



SIO-SITEKO TRANSBOUNDARY WETLAND CONSERVATION INVESTMENT PLAN



2021



CONSERVATION INVESTMENT PLAN FOR THE SIO-SITEKO TRANSBOUNDARY WETLAND BETWEEN THE REPUBLIC OF KENYA AND THE REPUBLIC OF UGANDA



On behalf of:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

of the Federal Republic of Germany



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Preface

Wetlands provide innumerable services that underpin food security, human well-being and indeed, the global economy. These services are rarely valued in terms that are entered into economic debates within local, national and regional planning processes, and are thus often traded away inappropriately. For transboundary wetlands, this lack of prioritisation is more evident. This is the case for the Sio-Siteko transboundary wetland, where sand harvesting, charcoal burning, wetlands encroachment and other exploitative activities have resulted in landscape degradation and loss of ecosystem services. These examples are only the tip of the iceberg. Given the complexity and interdependencies of nature, there are many risks that spell 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 Republic of Kenya and the Republic of Uganda adopted the *Sio-Siteko Transboundary Wetland Management Plan (2020 – 2030)*. The Transboundary Wetland Management Plan (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, which provides a window of opportunity to act on a wider scale in addressing the aforementioned challenges.

There is recognition that a healthy planet is good for business, where it is far cheaper to prevent environmental damage than to address it afterwards. However, for ecosystems such as wetlands, most 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 the other actions that are required to overcome the financial constraints for effective wetland management.

This CIP presents the business case – as practical proposals - mobilise finance for conservation measures of this biologically rich landscape. The objective is to support the implementation of the Sio-Siteko 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 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 Sio-Siteko 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).

Acknowledgements

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As the plan development process was highly consultative, valuable contributions were made by key stakeholders of the Sio-Siteko wetland landscape during field campaigns and consultative stakeholder workshops. The implementation team benefited from inputs provided by Jackson Twinomujuni, Commissioner, Transboundary Water Resources Management (Uganda), Lucy Iyango, Assistant Commissioner, Wetlands (Uganda), Wycliffe Tumwebaze, Senior Water Officer (Uganda), George Wamunga, Senior Wetlands Officer (Uganda), Sylvano Afai, Ministry of Water and Environment (Uganda), Lillian Taaka, Busia District Forest Officer (Uganda), Namajja Teopista, Senior Environment Officer (Uganda), Eugene Egesa, District Fisheries Officer (Uganda), Gladys Wekesa, Director Transboundary Water Resources Department, Ministry of Water, Irrigation and Sanitation (Kenya), Andrew M. Kinyua, Deputy Director, Water Quality Monitoring Ministry of Water, Irrigation and Sanitation (Kenya), Rose Ogara Fukwo, Regional Manager, Lake Victoria North Catchment Area, Water Resources Authority (Kenya), Stephen Manegene, Director Wildlife, Ministry of Tourism and Wildlife (Kenya), Roselyne Lunyolo, Water Resources Authority (Kenya), Edwin Menza, National Environment Management Authority (Kenya), Frederick Ashiono, Kenya Forest Service (Kenya), Dr Isaac Alukwe, County Executive Committee Member, Department of Environment, Water and Natural Resources, Busia County (Kenya) and Fred Mwangi, Regional Water Expert (IGAD).

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Table of Contents

Preface..... 3

Acknowledgements 4

Table of Contents..... 5

List of Figures..... 6

List of Tables 6

Acronyms and Abbreviations 7

Summary of the CIP 9

PART 1: BACKGROUND AND RATIONALE 11

1.1 Sio-Siteko Conservation Context..... 12

1.2 Threats and Challenges..... 14

1.3 The Business Case for Wetland Conservation and Wise Use 15

1.4 What the CIP Seeks to Fund..... 17

1.5 How the CIP is intended to be used..... 18

PART 2: INVESTMENT STRATEGY 19

2.1 Goals and Intended Outcomes 20

2.2 Guiding Principles 21

2.3 Coordination and Delivery Mechanisms 22

PART 3: INVESTMENT PACKAGES..... 23

3.1 Overview..... 24

3.2 Investment Package 1: Ecosystem Restoration & Protection 25

3.3 Investment Package 2: Sustainable Livelihood Improvement..... 31

3.4 Investment Package 3: Institutional Governance 36

PART 4: MONITORING 40

REFERENCES 41

List of Figures

<i>Figure 1: Summary of the Sio-Siteko Transboundary Wetland CIP</i>	10
<i>Figure 2: Location and administrative boundaries of the Sio-Siteko wetland landscape (NBI, 2020a)</i>	12
<i>Figure 3: Key Objectives of the Sio-Siteko Transboundary Wetland Management Plan (NBI, 2020c)</i>	18
<i>Figure 4: Summary of CIP Goals and Intended Outcomes</i>	20
<i>Figure 5: Investment Package 1 consists of 5 projects with a combined cost of US\$ 7 Million</i>	25
<i>Figure 6: Investment Package 2 consists of 5 projects with a combined cost of US\$ 8 Million</i>	31
<i>Figure 7: Investment Package 3 consists of 3 projects with a combined cost of US\$ 2 Million</i>	36

List of Tables

<i>Table 1: Overview of Investment Packages, Projects and their costs over 10 years</i>	24
<i>Table 2: Summary of Investment Package 1 (Ecosystem Restoration and Conservation)</i>	26
<i>Table 3: Summary of Investment Package 2 (Sustainable Livelihood Improvement)</i>	32
<i>Table 4: Summary of Investment Package 3 (Institutional Strengthening)</i>	37

Acronyms and Abbreviations

AfDB	African Development Bank
BMU	Beach Management Unit
BMZ	Federal Ministry for Economic Cooperation and Development
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CIDP	County Integrated Development Plan
CIP	Conservation Investment Plan
CMS	Conservation of Migratory Species
DAO	District Agricultural Officer
DNRO	District Natural Resources Officer
DWD	Directorate of Water Development
EIA	Environmental Impact Assessment
FAO	Food Agricultural Organisation
GEF	Global Environment Facility
GIZ	German Technical Cooperation
IBA	Important Bird Area
IGAD	Intergovernmental Authority on Development
IKI	International Climate Initiative
IP	Investment Project
IWRM	Integrated Water Resources Management
KEFRI	Kenya Forestry Research Institute
KWTA	Kenya Water Towers Agency
LVFO	Lake Victoria Fisheries Organisation

MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MoWE	Ministry of Water and Environment
MOWSI	Ministry of Water, Sanitation and Irrigation
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
NFA	National Forestry Authority
NILE-SEC	Nile Basin Initiative Secretariat
NILE-TAC	Nile Technical Advisory Committee
RAMCEA	Ramsar Center for Eastern Africa
SIDA	Swedish International Development Cooperation Agency
SMM	Sio Malaba Malakisi
TEEB	The Economics of Ecosystems and Biodiversity
TWMP	Transboundary Wetland Management Plan
UWA	Uganda Wildlife Authority
UGX	Ugandan Shilling
WRA	Water Resources Authority
WRUA	Water Resource User Association

Summary of the CIP

This CIP serves as an instrument to guide finance and investments toward the implementation of strategic actions detailed in the Sio-Siteko 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.

The Plan has been derived from and guided by the overall Sio-Siteko Transboundary Wetland Management Plan and is aligned to the overall objective **‘to restore the wetland and ensure retention of ecosystem services for the benefit of people.’**

It takes cognisance and harmonises existing conservation plans and instruments such as the *‘Sio-Siteko Community Based Wetland Management Plan (NBI, 2009), Busia County Integrated Development Plan (2018 – 2022), The Economics of Ecosystems and Biodiversity (TEEB) for Sio Siteko (NBI 2019a) and the Sio-Siteko Wetland Monograph, (NBI, 2020)*. Moreover, since the wetland area is inextricably linked to the wider basin and the associated activities, the Plan also mainstreams wetland management into river basin planning processes and cross-border catchment planning process of smaller sub-basins by integrating the management plan into existing basin-wide structures for purposes of national and regional harmonisation. This includes those identified by the Sio-Malaba-Malakisi (SMM) River Basin Management joint programming.

The CIP structures the conservation priorities laid out in the Sio-Siteko Transboundary Wetland Management Plan into coherent, consolidated, costed sets of mutually-reinforcing projects. It offers 3 bankable investment packages costing **US\$ 17,000,000**, over 10 years, as follows:

- IP#1: Restoring and protecting the wetland ecosystem.** This investment package seeks to restore, rehabilitate, and conserve biodiversity and ecosystem services in the Sio-Siteko wetland. It consists of **5 projects** with a combined cost of **US\$ 7 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 **4 projects** with a combined cost of **US\$ 8 million**.
- IP#3: Institutional governance.** 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**

GOAL: A WELL CONSERVED SIO-SITEKO WETLAND SYSTEM, SUSTAINABLY UTILISED FOR ECONOMIC BENEFITS IN A HARMONISED TRANSBOUNDARY RELATIONSHIP

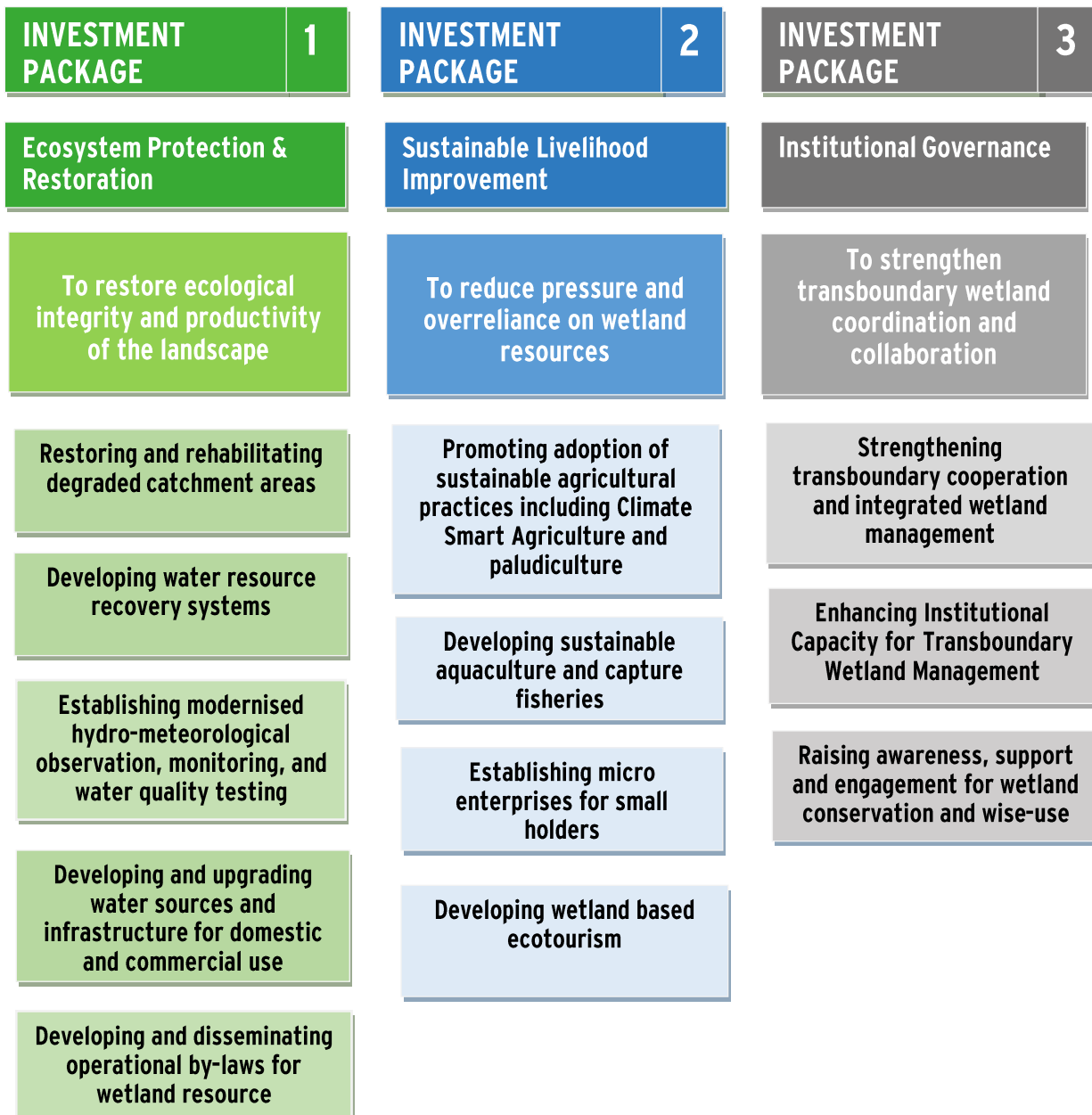


Figure 1: Summary of the Sio-Siteko Transboundary Wetland CIP

A yellow-green bird with a black face is perched on a branch in a savanna landscape. The background shows a vast field of tall grasses and a range of mountains in the distance under a clear sky.

PART 1:

**BACKGROUND
AND
RATIONALE**

1.1 Sio-Siteko Conservation Context

The Sio-Siteko wetland landscape is located northeast of Lake Victoria and encompasses the lower catchment of the Sio River crossing the boundary of the Kenya and Uganda (Figure 2). It lies between latitude 0.47 - 0.21 °N and longitude 33.98 - 34.20 °E and covers an area of approximately 415 km².

Administratively, the wetland traverses Busia County in Kenya and Busia District in Uganda and is part of the wider Sio-Malaba-Malakisi catchment. The Sio River, being the only major river traversing the wetland landscape has a total length of 85 km, covers a catchment area of 1,437 km² and has a mean discharge of 12.1 m³/s.

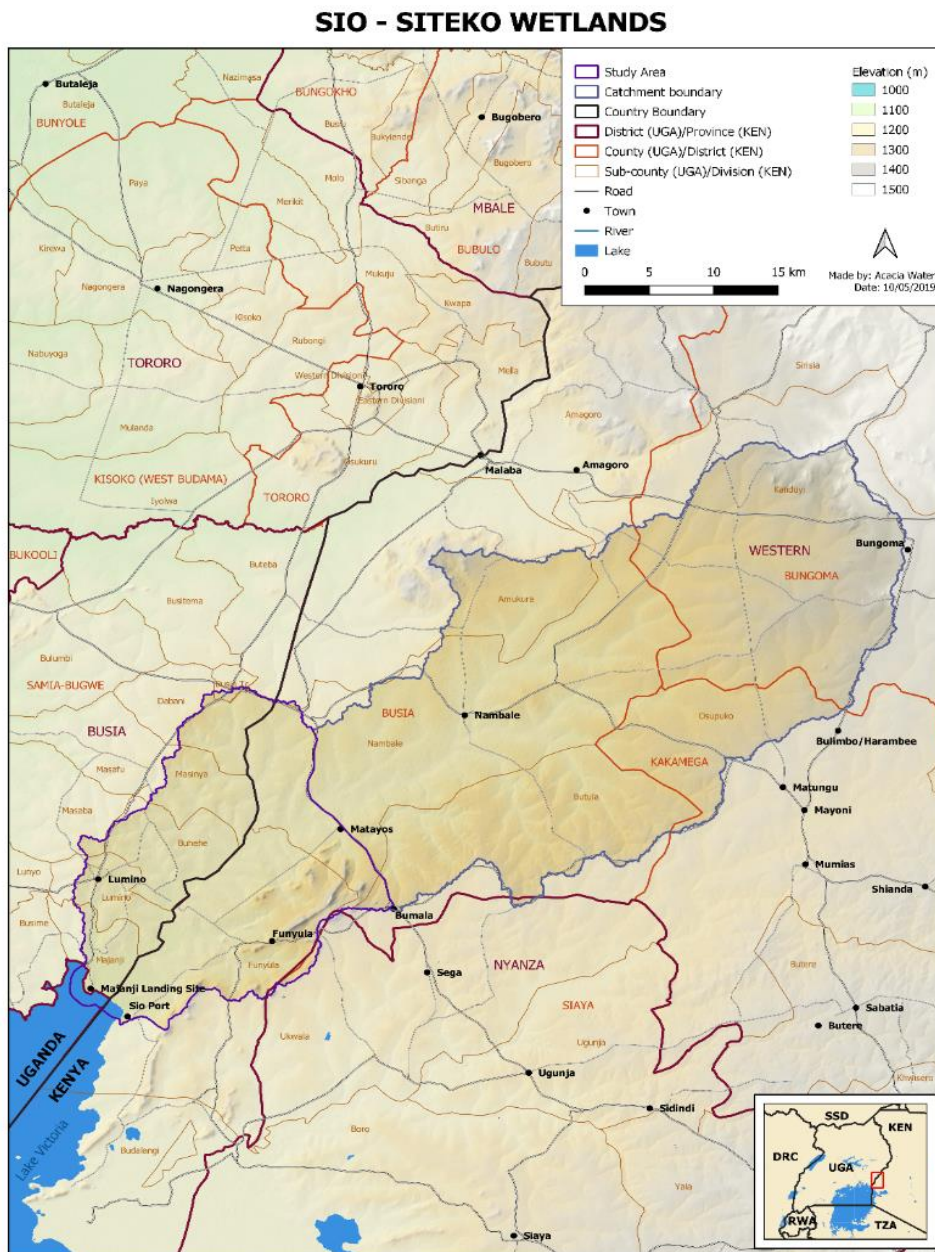


Figure 2: Location and administrative boundaries of the Sio-Siteko wetland landscape (NBI, 2020a)

The Sio-Siteko transboundary wetland landscape consists of varied habitat sub-types, including a number of Lake Victoria Basin Biome species of conservation significance. It is an Important Bird Area (IBA), providing habitat and breeding grounds for about five hundred and twenty (520) diverse bird populations and many other endemic plant, mammal, amphibian, reptile, fish and insect species. This wetland landscape is of great socio-cultural significance with strong attachment of the people through cultural heritage, spiritual values, and sense of place, quality and recreation.

Hydrologically, the wetland landscape 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, 2020d).

The wetland has tremendous potential for socio-economic development. It supports subsistence and commercial agriculture, capture fisheries, grazing land and pasture, timber and non-timber products and traditional medicine. During the dry seasons, the wetland serves as a watering area for livestock herds from drier districts such as Lyantonde and Lwengo in Uganda. The local communities also use palm leaves, sedges and grasses from the wetland and forests for making mats and other handicrafts (NBI 2019b). Fish is not only used for food but also medicine and leather tanning. The government of Uganda has recognised the wetland as one of the four most important fish breeding sites in Lake Victoria and is calling for the protection of the wetland against human activities that might degrade fish breeding and the breeding sites (NBI 2019).

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. There are a host of line agencies that support the local governments in Kenya 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 and the Wetland Management Department and the Victoria 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 Kenya, the Ministry of Water, Sanitation and Irrigation (MOWS&I), the Ministry of Environment and Forestry as well as the Water Resources Authority provide management support. Together with regional bodies such as the Ramsar Centre for Eastern Africa (RAMCEA), 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 such as Water Resource User Associations and Beach Management Units) cannot be understated.

1.2 Threats and Challenges

Despite its economic, social and ecological importance, the Sio-Siteko wetland faces several threats and challenges which have resulted into continued degradation of the important habitat for biodiversity (NBI, 2020a). These include unsustainable land-use practices, wetland encroachment, resource overexploitation, invasive species and pollution.

Unsustainable land-use practices are widespread within the wetland landscape. This includes **riverbank cultivation** and **encroachment into the wetlands** which are common in Hadoda area in Bumunji, Buyende and Bulolo in Nangoma sub-location and Bwaya and Bwalira areas in Uganda. Expansion and encroachment occur as a result of a shortage of land with population increase, which is further increasing soil degradation associated with poor agricultural practices that force farmers to leave the land fallow to recover.

There is widespread planting of **water-intensive trees** such as eucalyptus trees in the wetland landscape which abstract huge volumes of water particularly during the dry seasons resulting in the drying up of the wetlands. This is predominant in Busumba and Buyengo areas, and Mundulusia along Mavale River which is a tributary of River Sio.

Sio-Siteko wetland resources such as papyrus, wood, fish, sand and grassland are being **overexploited**. Indiscriminate sand harvesting at the local scale is contributing to the degradation. **Overfishing** and **use of illegal fishing gear common** in Munongo and Buyisa areas are experiencing a reduction in fish stock and disappearance of breeding sites. **Overgrazing** is a major threat to the wetland. This has not only led to reduced wetland vegetation but has also been a major source of conflict in the area. Often, the cattle wander through farmlands and destroys crops, leading to disharmony amongst farmers and livestock keepers.

The **overexploitation of timber**, mainly for firewood and charcoal production, is a reflection of the overreliance of the population on these resources for energy production. Hotspot areas for these activities are Siteko, Buyende and Buduluku. Finally, **over-abstraction of water** resources is an important contributor to lower groundwater levels, decreasing the yield of springs and boreholes or even causing them to run dry.

Several **invasive species** impact the Sio Siteko wetland system, by competing with native species for food and space and introducing disease. The **touch-me-not (*Mimosa pudica*)** is a creeping flowering plant that changes soil physical and chemical properties, affecting crops and slowing down grass growth. **Common lantana (*Lantana camara*)** is becoming a dominant understorey shrub that is reducing the productivity of pastures through the formation of dense thickets, which reduce the growth of crops as well as make harvesting more difficult. The emergence of the faster spreading parasitic **Dodder weed (*Cuscuta spp*)** along the Sio-Siteko wetland boundaries is killing the green vegetation of the wetland landscape. **Water hyacinth (*Pontederia crassipes*)** spreads prolifically in Lake Victoria and affects communities and biodiversity at the River Sio mouth by obstructing boats, forming a perfect breeding ground for malaria mosquitoes and other vector-spread diseases, and locally it deoxygenises water having a huge negative on young fish. The clogging of waterways with such invasive species, along with predation by the introduced Nile perch, the use of destructive fishing gears especially at the river mouths (including mosquito nets), and the destruction of spawning and nursery grounds due to encroachment into the wetlands are the main causes for **fish stock reduction** (NBI, 2020b).

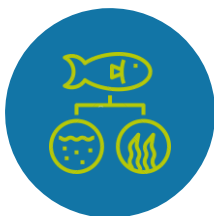
With the recognition that the underlying threats and challenges of ecosystem degradation are socio-economic, there exists an opportunity in addressing their drivers and pressures. This includes strengthening the institutional and technical capacity of local, national and transboundary institutions; developing and implementing sustainable income and livelihood sources; and implementation of management actions developed towards wetland and river basin management planning, which includes the *Sio-Siteko 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

Viewed through a traditional economic lens, the Sio-Siteko wetland landscape and **natural systems are essentially a capital stock** that provides a flow of services to people. These ecosystem services include fertile soil and pollination that make food production possible, forests and watersheds that sequester carbon, purify, regulate and replenish water, agriculture and genetic diversity among many others. These services have been valued at about US\$ 29 million per year (NBI, 2020a).

An Important Reservoir of High Species Biodiversity

The River Sio is listed among proposed Key Biodiversity areas of Uganda (Plumptre et al. 2019) on account of its being an IUCN Freshwater Site and containing a critically endangered species. As a site, it has not received much scientific attention, therefore, the mammal species diversity for the wetland is not very well documented. Nonetheless, the Sio-Siteko area has 26 known species of mammals representing five (5) orders (Martin 2019).



The wider Sio-Malaba-Malakisi basin area is an Important Bird Area where over 520 species have been documented, including the endangered Grey Crowned crane, the globally threatened Papyrus Gonolek (*Laniarius mufumbiri*; IUCN Vulnerable), the Papyrus Yellow Warbler (*Chrolopetta gracillostris*) and Pallid Harrier (IUCN Near Threatened). According to the Avian Worlds Database 2018, at least 16 globally threatened species are present in Sio-Siteko. Furthermore, four Lake Victoria biome-restricted and Papyrus endemic species (Papyrus Canary, Carruthers’s Cisticola, Papyrus Gonolek and Red-chested Sunbird) are found in the wetland landscape.

The values that these species draw in terms of habitat, refugia and tourism revenue is estimated at **US\$ 3.5 million/year**.

Natural Infrastructure for Food and Water Security



Agriculture is the backbone of the Busia District of Uganda and Busia County of Kenya economy with most residents depending on it as their main source of livelihood. A big proportion of the population earn their livelihoods through subsistence crop farming and agro-pastoralism. The Sio-Siteko wetland supports subsistence and commercial agriculture, capture fisheries, grazing land and pasture, timber and non-timber products and traditional medicine. During the dry seasons, the wetland serves as a watering area for livestock herds from drier districts such as Lyatonde and Lwengo in Uganda

These provisioning values for capture fisheries, livestock grazing, water for domestic use, crop farming and irrigation, aquaculture, are estimated at **US\$ 43.9 million/year**.

Nature's Shock Absorber



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.

Studies (NBI 2020b) have shown that a healthy Sio-Siteko wetland has the capacity to offset the human effect on rivers by cleansing the surrounding ecosystems and provide natural buffers to absorb water during rainy seasons, thus preventing flooding, while reducing impacts of drought through the steady release of water in dry seasons, to help keep river levels normal while filtering and purifying the surface water.

These regulatory services of flood control and water quality regulation are estimated at **US\$ 5.8 million/year**.

Healthy Economy



A healthy and proper functioning Sio-Siteko 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, costly efforts to replicate their natural services—or to address the consequences of not having them.

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 Kenya and Uganda.

While these estimates demonstrate a potentially huge value of the wetland ecosystem to the more than 273,000 people that live in the wetland landscape, a major challenge lies in the fact that, **for every contribution of nature that can be measured and imputed a dollar value, there are many more that cannot.** Nevertheless, articulating these economic values serve as a clear justification for financing the conservation and management of the wetland landscape.

According to the economic valuation of the wetland, investing in the sustainable management of the Sio-Siteko wetland would save losses and damages to wetland biodiversity and ecosystem services equivalent to a **net present value of US\$ 165 million** over the next **25 years** (NBI, 2020b). 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 Busia County of Kenya and Busia District of Uganda that are working toward wetland wise use and conservation in the Sio-Siteko wetland landscape. It takes cognisance of the critical shortage of funding to support implementation.

More specifically, the CIP targets to leverage resources to support the delivery of the implementation framework and management actions in the *Sio-Siteko Transboundary Wetland Management Plan (TWMP) (2020 – 2030)*. The TWMP is based on a vision of **‘a well conserved Sio-Siteko wetland system, sustainably utilised for economic benefits in a harmonised transboundary relationship’** and is guided by the following 3 objectives:

- i. Ecosystem protection and restoration
- ii. Livelihood improvement
- iii. Strengthening governance and institutional capacity

These objectives (figure 3) have been structured into costed investment packages for which it seeks to attract and mobilise additional funding flows. The financing needs identified complement and supplement 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.



Figure 3: Key Objectives of the Sio-Siteko Transboundary Wetland Management Plan (NBI, 2020c)

1.5 How the CIP is intended to be used

Although the CIP and the Transboundary Wetland Management Plan are closely linked 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 Sio-Siteko 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.



PART 2:

**INVESTMENT
STRATEGY**

2.1 Goals and Intended Outcomes

As earlier highlighted, the CIP contributes to the overall vision of the Sio-Siteko 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.

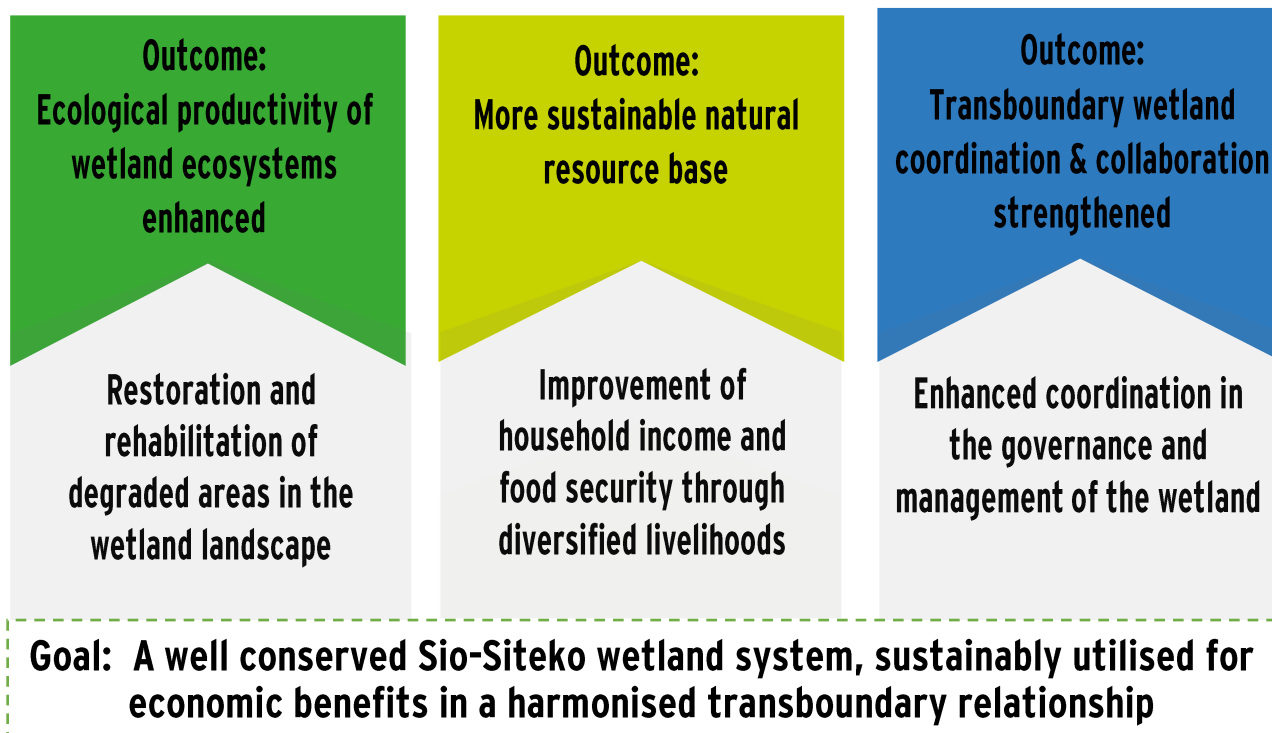


Figure 4: Summary of CIP Goals and Intended Outcomes

The **first action** focuses on revitalising the ecological functioning of the wetland system through restoration and rehabilitation of degraded areas. The proposed investment projects are targeted at among others, sustainable water, land and fisheries management, establishment of green borders. To ensure impact is sustained, these actions require wetland adjacent communities to be at the center 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 even 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 Sio-Siteko Transboundary Wetland Management Committee for enhanced cross-border collaboration and cooperation.

2.2 Guiding Principles

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

The CIP recognises that the Sio-Siteko wetland has been of immense importance for people. Therefore, ecosystem restoration efforts should maximise multiple benefits (biodiversity, resilience to climate change, climate change mitigation and adaptation 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.

Moreover, 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 Sio-Siteko Transboundary Wetland Management Plan (2020 – 2030), the Sio-Siteko Wetland Landscape Monograph Busia District Development Plan 2020/21 – 2024/25 and the Busia County Integrated Development Plan (2018 – 2022)

The CIP also **mainstreams wetland management into river basin planning processes** and cross-border catchment planning process of smaller sub-basins by integrating actions into existing basin-wide structures for purposes of national and regional harmonisation. This includes those identified by the Sio-Malaba-Malakisi (SMM) River Basin Management joint programming.

The proposed actions should be planned at various scales and implemented using the best available science and traditional knowledge. The prior informed consent and full and effective participation of local communities, as well as 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 Sio-Siteko 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.

A woman with a joyful expression is shown in a workshop, holding a large, cylindrical basket woven from light-colored bamboo or reeds. She is wearing a grey and white patterned apron over a light-colored top. The background is filled with various wooden and bamboo components, including long poles and rectangular frames, suggesting a traditional craft or construction environment. A semi-transparent yellow banner is overlaid on the upper portion of the image, containing the text.

PART 3:
**INVESTMENT
PACKAGES**

3.1 Overview

The CIP comprises **12 bankable projects**, classified into 3 main Investment Packages (IP). It covers a timeframe of 10 years, with a total cost of **US\$ 17 million**. Inflation of 10% is also provided for the duration of implementation.

IP#1	P1a	Restoring and rehabilitating degraded catchment areas	US\$ 750,000
Ecosystem Restoration & Protection	P1b	Developing water resource recovery systems	US\$ 2M
	P1c	Establishing modernised hydro-meteorological observation, monitoring, and water quality testing systems	US\$ 1.5M
	P1d	Developing and upgrading water sources and infrastructure for domestic and commercial use	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
Sustainable Livelihood Improvement	P2b	Developing sustainable aquaculture and capture fisheries	US\$ 2.5M
	P2c	Establishing micro and small enterprises for small holders	US\$ 2M
	P2d	Developing wetland based ecotourism	US\$ 500,000
IP#3	P3a	Strengthening transboundary cooperation and integrated wetland management	US\$ 1.5M
Institutional Governance	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 1: Overview of Investment Packages, Projects and their costs over 10 years

3.2 Investment Package 1: Ecosystem Restoration & Protection

The Sio-Siteko transboundary wetland system and its resources form the basis of livelihoods and economies for many people and economies in the wider Sio Malaba Malakisi basin area. However, many households find themselves trapped in a vicious cycle of poverty arising from reduced productivity. Not only does this serve to progressively weaken their socio-economic status and resilience, but in many cases, it forces people into wetland degrading activities to fill gaps in food production and income generation. Given the above considerations, a wide-scale plan for sustainable management and conservation of the wetland is necessary.

Investment Package 1 seeks to restore, rehabilitate, and conserve biodiversity and ecosystem services in the Sio-Siteko wetland landscape. 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: restoring and rehabilitating degraded catchment areas; developing wastewater treatment facilities; establishment of modernised hydro-meteorological observation, monitoring and water quality treatment systems to support compliance and enforcement of water quality regulations; developing and upgrading water sources and infrastructure for domestic and commercial use; and development and dissemination of by-laws for wetland resource management which constitute an arena of negotiation and enforcement.

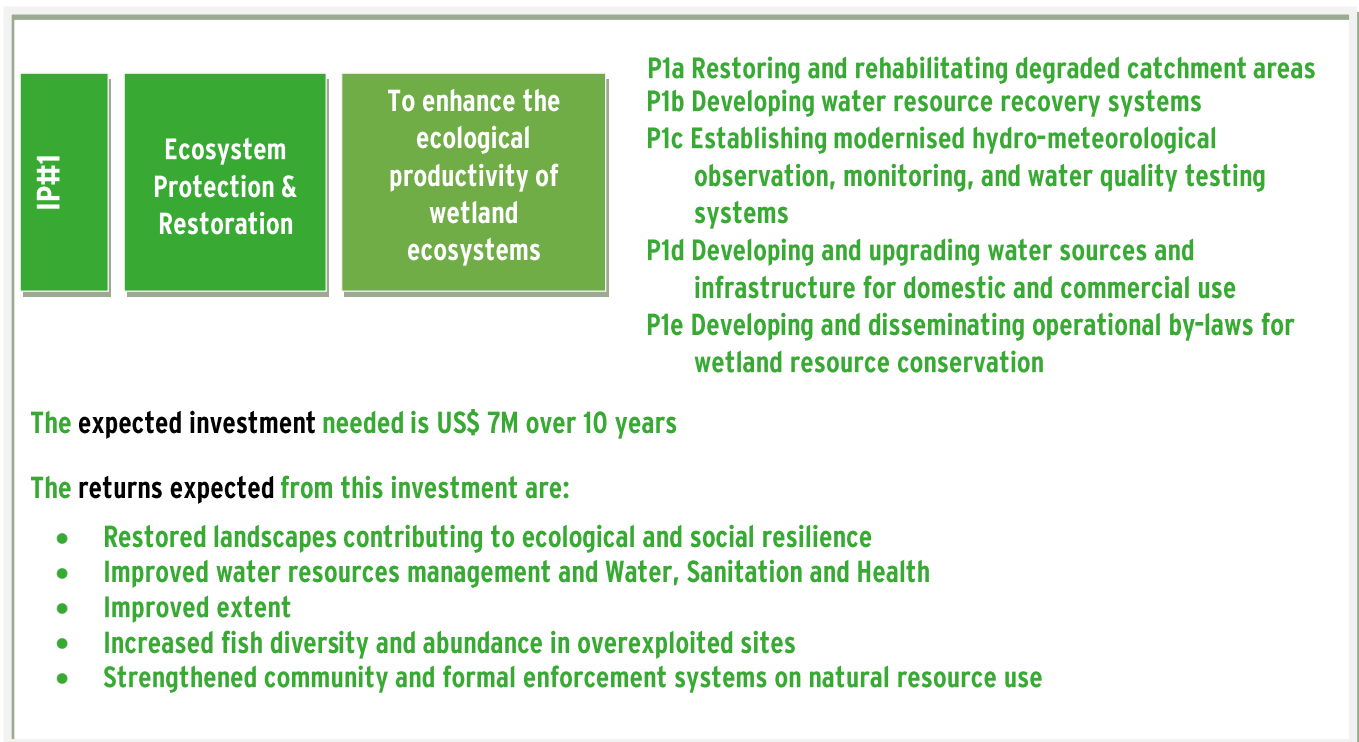


Figure 5: Investment Package 1 consists of 5 projects with a combined cost of US\$ 7 Million

Table 2: Summary of Investment Package 1 (Ecosystem Restoration and Conservation)

P1a Restoring and Rehabilitating Degraded Catchment Areas	
Investment	US\$ 750,000
Priority	Very High
Justification	Anthropogenic activities that adversely affect ecosystem resilience such as reduction of biodiversity, exploitation of natural resources, pollution, land use, and anthropogenic climate change are increasingly causing regime shifts in ecosystems, often to less desirable and degraded conditions in the Sio-Siteko wetland landscape. Therefore, 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.
Scope and Content	This project will restore and rehabilitate degraded natural forests, hills river banks and wetlands. The primary focus is on establishment of green borders and farmer led-natural regeneration along land under public ownership, including those in and around forest reserves, protected areas, riverbanks, lakeshores and wetland boundaries.
Indicative Activities	<ul style="list-style-type: none"> • 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 • Support community associations to establish tree nurseries for landscape restoration • Develop long-term agreements for landscape management • Monitor impacts on species, habitats and restoration of key ecosystem services
Results and Beneficiaries	<ul style="list-style-type: none"> • Wetland systems restored with the active involvement of and benefit to local communities • Increased wetland productivity (well-being, sustainable economies and biodiversity) • Reduced vulnerability against disaster risks related to ecosystem degradation <p>The primary beneficiaries will be wetland adjacent communities and stakeholders that depend on the productivity of the wetland ecosystem from Busia County (Kenya) and Busia District (Uganda).</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Water Resources Authority (WRA) • Uganda: Ministry of Water and Environment (MoWE)
Other Partners	<ul style="list-style-type: none"> • Kenya: Ministry of Water, Sanitation and Irrigation; Busia County, Kenya Forest Service, Water Resource User Associations; Kenya Forestry Research Institute • Uganda: National Forestry Authority (NFA); National Environment Management Authority, LC III, Busia District Government, Victoria Water Management Zone • Sio-Siteko Transboundary Wetland Management Committee; Wetlands International; IUCN; Eco-green; Water User Associations
Potential Investors	UNDP, Kenya Water Towers Agency (KWTA), UNEP, AfDB, GIZ

P1b Developing Water Resource Recovery Systems

Investment	US\$ 2 Million
Priority	Very High
Justification	Population and economic growth in the Sio-Siteko wetland landscape have driven a rapid rise in demand for water resources. This has created various water-related challenges, including degraded water quality and inadequate water supply and sanitation particularly in expanding peri-urban settlements. Sustainable Development Goal targets for water include improving water quality, implementing integrated water resource management, achieving water use efficiency across sectors, reducing the number of people suffering from water scarcity, and restoring water and wetland-related ecosystems. Significantly increasing levels of wastewater treatment is one of the ways for protecting and enhancing the productivity of wetland and water resources.
Scope and Content	This project will improve the wastewater situation in the wetland landscape by embarking on targeted programmes to collect and treat wastewater. As the Busia towns of Kenya and Uganda continue to grow, there is an opportunity to ensure that investments are made in the most sustainable and efficient way possible, where wastewater is considered a valuable resource from which energy and nutrients can be extracted, as well as an additional source of water.
Indicative Activities	<ul style="list-style-type: none"> • Develop wastewater initiatives as part of a basin planning framework to maximise benefits, improve efficiency and resource allocation, and engage stakeholders • Promote a shift from wastewater treatment plants to water resource recovery facilities, thereby realising wastewaters value e.g. Stormwater storage and treatment prior to discharge to receiving waters through green infrastructure. • Sewer replacement or rehabilitation (e.g., resin lining of cracked pipes) • Explore and support the development of innovative financing and sustainable business models in the sector
Results and Beneficiaries	<ul style="list-style-type: none"> • Transformed sanitation from costly to self-sustaining through resource recovery and reuse • Reduced incidental and unplanned water reuse that can have negative health and environmental consequences • Improved revenue streams for water utilities <p>The primary beneficiaries will be peri-urban communities in Mabale and Maringu (Kenya) and Busia Municipality (Uganda).</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Ministry of Water, Sanitation and Irrigation • Uganda: Ministry of Water and Environment
Other Partners	<ul style="list-style-type: none"> • Kenya: County Government of Busia; Busia Water and Sanitation Company; Kenya Water and Sanitation Civil Society Network • Uganda: Busia Municipal Council; National Water and Sewerage Company; Uganda Water and Sanitation Civil Society Network
Potential Investors	<ul style="list-style-type: none"> • The World Bank, AfDB, USAID, SIDA, BMZ

P1c Establishing Modernised Hydro-meteorological Observation, Monitoring and Water Quality Testing Systems	
Investment	US\$ 1.5 Million
Priority	High
Justification	Evidence based decisions require not just improved water information products but also enhanced institutional capacity (technical, policy and planning) The Governments of Kenya and Uganda have set priorities for the water sector, which have identified a shift in the management of transboundary water resources. One of the key areas identified is improvements of systems for water related data collection and management as well as transparency in availability of data. Non-structural mechanisms for flood management are also critical in enhancing social and ecological resilience.
Scope and Content	This project will strengthen hydrological and meteorological information services to deliver relevant, accurate and timely climate information to local communities, and also to support decision making and policy development in the water sector. This will be achieved by investments in optimised hydro-met monitoring networks, more effective management and exchange of hydro-met data; and improving the capacity to forecast future water and weather conditions. Ultimately, this information will be used to strengthen early warning systems including flooding which is rampant in the area.
Indicative Activities	<ul style="list-style-type: none"> • Establishment or improvement of hydromet stations • Upgrading or establishing water resources data acquisition network • Support development or upgrading of analytical tools for water resources modelling and decision support systems, for river basin water resources assessment, water accounting, basin systems simulation and optimisation • Develop flood forecasting and reservoir operation systems to manage floods and improve lead time by integrating with climate forecast • Institutional capacity enhancement
Results and Beneficiaries	<ul style="list-style-type: none"> • Improved communication and exchange between G2G (Kenya and Uganda as well as local government and central government) and facilitate real-time operation and decision making at river basin scale • Improved water resources information, to enable improved decision making in water resources operations and planning • Improved monitoring of scarce water resources and water pollution <p>The beneficiaries will be local and central government agencies responsible for water resources planning and management, as well as rural and urban water users and those affected by floods and droughts in the wetland landscape.</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Water Resources Authority • Uganda: Ministry of Water and Environment
Other Partners	<ul style="list-style-type: none"> • Kenya: County Government of Busia, National, Kenya Meteorological Department • Uganda: Busia District, Victoria Water Management Zone
Potential Investors	<ul style="list-style-type: none"> • Green Climate Fund, Dutch Ministry of Foreign Affairs, SIDA, The World Bank

P1d Developing and Upgrading Water Sources and Infrastructure for Domestic and Commercial Use	
Investment	US\$ 2.5M
Priority	Very High
Justification	Water is generally an under-valued and under-priced resource, resulting in poor record of cost recovery for water investments. In the wetland landscape, demand for potable water is fast outpacing supply, which itself, is impacted in terms of both quantity and quality by a range of factors including hydrologic variability and environmental degradation. Where they exist, water projects have been found to either be too small or too specific. This calls for the development and upgrading of water sources and infrastructure to meet demands of the growing populace.
Scope and Content	This project will be coordinated by government agencies, contributing to comprehensive water supply, sanitation, and hygiene activities which support the three pillars required for sustainable access and use of improved water supplies and sanitation: providing access to appropriate hardware – water supply systems, behaviour change and hygiene promotion, creating an enabling environment for improved water supply, sanitation and hygiene.
Indicative Activities	<ul style="list-style-type: none"> • Strengthen the capacity and sustainability of small-scale service providers that operate in rural and peri-urban areas of the wetland landscape • Develop drinking water and sanitation facilities • Promote shared learning to adapt/modify successful interventions
Results and Beneficiaries	<ul style="list-style-type: none"> • Guaranteed freshwater ecosystem services and continued access to water for people • Reduced incidences of waterborne diseases <p>The primary beneficiaries will be wetland adjacent communities that depend on the productivity of the wetland ecosystem for potable water services.</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Ministry of Water, Sanitation and Irrigation • Uganda: Ministry of Water and Environment
Other Partners	<ul style="list-style-type: none"> • Kenya: Water Services Regulatory Board, Busia Water and Sanitation Company; Lake Victoria North Water Works Development Agency • Uganda: Catchment Management Organisation, LC III, Busia District; National Water and Sewerage Company • Water Services Providers Association
Potential Investors	The World Bank, Oxfam, USAID, Water Sector Trust Fund, JICA, Kenya Innovative Finance Facility for Water

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 Sio-Siteko 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 can 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 which 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 more appropriate investment, enables effective decision making on use and management and enhances the well-being of local communities.
Indicative Activities	<ul style="list-style-type: none"> • Collection and collation of information on customary rules for natural resource governance in consultation with key stakeholders • Distillation 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	<ul style="list-style-type: none"> • Strengthened community and formal enforcement systems on natural resource management <p>The primary beneficiaries will be wetland adjacent communities that depend on the productivity of the wetland ecosystem from Busia County and District in Kenya and Uganda respectively.</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: National Environment Management Authority • Uganda: National Environment Management Authority
Other Partners	<ul style="list-style-type: none"> • Kenya: County Government of Busia, Water Resources Authority • Uganda: Catchment Management Organisation, LC III, Busia District Government • Sio-Siteko Transboundary Wetland Management Committee, Wetlands International, IUCN, Sio-Siteko Wetland User Association
Potential Investors	<ul style="list-style-type: none"> • DANIDA

3.3 Investment Package 2: Sustainable Livelihood Improvement

Majority of the rural population in Sio-Siteko of both Kenya and Uganda rely on subsistence farming as their main source of livelihood. The main crops grown are sorghum, millet, cotton, cassava, sweet potatoes, maize and beans. The agriculture is largely rain-fed, and production is entirely dependent on use of traditional implements, with limitations in the quality and quantity of production. The productivity for major crops has been low and has decreased over time, probably due to declining soil fertility, soil erosion and changing weather patterns. In view of the above mentioned challenges, any conservation effort should consider the livelihoods of the people especially those depending on Sio-Siteko for both income and food security.

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, 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 4 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.

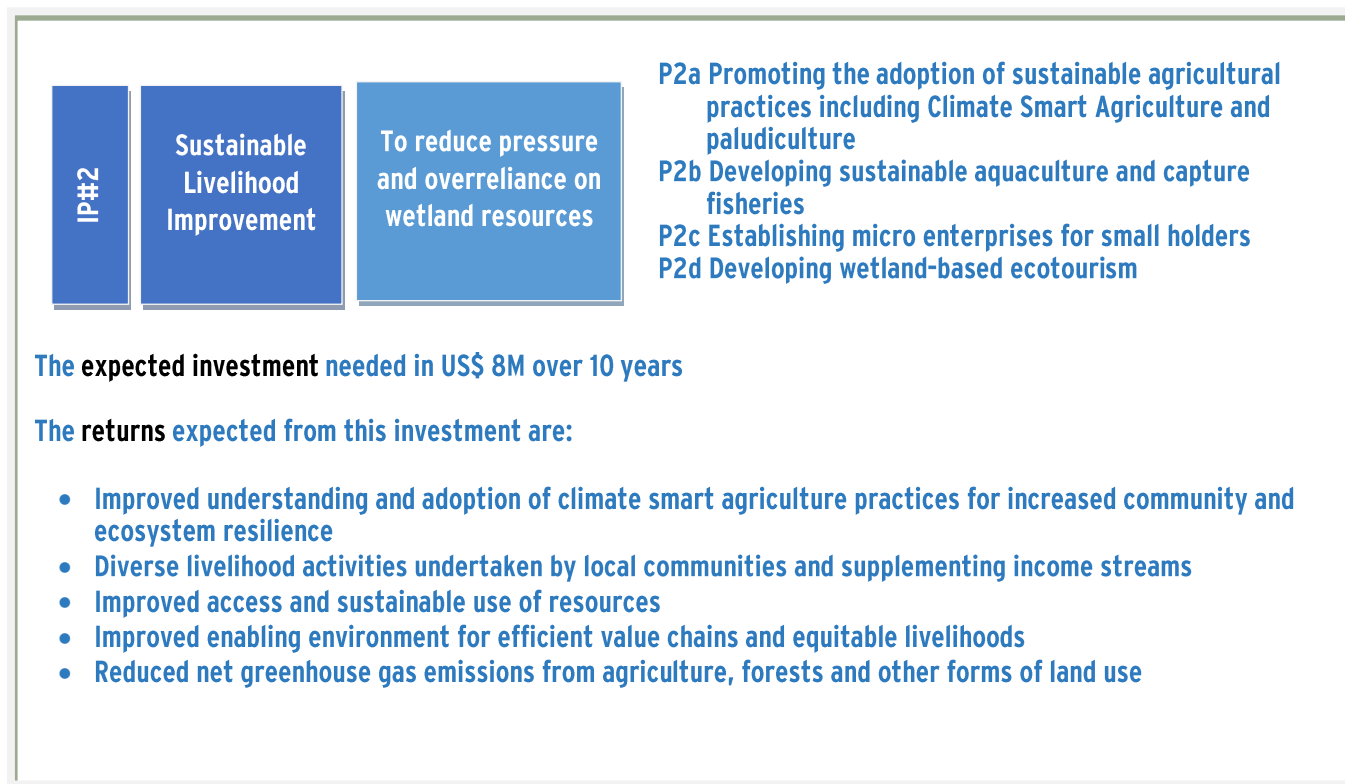


Figure 6: Investment Package 2 consists of 5 projects with a combined cost of US\$ 8 Million

Table 3: Summary of Investment Package 2 (Sustainable Livelihood Improvement)

P2a Promoting the Adoption of Sustainable Agricultural Practices Including Climate Smart Agriculture and Paludiculture	
Investment	US\$ 3 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 which are targeted to local needs, conditions, constraints and opportunities in the wetland landscape.
Indicative Activities	<ul style="list-style-type: none"> • Identify and promote appropriate Climate Smart Agriculture techniques and practices in consultation with farmers • Strengthen the capacity of crop farmers on sustainable land-use practices • Monitor impacts on soil and crop productivity • Establish paludiculture demonstration sites showcasing good land-use practices for knowledge exchange
Results and Beneficiaries	<ul style="list-style-type: none"> • Improved understanding and adoption of Climate Smart Agriculture practices for increased community and ecosystem resilience • Paludiculture pilots set up contributing to the recovery of the landscape • Improved participation in sustainable land-use practices • Reduced net greenhouse gas emissions from agriculture and other forms of land use <p>The primary beneficiaries will be farmers from Busia County and District in Kenya and Uganda respectively.</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Department of Agriculture • Uganda: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)
Other Partners	<ul style="list-style-type: none"> • Kenya: National Environment Management Authority; Kenya Forest Service; Water Resource User Associations; Community Forest Associations • Uganda: National Agricultural Research Organisation; Busia District and Sub-District; National Forestry Authority
Potential Investors	<ul style="list-style-type: none"> • UNDP/GEF, GIZ, NBI, USAID, World Vision, The World Bank

P2b Developing Sustainable Aquaculture and Capture Fisheries

Investment	US\$ 3 Million
Priority	Very High
Justification	In the current approach to fisheries management, indiscriminate fishing practices overharvest fish, destroy huge amounts of the kill species that are not fishing targets, commonly called by-catch. In addition, depleted fish populations are not given time to recover, which greatly compounds the problem. This project will promote and support sustainable fisheries and habitat ecosystems by: Supporting Busia Kenya and Uganda fisheries departments to adopt an ecosystem-based management plan that protects fish and conserves the habitat. Advocating for improved by catch monitoring and by catch reduction, especially in fish species that are at risk of extinction.
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. Efforts will be made to equip farmers and fisherfolk with the know-how 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 will be delivered on sustainable, low environmental impact approaches to cage fish and pond farming.
Indicative Activities	<ul style="list-style-type: none"> • Conduct community needs assessment, market research, technical and financial 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, and credit extension
Results and Beneficiaries	<ul style="list-style-type: none"> • Improved income for fishers and aquaculture farms • Increased fish production (in both capture and aquaculture fisheries) • Improved nutritional well-being and inclusive livelihood securing for young and women entrepreneurs. <p>The primary beneficiaries will be the fisherfolk that depend on the wetland ecosystem from Busia County and District in Kenya and Uganda respectively.</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Department of Fisheries • Uganda: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and National Fisheries Resources Research Institute (NAFIRRI), Lake Victoria Fisheries Organisation
Other Partners	<ul style="list-style-type: none"> • Kenya: Beach Management Units; Lake Victoria Basin Organisation • Uganda: Local Government; LUMA; BMUs; BUMASI; BUDA and Local communities
Potential Investors	FAO, AfDB, The World Bank

P2c Establishing Micro Enterprises for Smallholders

Investment	US\$ 2 Million
Priority	High
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 Sio-Siteko wetland landscape 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 <p>Primary beneficiaries will be farmers and women groups 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.</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Ministry of Agriculture, Livestock and Fisheries • Uganda: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)
Other Partners	<ul style="list-style-type: none"> • Kenya: County Government of Busia; Kenya Forest Service; Sub-Counties and WRUAs • Uganda: Busia District Production Department; Agricultural Extension Officers; NFA and CFMs • Private sector partners
Potential Investors	AfDB, AGRA, BMZ, GIZ, FAO, UNDP

P2d Developing Wetland Based Ecotourism	
Investment	US\$ 500,000
Priority	High
Justification	Ecosystems based enterprises are mainly those undertaken within the ecosystem like the wetland without degrading it. Most of these enterprises are based on the wise-use principles which emphasise location, economic viability, socio acceptability and ecological soundness. This project will support ecosystem base enterprises with the aim of conserving Sio-Siteko wetland landscape and improving the livelihoods of the local communities depending on natural resources within the Sio-Siteko landscape.
Scope and Content	This project will support and facilitate the development of ecotourism in the Sio-Siteko wetland landscape. This initiative will cover the entire landscape but starting with two locations spread in the two districts of Kenya (Mayenje and Busumba) and Uganda (Busia District).
Indicative Activities	<ul style="list-style-type: none"> • Conduct market assessment of ecotourism potential, demand and industry interest • Identify potential local service providers and formulate 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, with key actors and participants from different sectors and groups • 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	<p>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.</p> <p>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</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: County Government of Busia • Uganda: Ministry of Tourism, Wildlife & Antiquities (MTWA), Uganda Tourism Board (UTB), Local Government (LG)
Other Partners	<ul style="list-style-type: none"> • Kenya: Kenya Wildlife Service • 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	AfDB, UNDP, SIDA, DANIDA

3.4 Investment Package 3: Institutional Governance

Different policies, laws and agencies in Kenya and Uganda touch on the transboundary resources of the Sio-Siteko and its associated landscape. In this setup, harmonious governance structures must be sought and guided either by regional or international legal frameworks or mutual agreements through by-laws. However, there is minimal coordination between these two countries as far as the management of the Sio-Siteko 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 Sio-Siteko Transboundary Wetland Management Committee will play a key role in developing this package.

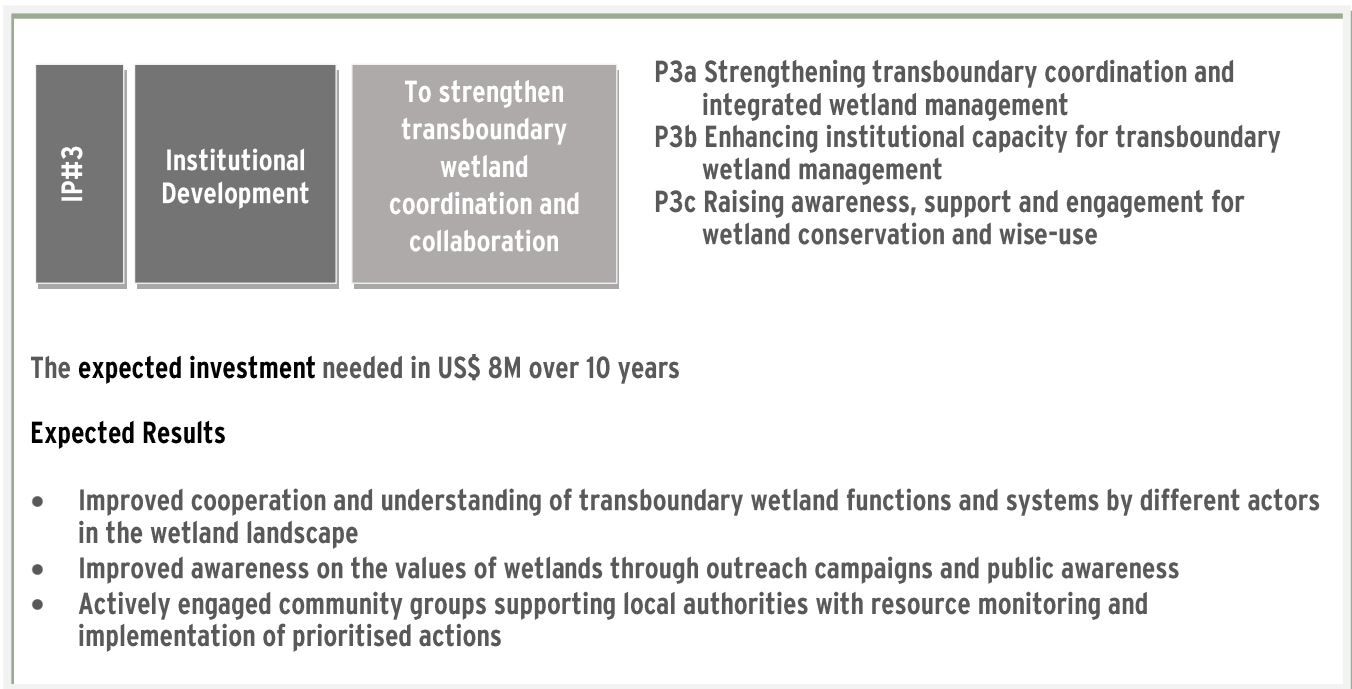


Figure 7: Investment Package 3 consists of 3 projects with a combined cost of US\$ 2 Million

Table 4: Summary of Investment Package 3 (Institutional Governance)

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 continuously building cooperation 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	<ul style="list-style-type: none"> • Facilitate regular meetings of the Sio-Siteko 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 • Collaboration sought with other partners working in the region including the Sio Malaba Malakisi working group
Results and Beneficiaries	<ul style="list-style-type: none"> • 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 <p>The primary beneficiaries will be wetland adjacent communities and stakeholders that depend on the productivity of the wetland ecosystem</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Ministry of Water, Sanitation and Irrigation • Uganda: Ministry of Water and Environment
Other Partners	<ul style="list-style-type: none"> • Kenya: Water Resources Authority; National Environment Management Authority, County Government of Busia • Uganda: National Environment Management Authority, Busia District • Sio-Siteko Transboundary Wetland Management Committee, RAMCEA, Wetlands International, IUCN
Potential Investors	UNDP, GIZ, USAID

P3b Enhancing Institutional Capacity for Transboundary Wetland Management	
Investment	US\$ 250,000
Priority	High
Justification	The conservation, wise use, and sustainable management of the Sio-Siteko 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, know-how, and competence among government agencies and CSOs. This will include providing technical knowledge and 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	<ul style="list-style-type: none"> • Formulate and implement a capacity building programme to include training on Integrated Water Resources Management and ecosystem-based approaches, with consideration for 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	<ul style="list-style-type: none"> • Site and local level knowledge improved for better transboundary wetland management • Strengthen the capacity of relevant institutions to effectively manage the wetland landscape <p>The primary beneficiaries will be technical and administrative staff of local government and line agencies, law enforcement officers, and civil society groups.</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Ministry of Water, Sanitation and Irrigation • Uganda: Ministry of Water and Environment
Other Partners	<ul style="list-style-type: none"> • Kenya: Water Resources Authority; National Environment Management Authority, County Government of Busia • Uganda: National Environment Management Authority, LC III, Busia District Government, Victoria Water Management Zone, RAMCEA • Sio-Siteko Transboundary Wetland Management Committee, Civil Society Organisations
Potential Investors	UNDP, GIZ, USAID, SIDA

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 as well as 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. As well as 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. <p>The primary beneficiaries will be wetland communities</p>
Focal Agencies	<ul style="list-style-type: none"> • Kenya: Ministry of Water, Sanitation and Irrigation • Uganda: Ministry of Water and Environment
Other Partners	<ul style="list-style-type: none"> • Kenya: Water Resources Authority; National Environment Management Authority, County Government of Busia • Uganda: National Environment Management Authority, LC III, Busia District Government, Victoria Water Management Zone, RAMCEA • Sio-Siteko Transboundary Wetland Management Committee, Civil Society Organisations
Potential Investors	UNDP, GIZ, USAID, SIDA

PART 4: MONITORING

Implementation of the proposed conservation actions in the Sio-Siteko 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 ex-post 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.

The Sio-Siteko Transboundary Wetland Management Committee will support the monitoring and evaluation of the actions, ensuring that the interests of the investors are met, while reflecting the strategic inputs from stakeholders as detailed in the Sio-Siteko Transboundary Wetland Management Plan.



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