



SEMLIKI DELTA TRANSBOUNDARY WETLAND CONSERVATION INVESTMENT PLAN



2021



CONSERVATION INVESTMENT PLAN FOR THE SEMLIKI DELTA TRANSBOUNDARY WETLAND BETWEEN THE DEMOCRATIC REPUBLIC OF THE CONGO AND THE REPUBLIC OF UGANDA



On behalf of:



of the Federal Republic of Germany



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Preface

Wetlands are fundamental for our collective wellbeing, providing essential ecosystem services and opportunities for sustainable economic growth. Despite this, the negative trajectory for these fragile ecosystems has kept its own pace, more so for transboundary wetlands. The Semliki Delta transboundary wetland is no exception: wetland resources are increasingly overexploited; loss of species diversity and abundance is accelerated; extractive industries threaten to open up new fronts; and the impacts of climate change have already significantly disrupted this ecosystem. This spells disaster for the communities that depend on the wetland ecosystem, thus signalling urgent action, including the adoption of pragmatic solutions that will deliver strong conservation and socio-economic outcomes.

In June 2020, the Governments of the Democratic Republic of Congo and the Republic of Uganda adopted the *Transboundary Wetland Management Plan (TWMP) for the Semliki Delta (2020 – 2030).* The TWMP provides a comprehensive implementation framework for the sustainability of the wetland. It also takes cognisance of national, regional and international environmental targets and commitments such as those espoused in the UN Decade on Ecosystem Restoration, the Ramsar Convention, Convention on Biological Diversity Aichi targets and United Nations Framework Convention on Climate Change that provide a window of opportunity to act on a wider scale in addressing the aforementioned challenges.

Nevertheless, there is recognition that wetland financial and management-planning processes are disconnected from each other. This means that the activities that are most important in conservation terms are not necessarily accorded the highest priority when wetland management budgets are requested, allocated and spent. Conservation Investment Plans (CIPs) provide a tool to assist in this process. They give a clear picture of the financial needs that must be met to deliver the management plan, locate the most appropriate funding sources, and identify other actions that are required to overcome the financial constraints for effective wetland management.

This CIP presents the business case - as practical proposals - to mobilise finance for conservation measures of this biologically rich landscape. The objective is to support the implementation of the Transboundary Wetland Management Plan. It represents an important pillar in support of the two countries' vital interests in strengthening their transboundary cooperation for environmental sustainability while contributing to their citizens' well-being and livelihoods. The financing needs outlined in the CIP are intended to supplement existing institutional funding. As such, the CIP has been designed to harmonise and integrate with existing interventions in the wetland, thus providing a comprehensive and coherent framework aimed at guiding strategic investments and programmes. It is targeted at development partners, private and public investors as well as government agencies with an interest to conserve the Semliki Delta wetland landscape. These financial blueprints will further be synthesised into a wider Nile Equatorial Lakes Wetlands Investment Plan (NEL-WIP), a comprehensive regional wetlands Investment programme, which is a precursor to the Multi-sectoral Nile Equatorial Lakes Investment Plan (NEL-IP).

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Acronyms and Abbreviations

amsl	Above Mean Sea Level
AfDB	African Development Bank
AWMZ	Albert Water Management Zone
CBD	Convention on Biological Diversity
СВО	Community Based Organisation
CBD	Convention on Biological Diversity
CDF	Chief of Defence Forces
CFR	Central Forest Reserve
CIP	Conservation Investment Plan
CMS	Conservation of Migratory Species
CORAF	West and Central African Council for Agricultural Research and Development
DAO	District Agricultural Officer
DNRO	District Natural Resources Officer
DRC	Democratic Republic of the Congo
DWD	Directorate of Water Development
EAC	East African Community
EIA	Environmental Impact Assessment
FLEVICA	Fleuves d'Eau Vive qui Coulent aux Autres
FAO	Food Agricultural Organisation
GEF	Global Environment Facility
GIZ	German Technical Cooperation
IBA	Important Bird Area
IBAR	Inter African Bureau for Animal Resources

ICCN	Institut Congolais Pour La Conservation de la Nature
IGA	Income Generating Activity
IWRM	Integrated Water Resources Management
JESE	Joint Effort to Save the Environment
КВА	Key Biodiversity Area
КССА	Karugutu Community Conservation Association
LC	Local Council
LEAF	Lake Edward and Albert Fisheries and Water Resources Management Project
LVEMP	Lake Victoria Environment Management Project
LVFO	Lake Victoria Fisheries Organisation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MESD	Ministry of Environment and Sustainable Development
MWE	Ministry of Water and Environment
NAFIRRI	National Fisheries Resources Research Institute
NBI	Nile Basin Initiative
NEL-IP	Nile Equatorial Lakes Investment Plan
NELSAP	Nile Equatorial Lakes Subsidiary Action Programme
NEL-WIP	Nile Equatorial Lakes Wetlands Investment Plan
NEMA	National Environment Management Authority
NILE-SEC	Nile Basin Initiative Secretariat
NILE-TAC	Nile Technical Advisory Committee
TWMP	Transboundary Wetland Management Plan
UWA	Uganda Wildlife Authority
UGX	Ugandan Shilling

Summary of the CIP

This CIP serves as an instrument to guide finance and investments toward the implementation of strategic actions detailed in the Semliki Delta Transboundary Wetland Management Plan. This entails recognition and inclusion of the key interests of communities and resource user groups who are the main determinants to the conservation of this wetland. The investments projects identified and designed for this wetland will not only contribute to safeguarding its biodiversity and ecosystem values but will also support the development of complementary livelihood opportunities for the riparian associated communities.

Therefore, the Plan has been derived from and guided by the overall Semliki Delta Transboundary Wetland Management Plan and is aligned to the overall objective 'to restore and protect the Semliki Delta wetland resources and functions'.

It takes cognisance and harmonises existing conservation plans and instruments such as the Bundibugyo and Ntoroko District Development Plans; The Greater Virunga Transboundary Collaboration Treaty, 2015; The Environmental Sensitivity Atlas for Semliki Wildlife Reserve; The Economics of Ecosystems and Biodiversity (TEEB) for Semliki, 2019, the Bilateral agreement between Uganda and the DRC on Fisheries Management and development signed during the 7th Uganda – DRC Joint Permanent Commission on 20 October 2018, and the Semliki Delta Wetland Landscape Monograph, 2020. It also tapped into national, regional and international development processes, conventions and agreements.

The CIP structures the conservation priorities laid out in the Semliki Delta Transboundary Wetland Management Plan into coherent, consolidated, costed sets of mutually reinforcing projects. It **offers 3 bankable** investment packages costing US\$ 25,000,000, over 10 years, as follows:

- **IP#1:** Restoring and rehabilitating degraded areas in the wetland landscape. This investment package seeks to restore, rehabilitate, and conserve biodiversity and ecosystem services in the Semliki Delta wetland. It consists of 5 projects with a combined cost of US\$ 10 million
- **IP#2:** Sustainable livelihood improvement. This investment package seeks to develop interventions that offer prospects to improve socio-economic wellbeing and security within key sectors of the wetland ecosystem. It consists of 5 projects with a combined cost of US\$ 13 million.
- **IP#3:** Institutional development. This investment package seeks to develop actions that provide for a more unified approach to transboundary wetland management. It consists of 3 projects with a combined cost of US\$ 2 million

INVESTMENT 1 PACKAGE	INVESTMENT 2 PACKAGE	INVESTMENT 3 PACKAGE	
Ecosystem Restoration & Protection	Sustainable Livelihood Improvement	Institutional Development	
To restore ecological integrity and productivity of the landscape	To reduce pressure and overreliance on wetland resources	To strengthen transboundary wetland coordination and collaboration	
Mapping and demarcation of the wetland	Promoting adoption of sustainable agricultural practices including Climate Smart Agriculture and	Strengthening transboundary cooperatior and integrated wetland management	
Restoring and rehabilitating	paludiculture	Enhancing Institutional Capacity for Transboundar	
	Developing sustainable		
Strengthening sustainable	aquaculture and capture fisheries	Wetland Management	
livestock and pasture management	Establishing agro-based	Raising awareness, suppor and engagement for wetlan	
Establishing fisheries	holders	conservation and wise-use	
Community Conservation Areas			
Developing and disseminating	practices and technologies		
wetland resource	Developing wetland based		

Figure 1: Summary of the Semliki Delta Transboundary Wetland CIP



PART 1:

BACKGROUND AND RATIONALE

1.1 Semliki Delta Conservation Context

Also referred to as Semuliki or Semiliki, the Semliki Delta is the last part of the River Semliki where it empties its waters into Lake Albert. It is part of the Albertine Rift Biodiversity hotspot and is shared between the Democratic Republic of the Congo (DRC) and Uganda, making it a transboundary wetland.

The wetland lies between latitude 1.31 - 0.98 °N and longitude 30.21 - 30.53 °E across the boundary of the Ituri Province, Irumu Territory in DRC and the Western Region in Ntoroko and Bundibugyo Districts of Uganda. The Semliki National Park is located to the Southwest of the 140 km long River Semliki which forms the international border between DRC and Uganda (NBI, 2020b) and covers approximately 830 square kilometres.



SEMLIKI WETLANDS

Figure 2: Location and administrative boundaries of the Semliki Delta wetland landscape (NBI, 2020a)

Semliki Delta is at a geographic crossroad as it transitions between the tropical rainforest in the highlands and dry savannah grassland in the rift valley where wetlands, open water and extensive flat plains are punctuated by deep river valleys. The delta is part of the Guinea-Congolian bio-geographical zone eco-region and contains more endemic and threatened species than any other part of Africa (NBI, 2020c). It holds both globally threatened and restricted-range species and is an important site for the congregation of birds which makes it one of the Important Birds Areas (IBAs) and Key Biodiversity Areas (KBAs) in Uganda (Akwetaireho & Getzner, 2010; Byaruhanga et al., 2001; NBI, 2020c).

Hydrologically, the wetland plays an important role in defining the entire catchment. As is characteristic of a wetland, the water moves more slowly and is stored for a longer period. The large storage capacity allows peak flows, for example resulting from extreme precipitation events, to be stored, thereby reducing flooding. The stored water is then released slowly over a long period, making more water available in the dry season. Water storage in wetland areas not only reduces sediments but also improves water quality. This purification service of the wetland is important for the survival of biodiversity and other life forms (NBI, 2020c).

In terms of capacity for carbon sequestration, part of the wetland landscape contains around 0.05 - 0.1 billion tonnes of peatlands (NBI, 2019). Tropical peatlands such as these are known to be the most space-efficient terrestrial carbon stock pool, with their carbon stock per hectare 10-15 times higher than a tropical rain forest on mineral soil.

Besides the ecological value of wetlands, the Semliki Delta wetland provides important socio-economic services to thousands of people living in Ituri Province of DRC and Ntoroko and Bundibugyo Districts of Uganda. These include food (mainly fish) and materials for construction and crafts, such as reeds and papyrus. Besides, the flat rift valley provides pasture, fodder and grazing grounds for livestock. Other important ecosystem services provided by the Semliki Delta wetlands include cultural values (NBI, 2020b).

The sustainable management of these wetland resources is not limited to physical management, but also incorporates the governance framework (including legislation, policies, economic tools and institutions), and stakeholders involved in wetland management, regulation and utilisation. Several line agencies support the local governments in the DRC and Uganda to manage and oversee conservation activities in the wetland landscape. Key partners in Uganda include the Ministry of Water and Environment (International and Transboundary Water Affairs Department, the Wetland Management Department and the Albert Water Management Zone), the National Environment Management Authority (NEMA), the National Forest Authority (NFA), the Uganda Wildlife Authority (UWA) and the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). In DRC, the Ministry of Environment and Sustainable Development, the Directorate of Water Resources as well as the Ministry of Agriculture, Fisheries and Livestock, provide management support. Together with regional bodies such as the Ramsar Centre for Eastern Africa, Nile Council of Ministers, Nile Technical Advisory Committee and the Nile Basin Initiative Secretariat, the East African Community, non-state actors including private sector institutions and non-government organisations also play a key role in collaborating for wise use of the wetland resources. The role of local community-based organisations and resource user groups (catchment management committees, water user and fisher associations) cannot be understated.

1.2 Threats and Challenges

Despite its economic, social and ecological importance, the Semliki Delta wetland faces several threats and challenges causing changes in its functioning and productivity (NBI, 2020a). These include a high and rapidly rising rate of encroachment, pollution, drainage, and conversion of the wetland.

Wetland **encroachment and deforestation** are widespread problems as farmers extend farmlands, herders need increasingly large areas to graze their livestock, and communities cut papyrus and trees for household use or commercial purposes. This encroachment is compounded by the increase in informal settlements along the riverbanks where natural vegetation is replaced by cultivated land and homesteads. Other than causing vegetation and biodiversity loss, these pressures are aggravating soil erosion, causing increased siltation of River Semliki and Lake Albert and fuelling conflicts amongst the different user groups.

Fragmentation of the natural vegetation, intensification of natural resource use and increase in invasive species in the ecosystem have resulted in declining species populations. Sewage, animal, agricultural and solid waste have resulted in **pollution of open water sources and the environment**.

The peatlands of the Semliki Delta are an important carbon sink. According to the NBI Carbon Study of 2019, **deterioration of these peatlands** through actions such as drainage enhances national carbon emissions at a significant scale. Therefore, the unsustainable use of the wetland, including for water supply, agriculture or energy generation, can turn these peatlands from a carbon sink into a huge carbon source.

Moreover, **resource overexploitation** like unregulated and unsustainable fishing has been found to indiscriminately reduce fish stock and cause the disappearance of breeding sites. Illegal game meat hunting mainly of hippos and crocodiles involves the burning of dense wetland vegetation to ease accessibility.

As a direct result of both physical processes and weak governance capacity in catchment management, the boundaries between the two countries as defined by River Semliki continue to change. Demarcation of areas that should be protected, conserved or restored is missing, and where available, it is unclear which policies, by-laws and regulations apply rendering enforcement difficult. Quite often, these issues come with power struggles between stakeholders. The dispute about changing borders due to the actively meandering River Semliki requires decision making at the highest level.

With the recognition that the underlying threats and challenges of ecosystem degradation are socio-economic, there exists opportunities in addressing their drivers and pressures. These are strengthening the institutional and technical capacity of local, national and transboundary institutions; developing and implementing sustainable income and livelihood sources; and implementation of management actions developed towards wetland and river basin management planning, which includes the *Semliki Delta Transboundary Wetland Management Plan (2020 – 2030)*. Successful Implementation of the Plan will not only contribute to the effective management of the ecosystem and improved livelihoods of the wetland adjacent communities but also contribute to the two countries' national, regional and international obligations on protection and conservation of fragile ecosystems.

1.3 The Business Case for Wetland Conservation and Wise Use

The Semliki Delta Wetland delivers multiple benefits of significant social and economic values that help to address a wide range of needs and objectives. A recent study on the value of the ecosystem services provided by the wetland estimated its worth at about **US\$ 28 million per year** (NBI, 2020a). Many of these ecosystem services are connected to water provision, regulation, purification and groundwater replenishment, and are crucial in addressing objectives of water and food security.

An Important Reservoir of High Species Biodiversity



Wetlands have been called "biological super systems" because they produce great volumes of food that support a remarkable level of biodiversity. Many species of fish and birds rely on wetlands to breed and nurture their young.

The Semliki Delta supports considerable biodiversity of flora and fauna including 325 species of birds, about 20 fish species, 253 species of butterflies and 72 species of dragonflies. Additionally, tourism is increasingly becoming an important activity in the wetland landscape given the location of the delta is next to Semliki Wildlife Reserve and Semliki National Park.

The values that these species draw in terms of habitat, refugia and tourism revenue is estimated at **US\$ 3.4 million/year** for both Uganda and the DRC.

Natural Infrastructure for Food and Water Security

The availability of water in appropriate quality and quantities is a fundamental requirement for sustainable development.



The Semliki Delta provides vital water-related ecosystem services at different scales. Where the water moves slowly and the vegetation is rich and diverse, the wetland provides time and opportunity for physical, chemical, and biological processes to occur. These natural processes remove nutrient contamination, other pollutants, and suspended sediment from the water.

In terms of food security, the wetland is a source of fish for the thriving Lakes Edward and Albert fisheries, as well as the provision of grazing grounds for livestock in its flood plains during the dry season. These services are valued at **US\$ 21.3 million/year**.

Nature's Shock Absorber



Overabundance of water can be problematic. Several excessive flooding events have been experienced between 2010 and 2020 in Semliki Delta resulting in millions of dollars in damage annually, not to mention the devastating consequences to people. Restoring the wetland is one of the solutions that could provide a net economic benefit.

Wetlands function as natural sponges, storing water and slowly releasing it. This process slows the water's momentum, reduces its erosive potential, lowers flood heights, and gives freshwater aquifers the opportunity to recharge. This process lessens damage to life and property. These functions are valued at **US\$ 2.5 million/year**.

Durable and Sustainable Carbon Sink



Wetland plants and soils both play an important role in sequestering carbon. The vegetation temporarily stores carbon dioxide and, when the plants die, the soils provide long-term storage for that carbon.

Recent studies (NBI, 2019) show that the peat deposits in the Semliki Delta of about 0.05 - 0.1 billion tonnes can demonstrate the long-term effectiveness of wetlands in storing carbon. This function is valued at **US\$ 880,000/year**

Healthy Economy



Because a healthy Semliki Delta wetland has the capacity to provide essential services such as removing pollutants from water, storing floodwaters, and sequestering carbon, restoring and protecting it can actually yield economic gains rather than being a financial burden. Without functioning wetlands in the landscape, efforts to replicate their natural services or to address the consequences of not having them are costly.

Nature-based solutions as detailed in Part III of this Plan constitute a lower- cost approach than alternative built capital solutions and offers significant cost savings for the governments of DRC and Uganda.

The productivity and benefits derived from the wetland depend on the health of the system. These values indicate significant environmental, economic and development returns spread across various sectors that can be gained from investing in this transboundary wetland. Additionally, articulation of the economic value for the Semliki Delta ecosystem serves as a clear justification for financing the management and conservation of the wetland landscape through interventions identified in the CIP. It is from this basis that this CIP has been developed.

1.4 What the CIP Seeks to Fund

The CIP has been designed to enhance the implementation of existing conservation and development strategies and plans in Ituri Province of DRC and Ntoroko and Bundibugyo Districts of Uganda that are working towards wetland wise use and conservation in the Semliki Delta landscape. It takes cognisance of the critical shortage of funding to support implementation. As such, the CIP targets the unmet needs of the catchment with an intent to leverage additional resources.

More specifically, the CIP targets to leverage resources to support the delivery of the implementation framework and management actions in the *Semliki Delta TWMP (2020 – 2030)*. The TWMP is based on a vision of 'a sustainably managed Semliki wetland for enhanced biodiversity and community livelihoods' and is guided by the following 3 objectives:



Figure 3: Key Objectives of the Semliki Transboundary Wetland Management Plan (NBI, 2020b)

These objectives are structured into costed investment packages for which it seeks to attract and mobilise additional funding flows. The financing needs identified complement existing institutional, programme and project funding at the local, national and regional levels.

The projects identified for this wetland shall not only contribute to safeguarding its ecosystem values but will also contribute to the development of livelihood opportunities for the wetland adjacent communities, who have, together with other key stakeholders, been involved in the plan development process.

1.5 How the CIP is intended to be used

Although the CIP and the Transboundary Wetland Management Plan are closely linked (the conservation investment planning process is concerned with setting in place the financial conditions to enable effective wetland management), these two documents serve distinct purposes and are addressed to different audiences. The CIP is targeted at potential funders including donors and investors that are interested in conserving the Semliki Delta wetland landscape toward the realisation of the opportunities and benefits of working with wetlands, as well as reversing the consequences of wetland loss and degradation for both people and nature. It presents 3 bankable investment packages, each of which contains 3 to 5 projects for implementation over 10 years.

Each investment project is further linked with the relevant focal point implementer/agency from either government or civil society, implementing partners and local communities. Therefore, it provides a clear linkage between the various actors responsible for various activities at various stages. The focal point agency will be responsible for coordinating specific project activities and overseeing successful implementations.



2.1 Goals and Intended Outcomes

As earlier highlighted, the CIP contributes to the overall vision of the Semliki Delta Transboundary Wetland Management Plan, which calls for sustainable management and utilisation of the natural resources in the wetland landscape to sustain and meet the demands of the growing population.



Figure 4: Summary of CIP Goals and Intended Outcomes

The **first action** focuses on enhancing the ecological integrity and productivity of the wetland system through restoration and rehabilitation of degraded portions of the wetland. The proposed investment projects are targeted at among others, sustainable land and fisheries management and wetland demarcation that requires wetland adjacent communities to be at the centre of each action.

The *second action* is concerned with improving local livelihoods and incomes through sustainable nature-based enterprises to reduce pressure on wetland resources. With proper organisation into user groups, communities will be empowered to adopt the implementation of such new techniques and linked to better markets, not only locally, but also regionally and internationally.

The *third action* looks into strengthening the enabling environment for achieving the above-mentioned goals, with specific attention for transboundary engagements. This goal will involve interventions targeted at capacity strengthening and facilitating cross-border dialogue through the Semliki Transboundary Wetland Management Committee for enhanced transboundary collaboration and cooperation.

2.2 Guiding Principles

In addition to those principles for implementation identified in the Semliki Delta Transboundary Wetland Management Plan adopted by the governments of DRC and Uganda, implementation of this CIP will be guided by the following principles:

The CIP recognises that the Semliki Delta wetland is of ever-growing importance for people. Therefore, ecosystem restoration efforts should maximise multiple benefits (biodiversity, resilience to climate change as well as economic and livelihood benefits). As such, priority should be given to **securing the productivity and functioning of ecosystem services**. Actions to achieve these outcomes are an integral part of the CIP and are detailed in the investment packages. They take cognisance of the linkages between human wellbeing, specifically their dependencies and impacts, which will be managed by applying wetland conservation and wise use principles¹.

In the same vein, the full incorporation of wetland conservation and wise use principles into local, national and regional development planning is essential for successful transboundary wetland management processes. Thus, the CIP builds on, and is consistent with the provisions of existing and planned management instruments such as the Semliki Delta Transboundary Wetland Management Plan (2020 – 2030), the Semliki Delta Wetland Landscape Monograph, 2020; Bundibugyo and Ntoroko District Development Plans 2020/21 – 2024/25; The Greater Virunga Transboundary Collaboration Treaty, 2015; The Environmental Sensitivity Atlas for Semliki Wildlife Reserve; The Economics of Ecosystems and Biodiversity for Semliki, 2020, and the Bilateral Agreement between Uganda and DRC on Fisheries Management of 2018.

Consequently, activities and water resource management decisions upstream in the Semliki River can affect the Semliki Delta in different ways. For example, changes in sediment and water flow regimes can have a profound influence on the wetland hydrological balance. The CIP proposes measures for addressing the **integration of the conservation and sustainable use of the wetland in broad-scale integrated ecosystem management**. This includes the wider Semliki Catchment Management Plan.

On implementation, the proposed actions should consider using the best available science and traditional knowledge. The prior informed consent and full and effective participation of local communities, and the engagement of women and other relevant stakeholders, are important considerations at all stages of the processes. As such, it is only by setting in place conditions under which ecosystems are perceived to be worth more if they are maintained than if they are degraded that people will be willing and able to conserve them, and in return, capture the considerable economic gains and opportunities from doing so. To this end, the CIP projects include activities designed to create adequate, appropriate and sustainable conservation incentives and financing mechanisms for ecosystem managers and users. Having been developed in an integrated and participatory manner, the CIP aims to **foster integration and cooperation between different stakeholder groups**.

¹ The Ramsar Convention defines 'wise use of wetlands' as the sustainable utilisation for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem.

2.3 Coordination and Delivery Mechanisms

The process of developing the Semliki Delta Transboundary Wetland Management Plan and its corresponding CIP facilitated the active participation of stakeholders responding to their particular needs, authority and responsibility for implementation. This highlighted the need to achieve integration and coordination among government actors and line agencies; ensure political support and institutional arrangements for implementation; shape the CIP process to allow flexibility and adaptation to the changing conditions; and achieve consensus on the sustainable use, management and financing of wetland resources.

Therefore, enhancing and improving the collaboration, cooperation and coordination between the institutions involved in wetland management is an integral element in the effective implementation of the CIP. In this context, each project outlined in the CIP has integrated priorities of several agencies, organisations and stakeholder groups into consolidated bundles of activities that are designed to be implemented collaboratively. A focal agency from central or local government is identified for each project. This represents the main coordinating institution for that set of activities and the initial contact point for follow-up, but will not necessarily be the agency that will take the principal role in project development and implementation. A wide variety of implementing partners are listed, one of which has been nominated to lead in taking the project forward in terms of detailed planning. This, therefore, provides clear guidance for users of this Plan on specific entry points for each project.



PART 3: INVESTMENT PACKAGES

3.1 Overview

The CIP comprises **13 bankable projects**, classified into 3 main Investment Packages (IP). It covers a timeframe of 10 years at a total cost of **US\$ 25 million**. Inflation of 10% is also provided for the duration of implementation.

IP#1	P1a	Mapping and demarcation of the wetland	US\$ 750,000
Ecosystem Restoration & Protection	P1b	Restoring and rehabilitating degraded landscapes	US\$ 4M
	P1c	Strengthening sustainable livestock and pasture management	US\$ 2.5M
	P1d	Establishing fisheries Community Conservation Areas	US\$ 2.5M
	P1e	Developing and disseminating operational by-laws for wetland resource conservation	US\$ 250,000
IP#2	P2a	Promoting adoption of sustainable agricultural practices including climate smart agriculture and paludiculture	US\$ 4M
Sustainable Livelihood Improvement	P2b	Developing sustainable aquaculture and capture fisheries	US\$ 5M
	P2c	Establishing agro-based micro enterprises for small holders	US\$ 3M
	P2d	Promoting clean energy practices and technologies	US\$ 500,000
	P2e	Developing wetland based ecotourism	US\$ 500,000
IP#3	P3a	Strengthening transboundary cooperation and integrated wetland management	US\$ 1.5M
Institutional Development	P3b	Enhancing institutional capacity for transboundary wetland management	US\$ 250,000
	P3c	Raising awareness, support and engagement for wetland conservation and wise-use	US\$ 250,000

Table 2: Overview of Investment Packages, Projects and their costs over 10 years

3.2 Investment Package 1: Ecosystem Restoration & Protection

The Semliki transboundary wetland is significant not just for conservation, but also for its contribution to local livelihoods and support to production in other sectors such as agriculture, fisheries, water supply, energy, and tourism. Yet the landscape is under threat due to the pressures resulting from among others, unsustainable water, land and fisheries resource use.

Investment Package 1 seeks to restore, rehabilitate, and conserve biodiversity and ecosystem services in the Semliki Delta wetland. It adopts a bottom-up approach to integrated wetland management planning that involves collaboration among conservation agencies, line ministries, and local resource users. A variety of projects are identified that would operationalise wise use and sustainable management concepts, aiming to balance local development and conservation needs in the face of climate change.

This package targets 5 key result areas which are particularly important to building back better ecosystem conservation, and which currently face critical shortfalls in funding, namely: demarcation and mapping of the wetland which is a key element not just for conservation, but also for conflict resolution; implementation of mechanisms to strengthen sustainable livestock and pasture management; protection of critical habitats and threatened species through the creation of Community Conservation Areas; and development and dissemination of by-laws for wetland resource management which constitute an arena of negotiation and enforcement.

Pla Mapping and demarcation of the wetland

wetland resource conservation

management

P1b Restoring and rehabilitating degraded landscapes

P1c Strengthening sustainable livestock and pasture

P1d Establishing Fisheries Community Conserved Areas

Ple Developing and disseminating operational by-laws for



Expected Results

- Degraded landscapes restored contributing to ecological and social resilience
- Reduced pressure and wetland resource use conflicts
- Improved forage, soil productivity and enhanced carbon sequestration
- Increased fish diversity and abundance in degraded/overexploited sites
- Strengthened community and formal enforcement systems on natural resource use

Figure 6: Investment Package 1 consists of 5 projects with a combined cost of USD 10 Million

Pla	mapping and Demarcation of the wetland
Investment	US\$ 750,000
Priority	Very high
Need and Basis for Action	River Semliki has always defined part of the country boundary between the DRC and Uganda. But with its volume and course determined by the amount of runoff from the Rwenzori Mountains, the melting of glaciers as a result of higher temperatures coupled with increased sedimentation has seen the river vary course in recent times. These unclear boundaries have been a source of conflict between the neighbouring communities. In addition, when it is unclear which riparian policies or regulations apply, this makes monitoring and enforcement difficult.
Scope and Content	This project will ensure that the wetland boundary is (re)surveyed, mapped and identified with markers. This will be undertaken with the active participation of wetland communities and line agencies from both sides of the border. Sensitisation efforts on conservation approaches, rights and responsibilities of stakeholders in the wetland will also be undertaken. A process of dialogue will be facilitated by the Semliki Delta Transboundary Wetland Management Committee to provide for the development and implementation of collaborative management arrangements for wetland ecosystem use.
Indicative Activities	 Facilitate multi-stakeholder dialogue on the need and process of wetland demarcation, including mediation over competing claims on wetland resources Map and place markers along the wetland with the participation of key stakeholders Demarcate a zone of non-utilisation along the riverbanks to allow vegetation to regenerate to stabilise the riverbanks and control erosion Develop awareness and capacity of wetland management committees and wetland adjacent communities on their rights and responsibilities for wetland management
Results and Beneficiaries	 Reduction of wetland resource use conflicts and contestations over boundaries Ease in monitoring and enforcement of resource use Better understanding of stakeholder roles and responsibilities in wetland conservation and management The primary beneficiaries will be wetland adjacent communities and stakeholders that depend on the productivity of the wetland ecosystem from Ituri Province (DRC) and Ntoroko and Bundibugyo Districts (Uganda).
Focal Agencies	DRC: Water Resources DirectorateUganda: Ministry of Water and Environment
Other Partners	 DRC: Ministry of Environment and Sustainable Development; Ituri Province Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments Semliki Transboundary Wetland Management Committee
Potential Investors	• FAO, AfDB, GEF, GIZ, UNDP

Table 3: Summary of Investment Package 1 (Ecosystem Restoration and Conservation) Plan Manning and Domarcation of the Wotlan

P1b	Restoring and Rehabilitating Degraded Wetland Landscapes
Investment	US\$ 4 Million
Priority	Very high
Justification	Investing in restoration and rebuilding degraded areas with climate-sensitive measures to improve biodiversity, increase habitat for wildlife and fisheries, enhance soils and catchment areas, support economic resilience and better confront a changing climate are critical to supporting human health and wellbeing. Prioritising wetland ecosystem restoration in the Semliki Delta can thus generate improvement in both ecological and social conditions.
Scope and Content	This project will restore and rehabilitate degraded ecosystems within the Semliki Delta wetland landscape, including the riparian, swamps, grasslands and other natural habitats. The primary focus will be on the establishment of green borders and the integration of sustainable land management measures such as farmer-managed natural regeneration. This will ensure the participation of wetland adjacent communities in the restoration process. Efforts will also be made to rehabilitate wetland areas by making use of available scientific, traditional and local knowledge.
Indicative Activities	 Engage stakeholders and support participatory governance in planning and decision-making regarding natural resource use, restoration goals and strategies, implementation methods, benefit sharing, monitoring and review processes Prioritise and resolve key governance challenges that may impede restoration such as poor participatory mechanisms and conflicts over land and resource rights Range improvement for targeted species Develop long-term agreements for landscape management Monitor impacts on species, habitats and restoration of key ecosystem services
Results and Beneficiaries	 Restored local wetland systems including soil and water cycles with the active involvement of and benefit to local communities Increased wetland productivity (sustainable economies and thriving biodiversity) Reduced vulnerability against disaster risks related to ecosystem degradation The primary beneficiaries will be wetland adjacent communities and stakeholders that depend on the productivity of the wetland ecosystem from Ituri Province (DRC) and Ntoroko and Bundibugyo Districts (Uganda).
Focal Agencies	 DRC: Water Resources Directorate Uganda: Ministry of Water and Environment
Other Partners	 DRC: Ministry of Environment and Sustainable Development; Ituri Province, LEAF III Project, FLEVICA Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, Albert Water Management Zone Semliki Transboundary Wetland Management Committee
Potential Investors	• FAO, GEF, World Bank, Private Sector

P1c	Strengthening Sustainable Livestock and Pasture Management
Investment	US\$ 2.5 Million
Priority	High
Justification	Livestock keeping is a major economic activity along the riverbanks on both sides of the border. On the Ugandan side, the area has been overstocked and overgrazed, leading to severe trampling of the vegetation, especially around the river watering points. The recurrent drought, degraded rangelands and reduced access to traditional grazing lands have left pastoral communities in the wetland area vulnerable. Climate change adds an extra layer of vulnerability to this already fragile ecosystem, exacerbating the underlying causes of poverty and food insecurity. There is thus a need to improve the sustainability of livestock and pasture management to address conservation threats and strengthen community livelihoods within the wetland landscape.
Scope and Content	This project will develop and deliver measures for reducing livestock-related pressures on the wetland ecosystem and adding value to sustainable livestock production. These measures include formulation and enforcement of by-laws regulating the entry of cattle into ecologically sensitive areas, improving pasture production, management and utilisation through learning activities aimed at improving the capacity of pastoral communities and at stimulating local innovation while building on local knowledge.
Indicative Activities	 Scope needs and niche for sustainable livestock production Formulate by-laws and agreements to regulate grazing in sensitive areas Train livestock workers and farmer groups on the establishment of sustainable pasture and livestock management, production, and marketing systems Support introduction of improved breeds and farm-based feeding practices Construct water storage facilities for irrigation and livestock use during dry seasons
Results and Beneficiaries	 Restored wetland degraded areas Improved sustainability and profitability of local livestock production systems Improved forage, soil productivity and enhanced carbon sequestration Reduced conflict over natural resources, including water and pasture The primary beneficiaries will be wetland adjacent communities including pastoralists and stakeholders that depend on the productivity of the wetland ecosystem from Ituri Province (DRC) and Ntoroko and Bundibugyo Districts (Uganda).
Focal Agencies	 DRC: Ministry of Agriculture, Fisheries and Livestock Uganda: Ministry of Agriculture, Animal Industry and Fisheries
Other Partners	 DRC: National Agricultural Study and Research Institute; Ituri Province, LEAF III Project, FLEVICA; International Livestock Research Institute, Local Government Uganda: National Agricultural Research Organisation, LC III, Ntoroko and Bundibugyo District Governments, Butungama Livestock Cooperative Society
Potential Investors	• AfDB, Netherlands Ministry of Foreign Affairs, FAO, BMUB, Private Sector

P1d	Establishing Fisheries Community Conservation Areas
Investment	US\$ 2.5 Million
Priority	Very high
Justification	In the Semliki Delta, local communities face a growing crisis in biodiversity loss due to poor and illegal fishing activities. Predictive climate scenarios for this ecosystem include significant temperature increases, severe weather events and other adverse effects. This affects especially the local people who may no longer have access to this resource that supports livelihoods and economies. There is therefore an urgency to protect wetlands and fisheries to promote suitable utilisation of these resources for improved health of the resource and enhancement of the quality of people's lives. Recent conservation efforts and practices have demonstrated that wetland biodiversity can be successfully achieved through full community involvement hence the need to encourage the establishment of Community Conservation Areas.
Scope and Content	This project will develop and deliver a package of measures for a community-based approach to fisheries resource management. These measures include setting aside areas previously used as fishing grounds for protection by local communities through consultations with other key actors in the wetland landscape.
Indicative Activities	 Facilitate consultative meetings between fishing communities and key line agencies for community conservation area development Feedback to the larger stakeholder groups (i.e., fishers, boat operators, fish traders, Residential hotels) Conduct participatory mapping and inventory Develop local fisheries community conservation agreements Training on biodiversity monitoring
Results and Beneficiaries	 Critical habitats and threatened species protected Destructive fishing techniques reduced Indigenous knowledge and practices on wetland conservation maintained Sustainable access to livelihood resources secured Financial benefits to local communities including Beach Management Units obtained Sustainable extractive exploitation of certain species for livelihoods explored The primary beneficiaries will be fishing communities and stakeholders that depend on the productivity of the wetland ecosystem from Ituri Province (DRC) and Ntoroko and Bundibugyo Districts (Uganda).
Focal Agencies	 DRC: National Agricultural Study and Research Institute (INERA) Uganda: The National Fisheries Resources Research Institute (NaFIRRI)
Other Partners	 DRC: Department of Fisheries, Ituri Province, LEAF III Project, Fish Farmers Associations Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, Albert Water Management Zone
Potential Investors	 World Bank, AfDB, AU, FAO, UNDP

P1e	Developing and Disseminating Operational By-laws for Wetland
	Resource Conservation
Investment	US\$ 250,000
Priority	High
Justification	Providing mechanisms through which local practices, cultures and innovations can be mainstreamed into official regulatory frameworks for natural resource management in the Semliki Delta wetland landscape arises from the recognition that compliance with laws and regulations is relative to the extent to which it reflects local customs, traditions and value systems of the people it is intended to govern. As such, to facilitate sustainability of ecosystem restoration and protection measures there is a need to strengthen the role of local communities in the management of resources. Formalising and enforcing locally recognised rules and regulations for wetland management through local by-laws could provide a framework for effective governance of natural resources by local communities.
Scope and Content	This project will work with resource users to develop by-laws at the decentralised level that recognise and build on customary rules and regulations. At the same time, resource users will be sensitised and trained on sustainable practices and technologies, and the capacity of environmental and law enforcement agencies to monitor and regulate compliance will be strengthened. More security over local rights to a resource base encourages investment that is more appropriate, enables effective decision making on use and management and enhances the well-being of local communities.
Indicative Activities	 Collection and collation of information on customary rules for natural resource governance in consultation with key stakeholders Translation of customary rules and regulations into a language that will permit for their enactment as regulations within the framework of relevant laws Presentation of the draft by-laws to the community and the holders of customary law for validation and approval
Results and Beneficiaries	• Strengthened community and formal enforcement systems on natural resource management
	The primary beneficiaries will be wetland adjacent communities that depend on the productivity of the wetland ecosystem from Ituri Province (DRC) and Ntoroko and Bundibugyo Districts (Uganda), and the regulatory agencies in both countries.
Focal Agencies	 DRC: Ministry of Environment and Sustainable Development Uganda: National Environment Management Authority
Other Partners	 DRC: Irumu Territory Chiefdoms; Ituri Province, Water User Associations Uganda: Catchment Management Organisation, LC III, Ntoroko and Bundibugyo District Governments, National Environment Management Authority Semliki Transboundary Wetland Management Committee
Potential Investors	• SIDA, BMUB, DANIDA, USAID

3.3 Investment Package 2: Sustainable Livelihood Improvement

Studies conducted on the Semliki Delta landscape including the 'Economic Assessment of the Ecosystem Services of the Semliki Delta Transboundary Wetland in Uganda and the Democratic Republic of the Congo' (NBI, 2020a) acknowledge the vital role of incentives for sustainable resource use in the wetland landscape. This is against the backdrop of the heavy reliance on wetland resources by communities for their subsistence. With the understanding of the impact of wetland ecosystem degradation on the poor who are more vulnerable to loss of environmental resources - due to a lack of alternative assets, there is a need to develop and implement solutions that address this twin challenge.

Investment Package 2 seeks to develop interventions that offer prospects to improve socio-economic wellbeing and security within key sectors of the wetland ecosystem. From sound ecotourism schemes to climate-smart agriculture and paludiculture which intends to maintain carbon storage in the peatlands of the Delta, to sustainable aquaculture and capture fisheries, these are some of the livelihood opportunities where wetland adjacent communities can compete without doing undue damage to the environment. All of these activities have been, and remain underfunded.

This package targets 5 key result areas which look at win-win solutions for both people and nature. By integrating biodiversity and sustainable livelihoods at the local level, emphasis is also laid on the need for improved governance to empower disenfranchised communities and stakeholders to contribute to negotiated solutions and ensure that the role of ecosystems as present and future livelihood support systems is taken into account in key public investment decisions.

Sustainable Livelihood Improvement To reduce pressure and overreliance on wetland resources

- P2a Promoting adoption of sustainable agricultural practices including Climate Smart Agriculture and paludiculture
- P2b Developing sustainable aquaculture and capture fisheries
- P2c Establishing agro-based micro enterprises for small holders
- P2d Promoting clean energy practices and technologies P2e Developing wetland-based ecotourism

Expected Results

IP#2

- Improved understanding and adoption of climate smart agriculture practices for increased community and ecosystem resilience
- Diverse livelihood activities undertaken by local communities and supplementing income streams
- Improved access and sustainable use of resources
- Improved enabling environment for efficient value chains and equitable livelihoods

Figure 7: Investment Package 2 consists of 5 projects with a combined cost of US\$ 13 Million

P2a	Promoting Adoption of Sustainable Agricultural Practices
	Including Climate Smart Agriculture and Paludiculture
Investment	US\$ 4 Million
Priority	Very high
Justification	Enhancing food security while contributing to mitigate climate change and preserving the natural resource base and vital ecosystem services requires the transition to more productive agricultural production systems, use inputs more efficiently, have less variability and greater stability in their outputs and are more resilient to risks, shocks and long-term climate variability. This more productive and resilient agriculture requires a major shift in the way land, water, soil nutrients and genetic resources are managed to ensure that these resources are used more efficiently (FAO, 2014).
Scope and Content	Successful implementation of this project requires changes in national and local governance, legislation, policies and financial mechanisms. This transformation will also involve improving producers' access to markets. By reducing greenhouse gas emissions per unit of land and increasing carbon sinks, these changes will contribute significantly to the mitigation of climate change. Emphasis will be put on employing a participatory approach based on working with farmers themselves to select techniques and practices that will yield both environmental and livelihood benefits targeted to local needs, conditions, constraints and opportunities in the wetland landscape.
Indicative Activities	 Identify and promote appropriate climate smart agriculture techniques and practices Empower local stakeholders and institutions responsible for coordinating and facilitating landscape management activities Monitor impacts on soil and crop productivity Establish paludiculture demonstration sites
Results and Beneficiaries	 Improved understanding and adoption of Climate Smart Agriculture practices for increased community and ecosystem resilience Paludiculture pilots contributing to the recovery of the landscape water regime established Sustainable agricultural production on peatlands implemented Reduced net greenhouse gas emissions from agriculture and other forms of land use The primary beneficiaries will be farmers from Ituri Province (DRC) and Ntoroko and Bundibugyo Districts (Uganda).
Focal Agencies	 DRC: Ministry of Agriculture Uganda: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)
Other Partners	 DRC: National Institute for Study and Agronomic Research (INERA); Ituri Province, FLEVICA, Local Government, CORAF Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, Climate Change Department
Potential Investors	SIDA, AFRI, The Conservation Fund, EU

P2b	Developing Sustainable Aquaculture and Capture Fisheries
Investment	US\$ 5 Million
Priority	Very high
Justification	Fisheries of the Semliki Delta are fundamental to nutrition, food security, livelihoods and societal well-being. The increasing demand for fish, combined with a variety of other factors such as over-fishing, use of unsustainable methods and gear, and destruction of natural habitats, has meant that capture fisheries are no longer sufficient. There is a need to find reliable sources of fish production that can meet people's needs for food and income, at the same time as reducing pressure on wild fish stocks in the wetland.
Scope and Content	This project will develop and promote sustainable aquaculture as a supplementary form of fisheries production, preferably using indigenous and non-predatory species such as <i>Mukene</i> and <i>Nyarugasa</i> . Efforts will be made to equip farmers and isherfolk with the expertise to carry out aquaculture, focusing especially on cage fish and finger pond farming, and to develop viable fish-based businesses. Guidelines will be developed and training delivered on sustainable, low environmental impact approaches to cage fish and finger pond farming.
Indicative	Conduct community needs assessment, market research, technical and financial
Activities	 feasibility studies to identify the most appropriate and sustainable aquaculture species, technologies, markets and value addition opportunities Develop guidelines and training materials in cage fish farming Establish fish breeding centres and distribution networks Establish demonstration sites and model fish farms Conduct community outreach, training and sensitisation on aquaculture Provision of material support to the development of fish farms, processing and value-addition marketing systems, credit extension
Results and	Improved income for fishers and aquaculture farms
Beneficiaries	 Increased fish production (in both capture and aquaculture fisheries) Improved nutritional well-being and inclusive livelihood securing for young and women entrepreneurs.
	The primary beneficiaries will be the isherfolk that depend on the wetland ecosystem from Ituri Province (DRC) and Ntoroko and Bundibugyo Districts (Uganda).
Focal Agencies	 DRC: Ministry of Agriculture Uganda: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and National Fisheries Resources Research Institute (NAFIRRI)
Other Partners	DRC: Department of Fisheries, Ituri Province, LEAF III Project, CSOs
	Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, CSOs
Potential Investors	• World Bank, AfDB, AU, FAO, UNDP

P2c	Establishing Agro-based Micro Enterprises for Smallholders
Investment	
Investment	US\$ 3 Million
Justification	Majority of the households living in the wetland landscape rely on subsistence agricultural production (livestock, fisheries or crop production). Over the years, productivity has declined, leading to increased encroachment and degradation of natural resources. The thousands of smallholders with access to limited landholdings in the areas surrounding the Semliki Delta present an opportunity for the private sector and governments to diversify their portfolio of suppliers of agricultural produce. In supporting the development of economic diversification and sustainable livelihoods, there is a need to develop and demonstrate the profitability of economic opportunities and value-addition associated with sustainable products and markets as compared to more environmentally degrading sources of income and production.
Scope and Content	This project will work with smallholder producers to identify, develop, and facilitate the uptake of agro-based enterprises. This involves working with the private sector and other stakeholders to provide support for the upgrade of smallholders' production factors as a direct response to farmers' lack of resources. Companies can either provide production factors directly or facilitate access to credit.
Indicative Activities	 Conduct research and develop innovations linked to agribusiness Upgrade smallholders' production factors (farming inputs and access to credit) Inform, train and consult to transfer knowledge and build capacity Agree on and enforce rules which are an important part of establishing common ground between stakeholders and smallholder business partners Strengthen links within the value chain
Results and Beneficiaries	 Smallholders earn greater incomes by improving the quality and quantity of their produce Improved access to finance and supplies Enhanced resilience and adaptation capacity in the face of external shocks and stresses and improved environmental conditions on and around farms Primary beneficiaries will be farmers living in the wetland landscape while other sectors and groups within the broader landscape will also benefit from improvements in the provision of agroecosystem services.
Focal Agencies	 DRC: Ministry of Agriculture Uganda: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)
Other Partners	 DRC: Ministry of Infrastructure, Public Works and Reconstruction; Ituri Province Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, Albert Water Management Zone Private sector partners
Potential Investors	• AU, FAO, GIZ, WWF, UNDP, NBI, World Bank, AfDB, BMUB

P2d	Promoting Clean Energy Practices and Technologies
Investment	US\$ 500,000
Priority	High
Justification	Reduction in forest cover in the areas adjacent to the Semliki Delta is partly due to increased demand for wood as the primary source of fuel energy for communities and they lack alternative sources of energy. This has created a need to explore alternative sources of energy so that forests are spared for performing their ecological and social-economic functions including absorption of carbon emissions. Moreover, the adoption of more energy-efficient technologies and products can aid climate adaptation and mitigation, improve household energy security, and reduce women's labour in search of wood fuel sources.
Scope and Content	This project will introduce and disseminate energy-saving wood fuel technologies (such as energy-efficient stoves and charcoal kilns) and other alternative forms of renewable energy (such as biogas, solar and non-wood charcoal briquettes). At the same time, it will focus on income generation and cost reduction through training local artisans and community groups in the construction, marketing, use and maintenance of these more sustainable and affordable energy technologies.
Indicative	Conduct an inventory of energy demand, needs and preferences
Activities	 Identify appropriate, affordable and sustainable alternative energy sources and energy-efficient technologies Establish household, commercial and institutional demonstration sites Community outreach and education on alternative energy sources and energy-efficient technologies Start-up/seed funds for the development of sustainable energy-based businesses and construction, marketing and use of energy-saving technologies
Results and Beneficiaries	Reduction in the rampant degradation of these ecosystems and the negative consequences such as increased poverty levels, climate variability and reduced food security arising out of their degradation.
	The primary beneficiaries will be at least 300 households that depend on the productivity of the wetland ecosystem.
Focal Agencies	DRC: Ministry of Energy and Hydraulics
	Uganda: Ministry of Energy and Mineral Development
Other Partners	 DRC: Ministry of Environment and Sustainable Development; Local Government and Municipal Councils Uganda: National Forestry Authority, LC III, Ntoroko and Bundibugyo District Governments, Forestry Sector Support Department (FSSD), National Environment Management Authority (NEMA), Civil Society Organisations (CSOs), private sector
Potential Investors	AfDB New Deal on Energy for Africa and Sustainable Energy Fund for Africa, GCF

P2e	Developing Wetland Based Ecotourism
Investment	US\$ 500,000
Priority	High
Justification	The Semliki Delta is a unique wetland ecosystem that can provide for the enjoyment of rich biodiversity, functioning and values of the environment. Its cultural specificity, heritage and biodiversity of wetland ecosystems provide benefits and is appropriate for ecotourism development. Despite this, the tourism sector activities remain largely uncoordinated and unplanned and are not yet harmonised either with environmental principles and regulations or with best practices in community participation.
Scope and Content	This project will support and facilitate the development of ecotourism in the Semliki Delta wetland landscape. It will formulate a coherent development strategy, based on the needs and preferences of key stakeholders and on a sound understanding of market demand and potential. Basic materials, infrastructure and facilities will be established with which to launch the sector. At the same time, efforts will be made to equip key government, private sector and community stakeholders with the capacity and means to deliver ecotourism in the wetland site.
Indicative Activities	 Conduct market assessment of ecotourism potential, demand and industry interest Identify potential local service providers Formulate landscape-level ecotourism strategy Conduct strategic environmental and social impact assessment of sector development Establish multi-stakeholder dialogue platforms, facilitation of joint planning Develop a code of conduct for ecotourism operation and engagement Capacity building of local communities in key skills relating to ecotourism activities Support the development of basic ecotourism infrastructure and facilities Support the implementing institutions to monitor and coordinate execution.
Results and Beneficiaries	Environmentally sound, socially responsible tourism will be initiated which fully engage and benefit local communities while enhancing biodiversity and ecosystem services, and local capacity will be built to jointly manage, deliver and maintain the ecotourism sector. The primary beneficiaries will be local communities, as well as other public and private sector groups engaged in the ecotourism industry. Recreational, educational and cultural visitors to the wetland will also gain from new tourism facilities and opportunities
Focal Agencies	 DRC: Ministry of Environment and Sustainable Development Uganda: Ministry of Tourism, Wildlife & Antiquities (MTWA), Uganda Tourism Board (UTB), Local Government (LG)
Other Partners	 DRC: Directorate of Water; Ituri Province Uganda: Uganda Tourist Association (UTA), Uganda Community Tourism Association Uganda Wildlife Authority (UWA), National Forestry Authority, National Environment Management Authority Civil Society Organisations (CSOs), cultural institutions, private sector
Potential Investors	UNDP, GEF, Royal Society for Protection of Birds, Private Sector

3.4 Investment Package 3: Institutional Development

Different policies, laws and agencies in DRC and Uganda touch on the transboundary resources of the Semliki Delta and its associated landscape. In this setup, harmonious governance structures must be sought and guided either by regional or international legal frameworks or by mutual agreements through by-laws. However, there is minimal coordination between these two countries as far as the management of Semliki delta wetland resources is concerned. This, therefore, implies that there is a clear need to strengthen existing institutions and to identify where additional guidelines, regulations or mechanisms are needed for the effective, equitable and sustainable functioning of the wetland ecosystem.

Investment Package 3 seeks to develop actions that provide for a more unified approach to wetland management that would accommodate different interests and establish a coherent and comprehensive framework for wetland conservation, wise use, and sustainable management.

This package targets 3 key result areas which look at strengthening wetland governance structures while building awareness and capacity among different stakeholders. The measures are designed to enhance important conditions for integrated wetland management: enhance institutional and legal frameworks (including government accountability and capacity), fostering stakeholder collaboration, and raising public awareness. The Semliki Transboundary Wetland Management Committee will play a key role in developing this package.



- Improved cooperation and understanding of transboundary wetland functions and systems by different actors in the wetland landscape
- Improved awareness on the values of wetlands through outreach campaigns and public awareness
- Actively engaged community groups supporting local authorities with resource monitoring and implementation of prioritised actions

Figure 9: Investment Package 3 consists of 3 projects with a combined cost of US\$ 2 Million

P3a	Strengthening Transboundary Cooperation and Integrated
	Wetland Management
Investment	US\$ 1.5 Million
Priority	Very high
Justification	Transboundary wetlands are vital for populations, ecosystems and the development of basins, but these resources are under growing pressure, making it crucial to cooperate for their effective management. However, many obstacles exist that can prevent countries from strengthening or embracing the joint management of transboundary waters in an effective way, which in turn can hinder this cooperative process. This includes inadequate collaboration and cooperation toward integrated wetland management. This calls for steadfast cooperation building to continue generating benefits for the two countries.
Scope and Content	This project will focus on enhancing integrated wetland management through improved transboundary cooperation and sustained ecosystem services. It takes cognisance that the right communication throughout the cooperation process and at all levels (from local communities to high-level decision-makers is a core element to both initiate and sustain cooperation. For effectiveness, the proposed actions will cover the local, national and regional level stakeholders.
Indicative Activities	 Facilitate regular meetings of the Semliki Delta Transboundary Wetland Management Committee Conduct bi-annual monitoring and review of actions touching on the wetland Joint resource mobilisation to finance development projects including those identified in the Transboundary Wetland Management Plan and help gain the support of and endorsement by local populations where appropriate Collaboration sought with other partners working in the region
Results and Beneficiaries	 Improved cooperation and understanding of transboundary wetland functions and systems by different actors in the wetland landscape More equitable use and distribution of benefits Reduced instances of natural resource use and management conflicts The primary beneficiaries will be wetland adjacent communities and stakeholders that depend on the productivity of the wetland ecosystem.
Focal Agencies	 DRC: Ministry of Environment and Sustainable Development, Directorate of Water Uganda: Ministry of Water and Environment
Other Partners	 DRC: Directorate of Water; Ituri Province, Catchment Management Organisation Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, Albert Water Management Zone, RAMCEA Semliki Transboundary Wetland Management Committee
Potential Investors	USAID, UNDP, DANIDA, SIDA, Government of Uganda, DRC

P3b	Enhancing Institutional Capacity for Transboundary Wetland
	Management
Investment	US\$ 250,000
Priority	Very high
Justification	The conservation, wise use, and sustainable management of the Semliki Delta wetland require the direct involvement of a wide range of actors. There is a need to ensure that wetland managers and users within government, local communities, and the private sector fulfil their mandates regarding wetland conservation, and manage the impacts of their activities on the natural environment. Yet many do not possess the knowledge and competencies to engage in wetland and climate-related activities and are not conversant with environmental rules and regulations governing their activities. There is an urgent need to build institutional capacity and accountability regarding wetland-related environmental rights and responsibilities.
Scope and Content	This project will strengthen the wetland conservation capacity, knowledge, and competence among government agencies and CSOs. This will include providing technical knowledge, training, and instilling general awareness and knowledge required to increase accountability in planning and implementing conservation and development activities within the wetland landscape.
Indicative Activities	 Formulate and implement a capacity building programme to include training on Integrated Water Resources Management and ecosystem-based approaches, with consideration of climate adaptation and gender Design and deliver targeted training on technical skills and knowledge related to wetland conservation and management Facilitate transboundary exchange visits for cross-learning and experience sharing
Results and Beneficiaries	 Site and local level knowledge improved for better transboundary wetland management Strengthen the capacity of relevant institutions to effectively manage the wetland landscape The primary beneficiaries will be technical and administrative staff of local government and line agencies, law enforcement officers, and civil society groups.
Focal Agencies	DRC: Directorate of WaterUganda: Ministry of Water and Environment
Other Partners	 DRC: Ituri Province, LEAF III Project, Catchment Management Organisation Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, Albert Water Management Zone, RAMCEA Semliki Transboundary Wetland Management Committee, Civil Society Organisation
Potential Investors	• SIDA, UNDP, World Bank, GEF, AfDB

P3c	Raising Awareness, Support and Engagement for Wetland Conservation and Wise-Use
Investment	US\$ 250,000
Priority	High
Justification	Wetland conservation, wise use, and sustainable management cannot be achieved without the active cooperation and support of local communities. Yet, inadequate awareness of the value of wetland ecosystems by riparian communities in addition to their hydrological and ecological functioning continues to hinder more sustainable use of the resources. Building community awareness on these topics can lend important support to conservation efforts in and around the wetland and help identify entry points for better engagement, support, and maintenance of local livelihoods within a sustainable wetland management framework.
Scope and Content	This project will develop and deliver conservation awareness activities among wetland community members. It focuses especially on wetland resource users and land managers, and on local leaders who can influence others' preferences, aspirations, actions, and decisions. As such, it complements the more technical training and skills-building activities in support of sustainable livelihoods. In addition to raising awareness, these activities are expected to fulfil an important role in leveraging local support and buy-in for wetland conservation and empowering community members to better participate and engage in conservation activities
Indicative Activities	 Conduct a strategic assessment of community interests, influences, aspirations, and concerns regarding wetland ecosystems Design content and prepare targeted educational and awareness materials Develop visual and print materials, and social media campaigns Conduct education and awareness campaigns at the transboundary level on the importance of the wetland
Results and Beneficiaries	 Enhanced awareness and education among wetland resource users Enhanced support for wetland wise use, reduced threats to the environment, and increased engagement and participation in conservation activities. The primary beneficiaries will be wetland communities
Focal Agencies	 DRC: Ministry of Environment and Sustainable Development Uganda: Ministry of Water and Environment
Other Partners	 DRC: Directorate of Water; Ituri Province, LEAF III Project, FLEVICA Uganda: National Environment Management Authority, LC III, Ntoroko and Bundibugyo District Governments, Albert Water Management Zone Semliki Transboundary Wetland Management Committee, RAMCEA
Potential Investors	• SIDA, UNDP, World Bank, GEF, AfDB

PART 4: MONITORING

This document details an impact investing approach, where the involved actors seek to create both financial return, and positive ecological and social impact that is actively measured. For this to happen, the proposed conservation actions in the Semliki transboundary wetland must continue to become more efficient and effective, especially where development and population growth pressures continue to escalate. This calls for the adoption of sound measures of monitoring the outcomes of investments and blended financial transactions from a broad coalition of stakeholders interested in wetland conservation.

The identified project focal agencies will play a pivotal role in developing and implementing ex-ante and expost impacts of investments at a range of scales and over a range of timescales. This includes an analysis and comparison of potential and achieved return on investment across specific portfolios, developing and tracking impacts against local, national and global targets.

Moreover, the Semliki Transboundary Wetland Management Committee will support the monitoring and evaluation of the actions.



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