NILE BASIN INITIATIVE
Initiative du Bassin du Nil

NILE BASIN INITIATIVE

WETLAND MANAGEMENT STRATEGY

June 2013

Burundi DR Congo Egypt Ethiopia Kenya Rwanda S. Sudan Sudan Tanzania Uganda


THE NILE BASIN
2012
basin boundary
(Map prepared by the NBI)
0
250
500 km
N
Alexandria
Suez
Cairo
Main Nile
Red Sea
EGYPT
Aswan
Wadi Halfa
Port Sudan
Main Nile
THE SUDAN
ERITREA
Asmara
Khartoum
El Obeid
Sudd
Addis Ababa
ETHIOPIA
SOUTH
SUDAN
Juba
DR CONGO
KENYA
UGANDA
Kampala
Lake
Victoria
Nairobi
RWANDA
Kigali
Bujumbura
BURUNDI
Mombasa
TANZANIA
The NBI is not an authority
on international boundaries

NBI Wetland Management Strategy

Preamble

This Wetland Management Strategy is premised on the following facts and observations pertaining to Nile Basin countries' efforts to sustain the Nile and its associated resource base for future generations, while also striving to judiciously utilize them to address the development needs of the present generation, particularly to tackle endemic and persistent poverty that characterizes most of the basin countries. The observations are summarized below:

1. Today's economic growth and development put growing demands on the river system and the basin's resources. Driven by population and economic growth across many riparian countries, the Nile Basin resources are currently bearing growing pressure. Once the carrying capacity is surpassed, the Nile Basin could sustain irreversible damage.

2. The Nile harbors valuable natural resources. Though it is difficult to assert their continued survival into the future, the Nile Basin, at present, boasts unique environmental and cultural assets.

3. The Nile Basin is highly vulnerable to the impacts of climate change owing to a multiplicity of factors. Basin communities have limited ability to cope with the negative impacts of climate variability. There is scientific consensus that the region can expect an increase in frequency and severity of extreme events like floods, droughts, and heat waves, and an intensification of natural variability. The socio-economic consequences of climate change in the basin will be severe and exacerbate the impacts of existing challenges. These include, among others, negative impacts on agriculture, fisheries and livestock, with strong implications for food security and future economic growth.

4. Wetlands are key natural environmental assets providing crucial ecosystem services that support livelihoods and socio-economic development in the basin. Their role in mitigating climate change and supporting climate resilience as well as safeguarding water, food and energy security is currently threatened through their insufficient protection and management.

5. Recognizing the above challenges and threats, Nile riparian governments are putting in place plans, policies, strategies and other measures to respond.

6. National-level measures, while playing critical roles in their own right, cannot sufficiently address basin-wide and transboundary full-scale impacts and threats on shared waters.

The Nile Basin Initiative (NBI), being the only forum that brings together the Nile riparian states, has been mandated to initiate and implement measures that complement national efforts to address these transboundary challenges. This strategy aims to reverse wetlands degradation and institute cooperative management and wise use practices for these important transboundary ecosystems.

Context

About the Nile Basin Initiative

The Nile Basin Initiative (NBI) is an intergovernmental partnership of riparian states of the Nile River: Burundi, the Democratic Republic of Congo (DRC), Egypt, Ethiopia, Kenya, Rwanda, South Sudan, the Sudan, Tanzania, and Uganda. The Initiative seeks to develop the River Nile in a cooperative manner, managing jointly its transboundary water resources and sharing the socio-economic benefits that arise from their development. The NBI is led by the Nile Council of Ministers (Nile-COM) assisted by a Technical Advisory Committee (Nile-TAC) and a Secretariat (Nile-SEC) based in Entebbe. The NBI is committed to its shared vision of "achieving sustainable socio-economic development through the equitable utilization of, and benefit from the common Nile Basin water resources." Given their crucial role as freshwater sources and in sustaining ecosystems and livelihoods, the sustainable management and conservation of wetlands will significantly contribute to the shared vision of the NBI.

About this strategy

The NBI Wetland Management Strategy was developed as stipulated in the Nile Basin Sustainability Framework under its Key Strategic Direction 3: "Environmental and water-related natural resources management". The Wetland Management Strategy forms an integral part of the existing landscape of NBI policies, strategies and guidelines and complements national efforts of NBI member countries. The strategy focuses on the transboundary management of Nile Basin wetlands to guide their sustainable utilization and enhance their greatest possible contribution towards the common benefit for the Nile Basin. The NBI is the addressee of this strategy.

Process of strategy development

The process of developing this Wetland Management Strategy involved comprehensive consultations and workshops at regional, national and local levels between 2007 and 2013. The process included socio-economic and ecological studies on wetlands in different sites in the basin and the demonstration of piloted transboundary wetland management plans in two selected transboundary wetland sites: Sio-Siteko (Uganda and Kenya) and Dinder-Alatish (Ethiopia and Sudan). The two pilot processes were used to capture lessons, experiences and practices of wetland management and helped understand the challenges of transboundary management. The NTEAP Baseline Inventory and Mapping of the Nile Basin's Wetlands have provided a solid basis for the development of the strategy and informed its strategic orientation. The strategy has been developed in close consultation with and under the guidance of the members of the Nile-TAC, as well as a task team of technical experts from the Nile-SEC, NELSAP and ENSAP. International experts and national thematic experts supported the process, bringing in state of the art analysis and knowledge on the topic of transboundary wetland management and alignment with national requirements. The finalization of the strategy has been complemented by a screening of relevant legal and policy documents of riparian countries in order to confirm their complementarity and consistency with provisions contained herein. Furthermore, key international conventions and agreements, as well as international best practice were taken into consideration to assure compatibility.

Foreword

Dear Eminent Reader,
It is my pleasure to welcome you to the Nile Basin Initiative Wetland Management Strategy (WMS). This Strategy is expected to foster the sustainable management and utilization of the Nile Basin's wetlands; subsequently preserve and enhance their environmental and socio-economic functions. The WMS will guide national, trans-boundary and basin-wide efforts.

The WMS has been informed by previous socio-economic assessments and ecological studies on wetlands in different parts within the Nile Basin, relevant baseline inventory and mapping of the Nile Basin's Wetlands, piloted trans-boundary wetland management plans, and key international conventions and agreements together with international best practices. Furthermore, the Strategy builds heavily on previous studies carried out under the Nile Basin Initiative (NBI) as well as an examination and systematic review of Nile Basin riparian countries' related legal and policy documents.

The guiding principles and approaches to strengthen trans-boundary cooperative wetlands management put forward by this Strategy are based on the rules, principles and approaches of international, regional, basin-wide, as well as sub-basin experiences and lessons learned. Alignment of trans-boundary wetland management with national requirements was also exceptionally ensured.

The WMS presents operational definition and different classifications of wetlands, describes Nile Basin wetlands and their significance, highlights Nile Basin wetlands functions and values, justifies the applicability of the worldwide accepted principles (wetlands as ecotones, wise use, and equitable wetland resources use) within the Nile Basin context, defines strategic outcomes together with their corresponding priority outputs, and lays down the respective implementation plan.

I expect this Strategy to noticeably reduce the rapid degradation of wetlands in the Nile Basin, regulate and guide multiple developments in order to diminish existing pressures in a way that restores the Basin wetlands adaptive potential and therefore strengthens the overall resilience of the Basin's hydrological system. Once adopted, the WMS will bring about significant positive effects on water quality and quantity, with substantial laudable impacts on lifestyles and livelihoods of local communities and the socio-economic development potential.

It is my hope that collaborative endeavors and proactive measures will be in place shortly so that the strategic means towards achieving sustainable management and conservation of wetlands are fully undertaken. The WMS will play a vital role in decreasing poverty, maintaining precious ecosystems and rich biodiversity, increasing rural development, minimizing pollution, stabilizing hydro-power, and limiting displacement of people; thus significantly contribute to the NBI Shared Vision.

I commend the Nile Secretariat for developing this Strategy, and thank the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ-Germany) for supporting the Strategy development process.

I call upon all Nile Basin countries to mobilize necessary resources to move forward with this Wetland Management Strategy.

Sincerely,

Hon. Ms. Jemma Nunu Kumba
Chairperson, Nile Council of Ministers (Nile COM) &
Minister of Electricity, Water and Irrigation
Republic of South Sudan

NBI Wetland Management Strategy

Content

Acronyms and abbreviations

CBD	Convention on Biological Diversity	NBI	Nile Basin Initiative
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	NBSF	Nile Basin Sustainability Framework
DRC	Democratic Republic of Congo	NELSAP	Nile Equatorial Lakes Subsidiary Action Program
DSS	Decision Support System	NELSAP-CU	Nile Equatorial Lakes Subsidiary Action Program Coordination Unit
EAC	East African Community	Nile-COM	Nile Basin Council of Ministers of Water
EIA	Environmental Impact Assessment	Nile-SEC	Nile Basin Initiative Secretariat
EMG	Environmental Management Guidelines	Nile-TAC	Nile Technical Advisory Committee
ENSAP	Eastern Nile Subsidiary Action Program	NTEAP	Nile Transboundary Environmental Action project
ENTRO	Eastern Nile Technical Regional Office	PIU	Project Implementation Unit
ESIA	Environmental and Social Impact Assessment	PMU	Project Management Unit
ESP	Environmental and Social Policy (NBI)	RAMCEA	Ramsar Center for Eastern Africa
GDP	Gross domestic product	SAP	Subsidiary Action Program
GIS	Geographic information system	SSEA	Strategic Social and Environmental Assessment
IWRM	Integrated water resources management	UNCCD	United Nations Convention to Combat Desertification
KSD	Key Strategic Direction	UNDP	United Nations Development Programme
LVBC	Lake Victoria Basin Commission	UNEP	United Nations Environment Programme
LVFO	Lake Victoria Fisheries Organization	UNFCCC	United Nations Framework Convention on Climate Change

NBI Wetland Management Strategy

1. Introduction

1.1 Wetlands in the Nile Basin

Wetlands are some of the most important ecosystems in the world and provide critical ecosystem services that are indispensable to human beings and biodiversity's survival, health and welfare. In the Nile region, wetlands perform crucial basin-wide functions, including providing food, water, livelihood sources, improving water quality, providing resilience against drought and flooding, and sustaining biodiversity. Many of these benefits – such as water quality and biodiversity – do not only reach the populations living near them, but also produce positive effects for communities in the basin that live well outside the wetland area.

The River Nile – the longest river in the world – has one of the most complex networks of freshwater subsystems, of which wetlands are an integral component. Embedded within this system, the Nile Basin wetlands maintain close interlinkages and sustain the overall equilibrium of the basin. Thus, given the high level of interdependence and positive transboundary effects of wetlands well beyond national borders, the urgent need to protect them is a matter of regional and international interest, which demands an integral perspective on the benefits and opportunities that these ecosystems present.

Wetlands represent approximately six percent of the global land surface. In the Nile Basin, wetlands and water bodies represent at least four percent of the total area. This relatively small portion of the territory provides a great range of basin-wide benefits. More than 70 major wetlands of relevance for the Nile system have been identified by the riparian countries, with concentrations in two areas: the Equatorial Lakes region and the Sudd area in South Sudan (see full list in the Annex). Still, in their aggregation many smaller wetlands are crucial for the Nile Basin's overall resilience. Currently, 17 Nile Basin wetlands are designated as "Ramsar wetlands of international importance", providing wintering grounds for migratory birds and important biodiversity hot spots.

Nevertheless, wetlands in the Nile Basin are rapidly degrading. Multiple developments and pressures alter their adaptive potential and threaten the overall resilience of the basin's hydrological system. Rapid population growth, urbanization, and economic development for improved conditions of the people in the riparian countries impose significant pressure on water resources in the basin. The Nile Basin countries have some of the highest population growth rates in the world. The majority of the population still resides in rural areas, their livelihoods heavily depending on the provision and services of wetlands. As demands on wetlands as a base to support this growth increase, the threats to wetlands include large-scale conversion, drainage, land-use changes, pollution through municipal and industrial effluents, agriculture, overfishing and hydropower development. Consequently, the Nile Basin is losing its rich biodiversity, decreasing buffering capacity will lead to an increase of flooding and raising sediment loads will be experienced.

Increasing pollution from agriculture, municipal waste and sewage, but also poor management practices and deforestation in upper parts of the basin lead to increased siltation and sedimentation resulting in considerable nutrient load released into the environment. The raising eutrophication has led to the proliferation of the water hyacinth. This invasive species has a range of negative ramifications for the ecology and biodiversity of wetlands. It adversely affects livelihoods of communities and the provision of safe drinking water, but also marine transport and navigation, hydroelectric power production, and tourism.

Furthermore, the development of hydropower is often impeding directly and indirectly on wetlands. Their productivity is reduced significantly through altered hydrological regimes, preventing the filling of seasonal wetlands, and contributing to their drying out. While the further development of hydropower in the basin is desirable, the potential loss of functions and services is often underestimated. This has to be carefully reflected in development strategies to enhance the Nile Basin's resilience to climate change. Other potential impacts include a reduction in downstream water flows, alteration in suspended load sediments, bed load transport, oxygenation, alteration of temperature regimes and microclimates, and the displacement of people into other ecologically-sensitive habitats. Such infrastructure projects can also isolate wildlife populations, leaving them particularly vulnerable to demographic changes and inbreeding, and to the impacts of human development and catastrophic environmental events. These effects are bound to be more severe if the hydropower developments are badly constructed and poorly managed.

In addition, the Nile region is vulnerable and will be hardest hit by the impacts of climate change. The basin's sensitivity to climatic variability originates from its relatively low water discharge compared to the size of the basin. Wetlands are particularly vulnerable to climate change as they occupy the transition zone between aquatic and terrestrial environments. Thus, slight alterations in precipitation and groundwater levels can have dramatic effects such as drying out completely, contraction in size or conversion.

Ultimately, these problems threaten the water resources and wetlands ecology, significantly impacting water quality and quantity, with substantial impacts on lifestyles and livelihoods of local communities and the socio-economic development potential of the Nile Basin's countries at large. These environmental concerns are moreover compounded by governance challenges further elaborated in the next chapter of this strategy.

1.2 Functions and values of wetlands

Wetlands provide ecosystem services that are critical for the region's sustainable socio-economic development, substantially contributing to their water, food and energy security. The direct economic value of these ecosystems derives from the use of its goods (fresh water, fish, crops and building materials) and services (water retention and treatment, storage and recycling of nutrients and waste, among others). It is estimated that environmental services contribute between 40 and 60 percent to the GDP of the Nile riparian countries, whereby wetlands provide a large part of this percentage.

Moreover, the environmental stabilization functions performed by wetlands, such as natural flood control and flow regulation, erosion control and climatic stabilization (through their water retention and buffering capacity), help to make the region more resilient to climate change impacts. Due to their potential for storing water and balancing water flows, and their role as carbon sinks, especially tropical wetlands which have a large capacity for carbon sequestration, wetlands have important adaptation and mitigation functions.

In terms of biodiversity, the Nile Basin wetlands stretch from high-altitude mountain bogs, as those in the Rwenzori Mountains, to low-lying flood plains and delta wetlands in Egypt. Along this range of altitudes and geographic locations, wetlands exhibit a series of diverse environmental characteristics that create unique habitats. Moreover, wetlands are ecotones – transitional ecosystems between terrestrial and aquatic systems – with presence of species from all the adjacent areas. As a result, the rich and distinct mosaics of animal and plant species that have adapted to these conditions represent a great portion of the basin's biodiversity. Wetland-dependent species (some of which are species shared across national

boundaries) co-exist as a functioning component within the wider ecosystem, explaining the importance of protecting the natural habitat as a whole.

For a detailed overview of the basin-wide functions, services and benefits of wetlands, see the table in the Annex 2.

1.3 Relevant definitions for a basin-wide approach for wetland management

For the purpose of this strategy, NBI defines wetlands as: those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. The term "wetland" is applied to a broad range of different habitats and ecosystems including swamps, flood plains, seasonally flooded grasslands, the edges and shallow waters of rivers and lakes, estuaries and coastal marshes, as well as mangroves and peat bogs.

Four main concepts are significant in view of the international nature of wetlands in a river basin. The first three (national wetlands, transboundary wetlands and wetlands of transboundary importance) are particularly important for NBI's basin-wide approach for wetland management. The fourth (Ramsar Wetlands of International Importance) is an additional term agreed on internationally by contracting parties of the Ramsar Convention on Wetlands of International Importance. To understand the multifaceted role of wetlands in a river basin and in order to guide their management, those concepts provide orientation for their classification.

Whereas national wetlands are those circumscribed within the territory of one state, thus lying in a sovereign area, transboundary wetlands are those that cross international borders or are located on boundaries between two or more states.

Wetlands of transboundary importance are located within the water catchment of more than one state. Therefore, the actions of the states within the catchment area may result in changes to the ecological character of the wetland and upstream hydrological and hydrodynamic changes may have a strong transboundary impact downstream. Under the guidance of the Convention, international cooperation is to be extended to states whose actions are within the catchment area of another state. In the Nile region, a good example is the dependence of the Sudd wetland in South Sudan on water releases from Lake Victoria in Uganda.

1.4 The NBIís approach to the state of Nile wetlands

The broad variety of functions and services provided by wetlands and the intricacies of the ecosystems make their restoration and management a complex challenge. Although these threats have been addressed to some extent by individual riparian states, given the interconnectivity of wetlands, each of these issues has a transboundary dimension that needs to be understood and addressed. An integrated perspective on the management of competing uses at multiple scales and a cooperative approach to protect the Nile wetlands are crucial to sustain basin-wide benefits, maintain the integrity of these valuable ecosystems, and retain the high levels of functions and services that they perform.

NBI provides a unique platform for joint action and transboundary perspective promoting sustainable and responsible management and development of shared wetlands in the Nile. NBI aims to complement national planning, management and restoration, and to act in compatibility with relevant regional and international agreements.

Most riparian counties have acknowledged the importance of wetlands through the establishment of specific policies and guidelines and provisions in the related legal frameworks. Furthermore, they have committed themselves to the protection of wetlands by signing the main international and regional conventions, such as the Ramsar Convention that obliges states to cooperate in the management of shared wetlands. Other relevant conventions the Nile riparian countries are parties to include the Convention on Biological Diversity (CBD), The United Nations Framework Convention on Climate Change, the Kyoto Protocol, the Convention Concerning the Protection of the World Cultural and Natural Heritage and the United Nations Convention to Combat Desertification. Furthermore, they are parties to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), as well as the Agreement on the Conservation of African- Eurasian Migratory Water birds.

This strategy sets out the NBI's goal and objectives, strategic outcomes and priority outputs for a joint transboundary river basin level response to support the sustainable management and development of wetlands in Africa's largest shared river basin.

2. Challenges

Currently, the management of wetlands constitutes a challenge to the riparian countries. The degraded state of the wetlands of the Nile Basin and the series of pressures and threats that these ecosystems face, are indicators of the difficult circumstances. The ability of the Nile Basin Member States to cooperate in order to tackle the existing threats is crucial. In this regard, a series of challenges arises in the joint management of wetlands in the basin that will need to be overcome to achieve successful outcomes. The key challenges to be addressed in this strategy are listed below:

2.1 Insufficient data, information and knowledge

Availability of data is an important challenge in the management and conservation of wetlands. In order to guide the sustainable utilization of wetlands and conservation and planning processes, regular monitoring of the status of wetlands is necessary. The data and information available in the basin are still limited and fragmented. There is no baseline available and no periodic and systematic monitoring and update of the Nile wetland inventory. Knowledge of the precise functions that the wetlands perform and their economic value is limited. Broader awareness of their role is also lacking. Furthermore, there is no comprehensive analysis, assessment and identification of wetlands of transboundary importance to sustain resilience of the basin. The uncertainty that arises from the lack of knowledge makes decision-making complex and challenging. The need for the Nile riparian countries to strengthen the basin-wide knowledge base is crucial to contribute to the conservation of wetlands.

2.2 Lack of a transboundary perspective in the management of wetlands

Given the transboundary importance of wetlands in the Nile Basin, a basin-wide and integrated perspective to plan and make decisions regarding their use and joint management is needed in order to conserve them. Yet wetland use and management are fragmented in two ways. On the one hand, in each riparian state wetland issues are governed by different sectoral institutions that have limited institutional frameworks for wetland management. On the other hand, national regulatory and institutional frameworks for the management of wetlands are not sufficiently aligned across riparian states, resulting in decision-making that is fragmented. Low coordination of management activities between sectors and among riparians of transboundary wetlands limits the overall benefits for the socio-economic development in the basin. Differing problem definitions and sets of priorities hamper sustainable management decisions in the basin and may trigger conflicting situations. Information in support of wetland management needs to be acquired at multiple scales from regional, national and local assessments to guide policymaking and prioritization of responses. Considerations of multiple stakeholder aspects and involvement are of major importance for the wetland management. Recent experience in the Lake Victoria Basin has also shown the need for long-term sustainable approaches and decisions based on sound data evaluation considering a variety of aspects. Furthermore, the existence of partnerships and cooperation with relevant regional and international institutions to amplify efforts is still limited.

Examples of key initiatives for cooperation

Regional initiatives:

- Lake Victoria Basin Commission (LVBC)
- Lake Victoria Fisheries Organization (LVFO)
- Ramsar Center for Eastern Africa (RAMCEA)

Relevant international MUA and intergovernmental agencies:

- Ramsar Convention
- CBD, UNCCD and UNFCCC
- EAC, UNEP and UNDP

2.3 Limited capacities at the national level

Existing technical, institutional, and financial capacities for the implementation of transboundary wetland management are limited at the national level, which might contribute to the existing degradation of transboundary wetlands. It is necessary to strengthen capacities at the operational level and countries' coordination abilities to support the implementation and enforcement of existing policies.

An assessment of capacities and needs at the national level highlights the need for improvement of national GIS capabilities and monitoring capacities of a number of local and national institutions responsible for the protection and management of wetlands in the region. This will be crucial for future monitoring and analysis of the basin development. Moreover, the development and implementation of wetland strategies, institutional and community capacities to manage wetlands, and networking among institutions have been identified as requirements for further analysis and improvement. For a basin-wide implementation and use of harmonized databases, countries' capacities and resources have to be assessed and addressed within a regional approach. In earlier consultation processes, national resources to incorporate this basin perspective and integrate the Nile Basin wetland inventory have been identified as insufficient. There is a need to identify and tap potential funding sources to support the protection and management of wetlands in the basin.

In general, funding of wetland conservation and management is lacking across the basin. Only a few countries have a wetland specific policy or strategy in place. Instead, they are governed by different policy frameworks. Thus, the allocation of funds does not contain the necessary funding support for wetlands. The protection and management of wetlands needs considerable human and technical resources to ensure surveillance, regularly monitor their status and fund restoration activities. Wetlands in the basin are vast and often not easily accessible, and their extensive utilization is essential for the livelihoods of local communities. Awareness, understanding and joint management and planning are not yet sufficient, as they require substantial financial resources currently not available. While wetland services could generate substantial revenues to support those activities, adequate mechanisms and methodologies need to be identified. There is a need to identify and tap potential funding streams, for example in the frame of new climate investments, carbon finance and other emerging specialized instruments, and financing from private sector funds. Moreover, a few new initiatives of water funds based on ecosystem payments need to be supported through adequate data and information to enable their operation. A regional approach will significantly improve access to funding, since the bundling of wetlands for funding applications will broaden the range and scale of funding streams for which they are eligible. Research should be conducted into potential approaches to support bundling and aggregation of wetlands in the basin for funding purposes.

2.4 Natural infrastructure is not sufficiently reflected in development priorities

Larger-scale development processes across the basin, such as infrastructure development (multi-purpose hydropower) and other economic activities (such as agricultural developments), are competing with and potentially threatening wetlands. The protection and sustainable management of wetlands has great potential for the Nile Basin. In the field of climate change mitigation, the ecosystem services of wetlands as carbon sinks can present significant opportunities. Taking advantage of mitigation opportunities through access to international carbon finance against land use changes and the promotion of clean energy sources (for example hydropower) could create win-win opportunities for the basin. This potential is not yet sufficiently taken into account into decision making.

3. Strategy goal and objectives

3.1 Goal

In view of the pressing threats and challenges for Nile Basin wetlands, the overarching goal of this Wetland Management Strategy is to foster the sustainable management and utilization of the Nile Basin's wetlands.

3.2 Strategic objectives

This strategy has the following five strategic objectives that govern NBI's Wetland Management Strategy. These are established on NBI's recognized and mandated role and guided through the wetland specific guiding principles:

Objective 1: Strengthen the knowledge base on wetlands of transboundary importance in the Nile Basin to support basin-wide conservation, management, planning and restoration efforts.

Objective 2: Raise awareness and undertake advocacy efforts to build consciousness around the important role of wetlands and their ecosystem functions for the basin's development.

Objective 3: Develop and promote a basin-wide approach for the sustainable and cooperative management of wetlands taking into account the full variety of wetland uses.

Objective 4: Strengthen national policies and institutional capacities for the effective management of wetlands with basin-wide importance.

Objective 5: Strengthen basin-wide access to finance for wetland management and the capacity for development of feasible projects in the Nile Basin.

These strategic objectives give rise to expected outcomes and strategic outputs achievable in short, medium and longer-term timeframes, depending on the NBI's current levels of readiness to implement them.

4. Guiding principles

This strategy rests on three cornerstone principles for wetland management. The NBI will strive to adhere to them in the course of its activities.

4.1 Wetlands as ecotones

Wetlands are transitional ecosystems between terrestrial and aquatic systems. Their biodiversity is particularly high since they contain species from the adjacent areas, but also have unique species. Many of these species are highly adapted to the specific conditions of wetlands and cannot survive outside of this environment. Furthermore, wetlands contribute to water storage, purification and filtration. Interventions for wetland management need to consider the transitional nature of wetlands, many of which are particularly dynamic in the Nile Basin, in order to sustain their functions and benefits for sustainable development in the region.

4.2 Wise use principle

Wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development. The wise use of wetlands maintains its ecosystem benefits and services with a long-term perspective to conserve biodiversity and ensure human well-being.

4.3 Equitable wetland resources use

The interests of different resource users need to be balanced to attain optimal and sustainable benefits. The user of wetland resources has to consider potential impacts on other users and ecosystem preservation. Management plans can ensure equitable utilization and conservation by defining rules and regulations.

NBI's overarching principles

In addition to the three principles for wetland management, this strategy is guided by nine overarching principles that inform all NBI's interventions. These are elaborated in detail in the NBI's Environmental and Social Policy (ESP).

1. Sustainable socio-economic development
2. Basin-wide cooperation
3. Subsidiarity
4. Compatibility and complementarity
5. Precautionary principle
6. Public participation and consultation
7. Accountability and transparency
8. Social equality
9. Gender equity

5. Outcomes

The overarching goal of this strategy will result in four outcomes contributing to the vision of the Nile Basin countries. This shall be realized through the implementation of a defined set of priority outputs further elaborated in the following section. Some of the outputs cut across multiple policy objectives and thus support the achievement of multiple outcomes.

Outcome 1: Basin-wide and national wetland conservation, management and planning activities are informed by a rigorous and accessible knowledge base on the Nile Basin wetlands.

At the heart of sustainable management of wetlands is the availability of a comprehensive knowledge base informing on the current state of the resources in the basin and allowing for a continuous monitoring and assessment of future developments. By closing data and information gaps, the basin's hydrological linkages and the role of wetlands within this system and in their function as supporting a resilient basin can be assessed. This shall contribute to a better understanding of the significant role of wetlands for the basin's resilience.

Outcome 2: The functionality and biodiversity of the Nile Basin wetlands are sustained through enhanced understanding and knowledge-based decision making.

The Nile Basin wetlands contribute significantly to the socio-economic development of the riparian countries. Through an improved understanding of their services, functions and their interconnectedness across catchments and within the basin, better informed management can generate positive cumulative impacts for all users. Continuous research will contribute to the establishment of methodologies to assess the capacities of Nile wetlands for carbon sequestration and support of regional and international biodiversity. Knowledge about the valuation of these assets will support investment decisions and improve the management of wetlands of transboundary importance.

Outcome 3: The management of shared wetlands has improved through aligned national policies and adequate institutional frameworks in the context of NBI projects.

The Nile Basin states have made significant progress to support the sustainable management of their shared resources. Still, resources are governed by diverse sectoral institutions and frameworks in each country. Thus, joint management efforts for transboundary wetlands and for the basin's sustainability and resilience require facilitation from a regional perspective. Cooperation efforts shall be supported and, wherever needed, initiated to align and harmonize national frameworks based on regular revision of the status of national provisions and activities.

Outcome 4: Institutional capacities and policies on transboundary wetland management are strengthened in NBI countries.

The conservation and management of Nile wetlands has improved and ensures the balancing of multiple needs and requirements to sustain and preserve wetlands of transboundary importance for the shared benefit among its users. Access to up-to-date knowledge about effective implementation of policies and new management concepts will guide national and NBI activities. Moreover, improved access to funding and better financing of wetland management activities will substantially improve national and regional efforts. This includes improved capacities of the operational level with technical equipment, access to technical expertise and adequate human resources to complement the existing monitoring and assessment of the state and development of wetlands. It also extends to improved capacities on the national level as well as on the regional level to implement and sustain management activities and coordinate activities relevant to shared wetlands.

6. Priority outputs

The outcomes in Section 5 shall be realized through the implementation of a defined set of priority outputs further elaborated in this section. Some of the outputs cut across multiple policy objectives and thus support the achievement of multiple outcomes. In this section each output is further elaborated and necessary key actions are described.

Output 1: A regularly updated wetland inventory and database is available

On the basis of a comprehensive baseline assessment and a real-time data portal, a regularly updated regional database with complete datasets provides information on development trends and status of Nile Basin wetlands. Wetlands in the database will be categorized according to agreed criteria regarding their transboundary dimension and criticality for the basin's hydrology. The database is shared with the Nile riparian countries informing decision-making and monitoring progress. The Nile Basin Wetland inventory shall be integrated into the NBI information and knowledge management system. A help desk function on wetland monitoring and mapping provides the base for its functionality, building on sufficient internal and external capacity for its operation and maintenance. In a periodically published atlas on the status of the Nile Basin wetlands, information about development and progress of management efforts and on-going activities will be provided. The atlas shall be published every three years.

Output 2: Diagnostic studies on important Nile Basin wetlands and their biodiversity are conducted

A diagnostic study shall map important wetlands in the basin, assessing their multifunctional role for the regional development. This diagnostic study shall take into account the conditions of wetlands specific to the countries they are found. It links to internationally important topics, such as the sustenance of habitats to maintain the basin's biodiversity and internationally important migratory bird routes. It will analyze the hydrological inter-linkages between wetlands in the basin and impact of large-scale development processes on critical transboundary wetlands (e.g. agriculture, infrastructure development, urbanization) and help to assess ranges of potential impacts on selected wetlands. Furthermore, recommendations for the establishment of thresholds for sustainable flow requirements shall be identified.

Output 3: Information and knowledge on Nile Basin wetland functions and services is synthesized and valuations of their contribution for socio-economic development are undertaken

Information and knowledge about the role of wetlands for the socio-economic development of the basin and support to the basin's resilience are still insufficient. Detailed studies on the services and function of wetlands to maintain and stabilize the regional water balance, reduce and buffer extreme events, and capacity to store carbon, as well as economic valuation of their contributions in sustaining livelihoods and fisheries for the basin's populations will inform management decisions and activities. Furthermore, assessments will reflect on the critical role of wetlands as the basin's natural infrastructure, and their underestimated potential.

Output 4: Funding options and innovative financing mechanism are identified

The provision of wetland services for multiple stakeholders is becoming increasingly important in the frame of innovative financing and funding mechanisms. As a first step for the establishment of mechanisms and application for specific funds, particular data and information need to be available to assess potential impacts and capacities. Regional perspectives and pooling of resources are becoming increasingly relevant and provide for more competitive and cost effective solutions. A regularly updated scoping of potential funding options shall enable early positioning to generate additional financing for wetland management activities.

Output 5: A basin-wide wetland conservation and management plan is developed, integrating a multipurpose perspective on the development of critical transboundary wetlands in the basin

Information and knowledge on identified critical transboundary wetlands and their importance for the Nile Basin development shall be consolidated in a wetland conservation and management plan. This plan shall allow for an integrative perspective regarding the hydrological regime and interconnectedness of wetlands cross the basin, also incorporating a cross-sectoral perspective to balance the various uses and demands on the resources. This planning-support tool will then inform riparian countries on spatially and temporally relevant aspects in the management of transboundary wetlands and provide concrete recommendations to inform national decision-making and activities.

Output 6: Recommendations on the management and conservation of shared wetlands are taken into account in national planning and management

Concrete recommendations for riparian countries' conservation and management efforts on shared wetlands shall be regularly provided by NBI. Recommendations will be derived from a basin-wide assessment of development impacts and require an integrative planning perspective to sustain the overall benefits and functionality of the basin's wetland network. Specific measures for different wetland categories of transboundary relevance will be elaborated. Furthermore, recommendations on the role of wetlands for national climate adaptation and mitigation activities shall be provided. Recommendations will be presented in different NBI publications, including the wetland atlas and wetland management plan, the state of the basin report, and specific policy briefs and knowledge products.

Output 7: The joint management of wetlands is promoted, supported by the establishment of a basin-wide cooperation mechanism

A regional cooperation mechanism shall be created to support multilateral working groups on particular issues of transboundary wetland management and help to convene science-policy dialogues for transboundary wetland management. It shall be utilized for concrete cooperation projects to harmonize and align national activities and approaches. This platform shall call meetings on demand on particular issues. Engagement of relevant country policy makers in specific processes shall be ensured. To further strengthen regional cooperation on transboundary wetlands, linkages with relevant regional initiatives and international conventions related to wetland management shall be strengthened.

Output 8: Regular training programs and a pool of experts are available to the riparian countries to strengthen and support both national and NBI capacities for sustainable wetland management

Capacities of national authorities and communities on transboundary wetland management in the Nile Basin and within NBI projects shall be strengthened. To fulfill its mandate in supporting riparian countries with the management of their shared resources, specific training programs and expert support to improve the management of transboundary resources shall be made available at the request of countries. Training programs shall enhance knowledge on the management of shared resources, improve capacities to coordinate and align policies, build the capacity of administrative authorities to carry out continued inventory and mapping of national and transboundary wetlands and key biodiversity ecosystems, as well as to support the implementation capacities and acquisition of new funding. Experts shall provide feedback on specific legal, institutional or technical requirements to enable the successful shared management of resources across borders but also across the whole basin.

Output 9: A wetland communication strategy is developed to raise awareness and promote the sustainable management of the Nile Basin wetlands

A communication strategy shall outline NBI's approach and avenues to disseminate the generated information and knowledge to relevant stakeholders across the basin. Adequate communication products

shall be defined. The strategy shall encompass a strategic approach for the dissemination of the wetland inventory for further utilization in the countries and within NBI, the establishment of a specific line of publication on thematic topics, regularly updated fact sheets such as a 'Wetland Barometer', as well as the establishment of specific fora and expert dialogues. The strategy shall be based on NBI's approach on joint learning in the basin and on the work carried out by other river basin organizations.

7. Implementation arrangements

This strategy sets out the strategic directions of the NBI's efforts to strengthen the sustainable management and development of wetlands in the Nile Basin. Building on the goal and objectives, outcomes and outputs outlined here, an implementation plan including a roadmap on how to put the strategy into practice will be developed. The implementation plan will be based on a five-year horizon and will include further details on how the strategy will be put into action, including the following provisions:

Definition of activities

Identification, further development and prioritization of short and medium term activities is planned to achieve the stated outputs, such as the exploration of opportunities to partner with other organizations in the region, such as the Lake Victoria Basin Commission (LVBC) and the Ramsar Center for Eastern Africa (RAMCEA).

Log-Frame

A Log-Frame Matrix will be developed, indicating a detailed timeline for achieving each of the outputs, defining roles and responsibilities within the NBI and for National Focal Points, allocating a corresponding budget, and including indicators to enable measures of progress.

Monitoring and Evaluation (M&E)

An M&E mechanism or system for following up on the operationalization of the strategy will be put in place. For this purpose, indicators at the level of outcomes, outputs and activities will need to be identified and formulated (see Log-Frame Matrix above), including a timeline for their achievement.

Risk Assessment

An assessment of the potential obstacles and impediments will be undertaken within the course of action planning; appropriate risk mitigation measures will be introduced.

National Focal Points (NFPs)

The implementation plan will reflect on ways to strengthen the coordinating role of the NFPs with relevant national institutions in riparian countries and define procedures for liaison with the NFPs, or their formal nominees.

Institutional arrangements

The Nile-SEC, in collaboration with technical experts from the two SAPs, shall develop the roadmap, logical framework, corresponding budget, and risk assessment, as well as an M&E plan for the operationalization of this strategy in line with already established NBI procedures.

Guidelines and Regulations under the scope of this strategy

Relevant existing NBI guidelines and regulations shall be revisited to assure consistency with the goal and objectives established in this strategy.

Review

In case new issues emerge that are relevant for the content of this strategy, revisions shall be initiated by Nile-SEC as necessary and consulted with active participation of all relevant stakeholders.

Overall coordination for implementation of this strategy will be done by the NBI Secretariat. The implementation of the strategy builds on previous and ongoing NBI wetlands activities that include the continued use of national and regional networks and working groups. The NBI will work in close collaboration with national authorities and institutions responsible for the management and protection of wetlands to implement the strategy.

8. Annexes

Annex 1: Glossary

Adaptive capacity

The ability or potential of a system to respond successfully to climate variability and change, and includes adjustments in both behavior and in resources and technologies. The presence of adaptive capacity has been shown to be a necessary condition for the design and implementation of effective adaptation strategies so as to reduce the likelihood and the magnitude of harmful outcomes resulting from climate change. (IPCC Fourth Assessment Report: Climate Change 2007, Annex II, p. 76)

Invasive species

An alien species whose introduction and/or spread threaten biological diversity. (Convention on Biological Diversity (CBD) Online Glossary of Terms)

Resilience

The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions. (IPCC Fourth Assessment Report: Climate Change 2007, Annex II, p. 86)

Wetlands

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. The term "wetland" is applied to a broad range of different habitats and ecosystems including swamps, flood plains, seasonally flooded grasslands, the edges and shallow waters of rivers and lakes, estuaries and coastal marshes, as well as mangroves and peat bogs. (United States Environmental Protection Agency 2012: Wetlands Definitions. EPA Regulations 40 CFR 230.3(t).)

Annex 2: Basin-wide functions, services and benefits of transboundary wetlands

Functions	Services and benefits
Livelihoods and food security	• Sustenance of livelihoods and food provision for the largely rural population (up to 70-80%) of the Nile Basin. • Production of water, food, fuel wood, medicinal resources and raw materials for construction. • Sustenance of wetland agriculture, including crop production and fishing, both for food production and income generation. • Carrier of stock farming (grazing). • Base for other economic activities, such as tourism and recreation.
Water quality and quantity	• Water production and storage, used for irrigation and domestic water supply. • Basis for hydropower capacities for energy production. • Groundwater discharge and recharge. Recycling of nutrients, human and organic waste, and water treatment • Water purification through filtering capacity, urgently needed as almost 70% of effluents are not treated sufficiently before their discharge into surface waters. This is critical for quality of surface water and groundwater across the basin.
Biodiversity	• Habitat and reservoir for endemic species. • Ecological stepping-stones within a network of ecosystems across the basin necessary for adaptive capacity of species in times of climate change and unusual weather events (droughts). • Maintenance of biological and genetic diversity. • Breeding grounds and habitat during seasonal changes and annual climatic changes (migration of great mammals in parts of the basin, e.g. Dinder National Park). • Provide ecological refugee for animals (e.g. Sudd, dry-season refuge). • Stopover and wintering grounds for birds of international conservation importance (e.g. Sudd, etc.).
Climate change	• Wetlands are important carbon sinks, particularly tropical wetlands. • Climatic stabilization. • The stabilizing effect of wetlands on the water flow enhances resilience of landscapes and people to droughts and floods.
Environmental stabilization	• Natural flood control and flow regulation. • Erosion and salinity control. • Maintenance of ecosystem stability and integrity of other sub ecosystems. • Shoreline stabilization and storm protection. • Sediment and nutrient retention and export
Other	• Socio-cultural significance. • Information functions in education, science and research.

Sources: Living Waters, Conserving the source of life: The Economic Values of the World's Wetlands; State of the River Nile Basin 2012.

Annex 3: Major wetlands in the Nile Basin

The below table provides a list of the major wetlands that have been identified and selected as of importance in the Nile Basin, based on discussions with workshop group members within the NTEAP project. It has been complemented by national provisions on identified transboundary wetlands as well as with RAMSAR wetlands on international importance. Further unnamed wetlands exist that could be captured during updating exercises.

Major Nile Basin Wetlands (NTEAP Wetland Inventory)

Country	Name	River/Lake	Town (near)
Burundi	Lake Cohoha	Akanyaru River	Bujumbura, Gitega
	Lake Gacamirinda	Akanyaru River	Muyinga, Gitega
	Lake Rwihinda	Akanyaru River	Muyinga,Gitega
	Lake Rweru	Nyawarungu River	Bujumbura, Muyinga
	Lake Kanzigiri	Lake Rugwero	Muhinga, Gitega
	Luivironza/ Kayongonzi/ Ruvubu System	Luvironza/ Kayongozi/ Ruvubu System	Muyinga
	Akanyaru River	Akanyaru River	Muyinga
DRC	Lake Albert Swamps	Lake Albert	Bunia
	Lake Edward	Kazinga Channel	Lubero
	Semliki River	Semliki River	Bunia
Egypt	Lake Manzala	Nile	Alexandria
	Lake Nasser	Nile	Aswan
	The Delta Proper	Nile	Alexandria
	Lake Maryut	Nile	Alexandria
	Lake Idku	Nile	Alexandria
	Lake Burullus	Nile Delta	Kafr El Sheikh
	Lake Bardawil	Nile Delta	Port Said
Ethiopia	Lake Tana	Lake Tana	Amhara Region
	Fogera floodplain marsh and swamps	Gumera River, Lake Tana Eastern shore	Fogera Woreda, South Gondar
	Dembia floodplain Marsh and swamps	Dembia River, L Tana, northern valley	Dembia Woreda, North Gondar
	Bahir Dar Zuria marsh and swamps	Lake Tana, southern valley	Bahir Dar Woreda, West Gojam
	Dangela floodplain marsh and swamps	Kilti River, (L. Tana's tributary)	Awi Zone, Dangela Wereda
	Gambela marsh and swamps	Baro, Akobo, Alwero and Gilo Rivers	Gambela Region
	Fincha'a-Chomen Lake marsh	Finch'a- Chomen Reservoir	Fincha'a, Shambu, E Wellega
	Dabus River marsh and swamps	Dabus River floodplain	Nejo, W.Wellega, Oromiya Region
	Illubabor marsh and swamps	Valley bottom along numerous highland small streams	Illubabor Zone, Oromiya Region
	Abay and Beles River floodplains	Abay and Beles River (lower)	Benishangul-Gumuz Region

Kenya	Winam Gulf swamps	Lake Victoria	Kisumu
	Lake Vicrotia East Shore	Lake Victoria	Kisumu
	Sio-Siteko Wetland System	Lake Victoria	Nambobato
	Lotakipi (Lotagipi) Swamp	Lake Turkana	Loropio
	Mara river basin wetlands	Mara River	Migori
	Lake Jipe wetlands	Lake Jipe	Voi
	Lake Chala wetlands	Lake Chala	Voi
Rwanda	Kamiranzovu Swamp	Rukarara River	Rusizi
	Lake Muhazi	Nyabugogo River	Kigali, Kibungu
	Rugezi Swamp	Ruhondo Lake	Gicumbi, Musanze
	Mugesera Rweru Swamp Complex	Nyabarongo River	Kigali, Kibungu
Sudan	Lake Nubia/ Nasser	Nile	Dongola
	El Roseires	Blue Nile	El Roseires
	Sennar	Blue Nile	Sennar
	Kashm el Girba	Atbara	Kassala
	Dinder Floodplains	Dinder River	Dinder Town
	Gebel Aulia	White Nile	Khartoum
South Sudan	Sudd swamp	Bahr el Jebel	Bor
	Lake Yirol	Yei River	Yirol, Shambe
	Lake Anyi	Yei River	Shambe
	Lake Nyiropo	Lau River	Shambe
	Kenamuke/ Kobowen Swamp	Kangen River, Sobat River	Juba
	Lotilla Swamps	Lotilla River	Pibor
	Badigeru Swamp	Kenyenti River	Juba, Bor
	Nile Valley below Malakal	White Nile	Malakal
	Veveno/ Adiet/ Lilebook Swamps	Lotilla River	Bor, Pibor Post
	Lake Ambadi	Bahr el Ghazal	Rumbek
	Bahr el Ghazal Swamps	Bahr el Ghazal	Wau
	Machar marshes (Sobat Marches)	Sobat River	Daga Post, Malakal
Tanzania	Kagera swamps	Kagera River	Mwanza
	Lake Vie, south shore swamps	Lake River	Mwanza, Kagera
	Mara wetlands	Kafu River	Mara
Uganda	Kafu System	Kafu River	Masindi
	Lake Wamala	Kibimba River	Kampala
	Lake Bisina & Opeta	Lake Kyoga	Junja
	Kijanebalola Lake	Ruizi River	Mbarara
	Bunyoni Lake	Kabirita River	Mbarara
	Lake Albert	Albert Nile	Masindi, Hoima
	Lake Edward	Kazinga Channel	Fort Portal
	Lake Vie, north shore swamps	Lake Victoria	Entebbe, Jinja, Kampala, Masaka
	Lake Kyoga Kwani Swamps	Lake Kyoga	Lira, Soroti, Mbale, Nakasongola
	Lake George swamps	Lake George	Kasese
	Albert Nile swamp	Albert Nile	Arua

Annex 4: List of consulted national policy and legal documents

This strategy builds upon national policies and legal frameworks in NBI countries. The following relevant national policies and pieces of legislation were consulted as part of the development process of this strategy. NBI complements diverse national efforts by strengthening the transboundary and cooperative dimension in the Nile Basin.

National Policies and Documents relevant for the Wetland Management Strategy

BURUNDI

National policies, laws and regulations related to wetlands

Mining Act (1978)
Law n°1-02 of 25 March 1985 defines the forest domain, and contains all provisions concerning forest reserves, protection forests
Land Act (1986)
National Environmental Strategy (SNEB) (1997)
Master Plan of Swamps Management (1999)
National Strategy and Action Plan on Biological Diversity (NSAP-BD) (2000)
Environment Act (2000)
National Strategy and Action Plan in Capacities Reinforcement on Biological Diversity (2004)
National Action Plan to reduce Land Degradation (2005)
National Strategy and Action to the Climatic Changes (NAPA) (2006)
National Water Policy (2009)*

International and regional conventions/treaties/protocols on water to which country is a signatory

Convention Concerning the Protection of the World Cultural and Natural Heritage (1982)
Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1988)
The United Nations Framework Convention on Climate Change (1997)
The United Nations Convention to Combat Desertification (1997)
Ramsar Convention 1971 and Protocol 1972 (2002): Rusizi Delta of the Réserve Naturelle de la Rusizi and the northern part of the Lake Tanganyika littoral area
The Kyoto Protocol (2005)
Convention on the Conservation of Migratory Species of Wild Animals (2011)

D.R. CONGO

National policies, laws and regulations related to wetlands

Decree of 21 April, 1937 on fishing (1937)
Wild life Conservation Law (texts of 1969)
Law n° 82-002 of 28 May, 1982 on hunting (1982)
Forest Law (2002)

International and regional conventions/treaties/protocols on water to which country is a signatory

Convention Concerning the Protection of the World Cultural and Natural Heritage (1974)
Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1983)
The United Nations Framework Convention on Climate Change (1995)

The United Nations Convention to Combat Desertification (1997)
Ramsar Convention 1971 and Protocol 1972 (1998)
Agreement on the Conservation of African- Eurasian Migratory Waterbirds (1999)
Convention on the Conservation of Migratory Species of Wild Animals (2000)
The Kyoto Protocol (2005)

EGYPT

National policies, laws and regulations related to wetlands

National Strategy and Action Plan for Biodiversity Conservation (1998)

International and regional conventions/treaties/protocols on water to which country is a signatory

Convention Concerning the Protection of the World Cultural and Natural Heritage (1974)
Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1978)
Convention on the Conservation of Migratory Species of Wild Animals (1983)
Ramsar Convention 1971 and Protocol 1972 (1988)
The United Nations Framework Convention on Climate Change (1995)
The United Nations Convention to Combat Desertification (1996)
Agreement on the Conservation of African- Eurasian Migratory Waterbirds (1999)
The Kyoto Protocol (2005)

ETHIOPIA

National policies, laws and regulations related to wetlands

Environmental Policy (1997)
Ethiopian Water Resources Management Policy (1999)

International and regional conventions/treaties/protocols on water to which country is a signatory

Convention Concerning the Protection of the World Cultural and Natural Heritage (1977)
Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1989)
The United Nations Framework Convention on Climate Change (1994)
The United Nations Convention to Combat Desertification (1997)
The Kyoto Protocol (2005)
Agreement on the Conservation of African- Eurasian Migratory Waterbirds (2010)
Convention on the Conservation of Migratory Species of Wild Animals (2010)

KENYA

National policies, laws and regulations related to wetlands

Agriculture Act (1955)
Environmental (Management and Coordination) Act (1999)
Water Act (2002)
The Forests Act (2005)
Kenya Maritime Authority Act (2006)
National Land Policy (2007)
Sessional Paper on National Wetlands Conservation and Management (2008)
Draft Wetlands Policy
The Wildlife (Conservation and Management) Act (1985, revised 2009)
Physical Planning Act (1996, revised 2009)

The Environmental Management And Co-Ordination (Wetlands, River Banks, Lake Shores And Sea Shore Management) Regulations (2009)
Fisheries Protection Act (1991, revised 2012)
Kenya Wetlands Atlas (2012)
The National Land Commission Act (2012)
The Land Registration Act (2012)
The Land Act (2012)

International and regional conventions/treaties/protocols on water to which country is a signatory

Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1979)
Ramsar Convention 1971 and Protocol 1972 (1990)
Convention Concerning the Protection of the World Cultural and Natural Heritage (1991)
The United Nations Framework Convention on Climate Change (1994)
The United Nations Convention to Combat Desertification (1997)
The Kyoto Protocol (2005)
Agreement on the Conservation of African- Eurasian Migratory Waterbirds (2011)

RWANDA

National policies, laws and regulations related to wetlands

Organic Law. Determing the Modalities of Protection, Conservation and Promotion of Environment in Rwanda (2005)
Organic Law Determining the Use and Management of Land in Rwanda (2005)
Convention on the Conservation of Migratory Species of Wild Animals (2005)
National Policy on Water Resources Management (NWRM)(Draft) (2011)

International and regional conventions/treaties/protocols on water to which country is a signatory

Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1981)
The United Nations Framework Convention on Climate Change (1998)
The United Nations Convention to Combat Desertification (1999)
Convention Concerning the Protection of the World Cultural and Natural Heritage (2000)
Ramsar Convention 1971 and Protocol 1972 (2002) (ratified)
The Kyoto Protocol (2005)

SOUTH SUDAN

National policies, laws and regulations related to wetlands

Water Policy (2007)
National Environmental Policy (2012)

International and regional conventions/treaties/protocols on water to which country is a signatory

The United Nations Framework Convention on Climate Change (observatory state)

SUDAN

National policies, laws and regulations related to wetlands

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International and regional conventions/treaties/protocols on water to which country is a signatory

Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat (1971)
Convention Concerning the Protection of the World Cultural and Natural Heritage (1974)
Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1983)
The United Nations Framework Convention on Climate Change (1994)
The United Nations Convention to Combat Desertification (1996)
Agreement on the Conservation of African- Eurasian Migratory Waterbirds (1999)
The Kyoto Protocol (2005)

TANZANIA

National policies, laws and regulations related to wetlands

The Land Act (1999)
National Water Policy (NAWAP0) (2002)
Forest Act (2002)
Environmental Management Act (EMA) (2004)
National Adaptation Programme of Action (NAPA) (2007)
Water Resources Management Act (2009)
The Wetlands and Wildlife Policy (2010)

International and regional conventions/treaties/protocols on water to which country is a signatory

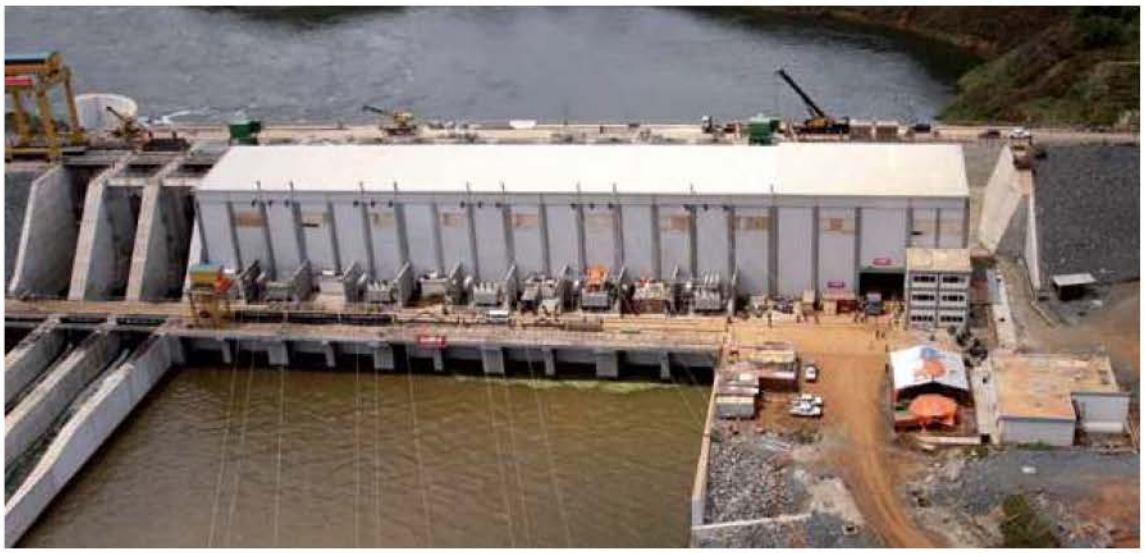
Convention Concerning the Protection of the World Cultural and Natural Heritage (1977)
Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1980)
The United Nations Framework Convention on Climate Change (1996)
The United Nations Convention to Combat Desertification (1997)
Agreement on the Conservation of African- Eurasian Migratory Waterbirds (1999)
Convention on the Conservation of Migratory Species of Wild Animals (1999)
Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat (2000)
The Kyoto Protocol (2005)

UGANDA

National policies, laws and regulations related to wetlands

National Policy for the Conservation and Management of Wetland Resources (1995)
National Environmental Act (1995)
Uganda Wildlife Policy (1996)
National Environment Regulations Wetlands, Riverbanks and Lakeshores Management (2000)
National Environment (Hilly and Mountainous Areas Management) Regulations (2000)
The National Forestry and Tree Planting Act (2003)
International and regional conventions/treaties/protocols on water to which country is a signatory
Convention Concerning the Protection of the World Cultural and Natural Heritage (1987)
Ramsar Convention 1971 and Protocol 1972 (1988) (ratified/contracting party)

Convention on International Trade in endangered Species of wild Fauna and Flora (CITES) (1991)
The United Nations Framework Convention on Climate Change (1994)
The United Nations Convention to Combat Desertification (1997)
Agreement on the Conservation of African- Eurasian Migratory Waterbirds (2000)
Convention on the Conservation of Migratory Species of Wild Animals (2000)
The Kyoto Protocol (2005)



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