

Biodiversity Conservation and Utilisation of Ecosystem Services in Wetlands of Transboundary Significance in the Nile Basin: Early Investment Projects

Final Report
October 2021

Project Information	
Project name:	Biodiversity Conservation and Utilisation of Ecosystem Services in Wetlands of Transboundary Significance in the Nile Basin: Early Investment Projects
Project location:	<ul style="list-style-type: none"> i. Sango Bay – Minziro (Tanzania – Uganda) ii. Semliki Delta (DRC – Uganda) iii. Sio-Siteko (Kenya – Uganda)
Client:	Nile Equatorial Lakes Subsidiary Action Program – Coordination Unit (NELSAP – CU)
Financial Support:	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) under its International Climate Initiative (IKI)
Grant Number:	CN 81230148
Project Period:	December 2019 – August 2021
Deliverable:	<ul style="list-style-type: none"> i. Implementation of Early Investment Projects for 3 wetlands in the Nile River Basin: ii. Development of a Uganda focused Wetlands Investment Programme for the implementation of the transboundary wetlands investment plans
Date:	22 October 2021

Contents

Project Information	2
Contents.....	3
Acronyms and Abbreviations.....	4
1. Introduction.....	5
2. Overview of Project Results and Beneficiaries	6
3. Activities Implemented and Approach	10
4. Changes in the Project Area before and after intervention	17
5. 5. Comprehensive Assessment of Project Targets.....	21
5.1 Relevance.....	22
5.2 Efficiency.....	22
5.3 Effectiveness.....	23
5.4 Sustainability	23
6. Challenges and Deviations from Original Targets.....	24
7. Lessons Learned and Recommendations on the Way Forward	25
8. Annexes.....	26
Annex i. Contractual deliverables.....	26
Annex ii. Activity reports.....	26
Annex iii. Media Engagement.....	26
Annex iv. Photo Gallery	26
Annex v. Maps	27

Acronyms and Abbreviations

BMU	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
CFA	Community Forest Association
CIP	Conservation Investment Plan
DRC	Democratic Republic of the Congo
FMNR	Farmer Managed Natural Regeneration
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IKI	International Climate Initiative
INBAR	International Bamboo and Rattan Organisation
KEFRI	Kenya Forest Research Institute
KFS	Kenya Forest Service
MoU	Memorandum of Understanding
NBI	Nile Basin Initiative
NELSAP – CU	Nile Equatorial Lakes Subsidiary Action Program - Coordination Unit
NEMA	National Environment Management Authority
RAMCEA	Ramsar Centre for Eastern Africa
TWMC	Transboundary Wetland Management Committee
TWMP	Transboundary Wetland Management Plan
WRUA	Water Resource User Associations

1. Introduction

The Nile Basin is endowed with rich and diverse wetlands crucial for the provision of multiple ecosystem goods and services, beneficial to its citizens, economies and associated ecosystems. Despite the benefits offered by these wetlands, they continue to be heavily fragmented, degraded and reclaimed due to human activities such as encroachment for settlement, conversion into agricultural lands owing to population pressure, grey infrastructural development and weak implementation of policies protecting wetlands. For wetlands that are transboundary in nature, the above challenges are exacerbated, which only works to compromise their health and integrity.

In order to maintain their biological diversity and productivity, and to permit the wise use of their resources, there is need to develop and implement focused management actions, and where they exist, conduct regular reviews to address emerging issues in line with the changing context of the environment in the wider wetland landscape.

Nile Basin Initiative (NBI) in collaboration with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has contributed to these efforts under the '*Biodiversity Conservation and Sustainable Utilisation of Ecosystem Services of Wetlands of Transboundary Relevance in the Nile Basin*,' project. Through this project, NBI mandated Wetlands International to undertake among others, develop Transboundary Wetland Management Plans for three wetland landscapes: Sio-Siteko (Kenya and Uganda), Semliki (Uganda and Democratic Republic of Congo) and Sango Bay-Minziro (Uganda and Tanzania). These plans were reviewed and adopted by the respective governments in a virtual workshop held on 2 June 2020.

The project served as a critical avenue through which the partnership leveraged and synergised its comparative advantage in support to the development and implementation of fast-track measures or pilot actions that inspire and motivate stakeholders to implement measures that respond to the various challenges identified in the Transboundary Wetland Management Plans for the three wetland landscapes.

A three-pronged strategy for implementation of the pilot actions was employed. These are:

- i. Establishment of transboundary governance mechanisms to enhance cross-border cooperation, understanding and agreement in wetland management;
- ii. Development of instruments to finance the implementation of priority measures in the Transboundary Wetland Management Plans; and
- iii. Implementation of sustainable livelihood measures to incentivise wetland conservation.

This report summarises the approaches used, significant outcomes, challenges experienced and lessons learned in implementation of the pilot actions. Recommendations to enhance sustainability and further the good practices from the project are also detailed.

2. Overview of Project Results and Beneficiaries

During the period of implementation December 2019 – August 2021, the following significant results were achieved:

- i. **Established Transboundary Wetland Management Committees** for the Sango Bay-Minziro, Semliki and Sio-Siteko wetlands. Experiences from the implementation of management instruments in the region point to inadequacies largely as a result of lack of functional structures to coordinate conservation efforts within the wetland landscape. As such, there was broad consensus by the stakeholders to establish transboundary wetland management committees for purposes of formalising and enhancing coordination. The committees were established through a collaborative stakeholder process between August and November 2020, which not only provided for greater understanding of the essence of the interventions in the management plans, but also served as a platform for exchange of experiences in the use, governance and management of the wetland landscapes. This aspiration is also aligned to the implementation of the Ramsar Convention and the wetland wise use principle in the framework of the Convention's Strategic Plan. *See Annex i - Semliki Delta Transboundary Wetland Management Committee meeting report*
- ii. **Strengthened partnerships for wetland conservation through Memoranda of Understanding.** Following the establishment of the Transboundary Wetland Management Committees, Wetlands International facilitated a process for the Governments of Uganda, Democratic Republic of the Congo (DRC) and Tanzania to sign joint commitments toward Memoranda of Understanding (MoU) for the management of Semliki Delta and Sango Bay-Minziro transboundary wetlands. Anchored on two joint management plans developed in 2020, these partnership agreements establish the foundations and guiding principles for the neighbouring countries to work closely to support the achievement of transboundary wetland conservation goals such as mobilisation of resources or implementation of the management plans. *See Annex ii - signed joint commitment to an MoU for Sango Bay – Minziro Wetland*
- iii. **Conservation Investment Plans (CIPs) for three wetland sites of Sango Bay – Minziro, Semliki and Sio-Siteko finalised and adopted** after more than a year of consultations. On 5 August 2021, in a workshop convened by GIZ and NBI, the Governments of the DRC, Kenya, Tanzania and Uganda unanimously adopted CIPs for the three transboundary wetlands. These plans present the business case - as practical proposals - to mobilise finance for conservation measures that support the implementation of the Transboundary Wetland Management Plans. They showcase support of the 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 by aligning aspirations and needs with development plans and opportunities. They are targeted at development partners, private and public investors as well as government agencies with an interest to conserve the wetland landscapes. *See Annex iii - Minutes of the approval of CIPs for three transboundary wetlands*

- iv. **Processes for improving the conservation status of the Minziro Forest Reserve as Tanzania's fifth Ramsar site initiated.** The aspiration to put in place additional management arrangements to support wise use of the Minziro Forest Reserve which is part of the Sango Bay – Minziro Transboundary wetland through enlistment as a Ramsar Site was mooted by the Government of Tanzania during the Transboundary Wetland Management Plan development process. To move this forward, consultative stakeholder meetings from the local to the national level led by the Tanzania Forest Service and Tanzania's Ramsar Focal Point from the Division of Environment were held between November 2020 and March 2021. These meetings provided an opportunity for creating awareness on the benefits of the enlisting as well as valuable input for the completion of the Ramsar Information Sheet. The act of designating a wetland as internationally important under the Convention is considered as an appropriate first step along a conservation and sustainable use pathway, the endpoint of which is achieving the long-term wise (sustainable) use of the site. The process is under final discussions by the Government of Tanzania. *See Annex iv - Ramsar Information Sheet Minziro Forest Reserve*
- v. **Linkages between River Basin Management and Wetland Planning established.** With the understanding that activities and water resource management decisions upstream can impact downstream ecosystems, synergies with ongoing river basin planning and management processes were made as relevant. For example, the Semliki Delta Conservation Investment Plan proposed measures for addressing the integration of the conservation and sustainable use of the wetland such as sediment and water flow regimes which can have a profound influence on the wetland hydrological balance. These were included in the Semliki Catchment Management Plan. For the Sio-Siteko wetland, it was imperative that the ongoing interventions in the Sio-Malaba-Malakisi Basin Investment Framework were considered and complement those prioritised into the Sio-Siteko Conservation Investment Plan.
- vi. **Degraded wetland areas and riverbanks restored.** Hundreds of kilometres of degraded sites in the three wetland were restored through the application of various approaches. These include river buffer zone establishment, river bank stabilisation by use of bamboo and indigenous tree species, as well as Farmer Managed Natural Regeneration (FMNR). These measures will in the long-term lead to the restoration of the ecological characteristics of the wetlands and strengthen the social and economic resilience of wetland adjacent communities. Some of the notable successes from the restoration efforts include uptake by other land owners who have replicated similar approaches to stabilise the riverbanks. This is a good indicator of sustainability. In addition, there has been increased interest from other stakeholders to scale up the interventions in other hotspot areas as identified in the transboundary wetland monographs. An example is support by the Busia County Government to donate 1,000 tree seedlings to Water Resource User Associations within the Sio-Siteko wetland.
- vii. **Strengthened the capacity of six hundred and seventy five (675) wetland adjacent communities** in the three wetland landscapes from Busia District (Uganda), Busia County (Kenya), Kyotera District (Uganda), Kagera region (Tanzania) and Ituri Province

(DRC). Between September 2020 and August 2021, Wetlands International together with its partners from the four countries facilitated trainings on Sustainable Water and Land Management, riparian land management, landscape approaches in biodiversity conservation, Natural Farmer Managed Regeneration of bamboo, bee-keeping and animal husbandry. These trainings are linked to the support to sustainable livelihood measures. The trained communities are now applying better water and wetland resource use management practices.

- viii. **Sustainable livelihood measures implemented:** Support in the delivery of key inputs, materials, training and extension to enable the planning, uptake and maintenance of select livelihood activities involving households, local government and community based organisations has been provided in the three wetland sites. These include sustainable capture fisheries and kitchen gardens in Semliki (DRC), fruit tree farming in Sango Bay and Semliki (Uganda), bee-keeping in Minziro (Tanzania) and animal husbandry in Sio-Siteko (Uganda and Kenya). Implementation of these actions laid a good base for community groups who can go on to play an important role in the development of the communities they represent. Linkages with ongoing activities were made as much as possible and conservation agreements signed with beneficiary groups. *See Annex v – Sample conservation agreement for animal husbandry in the Sio-Siteko Transboundary wetland*
- ix. **Enhanced the profile and visibility of transboundary wetland collaboration in the Nile Basin:** During Project implementation, Wetlands International and its partners have participated in various local, national, regional and global events to raise the profile of the Project and its outputs. Examples are:
- 6th EbA Knowledge Day! Maximising the potential of EbA: [Bridging the gap between climate change and biodiversity agendas on 8 June 2020](#)
 - 6th Nile Basin Development Forum on 6 March 2021: [Conservation Investment Plans in the Nile Equatorial Region](#)
 - SIWI World Water Week on 23 August 2021: [Peatlands and Transboundary Wetland Management Plans](#)
 - Bamboo for Water and Livelihoods on 18 September 2021, World Bamboo Day Celebrations in Kenya: [Bamboo Industry Awareness Event](#)
 - United Nations Framework on Climate Change COP 26 on 12 November 2021: [Transboundary Waters and Wetlands: From Mitigation to Adaptation](#)

These events have not only raised awareness on the value, benefits and challenges faced in the transboundary wetlands, but have also generated interest on the Project and its role in strengthening cross-border collaboration and cooperation toward their sustainable conservation and management.



3. Activities Implemented and Approach

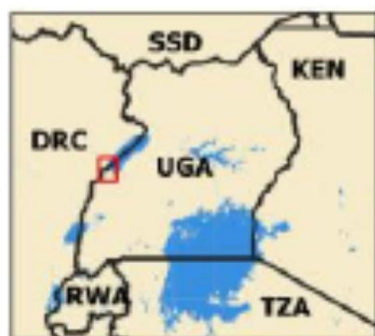
To achieve the results described in section 2 above, site-specific activities were implemented for each wetland landscape. These activities and the approach toward their implementation are described per wetland landscape below:



**Sango Bay – Minziro
Transboundary Wetland
(Tanzania and Uganda)**

#	Activity	Approach
1.	Transboundary governance mechanism established	<ul style="list-style-type: none"> Facilitated the joint identification of participants for stakeholder meetings together with the Nile Technical Advisory Committees from Tanzania and Uganda. Facilitated the establishment of a Transboundary Wetland Management Committee, and held discussions on its structure, roles and responsibilities in participatory meetings held on 26 and 27 November 2020 in Missenyi, Tanzania. Based on the results and conclusions of the joint workshop in November, a Memorandum of Understanding concerning cooperation in wetland conservation and management of the transboundary wetland was drafted and discussed by relevant parties. Provision of a platform for sharing of experiences and good practices in the establishment and operations of transboundary committees. Joint commitment toward adoption of a Memorandum of Understanding for cooperation in the management of the transboundary wetland reached by the governments of Tanzania and Uganda on 21 April, 2021 in Kyotera, Uganda.
2.	Strengthened capacity for wetland management	<ul style="list-style-type: none"> Developed a Conservation Investment Plan (CIP) for the Sango Bay – Minziro Transboundary Wetland through consultative processes held between 2019 and 2020. The CIP was adopted by the governments of Tanzania and Uganda on 5 August 2021. Developed a roadmap for the designation of Minziro Forest Reserve as a Ramsar Site. Facilitated the delineation of the proposed Ramsar site boundaries which were presented during national, regional and

		<p>local stakeholder meetings held from 17 to 24 November 2020.</p> <ul style="list-style-type: none"> • Supported the government of Tanzania to complete the Ramsar Information Sheet – An online form which helps in collecting data for the designation of a Ramsar site. • Initiated discussions with the Ramsar Secretariat toward the intention and support required for the designation process including on the requirements for successful completion and submission of the Ramsar Information Sheet. • Conducted trainings on sustainable land management and agroforestry for 320 farmers and local leaders from Minziro and Katongero in Kyebe sub-county, Uganda. • Established the first district tree nursery in Kyotera with a capacity of 200,000 indigenous, bamboo and fruit tree seedlings for distribution to farmers. In Tanzania, a tree nursery with a capacity of 10,000 tree seedlings has been established at the Minziro Nature Reserve Office. • Conducted trainings for 52 participants representing 6 beekeeping groups from Missenyi and Bukoba rural districts in Tanzania on apiculture (basics of beekeeping and the honey value-chain).
3.	Sustainable livelihood measures to incentivise conservation implemented	<ul style="list-style-type: none"> • Livelihood committees set up in both Uganda and Tanzania to ensure the beneficiaries of the sustainable livelihood support are linked to wetland conservation action. These include groups such as Community Forest Associations, Water User Associations and farmer cooperatives. • Procured and distributed 100 complete beekeeping equipment including beehives to 6 trained beekeeping groups from Missenyi and Bukoba rural districts in Tanzania. • Purchased and distributed 500 seedlings of improved avocado varieties to farmers trained on sustainable land management in Missenyi district council, Tanzania. • Procured and distributed 8,700 assorted fruit tree seedlings to farmers living next to the wetland in Minziro, Tanzania. • Monitoring of the implemented activities has, and will continue to be done on a regular basis by both the designated agencies (Kyotera District Environment Office and Minziro Nature Forest Reserve).



**Semliki Delta
Transboundary Wetland
(DRC and Uganda)**

#	Activity	Approach
1.	Transboundary governance mechanism established	<ul style="list-style-type: none"> • Facilitated the joint identification of participants for stakeholder meetings together with the Nile Technical Advisory Committees from the DRC and Uganda. • Facilitated the establishment of a Transboundary Wetland Management Committee, and held discussions on its structure, roles and responsibilities in participatory meetings held on 20 and 21 October 2020 in Fort Portal, Uganda. • Draft Memorandum of Understanding concerning cooperation in wetland conservation and management of the transboundary wetland was drafted and discussed by relevant parties. • Facilitated dialogue between two conflicting cross border communities to identify and agree on joint measures for transboundary cooperation and collaboration. • Joint commitment toward adoption of a Memorandum of Understanding for cooperation in the management of the transboundary wetland reached by the governments of the DRC and Uganda on 15 April, 2021 in Fort Portal, Uganda.
2.	Strengthened capacity for wetland management	<ul style="list-style-type: none"> • Developed a Conservation Investment Plan (CIP) for the Sango Bay – Minziro Transboundary Wetland through consultative processes held between 2019 and 2020. The CIP was adopted by the governments of the DRC and Uganda on 5 August 2021. • Established a local resource co-management committee in the DRC. Composed of 11 people representing local government, Civil Society Organisations and women and youth groups, the committee has been mandated to support the development of local fisheries resource base. • Trainings on sustainable fisheries smoking by use of renewable energy such as improved ovens and use of woodlot plantations for fuelwood supply were conducted. • Facilitated trainings on fisheries value chain management for

		<p>local authorities and fisher representatives. The trainings covered fisheries production, hygiene standards, salting and smoking, drying and marketing.</p> <ul style="list-style-type: none"> • Conducted training for 36 women herders in the DRC on sustainable agricultural activities including establishment of kitchen gardens. These women have been further supported to form 3 cooperative groups that have been registered into a micro credit fund (Mutuelle des Solidarités) to enable the provision of short-term loans for furthering their sustainable economic activities. This activity was initiated from the recognition of the frequent conflicts between herders and farmers over water and pasture. • Conducted 3 awareness campaigns for local populations on reforestation and the sustainable management of fishery resources. This includes a radio programme by in the local language to support community awareness efforts and share information on the role of transboundary cooperation for improved wetland ecosystem services.
3.	Sustainable livelihood measures to incentivise conservation implemented	<ul style="list-style-type: none"> • 664 indigenous and fruit tree seedlings and 1000 bamboo seedlings planted in Kiranga, Kabimbili, Rukora and Haibale villages in Bweramule and Rwebisengo sub-counties of Uganda. • Bamboo planted along the Semliki River in the DRC side covering 12 km. To conduct this activity, a cash for work strategy was adopted where the community members directly benefited from transporting, digging holes and planting bamboo. • To reduce demand for woodfuel required during fish drying, a small demonstration woodlot of fast growing species has been set up. This will help provide wood energy to fuel the growing fish drying and smoking enterprises that have been set up by other projects. • FLEVICA, a local non-governmental organisation supported the implementation of the activities in DRC and will continue with its monitoring in consultation with the Lake Edward and Albert Fisheries Programme implemented by the Ministry of Environment and Sustainable Development.



Sio-Siteko Transboundary Wetland (Kenya and Uganda)

#	Activity	Approach
1.	Transboundary governance mechanism established	<ul style="list-style-type: none"> Facilitated the joint identification of participants for stakeholder meetings together with the Nile Technical Advisory Committees from Kenya and Uganda. Facilitated the identification of a Transboundary Wetland Management Committee, and held discussions on its structure, roles and responsibilities in participatory meetings held on 15 and 16 September 2020 in Busia, Kenya. Memorandum of Understanding on the establishment of a Transboundary Wetland Management to oversee management of the wetland drafted and discussed by relevant parties. Provided a platform for sharing of experiences and good practices in the establishment and operations of transboundary committees.
2.	Strengthened capacity for wetland management	<ul style="list-style-type: none"> Together with the Kenya Forest Service, Busia District Forest office and other stakeholders, site species matching for the green borders was conducted. This process included scouting for locations to plant the right seedlings, with soil conditions and moisture availability being among the factors considered in the decision making process. Targeted awareness creation sessions on the importance of establishing green borders, wetland conservation and the accrued benefits was conducted in both sides of the border. Trainings on bamboo nursery management and farm based planting were conducted in September 2020 and August 2021. The training covered techniques for establishment of bamboo plantations for land and water management, intercropping, sustainable harvesting and management, as well as disease and pest management. Between September 2020 and March 2021, trainings on bamboo value chain technology transfer were conducted in collaboration with the Kenya Forest Research Institute (KEFRI). Targeting 49

		<p>participants from the wetland landscape, the training focused on the diverse uses of bamboo including furniture, weaving, handicrafts, briquette making and marketing of final products.</p> <ul style="list-style-type: none"> • In collaboration with veterinary doctors from both sides of the border, trainings on heifer feeding and management were conducted for 18 farmers from relevant water user associations. The training covered aspects of dairy management such as nutrition, reproduction, animal health and sustainability of dairy production systems.
3.	Sustainable livelihood measures to incentivise conservation implemented	<ul style="list-style-type: none"> • Farm preparation, including demonstrations on best approaches for planting and growing bamboo and fruit tree seedlings conducted in Kenya and Uganda. • In partnership with local and national government agencies such as the Kenya Forest Service (KFS), National Environment Management Authority (NEMA), KEFRI and the International Bamboo and Rattan Organisation (INBAR), a total of 7,675 bamboo seedlings, 13,913 indigenous tree seedlings and 1,273 fruit tree seedlings distributed and planted in Kenya and Uganda for the Sio-Siteko wetland. • To help wetland adjacent communities secure, build and safeguard their assets as well as incentivise conservation, a dairy farming project was initiated on both sides of the border. This involved construction of dairy farming structures, training and extension services. 10 in-calf heifers with the capacity to produce large volumes of milk distributed to 6 water user associations of Nanguba, Wakhungu and Bumasa Water Resource User Associations in Kenya and Lumino Majanji, Bumasi and Buda water user associations in Uganda. • To enhance sustainability of the dairy farming project, conservation agreements detailing benefit sharing mechanisms were signed by first beneficiaries. • Ecogreen, a local non-governmental organisation in Kenya supported the implementation of the activities across the border and will continue with its monitoring and making linkages to other initiatives that on value-chain addition such as sustainable management, formation of cooperatives and bamboo product making and marketing.



'I am reaping benefits from Bamboo. This supergrass is good for the wetland and for women like me'

Beatrice Murwayi, Sio-Siteko
Wetland beneficiary

4. Changes in the Project Area before and after intervention

Although it would be unrealistic for a project of this scale to have meaningful impact, there have been several changes (both observed and reported) linked to project intervention.

Firstly, as the meetings were highly participatory, bringing together cross border communities in one platform to identify and agree on joint issues and solutions helped build social cohesion. When enforced, community land suitability and land use maps developed during the meetings can be useful in solving land and natural resource use conflicts.



Figure 1: Kenyans and Ugandans mapping land uses and degradation hotspots in the Sio-Siteko wetland

Secondly, the process of establishing Transboundary Wetland Management Committees, highlighted that understanding of shared goals as well as opposing interests is key in wetland cooperation and commitment. There was an observed change where buy-in from all countries involved helped to find pathways and opportunities for significant improvement in transboundary wetland governance.



Figure 2: Representatives from Uganda and Tanzania after signing commitments to a MoU for the Sango Bay – Minziro wetland

Communication between the riparian states has also been important in helping to prompt progress in addressing identified challenges. For example, the process of designating Minziro Nature Forest Reserve as a Ramsar Site inspired the plans for further protection of the Sango Bay – Minziro as a transboundary wetland.



Figure 3: Participants deliberating on the establishment of the SAMUKAMI transboundary Ramsar Site

Participation and sharing of the aspirations of the Project in various events helped to raise the conservation profile of the three transboundary and the need to address their conservation and management challenges. In communicating the benefits of cooperation the project beneficiaries have galvanised support to and financing of transboundary wetland cooperation. For example, the County Government of Busia has supported the Sio-Siteko Wetland User Association with tree seedlings to further wetland restoration efforts.



Figure 4: Farmers practicing fruit tree and bamboo intercropping along the wetland landscape

Following the capacity building efforts initiated from the Project, there has been an increased uptake of sustainable wetland conservation and management measures. For example, in Uganda, farmers are incorporating sustainable land management practices. These measures comprise practices that are adapted to biophysical and socio-economic conditions aimed at the protection, conservation and sustainable use of wetland resources.



Figure 5: Conservation tillage providing for soil and water conservation in Kyebe, Uganda

In developing the green borders, we have observed changes in the attitudes of wetland adjacent communities toward wetland restoration. The farmer to farmer approach that incorporated indigenous knowledge in all three wetland sites has been adopted, with farmers planting wetland friendly trees along the wetland. There has also been interest from other stakeholders within the wetland landscapes to support wetland restoration in line with sub-national, national, regional and global conservation targets.



Figure 6: Sprouting bamboo and indigenous tree seedlings after three months of planting

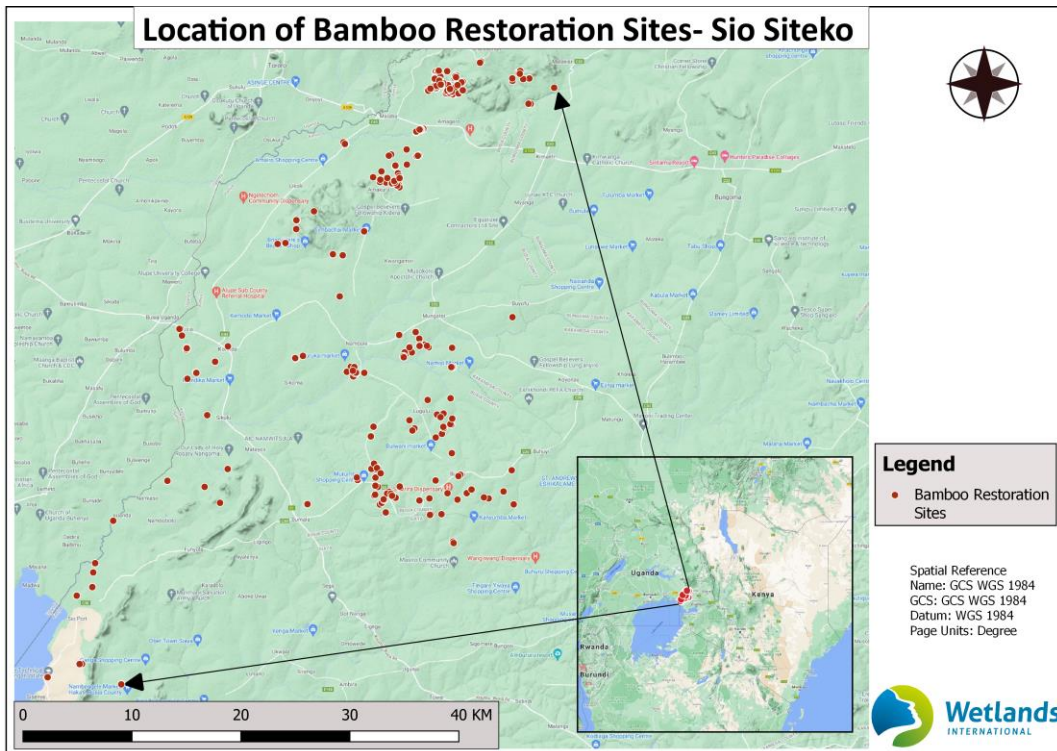


Figure 7: Location of bamboo restoration sites in Sio-Siteko, Kenya. Source: <http://bambooafrica.inbar.int/>

With the understanding that tree nurseries are a key factor in many restoration interventions, the project supported their establishment in all the Project sites. The size and composition of these nurseries vary, with some government run nurseries typically producing an average of 200,000 seedlings per season. Nursery production is focused on multiple purpose tree seedlings or a combination of species types e.g. bamboo, *Markhamia lutea*, *Terminalia superba* and grafted mango and oranges. At the time of reporting, some nurseries have evolved from project support to become independent and self-sustaining.



Figure 8: Kyotera District Tree Nursery Site (before and after establishment)

5.

The Sio-Siteko Green Border Project Is Supported By



Bundesministerium
für Umwelt, Naturschutz
und nukleare Sicherheit

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



In collaboration with



5. Comprehensive Assessment of Project Targets

To assess the achievement of the project targets described in section 2 – 4 above, we have used the relevance, efficiency, effectiveness and sustainability criteria for evaluation where: *Relevance* looks at the extent to which the Project objectives are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies; *efficiency* measures how resources or inputs such as funds, expertise and time are converted into results; *effectiveness* addresses the extent to which the Project's interventions objectives were achieved taking into account their relative importance; and *sustainability* which looks at the continuation of the benefits of the Project beyond its implementation duration.

5.1 Relevance

The Project has contributed to raising awareness and developing the technical capacity of wetland adjacent communities on their roles and responsibilities in wetland conservation as well as the application of sustainable ecosystem restoration approaches.

Implementation of the green borders can be used to guide action on wetlands as part of the UN Decade on Ecosystem Restoration (2021 – 2030) and support progress toward achieving Sustainable Development Goal 6.6 on protecting and restoring water-related ecosystems including wetlands and Aichi targets on reducing direct pressures on biodiversity and promoting sustainable use.

Peatlands are the largest natural terrestrial carbon store. They store more carbon than all other vegetation types in the world combined. These values have been recognised by the relevant riparian states in the Project sites and included in the Conservation Investment Plans. Therefore, peatland restoration can be incorporated into countries' Nationally Determined Contributions under the Paris Agreement.

5.2 Efficiency

The Project progressed very slowly at first with the onset of the COVID-19 pandemic. Several scenarios for implementation were developed and discussed. Changes to the initial implementation plan were made in consultation with riparian states and approved by GIZ and NBI. The changes include a no-cost extension to the implementation period.

The flexibility in budgetary allocation and in shifting funds from one budget line to another was instrumental in enhancing efficiency of the project. The support from the GIZ finance and technical teams was crucial in ensuring

Through a combination of approaches targeting restoration, socio-economic strengthening and wetland conservation governance, 675 stakeholders have been reached, degraded wetlands and riverbanks have been restored and transboundary governance instruments and frameworks developed and adopted. These results (see description in section 2 to 4 above) demonstrate efficiency in the translation of resources into results.

5.3 Effectiveness

The primary objective of the Project has largely been fulfilled. Transboundary governance mechanisms to enhance cross-border cooperation, understanding and agreement in wetland management, as well as instruments to finance the implementation of priority measures in the Transboundary Wetland Management Plans have been developed and adopted.

The activities implemented (see section 3) were not only mutually reinforcing, but also contributed to the effectiveness of the Project. Despite the challenges in implementation including an overly ambitious objective for a short duration of implementation with limited resources and increased interest from stakeholders and Project start-stop from containment measures to combat the COVID-19 pandemic, the Project was largely able to generate good value for money.

5.4 Sustainability

The level of collaboration demonstrated continued commitment and sustainability of our interventions in the transboundary wetlands and elsewhere beyond the project period. For example, through this project, we engaged a wide variety of stakeholders who were interested in establishing new partnerships and multi-stakeholder platforms to engage in wetland conservation at different scales. As a result, several local champions have been identified, who not only supported implementation of actions on the ground, but also offered to provide follow-up and support monitoring of the initiatives post implementation. An example is Ecogreen, which is a local NGO Based in Busia, Kenya.

In order to ensure the sustainable management of the natural resources of the Semliki Delta, the Project has established a joint committee and will continue to adopt participatory approaches, bringing together all interested stakeholders and involving them, not only as project participants but also as people actively involved in its implementation, decision-making, monitoring and evaluation.

The Project utilised the technical, human and other resources available in the four riparian states and drew on existing knowledge and skills within the wetland areas. For example, support, advice and ideas from the Ramsar Centre for Eastern Africa (RAMCEA) proved to be useful throughout project implementation.

While the challenges of sustaining the successes of Project fast track measures are acknowledged, Wetlands International remains committed to the continuation of these activities and view implementing transboundary wetland management strategies as a long-term process that is well underway. Specific recommendations on next steps are included in section 8 below.



6. Challenges and Deviations from Original Targets

Challenges in implementing the Project were diverse. Perhaps the most dramatic was the impact of the COVID-19 pandemic. The pandemic caused long delays in implementing activities as a result of measures in place to curb the spread of the virus particularly restrictions on travel and gathering. This had an impact on the timely delivery of outputs leading to deviations in project finalisation date.

In addition, when possible to organise meetings, the cost of COVID tests for participants as well as increased travel costs made a huge dent on the budget. This meant that instead of organising two transboundary meetings in all three wetlands, only one was held at the Sio-Siteko wetland.

Balancing expectations of key stakeholders was a challenge. For example, the community members had huge expectations for support to livelihoods. In Sio-Siteko, instead of delivering 20 heifers, the Project only delivered 10 heifers which were distributed among 6 water user associations from both Kenya and Uganda.

In developing transboundary governance mechanisms, there arose issues and interests from the decision making organs within states. These bureaucracies and prolonged dialogues led to delays in finalisation and adoption of key documents as deliverables of this Project. For

example, the process of designating Minziro Forest Reserve as a Ramsar Site was delayed as a result of back and forth with Tanzania's Foreign Affairs Department.

In cross-border cooperation, language barrier was one of the challenges that led to complications and delays. For example, in the Semliki Delta and Sango Bay-Minziro meetings, French and Swahili translation was required to facilitate communication with and between partners and stakeholders. The capacity and resources for translation and longer meetings was not taken into consideration and thus had an impact on timely and effective delivery of outputs.

7. Lessons Learned and Recommendations on the Way Forward

The following is a summary of lessons learned and recommendations by the Project team.

Understanding the role of the stakeholders and building relationships in this Project was a key element for the success of the project. To do this, we began by the identification and mapping of stakeholders depending on their interest and influence. Key government institutions such as the Ministry of Water and Environment of Uganda have gone on to play a critical role in providing information and creating legitimacy for the project.

Involving mandated local institutions such as Water Resource User Associations (WRUAs) and Catchment Management Committees who represent local communities and have their interests at heart proved to be critical and useful for the success of the project. However, selecting the 'right' people was important (based on a set-criteria) in order to ensure inclusivity and avoid 'elite-capture' which is common with these institutions.

The need to understand and respond to stakeholder needs and concerns with considered and timely responses was very important to the success of the project. Holding meetings where we were transparent about project work plans and budgets, and explaining right from the onset what elements of the project can be influenced - when and in what way - served to be an important element in managing expectations.

This Project (capacity building, ecosystem restoration and promotion of governance) such as many other natural resource management projects require a relatively long period of implementation to yield impact. For example, policy processes which were not entirely dependent on planning but also political issues.

Achieving results requires the long-term commitment and relationship of trust between the partners and focus on achieving overarching objectives and targets. As trust takes time to develop, the set-up of the Project where implementation began after other transboundary processes such as wetland management planning were already in motion was critical.

8. Annexes

Annex i. Contractual deliverables

- Conservation Investment Plan for the Sango Bay – Minziro Transboundary Wetland
- Conservation Investment Plan for the Semliki Transboundary Wetland
- Conservation Investment Plan for the Sio-Siteko Transboundary Wetland
- Project Concept Note: Toward Conservation and Sustainable Utilisation of Transboundary Wetlands in the Nile Basin

Annex ii. Activity reports

- FLEVICA report – Implementation of Early Measures in Semliki Delta (DRC)
- Ntoroko District Government reports – Implementation of Early Measures in Semliki Delta (Uganda)
- Kyotera District Government reports – Implementation of Early Measures in Sango Bay – Minziro (Uganda)
- Ecogreen report – Implementation of Early Measures in Sio-Siteko wetland (Kenya and Uganda)
- Lake Victoria Basin Development Authority – Implementation of Early Measures in Sango Bay – Minziro (Tanzania)
- Semliki Delta Transboundary Wetland Management Committee Meeting Report

Annex iii. Media Engagement

- [Green Borders for Sango Bay – Minziro Transboundary Wetland](#) – 28 April 2021
- [Uganda, DR Congo, Tanzania sign Memoranda to Manage Transboundary Wetlands](#) - 26 April 2021
- [Uganda and DRC embark on Saving Semliki Delta](#) – Next Media Uganda, April 14 2021
- [Sio-Siteko: Making Steps to Implement Transboundary Wetland Management Plan](#) - 25 September 2020
- [Wetlands Across Borders: Managing Sango Bay – Minziro, Semliki and Sio-Siteko Transboundary Wetlands](#) – 30 June 2020
- [Toward managing Transboundary Wetlands in the Nile Basin](#)

Annex iv. Photo Gallery

- Sango Bay - Minziro Transboundary meetings Day 1:
<https://drive.google.com/drive/u/0/folders/1vEEfiXKpdb9M2l8VjJBL0s6iMh7O-Chw>

- Sango Bay – Minziro Transboundary meetings Day 2:
<https://drive.google.com/drive/u/0/folders/1QszLYBEGaTjzXD0eJmH7urlivUJBiyiB>
- Village leaders' presentations (Missenyi):
<https://drive.google.com/drive/u/0/folders/1J7rcrSucqUqbOzZ8DHoOS-pM3vaCptUt>
- Minziro Ramsar Site consultations:
<https://drive.google.com/drive/u/0/folders/1Z2f835ktly820g4ZAoWPO94zOuD-RLbU>
- Minziro field excursion:
<https://drive.google.com/drive/u/0/folders/1V7jnTu6vJOi8MOJ4-MBIPvPi2YlnIOdk>
- Sio-Siteko Transboundary meetings:
<https://drive.google.com/drive/folders/1OOSxqaGyYD6aGfqDnpY9EmPwcVFytg?usp=sharing>

Annex v. Maps

- Shapefiles (GIS Layers and Maps) for Sango Bay – Minziro, Semliki and Sio-Siteko Transboundary Wetlands:
<https://acaciawater.wetransfer.com/downloads/b7670cd38e07161e584ac37505023f3020200303095116/610deca20109c23599927c3a7e88400f20200303095116/4b25ee>
- Sio-Siteko bamboo restoration sites: <http://bambooafrica.inbar.int/>