya-Tanzania Interconnection feasibility studies USD 3.4 million, from Norway; Investment cost: USD 262M
Mara River Basin Management and Development (Tanzania, Kenya)
NEL Regional Power Trade Project (TA) advancing preparation of NEL regional power projects (main component Iringa - Mbeya Power Transmission Line Study in Tanzania) USD 3.8 million NBTF; Investment cost: USD 190M
Uganda - DR Congo Power Transmission Line Study USD 3 million Norway ; Investment cost: USD 165M
NEL Climate Adaptation Mainstreaming Project (TA) □400,000 from KfW
Bugesera trans-boundary Water Management Project 770,000 from the Africa Water Facility.
Regional Agriculture trade and Productivity Project USD 7.7 million, from NBTF
Sio-Malaba-Malakisi River Basin Mgmt & Development (Kenya, Uganda)
Sudan Irrigation and Drainage (Upper Atbara, Sudan)

FINANCIAL REPORT

The following financial tables provide an overview of the grants receipts and expenditure of the three NBI centres for the fiscal year July 1, 2011 to June 30, 2012.

NBI CENTRES BUDGET AND EXPENDITURES (USD) FY 2011-12		
	Grant Receipts	Expenditure
NILE-SEC Core	3,610,734	3,568,322
NILE-SEC SVP	8,870,056	6,512,029
ENTRO	5,057,659	3,132,391
NELSAP-CU	14,019,763	*14,595,802
TOTAL NBI	31,558,212	27,808,544

* NEL-SAP-CU expenditure beyond current year's receipts is covered by the balances brought forward from previous year.

Sources of Financing

The NBI's revenues are derived from contributions from Member States and from grant agreements with development partners. All grant agreements are subject to rigorous financial audits on an annual basis.

The pie chart summarizes the relative contributions to the NBI's budget since its establishment. The Member States' cash contributions represent approximately 3% while in-kind contributions represent 19% of total financial resources (cash and in kind). In kind contribution includes actual rent paid by the host governments for NBI centres and for Project Management Units among other cash equivalents.

Approved NBTF grants portfolio accounts for 59%, with direct bilateral funding of 21% comprising AfDB 7% and other bilateral 14% of total funding.

Nile Basin Trust Fund

The NBTF was established in 2001, at the request of the Nile Council of Ministers, as the preferred funding mechanism to administer donor support pledged to NBI at the International Consortium for Coopera-

tion on the Nile (ICCON1) held in Geneva, Switzerland. The NBTF is scheduled to close on 30th June 2015.

The members of the NBTF are: Canada (CIDA), Denmark (DANIDA), European Commission (EC), Finland, France, Netherlands, Norway, Sweden (Sida), United Kingdom (DFID) and the World Bank (DGF). These development partners have provided USD 191.74 million to NBI projects financed through the NBTF, out of which grants amounting to USD 178 million have been signed.

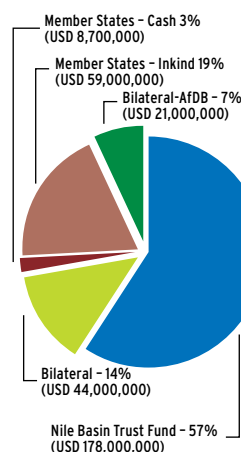
Member States Contributions

Each Member State contributes USD 35,000 per year to Nile-Sec. Each EN Member State contributes USD 80,000 per year to ENTRO while each NEL Member State provides USD 15,000 per year to NELSAP-CU. To date, Member States have contributed over USD 8.7 million in cash.

Other Major Contributors

Development Partners contributing to the NBI bilaterally other than through the NBTF include Germany (GIZ), the African Development Bank, Finland (Finnida), France (AFD), Sweden and Norway.

TOTAL FUNDING SINCE 2001



NBTF CONTRIBUTION BY PARTNERS

Partner	Revenues
Canada (CIDA)	18%
Denmark (DANIDA)	9%
European Union (EC)	14%
Finland	1%
France	3%
Netherlands	20%
Norway	14%
Sweden (SIDA)	8%
UK (DFID)	13%
World Bank (DGF)	0.4%

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"I thank the Development Partners for the moral, technical and financial support extended to NBI to-date".

Hon. Alemayehu Tegenu,
Ethiopia's Minister of Water and Energy, speaking as Nile-COM chair during the 19th Nile-COM meeting on 28th July, 2012 in Nairobi, Kenya

OUR DEVELOPMENT PARTNERS



Canadian International Development Agency

Agence canadienne de développement international



DFID Department for International Development



Sida

giz



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