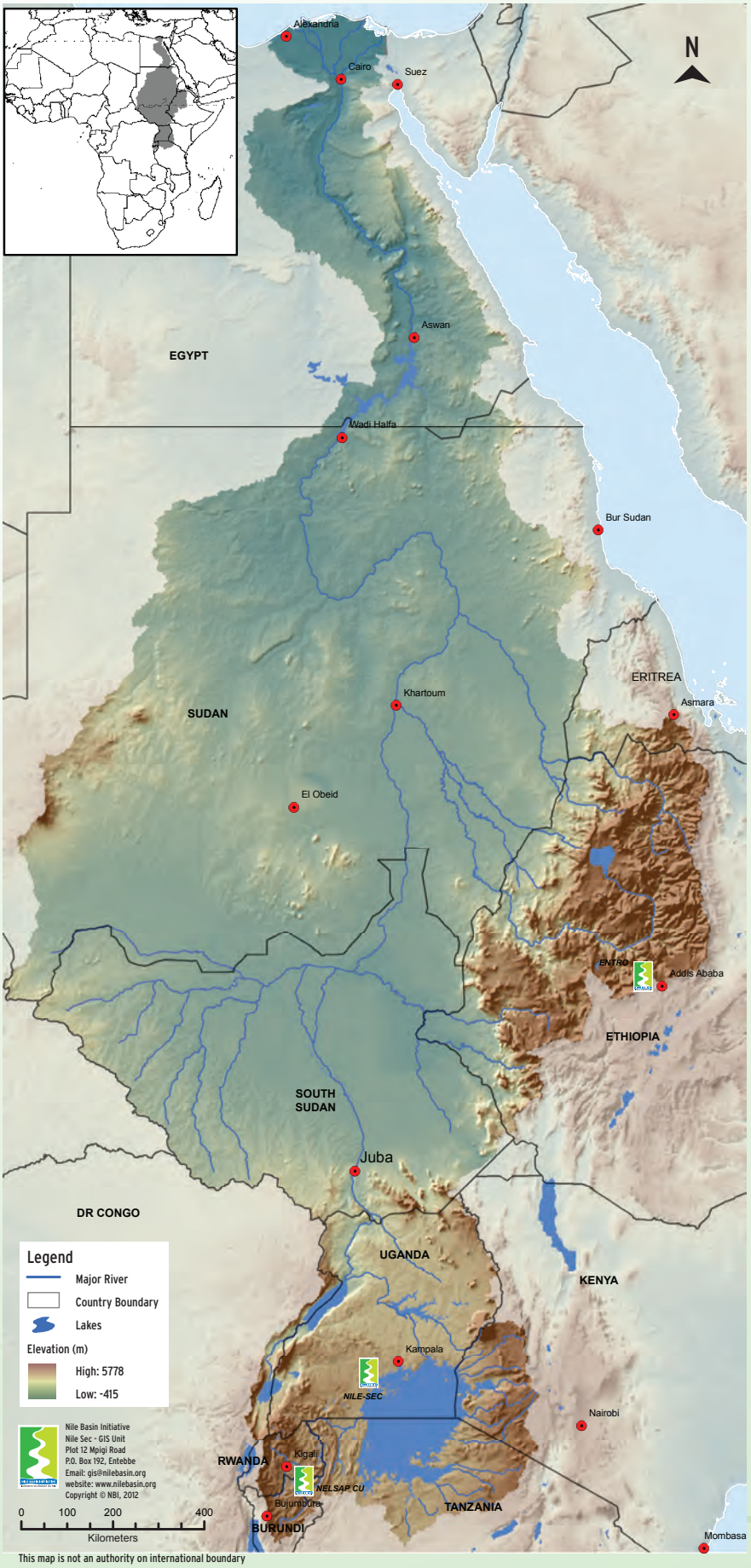
NILE BASIN INITIATIVE
Initiative du Bassin du Nil

One River One People One Vision

2011 Edition: Please send your feedback to the NBI Secretariat

The Nile Basin



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Ministers in charge of Water Affairs and Representatives of the Nile Basin countries during the 19th Nile Council of Ministers' meeting held in Nairobi, Kenya - July 2011

MEMBERS OF THE NILE COUNCIL OF MINISTERS

HON. JEAN-MARIE NIBIRANTIJE
MINISTER OF WATER, ENVIRONMENT, LAND MANAGEMENT AND URBAN PLANNING, BURUNDI

HON. JOSE BONONGE ENDUNDO
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 WATER, ENVIRONMENT AND NATURAL RESOURCES, RWANDA

PROF. DR. SEIFELDIN HAMAD ABDALLA
MINISTER OF WATER RESOURCES, SUDAN

HON. PROF. MARK J. MWANDOSYA
MINISTER OF WATER, TANZANIA

HON. MARIA MUTAGAMBA
MINISTER OF WATER AND ENVIRONMENT
UGANDA

ABOUT THE NILE BASIN INITIATIVE

The Nile Basin Initiative (NBI) is an inter-governmental organization dedicated to equitable and sustainable management and development of the shared water resources of the Nile Basin. Member States include Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda. Eritrea and South Sudan participate as observers. The NBI was established on 22nd February, 1999 by Ministers responsible for Water Affairs in each Member State. These Ministers comprise the governing body known as the Nile Council of Ministers (Nile-COM) supported by the Nile Technical Advisory Committee (Nile-TAC). The latter is comprised of technical representatives from the Member States. The Nile-TAC offers technical support and advice to the Nile-COM on matters related to the management and development of the common Nile basin water resources and provides oversight for NBI programmatic activities. A Shared Vision and a Strategic Action Program to operationalise NBI were agreed upon to guide Nile cooperation.

SHARED VISION

TO ACHIEVE SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT THROUGH THE EQUITABLE UTILIZATION OF, AND BENEFIT FROM, THE COMMON NILE BASIN WATER RESOURCES.

NBI'S 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.

NBI CENTERS

NILE-SECRETARIAT

The Nile Secretariat (Nile-SEC) is the executive arm of NBI responsible for the overall corporate direction as delegated by the Nile Council of Ministers. It is also the lead centre for NBI's two core functions, namely 'Facilitating Cooperation' and 'Water Resource Management'. Nile-SEC is based in Entebbe, Uganda.

EASTERN NILE TECHNICAL REGIONAL OFFICE

The Eastern Nile Technical Regional Office (ENTRO) is the executive arm of the Eastern Nile Subsidiary Action Program taking the lead in Water Resource Development in the Eastern Nile sub-basin (Egypt, Ethiopia and Sudan). ENTRO is based in Addis Ababa, Ethiopia.

NILE EQUATORIAL LAKES SUBSIDIARY ACTION PROGRAM COORDINATION UNIT

The Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU) is the executive arm of the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) taking the lead in Water Resource Development in the Nile Equatorial Lakes sub-basin (Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda). NELSAP-CU is based in Kigali, Rwanda.

Egypt & the Nile Basin Initiative
Benefits of Cooperation

"I reiterate Egypt's commitment to the Nile cooperation. The NBI is a partnership that seeks to develop the river in a collective and cooperative manner. Egypt still upholds the NBI objectives and looks forward to settlement of the differences in opinion."
Dr. Hesham Kandil, Minister of Water Resources and Irrigation

This profile provides a brief description of the Nile Basin Initiative, the cooperation with Egypt and highlights benefits of the cooperation. The benefits are results of more than a decade of cooperative effort in water resource management and development in the Nile Basin.

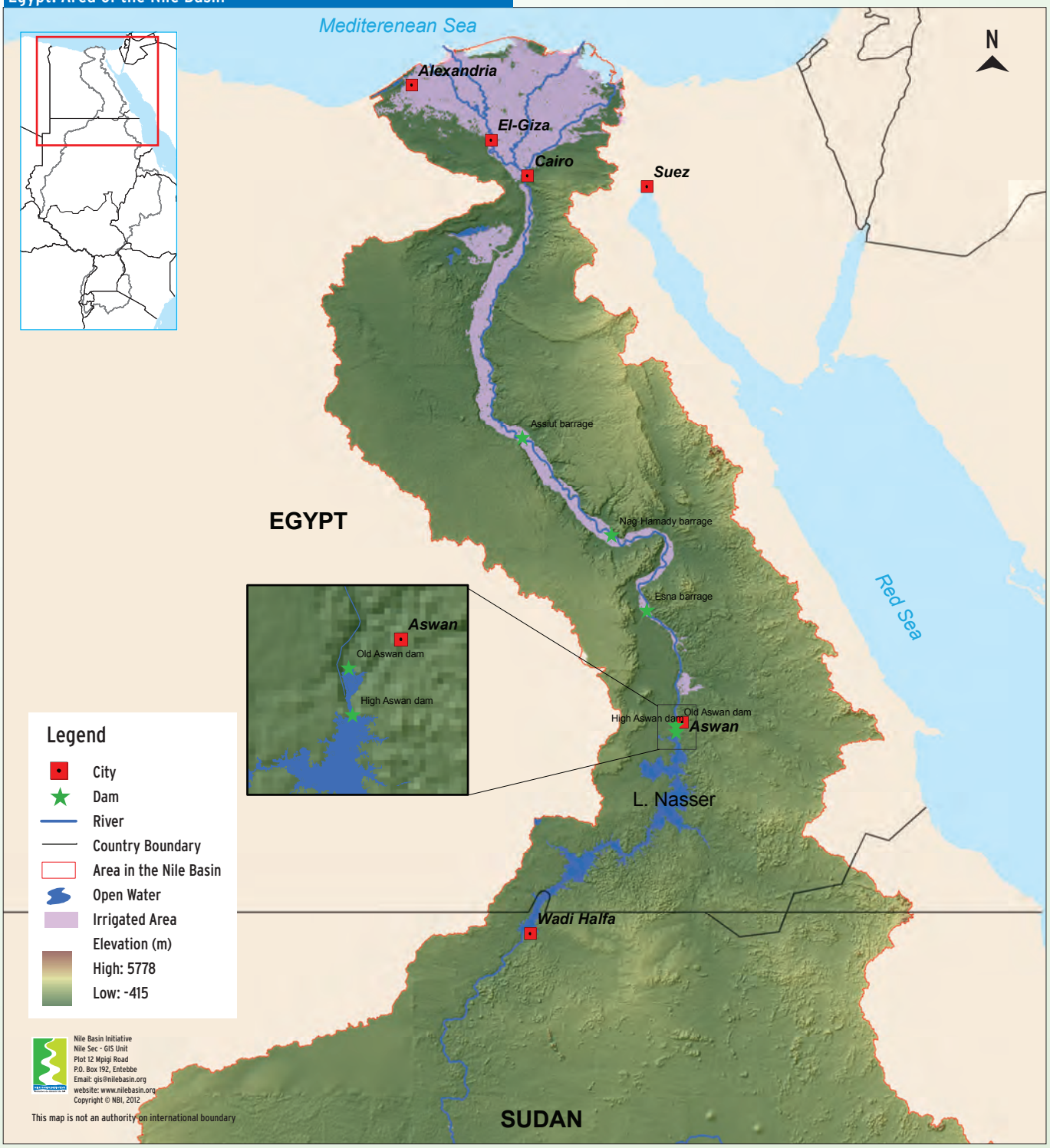
Egypt has actively participated in NBI programs and projects since 1999 when the Initiative was formed in Dar es Salaam. The Ministry of Water Resources and Irrigation is the focal point government institution that coordinates NBI activities in Egypt. The Minister of Water Resources and Irrigation represents Egypt on the Nile-COM. Similarly, two senior government officials represent the country on the Nile-TAC. Steady progress is also being made in integrating NBI activities in the national plans.

The country provides both cash and in-kind contribution annually towards NBI's (ENTRO, Nile-Sec and NELSAP-CU) operational costs. Cash contribution to ENTRO is approximately USD 80,000; approximately USD 35,000 towards Nile-Sec and approximatly USD 15,000 towards NELSAP-CU.

1014.1	302.4	30.3	81.1	77.6	95.7
Country Area (1000 km^2)*	Area in the Nile Basin (1000 km^2)***	% of Country Area in Nile Basin***	Total Population in 2010 (millions)**	Population Living in the Nile Basin in 2010 (millions)***	% population living in the Nile Basin***

Source: *CIA The World Fact Book; **UN Population Division; World Population Prospects; ***NBI Nile-Sec

Egypt: Area of the Nile Basin



Annual in-kind contribution is approximately USD 630,000. This contribution includes; supervision and technical guidance by members of the Eastern Nile Subsidiary Action Plan Team (ENSAPT) and the Nile-TAC, attendance by Ministry officials in specialized meetings on NBI issues, hosting incoming NBI missions as well as telecommunication services. Furthermore, staff time through either secondment or direct hire of coordinators based on relevant sector institutions (Water, Power, Agriculture, Environment and Finance) is increasingly being devoted to NBI's different programs and projects.

Egypt also hosts and financially contributes to regional events such as Nile-COM meetings, Nile Day celebrated annually on 22nd February and the Nile Basin Development Forum held once every two years.

The country has in the past (between 2004 and 2009) provided offices for the Project Management Unit of one of NBI's Shared Vision Program Projects, the Applied Training Project.

Unlocking the Nile Basin's Development Potential

Benefits of Cooperation: Egypt

The benefits to Egypt are results of more than a decade of cooperative effort in water resource management and development in the Nile Basin. Broadly and at a basin-wide level the results include: the establishment of a transitional regional institution; the preparation of investment projects worth more than USD 1 billion; and the creation of scientific tools (e.g. Nile Basin Decision Support System) as well as capacity building (institutional and technical) for joint planning and management of the shared waters of the Nile Basin.

Egypt derives benefits from NBI's facilitation in the following core areas:

- Water Resource Development: The NBI assists Member States to identify development opportunities, prepare projects and seek investments.
- 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.
- Facilitating Cooperation: The NBI provides a platform upon which Member States can deliberate issues of trans-boundary water resources management and development.

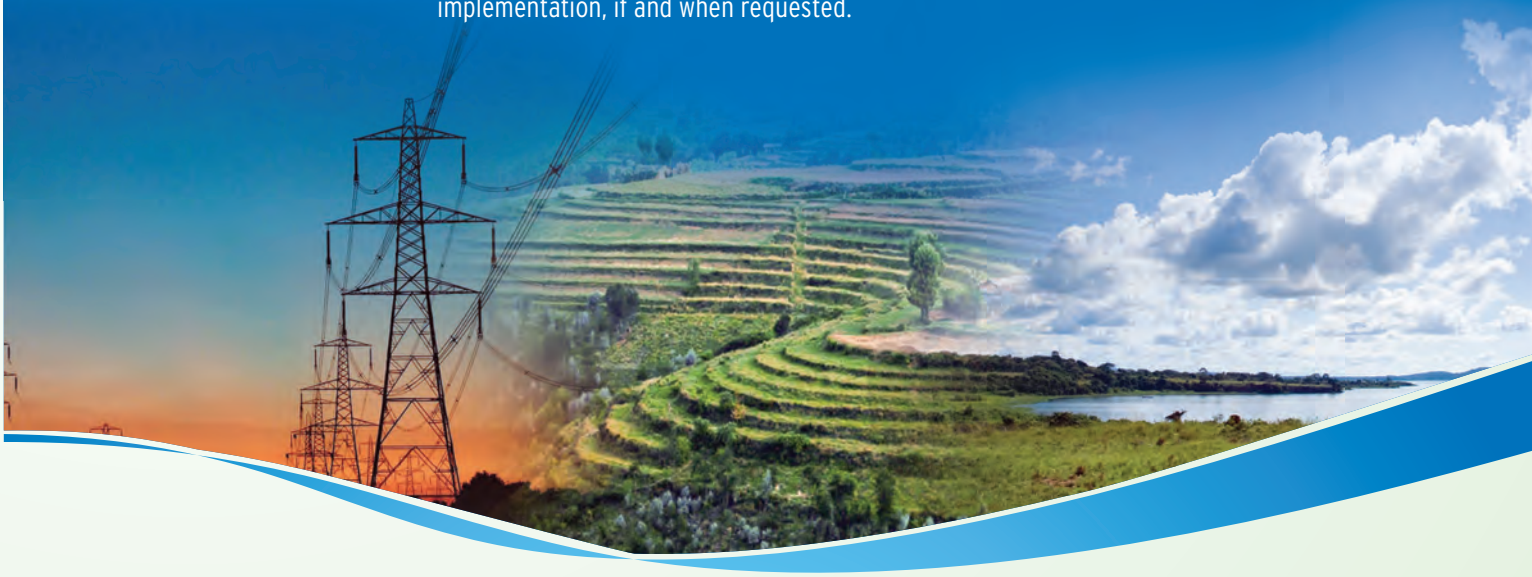
The benefits, some of which have already been realised while others are potential, are elaborated in the following pages.

BENEFITS OF COOPERATION

Unlocking the Nile Basin's development potential

Water Resource Development

The NBI through its Subsidiary Action Programs (SAPs) promotes investments in three critical areas of priority to all 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. The NBI **assesses costs** and **benefits** of participation in proposed joint projects and **facilitates agreements on cost-benefit sharing** among Member States who are party to joint projects. The NBI also supports investment **resource mobilization, preparation of multi-country agreements** and provides technical assistance in project supervision and monitoring during project implementation, if and when requested.



POWER

Electrical power constitutes one of the areas where the Nile basin's infrastructure has fallen short of potential, but where cooperation is beginning to show tangible results. 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. Technical specialists and policy makers are working to build capacity to negotiate and manage power trade arrangements.

While possible transmission interconnections had been identified prior to the formation of the NBI, some even decades earlier, the Member States lacked the mechanisms to jointly prepare and advance the infrastructure and policy environment needed for power trade. Today, the NBI has filled this void by providing a platform for Member States to negotiate necessary agreements as well as conducting the detailed studies and preparation work necessary to advance the investment programs. 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. The enhanced infrastructure capacity and transmission in power interconnection will increase the countries' options and accessibility to cheap and reliable power.

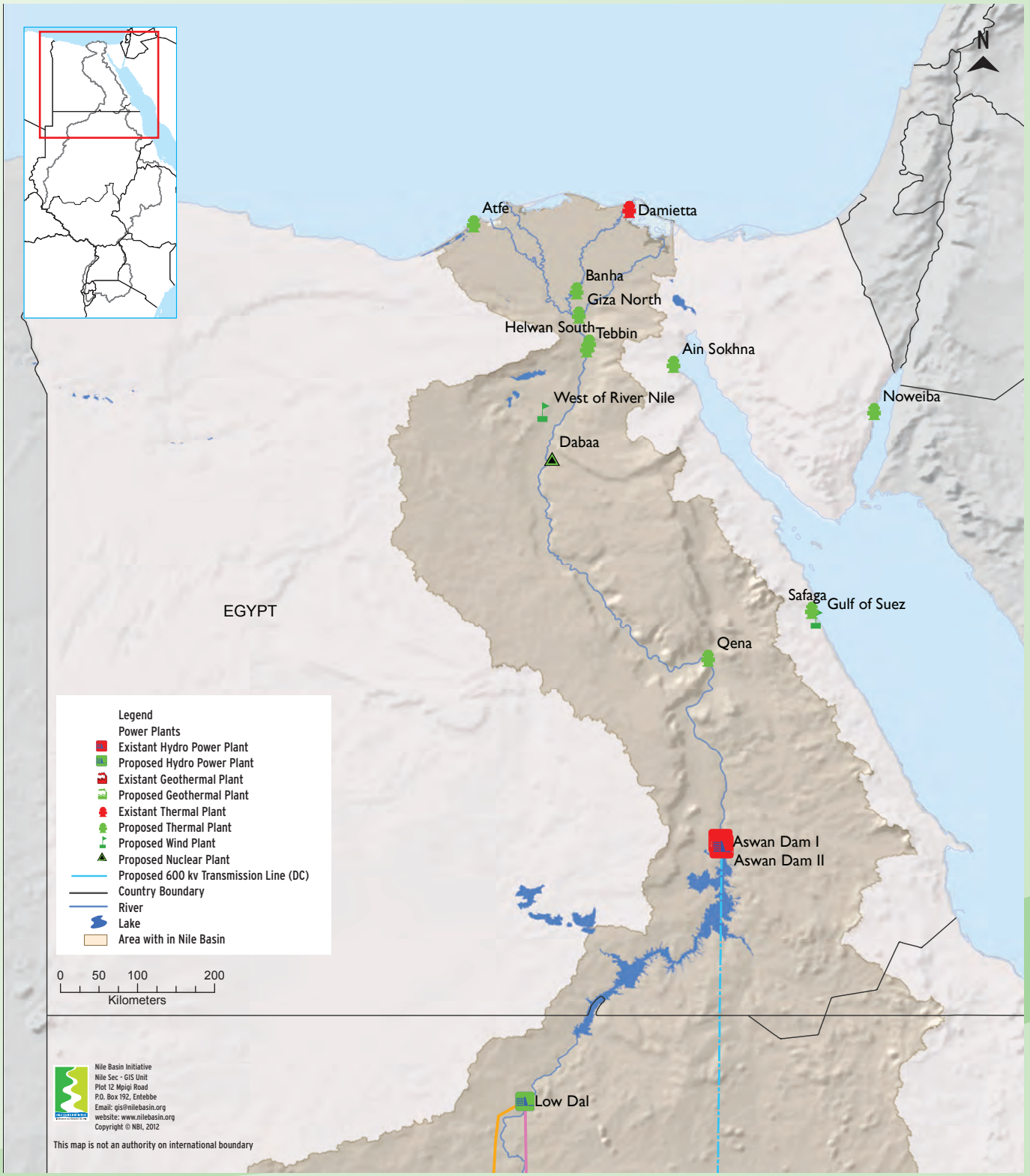
AGRICULTURE

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 labour 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 eco-systems thereby enhancing integrated water resources management and ensuring sustainable development.

PROPOSED POWER OPTIONS IN EGYPT



POWER
Portfolio

Joint Multipurpose Program

Total Investment (Preparatory studies)
USD 7.0 million

Total Potential Investment
USD 4.0-6.0 billion

Participating Member States

The Joint Multi-purpose Program (JMP) is a long-term program which includes a set of coordinated major investments such as power development, power transmission lines, watershed management and other multipurpose water uses. The project is coordinated under ENTRO in Addis Ababa, Ethiopia.

Project objective
Contribute to transformational and sustainable socio-economic development, economic integration and stability in the Eastern Nile region. A more immediate development objective of the JMP1 is to undertake cooperative and sustainable development and management of the shared Blue/Main Nile water resources, putting in place the requisite trans-boundary institutions, linking the beneficiary countries through multi-purpose storage and power system infrastructure, improving watershed and flood plain management, as well as modernizing irrigation systems and promoting related investments such as in transport and rural electrification

Before

Egypt and its two neighbouring Eastern Nile countries, namely Ethiopia and Sudan were least informed about each other's water resources development plans and aspirations and as such pursued their individual/ unilateral national solutions and development paths to address their respective water resources challenges. The transboundary, basin-sub-basin perspective and the hydrologic unity of the Nile were least factored in.

NBI Role

- Providing a political and technical platform for consultation with Egypt and Ethiopia.
- Completing the JMP launch phase which resulted in information and analysis, identifying the most favorable sub-basin (Abay-Blue Nile) that provides the requisite scale and features for the first JMP.
- Undertaking resource mobilization for JMP-1 identification studies including strategic social and environmental assessment and consultations.

Potential Benefits

- One System Inventory of natural resources, water resources and socio-economics of the Eastern Nile sub-basin prepared on the basis of "no-borders" analyses.
- Enhanced risk mitigation.
- Enhanced national and regional capacity building for management and coordination of large scale national/regional infrastructure institutions.
- Regional technical consultations leading to improved understanding of the Eastern Nile Sub-Basin.

AGRICULTURE
Portfolio

Eastern Nile Irrigation and Drainage Study Project

Total on-going Investment
USD 342.6 million

Egypt Contribution
USD 230.0 million

Project Preparation Cost
USD 2.6 million

Total Potential Investment
USD 112.1 million

Project Preparation Cost
USD 2.4 million

Participating Member States

The Eastern Nile Irrigation and Drainage Studies project strives to foster a coordinated regional approach in the development of irrigated agriculture in the Eastern Nile region with the aim of ensuring food security enhancing agricultural productivity and improving livelihoods. The project is coordinated under ENTRO in Addis Ababa, Ethiopia.

Project objectives

- Support the development and expansion of irrigated agriculture as well as improve productivity of existing small and large scale irrigation systems through improved agricultural water use.
- Address the institutional, infrastructural and technological issues that are at the root of low irrigation agricultural productivity.
- Contribute to the creation of national planning, design and supervision capacity for project implementation and promote local farmer responsibility for operation and maintenance.

Before

In its effort to satisfy the increasing food requirements of its growing populations, Egypt, just like Ethiopia and Sudan, is faced with complex challenges associated with water scarcity, technology and institutions pertaining to irrigated agriculture. These challenges are likely to be exacerbated by the impact of climate change expected to result in water scarcity/drought and rainfall variability. In order to address the challenges, the three countries jointly initiated the Eastern Nile irrigation and Drainage Study Project.

NBI Role

- Providing a political and technical platform for consultation with Ethiopia and Sudan.
- Developing guidelines for assessing and identifying irrigation projects.
- Identifying trans-boundary irrigation development challenges and opportunities.
- Examining agriculture development policies and proposing projects that would confer win-win outcomes for each Member State.
- Identifying potentially irrigable land.
- Proposing Action Plan for rehabilitating and improving performance of existing schemes.
- Proposing an Eastern Nile Irrigation Management Information System on the basis of lessons learnt from other countries.
- Enhancing joint long term regional planning of the sector; irrigation management knowledge transfer, coordination of trans-boundary water policies; as well as consistency with national plans.

Potential Benefits

- Potential to save billions of cubic meters of irrigation water
- Irrigable area of millions of hectares to be potentially increased through water saving and efficiency use.
- About 20% reduction in harvest loss/productivity under performance on existing irrigation schemes to be realized
- Overall improvements in irrigation management through rehabilitation and modernization of drainage and irrigation systems
- The Eastern Nile Irrigation Management Information System finalized and made available to participating Member States for use.
- Improved access to markets and credit
- Increased rural employment opportunities and better income for both women and men.

AGRICULTURE
Portfolio

Regional Agricultural Trade and Productivity Project

Project Preparation Cost
USD 7.0 million (Phase 1 & 2)

Participating Member States

The Regional Agricultural Trade and Productivity Project will conduct studies that will highlight potential agriculture and agricultural trade opportunities in the Nile basin countries and beyond. It will also increase knowledge of basin agriculture in NBI institutions and promote more efficient and sustainable use of water resources and economically viable investment in agriculture. The Project is coordinated under NELSAP-CU and the Project Management Unit is located in Bujumbura, Burundi.

Project objectives

- Define NBI future agricultural functions.
- Support productive water-use in basin agriculture.
- Incorporate agricultural trade into basin water resource planning.

Before

- Absence of decision support tools for Agricultural Investments.
- No consistent information on irrigation potential.
- Lack of user friendly training materials on best practices in water harvesting and small scale irrigation.
- Scattered information on trans-boundary agricultural trade Issues.
- Water footprint and comparative advantage not documented and used by countries.

NBI Role

- Defining Nile Basin Member States' core agricultural functions.
- Extending the Nile Basin Decision Support System (Nile-DSS) to agricultural decision tools and integrating agricultural data and information into the Nile-DSS.
- Assessing irrigation potential in selected Nile Equatorial Lakes countries and preparing pre feasibility studies for at least four irrigation schemes per country.
- Preparing and disseminating training materials on best practices in rain water harvesting and small scale irrigation.
- Conducting analysis of selected cross border trade corridors and identifying potential investments in Agricultural cross border trade.
- Analyzing and documenting virtual water and water foot print for major commodities.

Benefits/ Potential Benefits

- Informed decision making in agricultural policies and investments.
- Pre-feasibility studies for four to five irrigation schemes prepared for each Member State for resource mobilization.
- Trained people and prepared materials on best practices in water harvesting and small scale irrigation.
- Policies and investment profiles available to beneficiary Member States to improve regional trade.
- Policy options on virtual water/ water footprint developed and used in investment decision making by Nile Basin countries.

Flood Preparedness and Early Warning Project

Total on-going Investment
USD 4.46 million
Egypt Contribution
USD 0.25 million
Project Preparation Cost
USD 1.63 million
Total Potential Investment
USD 38.72 million
Egypt Contribution
USD 3.49 million
Project Preparation Cost
USD 6.93 million
Participating Member States

The Flood Preparedness and Early Warning Project focuses on flood plain management and flood plain mitigation planning, flood forecasting and warning as well as emergency response and preparedness at regional, national and community levels. The project is coordinated under ENTRO in Addis Ababa, Ethiopia.

Project objectives

- Establish a comprehensive regional approach to flood management that integrates watershed, river and flood plain management, and incorporates a suite of structural flood mitigation measures within a broad multipurpose framework.
- Strengthen the existing capacities of Eastern Nile countries in flood forecasting, mitigation and management.
- Enhance the readiness of Eastern Nile countries to implement the subsequent phases of the project.

BENEFITS OF COOPERATION

Unlocking the Nile Basin's development potential

Before

Egypt and the entire Eastern Nile region is characterized by highly variable river flows, making it prone to extreme flood and drought events. Flooding affects major urban centers such as Khartoum and rural settlements riparian to the Blue Nile and Main Nile particularly during high rainfall periods (July-September), with devastating effect on lives and property. At the outset, there were acute imbalances among the Eastern Nile countries. Egypt employed a workable system for rainfall forecasting, and numerical modelling of changes in flows in the Nile. But Ethiopia had no national forecasting centre at all, and neither Ethiopia nor Sudan made use of numerical modelling systems. Any communication, if at all, among Egypt, Ethiopia and Sudan was limited to officials' adhoc communication during flood episodes. There used to be no tools or norms for information exchange during these critical times. In general, governments were unwilling to discuss the details of flood control problems together, let alone design joint major flood control measures such as water storage infrastructure.

NBI Role

- Establishing common processes and systems for predicting and issuing warnings about flooding.
- Establishing regular meetings between the countries on flooding and information exchanges on weather patterns or river levels.
- Carrying out flood forecasting studies.
- Providing a political and technical platform for consultation with Ethiopia and Sudan.
- Establishing network of reporting river gauging and rain gauge stations.
- Conducting community education and training.
- Piloting appropriate technology for bank stability.
- Sustaining information flow and convening government, university and local leaders involved in flood preparedness.
- Strengthening the Numerical Weather Prediction Models.
- Revising flood forecasting procedures.

Benefits/ Potential Benefits

- National Forecasting Centre strengthened and harmonized.
- Peak season community surveillance instituted.
- Data acquisition, communication and flood forecasting systems designed.
- Use of same modeling systems with Ethiopia and Sudan, making it easier to share and interpret information regarding heavy rainfall and flooding.
- Observed and forecasted rainfall data publicly posted on meteorological authorities' websites and available for viewing and comparison.
- National flood coordinators trained to run models and send alerts to district leaders, who would in turn inform communities.
- Community leaders trained to designate escape routes and to identify safe locations to move people, livestock and grain and to report back to national level about evolving flood conditions and observed rainfall.
- Reduced loss of life and damage of property through flood and drought management.
- A number of flood-related activities at the national level funded. These include flood risk mapping studies, development of technical flood embankment manuals and guidance on voluntary resettlement policies.

- **National flood coordinators trained to run models and send alerts to district leaders, who would in turn inform communities.**
- **Community leaders trained to designate escape routes and to identify safe locations to move people, livestock and grain and to report back to national level about evolving flood conditions and observed rainfall.**

Eastern Nile Watershed Management Project

Total on-going Investment
USD 80.3 million
Egypt Contribution
USD 2.7 million
Project Preparation Cost
USD 2.0 million
Total Investment Potential
USD 780.0 million
Egypt Contribution
USD 60.0 million
Project Preparation Cost
USD 4.0 million
Participating Member States

The Eastern Nile Watershed Management Project is intended to establish a framework for sustainable management of selected watersheds in the Eastern Nile region. The framework is required in order to improve the living conditions of the people that depend on these water sheds by providing alternative and/or complimentary livelihood opportunities, decreasing population pressure and increasing land productivity. The framework will also be used to protect the environment, reduce soil erosion, sediment transport and siltation in addition to laying the foundation for the future. The Project is coordinated under ENTRO in Addis Ababa, Ethiopia.

Project objective
Increase adoption of sustainable land and water resource management practices through:
- Building national capacity; facilitating stakeholder consultation; information and knowledge sharing.
- Establishing long-term coordinated system of monitoring and knowledge development for effective watershed planning.
- Conducting detailed project preparation for Eastern Nile watersheds hot spots in an investment ready format.

Before

The Eastern Nile watersheds, especially the steeper, upper Ethiopian highlands are severely degraded due to poverty-driven over exploitation of natural resources and they constitute the most critical clusters of watershed hotspots, without whose prior restoration, all future water resources infrastructure development will be rendered of limited economic benefit to any one of the three countries – Egypt, Ethiopia, and Sudan.

The annual economic cost of watershed degradation in Ethiopia is currently estimated at USD 670 million, expected to reach at least USD 4.5 billion in 25 years unless the problem is addressed urgently. Watershed degradation impacts are not confined in the Ethiopian highlands, but run all along downstream in Sudan and Egypt. Between 157.2 and 207.2 million tons of sediment are transported annually from the Ethiopian highlands along the Blue Nile, Tekeze and Sobat main sub-basins of the Nile. These sediments also entail huge costs downstream in Sudan and Egypt including Hydropower underperformance; high HP infrastructure maintenance costs, dredging costs of clogged irrigation channels, etc.

Integrated watershed management – a system of multifaceted interventions – (e.g. increasing agricultural productivity through improved farming systems, marketing, education, health care, energy supply, alternative employment, population policy, etc.) – that targets poverty alleviation and enhancement of sustainable livelihoods is the proven way to address the root causes of watershed degradation, which the three countries are promoting through the Eastern Nile Watershed Management (ENWSM) Project.

NBI Role

- Providing a political and technical platform for consultation with Ethiopia and Sudan.
- Establishing the baseline and characterizing the watershed system.
- Working out the environmental, social and economic cost and benefit distribution among the three Eastern Nile countries, of the positive and negative effects arising from watershed management interventions.

Benefits/ Potential Benefits

- Implementation of the Lake Nasser-Nubia watershed management investment project, which is on-going.
- Demography and poverty related drivers and causes of watershed degradation identified.
- Critical Eastern Nile watershed hotspots adversely impacting any future water resources infrastructure development in the region identified.
- Regional cooperation further fostered.
- A Cooperative Regional Assessment (CRA) identifying challenges, opportunities and cost of inaction along with the institutional mechanism and requirements worked out from a trans-boundary perspective.
- Capacity of national institutions to undertake watershed management enhanced.
- Sediment and water quality monitoring framework established.

RIVER BASIN MANAGEMENT
Portfolio

Baro-Akobo-Sobat Multipurpose Water Resources Development Study Project

Project Preparation Cost
USD 8.5 million

Participating Member States

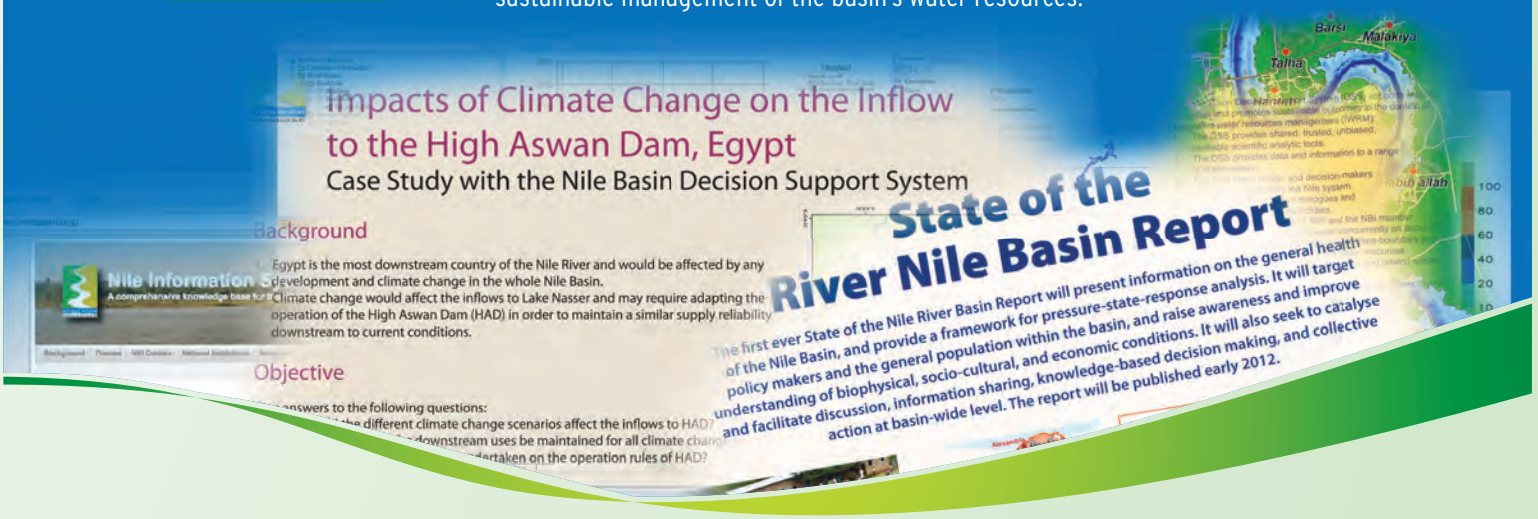
The Baro-Akobo-Sobat Multipurpose Water Resources Development Project is located in an area that is plagued by extensive poverty, land degradation, extensive flooding and high water loss, on the border between Ethiopia and Sudan. Promoting rapid socio-economic development in a socially and environmentally sensitive way poses formidable challenges. It is the realization of the development challenges that spurred Egypt to embark on this project together with Ethiopia and Sudan. The project is coordinated under ENTRO in Addis Ababa, Ethiopia.

Project objective
Enhance the water resources planning and management capabilities in the sub-basin through preparation of water resources development plans and projects that respect social, environmental and economic sustainability.

Before	NBI Role	Benefits/ Potential Benefits
No adequate Sub-basin socio-economic, hydrological and environmental baseline data and knowledge base.	• Providing a political and technical platform for consultation with Ethiopia and Sudan. • Conducting regional and national consultations which resulted in preliminary identification of challenges and opportunities as well as community priorities. • Undertaking environmental, social and hydrological knowledge and data base assessment, helping identify data gaps. • Carrying out resource mobilization to undertake a strategic social and environmental assessment of the basin as well as preparation of the integrated water resources development plan. • Preparing initial set of short, medium, long term investment projects. • Preparing regional marketing and trade infrastructure.	• The project is undertaking critical preparatory work that enables generation of much needed hydrological, socio-economic, and environmental data and information which is a pre-requisite to understanding the least studied of the four Eastern Nile Sub-basins (Abay/Blue Nile; Tekeze/Atbara; Baro-Akobo-Sobat and Main Nile).

Water Resources Management

To ensure equitable and sustainable use of the common water resources across the basin, the NBI has intensified its efforts to **provide state-of-the-art** water resource management tools and expertise. The NBI **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. It also **maintains and operates** analytical and scenario evaluation systems that support informed decisions on sustainable management of the basin's water resources.



Basin-wide Benefits

- **The first ever State of the River Nile Basin Report.** This strategic-level document presents a basin-wide picture of prevailing physical and socio-economic conditions, pressures and threats to the water and environmental resources of the basin. It also assesses the potential of the water and related natural resources of the basin to meet common development goals as well as opportunities for collaboration among Member States. The report further provides an invaluable summary of key indicators of the health of the Nile Basin that can be used to inform decision-making from a basin-wide vantage. The first edition presents a baseline for the basin while subsequent reports to be published every three years will present trends over time.
- **Nile Basin Decision Support System (Nile Basin-DSS)**. This is a state-of-the-art tool providing Member States with a common analytic platform and knowledge base to support the cooperative development of the Nile Basin water resources. NBI in collaboration with Member States has piloted the tool to answer questions relating to the physical system of the Nile including river flow patterns, past and present trends in climatic variables versus stream flows, and the water balance in different parts of the system. More importantly, the Nile Basin-DSS is being used to answer questions about expected benefits and potential impacts of planned development interventions. **Egypt has so far used the tool to conduct a pilot case on 'Impacts of Climate Change on the inflow to the High Aswan Dam.'**
- **Technical support in water policy.** Technical support is provided to strengthening the consideration of the trans-boundary dimension (so far Kenya and Rwanda supported).
- **Support for Basin-wide information exchange.** A mechanism for basin wide exchange of information and prior notification for water resources development following the adoption by the Nile-COM in July 2009 of the Nile Basin Data and Information Sharing and Exchange Interim Procedures.
- **Investment in basin human resources.** Increased human capacity including Post Graduate training in Integrated Water Resources Management.
- **Nile Basin Sustainability Framework (NBSF).** This is a suite of policies, strategies and guidelines used by NBI to ensure that its activities with regard to the Nile Basin water resources are in accordance with the principles of integrated water resources management.
- **Nile-Information System (Nile-IS).** This enables sharing of information across NBI centres and access to information by NBI governance, Member States' institutions, media practitioners, researchers and the general public. The system complements other NBI information and knowledge tools such as the online library, archives, website and the intranet.

The first ever State of the River Nile Basin Report as well as the State-of-the-art Nile Basin Decision Support System are some of the water resources management products/tools developed by NBI.

BENEFITS OF COOPERATION

Unlocking the Nile Basin's development potential

Facilitating Cooperation

Of the estimated total population of 424 million in the Nile basin countries, more than half i.e. 54% (232 million) live within the Nile Basin (United Nations Population Division, 2010). Despite the basin's natural and environmental endowments and opportunities for growth, its people face increasing water scarcity, deteriorating water quality, lack of access to electricity, climate change impacts (such as droughts, floods) as well as uneven levels of economic development.

Water resources related drivers of poverty and under development in the basin can be addressed only through cooperative management and development of the common Nile basin water resources. This fact was the impetus for the formation of the Nile Basin Initiative.

"Sharing of resources and in particular water resources is a complex issue that requires goodwill and commitment of all the riparian parties to trans-boundary waters. 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.

The NBI is the unique platform for Member States to facilitate, support and nurture cooperation amongst the Nile Basin countries so as to promote timely and efficient joint actions required for securing benefits from the common Nile Basin water resources. This platform enables Member States to continue to benefit from opportunities of cooperative water resources management and development, building upon the more than USD1 billion in investment leveraged to date.

Basin-wide benefits

- A platform where NBI countries, through Nile-COM and Nile-TAC regularly deliberate on cooperative management and development of the shared water resources of the Nile Basin.
- A forum for technical exchange of ideas and experiences in river basin management, agriculture production and productivity as well as power generation and trade through various Project Steering Committees and Task Forces.
- Basin-wide power development and trade options identified to limit power shortfalls, increase access to electricity and reduce cost of power.

Potential benefits beyond water

- Increased economic growth due to increased and stable power supply, bigger regional markets and cross border trade.
- Overcoming associated impacts of climate change such as extreme events (floods and droughts) that lead to loss of life, serious water scarcity and food shortage.
- Enhanced regional peace, security and political stability, ensuing from regularised inter riparian collaboration.

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