





# **Darwin Initiative Main: Final Report**

# To be completed with reference to the "Project Reporting Information Note": (<u>https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/</u>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes.

#### Submission Deadline: no later than 3 months after agreed end date.

Submit to: <u>BCF-Reports@niras.com</u> including your project ref in the subject line.

Project reference	26-019
Project title	Secure Wetland Ecosystems to improve livelihoods through Community Conservation Agreements
Country(ies)	Uganda
Lead Partner	NatureUganda
Project partner(s)	BirdLife International
	Wetland Management Department (WMD)
	Kabale and Rubanda District Local Governments
	Ramsar Committee of East Africa (RAMCEA)
	Community Rural Development (CRD)
Darwin Initiative grant value	£299,939.00
Start/end dates of project	01 April 2019 - 31 March 2022
Project Leader name	Mr Achilles Byaruhanga
Project website/blog/social media	www.natureuganda.org https://twitter.com/NatureUganda https://www.facebook.com/NatureUganda
Papart author(a) and data	Mr. Ashilles Duewhence, Dr. Diensk Nahuence and Mr. Linemu
Report author(s) and date	Mir Achilles Byaruhanga, Dr Dianah Nalwanga and Mr Jimmy Muhoozi Muheebwa
	30 <sup>th</sup> May 2022

# **Darwin Initiative Project Information**

# 1 Project Summary

**Project location:** The project is addressing threats to three hydrologically-linked high-altitude wetlands in Rubanda and Kabale districts located in the Kigezi region south-western Uganda. The wetlands are: Nyamuriro swamp (5,100 ha), Kiruruma valley (4,500 ha) and Lake Bunyonyi and associated wetlands (12,500 ha) collectively covering approximately 60% of all wetlands in the Kigezi region.



**Problem being addressed:** Ugandan wetlands are considered wastelands with no incentive to manage them sustainably. The main threats were unsustainable use such as unregulated drainage for agriculture. These wetlands are dominated by peat, and exposing peat to oxidation not only reduces productivity for food but accelerates carbon emission. In 2017 the government proposed and advertised for mining the peat (Annex 1) but Local communities with support from NatureUganda petitioned government showing that mining would be uneconomic, displace people and emit extensive amounts of carbon thus contribute to climate change. In addition, the Uganda Wetlands Atlas and Uganda Wetlands Assessment Report 2017 indicated that wetland encroachment changed water regime, water quality, and the macro-climate with negative impacts on the availability of wetlands resources, safe water, and public health.

**Biodiversity challenges being addressed:** NatureUganda's monitoring programme (2017) shows, that together the above wetlands support the highest number of breeding Grey Crowned-Cranes (>100 pairs) in Uganda, and other globally threatened birds such as Papyrus Yellow-Warbler, wetland endemic mammals including the Sitatunga and endemic amphibians especially Xenopus frogs (a local delicacy).

**Poverty challenges being addressed:** In 2019/20 Uganda's population was increase at over 3% with average household (HH) size estimated at 5 persons, with a monthly consumption expenditure per adult at less than UGX 46,233.65 (cc BP 1). Nearly 33.8% of the rural population in Uganda lived in poverty and Kigezi sub-region registers the highest poverty gap in the Uganda as documented by Uganda Bureau of Statistics (UBOS). Considering the poverty parameters, the Kigezi region qualifies as a poverty stricken one; more that 50% thrive on subsistence agriculture with a little surplus for sale (income). Housing units are mainly mud and wattle, electricity use, like elsewhere in rural Uganda is still at its very minimum. The main form of energy source is wood (biomass) for cooking, lighting and warming. Transport is mainly on foot and health standards are very low and majority HH survive on one meal a day. The region's terrain is steep, hills and v-shaped valleys are prone to high degradation and the heavy reliance forests and wetlands for survival leads to degradation of forests. Over 90% of wetlands are degraded or converted to subsistence farms for food crops and vegetables. Species such as the endangered Grey Crowned Crane and breeding success plummeted.

# 2 Project Partnerships

NatureUganda values the role played by partners in implementation of the project and collaborated with other players in community, local and central government or other civil society partners. These included:

- Birdlife International supported the project based on their extensive experience in nature conservation and the empowerment of local communities and as a depository of all IBA/ KBA information through World Bird database.
- Wetlands Management Department (WMD) under the ministry of Water and Environment) supported wetland baseline surveys, reviewed all the reports and same reports were used to complete the Ramsar Information Sheet (RIS) as part of Ramsar site designation process by National Ramsar Committee. The national Ramsar Focal point for Uganda was fully involved in data management and drafting necessary document.
- Kabale and Rubanda district Local Governments are mandated institutions to manage wetlands and the environment at the local level. We worked with the Kabale and Rubanda district local governments to mainstream biodiversity conservation and other project interventions such as soil and water conservation into the district's development plans. The districts supported the first approval for Ramsar designation by local councils.
- Ramsar Committee of East Africa (RAMCEA) worked with NU in providing technical support on Ramsar designation through guiding on the compilation of the Ramsar Information Sheet (RIS).
- Community Rural Development (CRD) supported the establishment of five Farmer Field Schools (FFS), reviewed guidelines and supervised demonstration sites.
- Makerere University and Uganda Fisheries Research Institute: Makerere University and Uganda Fisheries Research Institute conducted the biodiversity baseline studies (Birds, mammals, Fish, Amphibians, Ecosystem services, Peat, upland soils, water quality, and farming practices)
- **Community groups** were engaged through feasibility assessments to determine their readiness and ability to perform the desired conservation actions against negotiated benefits into Community *Conservation Agreements* (CCAs).

# 3 Project Achievements

# 3.1 Outputs

**Output 1. Wetland ecosystem values known and availed to local and national decision make** An ecosystem valuation was conducted of the targeted wetlands (Kiruruma, Nyamuriro, and Lake Bunyonyi) (Annex 2), and the results shared with local governments and Central government to support decision making and policy implementation. Other reports including peat carbon stocks and impact of conservation activities on emissions was produced and shared with local and central governments (Annex 3). Both reports highlighted the importance of the wetlands to the community including water provision and purification, climate regulation and food production. We presented the valuation report and the report on peat to the respective districts of Rubanda and Kabale and central government through Wetlands management Department. The districts have followed up the recommendations in the reports and tasked the sub-county councils to develop bylaws on the conservation and management of wetlands. Muko sub-county in Rubanda District had submitted its draft bylaw to the district council for review and approval by time of writing this report. Further a review of the Nyamuriro wetland Management Plan was initiated and completed (Annex 4)

# Output 2. Wetlands biodiversity assessed and data obtained and used to evaluate Ramsar status of the sites and enable designation

We conducted Biodiversity assessments of the three-targeted wetlands of Kiruruma, Nyamuriro, L. Bunyonyi. The following higher taxa were considered as indicators of the quality of a wetland

ecosystem; plants, insects, birds, mammals, herps, Fish and associated water biodiversity and water quality. (Annex 5). Synthesis and analysis of the data was conducted and a RIS was compiled from the information collected, complimented by other existing information at NatureUganda. The RIS was presented to the both local governments of Kabale and Rubanda (Annex 6). The National Ramsar committee met and approved Lake Bunyonyi wetlands as Ramsar site (Annex 7). We presented lake Bunyonyi together with another site Kiyanja wetlands and both were approved.

All biodiversity assessments recommended indicator species for monitoring during the project. Due to financial limitation, the project team selected the Grey crowned Crane as a cornerstone species for wetlands and therefore a good indicator species. We built on the existing monitoring experience on birds in the country to design and implement a monitoring strategy. Resulting data was shared with national and international partners including National Biodiversity Data Bank (NBDB) and world bird database hosted British Trust of Ornithology (BTO). Crane data is also shared with International Crane Foundation (ICF).

We also trained local communities in a crane custodianship programme – an initiative where members of the community volunteer to monitor (bio-monitors) the cranes. The total cranes numbers seem to have stabilised and increasing. In addition an enhanced crane breeding success has been recorded i.e. the ratio of the fledging juvenile cranes to the number of breeding pairs was calculated at 2.0 during the project period 2019/2020 and 2020/2021 breeding season as compared to 1.5 of 2013/14, a result from protection of breeding pairs by custodians.





#### Monitoring results for the Grey Crowned Crane

Assessments were made; results presented to the stakeholders and district councils of Kabale and Rubanda districts. In their respective council meetings, the leadership passed on overwhelmingly supported the Ramsar listing aspect (Annex 16, 17)

# Output 3. Engagement of community stakeholders in the implementation of Community Conservation Agreements to sustainably manage and wisely use wetlands:

Through a participatory method, ten (10) community groups were identified and needs assessment conducted. They were trained in group formation, group management and governance. Further training included engagement in conservation agreements – where communities commit to undertake specific conservation actions (commitments) in return for ecosystem related benefits. The trainings also aimed at changing perceptions about wetland resources. Training supported group composition, diversity and inclusivity in gender, youths and persons with disabilities. In the ten groups formed they were comprised 30% males and 70% females (Annex 8).

Workshops for every community group to promote good understanding of laws and regulations regarding protection and wise-use of wetlands were conducted. Twelve (12) community level meetings were conducted and were attended by 500 participants. The following topics were covered; importance of wetlands, wise-use of wetlands, laws and regulations that govern

wetlands. Elements that reflect wetlands in the Uganda laws were highlighted and sanction related to wetlands degradation.

We introduced development of Community Conservation Agreements (CCAs initiative to facilitate the negotiation for benefits and conservation actions. Such actions included protecting species and sites, enhancing wetland coverage, and or restore the habitats on hillsides and wetlands - ultimately improving the ecosystem services. Details of the Conservation Agreements development included '*Feasibility Assessment and introducing the concept of the Conservation Agreement; Generating information on the community and natural resources that are in their midst; Drafting of a "Perception-Participatory-Map" by the community for the location of key resources used/ needed, pressures to the resources; Negotiating for benefits that matched the conservation actions and finally Agreement and signing'. (Annex 9)* 

#### Output 4. Wise use/sustainable use strategies and plans developed and demonstrated

Assessment of upland soil quality in the study area was conducted. Degradation of Upland soils is a common phenomenon in the Kigezi region. When the hillsides have been degraded, the community resort to wetlands with the excuse that '*all their soils were washed away into the wetlands*'. Addressing wetland encroachment therefore requires addressing the cause of declining productivity on upland. Against this background, we conducted a study to document the condition and issues at the upland soils around the three-wetland areas in Kabale and Rubanda districts, and activities, which could be implemented to address these issues (Annex 10).

In order to improve wise use of wetlands and sustainability in the hillsides, we established Farmer Field Schools. The FFS models or initiatives was first developed by FAO but has been adapted in many communities and we domesticated the guidelines (Annex 11). It was used to empower farmers (local communities) with knowledge and skills, making them experts in their own fields. We covered topics such as conservation agriculture, climate smart agriculture, animal husbandry, and soil and water conservation and income- generating activities. FFS provide opportunities for learning by doing. Five host and ten sub host farmers were selected in the project sites to demonstrate farmer field school technologies. Animals (ruminants) provided organic manure to apply in the agricultural fields to improve soil fertility in the agricultural plots of lands. With the FFS initiative, the farmer communities hold periodic meetings and under the guidance of a trained facilitator to learn and undertake sustainable farming practices. The communities are involved in the following practices: agroforestry, soil fertility improvement with farmyard manure, soil and water conservation, and terracing and wetland conservation. Farmers in FFS have field days – once a month per group when all the farming community gather to share learned experiences (dubbed peer to peer learning). (Annex 12)

Soil erosion is the single biggest challenge in the hills of Kigezi. We therefore prioritised adoption of efficient approaches for soil and water conservation and agricultural sustainability. During the project time, 438 farmers were trained as Trainers of Trainees (TOTs) in SWC methods, soil fertility improvement, and establishment of fodder banks and sustainable farming practices. Subsequently, the trained TOTs have reached over 2000 farmers in the project landscape through the FFS and monthly peer-to-peer learning. This knowledge transfer is witnessed through uptake and adoption of the initiatives: digging trenches in their fields, planting Napier grass and Calliandra (fodder to feed animals and stabilisation of trenches to stop soil erosion). Adoption is also observed in the non-target communities. We provided agroforestry trees to the community groups to integrate into crop and animal farming systems. Tree species provided to the farmers included Hass avocadoes 5000, Calliandra and Griveria (10000 seedlings), Sesbania (1000 seedlings) and six (6) trucks of elephant grass that covers nearly 6km. Also provided to community were farm tools including 100 hoes, 100 mattocks, 100 pangas and 100 spades used for gardening and digging trenches.

Among the trained farmers, 1500 adopted soil fertility improvement practices and establish fodder banks in the uplands to reduce their dependence on wetland and construction of standard

soil conservation structures (check dams, trenches (referred to as *Fanya chini - fanya juu*), and stabilize them with agroforestry trees (Annex 13). With skills being gained from the FFS, over 6000 metres of elephant grass and 1530 meters of Setaria grass were planted in the landscape facing the three wetlands. By reporting time, 383 trenches (appr 38000m) to stabilise soils and 148 check dams (to slow down water on hills) have been constructed in uplands. In addition, communities were trained in wetlands laws and regulations ie wetlands are held in trust by government and degradation or cultivation of wetlands is illegal and may attract sanction, arrest or fines (Annex 14).

In order to improve livelihoods, income generation and organic manure production, we provided livestock as follows: Nyamiryango Barema Tukwatanise (35 sheep), Ruhuma Wetland Conservation and Crane Monitoring Group (25 goats), Katembe Bigyegye Turinde Eitaka (33 sheep), Nyamatembe Turinde Eitaka (30 pigs), Biringo Nyombe Tukwatanise (30 sheep and 15 Kenya Top Bar bee hives/ KTB), Lake Bunyonyi Tour Guides Association (a 15 seat capacity boat and 15HP Yamaya engine to support in transporting tourists and income generation), Nyamiringa Functional Adult Literacy (FAL) were supported with music dance and drama costumes and equipment and Kigezi Women children health initiative (tailoring and knitting machines and start-up materials)

These interventions are contributing to implementation of the government's programme of Parish Development Model (PDM) and also to the overall reduction pressure or demands on wetland resources.

Lake Bunyonyi Tour Guides Association was established to bring together all tour guides: The group has been in existence for over 10 years and operating on Lake Bunyonyi getting and taking tourists for bird watching and cultural sites. With their limited tourism skills, the group members were not able to derive a meaningful wellbeing out of the enterprise. The situation was worsened with the Covid-19 pandemic when tourism activity collapsed. We supported the group with a boat and boat engine (15 HP Yamaha); In additional the project provided 10 bird guide books, 5 binoculars and 25 life jackets since their business is on the water. The group was also registered in the Kigezi Tourism Cluster Group for networking and learning. Lake Bunyonyi Tour guides Association has a monthly duty to lead on clean-up operations of the landing site (Harutindo) where they operate (Annex 15)

# Output 5: Lessons from management of wetlands in Kabale shared at national, regional and international levels for future replication to protect peat wetlands

(a) **Developing a communication plan for the project:** In 2019, NatureUganda led on the development of a communication plan for the Darwin funded project. The plan provided guidance in public awareness, education and advocacy particularly local stakeholders and local governments.

(b) Exchange visits: Though our planned exchange visits were hampered by the Covid-19 lockdowns that prevailed in the country between Oct 2020 to Feb 2022, we were able to facilitate small teams from the groups of Nyamatembe Turinde Eitaka and Katembe – Bigyegye Turinde Eitaka (both from Rubanda district) to visit their counterparts of Nyamiryango Barema Tukwatanise Group in Kabale district. This was dubbed peer-to-peer learning. The choice of the group to visit was premised on the fact that Nyamiryango Barema group is for the persons with disabilities yet their level of engagement has never been affected by the disabilities they exhibit on their bodies.

(c) Sharing of lessons learnt: Project outcomes and lessons shared in at least 5 forums, local radio/TV programmes in local language, print media and schools. https://www.youtube.com/watch?v=H2V9gtOdQz0 ; https://www.youtube.com/watch?v=seFkdhwPlm0

Project information was shared on various media platforms - radio (especially Voice of Kigezi), Twitter, Facebook, and WhatsApp forums in the region. Two Public Talks were held with one of them being an online one (due to covid limitation) that featured the Executive Director National Environment Management Authority (NEMA) as the Key Note speaker and his talk focused 'Wetlands restoration in Uganda". Another public talk featured the Commissioner of Wetland Management Department focusing on "sustainable wetland uses and climate change;

The project also organized Biodiversity Conservation Forum (BCF), a platform that brought together all stakeholders (civil society, local government, representatives from central government departments, private sector players and heads of community associations). The forum discussed trends in wetlands and forest conservation, degradation of wetlands, the dangers of wetland degradation and commitment were especially by local governments to support wetlands conservation and restoration in the districts. The designation of wetlands as Ramsar sites was recommended .Three districts of Kabale, Rubanda and Kisoro participated.

https://www.independent.co.ug/lake-bunyonyi-endorsed-as-ramsar-site/

https://chimpreports.com/lake-bunyonyi-designated-as-ramsar-site/

https://www.talkuganda.com/news/lake-bunyonyi-certified-to-be-a-ramsar-site/

### 3.2 Outcome

This project was designed to achieve the outcome - 10,000 households benefit from the wise use of wetlands and ecosystem services, mainly water, biodiversity and secure long-term conservation of the three wetlands in Kabale. However, Lake Bunyonyi and surrounding wetlands provide water to over one million people from Rubanda and Kabale Districts.

Indicators:

- i. 40% of 10,000 households show improved wellbeing (e.g. access to water, better health, and benefits from wetlands etc.). The wetland area is now stable which will ensure long term sustenance of water for the communities. In the coming years, community access to water will be enhanced but also access to cleaner water that has less or no pollutants is available due to the conserved wetlands, avoidance of peat extraction and better management of the hill sides.
- ii. Improved biodiversity scores as determined by IBA monitoring showing no further loss on baseline levels. Using Grey Crowned Crane as an indicator species, the monitoring scores indicate an improved breeding success and more or less stable numbers along set transects. No further drainage was observation since the second year of the project, sections of the wetlands in Nyamuriro are reserves and a management plan has been produced. With the designation as a conserved area and increased awareness, will ensure protection of biodiversity in the long term
- iii. Lake Bunyonyi and surrounding wetlands were approved by National Ramsar committee for designation as Ramsar site. A new requirement for a Cabinet recommendation delayed the announcements because another site needed to be considered together. The Wetland Management Department is convinced the approved by cabinet will happen sooner.

# 3.3 Monitoring of assumptions

**Outcome risks and assumptions:** The political environment remained stable as has been the case in Uganda for over 3 decades now. We have noted that our interventions in sustainable farming practices, alternative incomes and CCAs are gradually reducing the impact that the communities had on wetlands. The rights, roles and responsibilities of communities, have been articulated in the Community Conservation Agreements that were signed. Furthermore, the improved agricultural methods being implemented outside the wetlands and the promotion of wetland wiseuse practices are showing better wetland management regimes.

#### Output risks and assumptions:

- Wetland ecosystem values known and availed to local and national decision-makers; The ecosystem valuation of the three targeted wetlands; Kiruruma, Nyamuriro, Bunyonyi was completed and disseminate to stakeholders particularly the Biodiversity Conservation Group in the three neighbouring districts, we addressed two district local government councils (Rubanda and Kabale) which lead to approval of the Ramsar site designation.
- National and the respective local governments of Kabale and Rubanda have remained committed to wetlands conservation. Local government technical and political staff have been part of the implementation of this project and they provided guidance all through the project period. The national government has been an integral part of the process of listing Lake Bunyonyi and associated wetlands for designation into a Ramsar site.
- The local government councillors resolved in favour of the Ramsar listing and showed their commitment by providing support letters to the project for the listing.
- Communities and their leadership were part of the enterprise selection which made them receptive of the initiative.
- Uganda went through presidential and parliamentary elections in 2021 but these had no significant impact on the prevailing political stability. The only (unexpected) impacting issue was the COVID 19 and its related lockdowns which mostly affected the tourism industry.
- Our progress towards realizing our intended output of Ramsar designation of Lake Bunyonyi was realised and we look forward the listing of the site.
- Lessons learnt from project are beginning to inspire increased wetlands conservation in the region. Muko sub-county is already a pioneer in developing bylaws for wetland conservation; the revision of the Nymuriro wetland management plan.

### 3.4 Impact: achievement of positive impact on biodiversity and poverty reduction

In this project, NatureUganda set out to work with the local communities to build their capacity to manage biodiversity and the natural environment in the Kigezi sub-region of Uganda. We intended to work with local communities to secure the continued benefits from natural resources for them today and in the future. In other words, we wanted to work with them in contributing towards reversing the increase in threats of the flora and fauna in the immediate environment but also contributing the international cause for halting the overall decline in biodiversity at the ecosystem level, habitat level and species level. The following interventions have been demonstrated:

- Biodiversity assessment to gain a better understanding of the biodiversity that the landscape holds.
- Awareness campaigns so that values and importance of biodiversity are better understood; laws that govern biodiversity conservation are better understood and applied.
- Wetland demarcation and restoration were conducted so that loss of biodiversity in wetlands and fringes is halted and or reversed
- Profiling for Ramsar listing so that the status of the Lake Bunyonyi and associated wetlands id enhanced.
- Soil structure/ fertility improvement and soil and water conservation practices to reduce top soil loss, increase production and enhance food security.
- Key biodiversity monitoring programmes so as to understand the population trends and improved conservation on species, sites and habitats conservation measures.
- The project provided Farmer Field Schools for demonstrating resource wise-use, climate smart agricultural practices and soil and water conservation practices.

The project target was to involve 1000HH but BEOP we had involved 438 TOTs, 513 CCA members and over 1500 HH that have undergone training through FFS and CCAs processes. Uganda Bureau of statistics (UBOS) provides the average HH income in Uganda for 2021-2022 as Ush 7,700 (US\$3.5). All the activities were successfully implemented but attribution to household income is evidenced from MECDA (Katembe FFS) and BECLA (Nyamatembe Turinde Eitaka). In 2018 NU had provided Ush 6,000,000 (USD 1600) to both groups as seed

funds. In December 2022, the capital has increased to Ush 11,364,800 (US\$3080) for Katembe, 190% increase and and Ush 46,312,900 (US\$12,350) for Nyamatembe, nearly 770% increase in three years (from the savings groups ledger records). With 200 beehives provided and expected to harvest 8000 kgs of honey (expected to raise Ush 80 million, appr US\$ 23,000), there will be sustained over a long-term.

# 4 Contribution to Darwin Initiative Programme Objectives

# 4.1 Project support to the Conventions or Treaties (e.g. CBD, Nagoya Protocol, ITPGRFA, CITES, Ramsar, CMS, UNFCCC)

- Goal A: We raised awareness among the local population and establish sustainable local structures ie CCAs and FFS and supported Nyamuriro wetland management Plan. Target 1, 2, 3, 6. We contributed to the preparatory meetings of the national CBD delegations.
- Goal B: Local governments approved Ramsar designation, that will protect the lake and associated wetlands for posterity. Target 11, 12
- Goal C: We safeguarded ecosystems, species and genetic diversity through Site management Plan and designation of the wetlands as Ramsar sites including restoration of the degraded areas . Target 11,12, 15.
- Goal D: We supported communities through FFS with animals for organic manure and practised climate smart interventions such as CSA, protected land through soil and water conservation to enhance ecosystem services. Target 4, 7
- Strategic Goal E: We established Community Conservation Associations and farmer Field Schools and are rallying platforms for capacity building. The structures will enhance participatory planning, knowledge sharing and capacity building. Target 17, 18
- Article 2.1, 2.2 of the Ramsar Convention: 'Each Contracting Party shall designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance and Article 4 on guidelines to restoration of wetlands.

### We also contributed to the SDG

SDG 1 - No Poverty: Livelihood improved through interventions to provide animals and improving land productivity for income generation for the community. Target 1.1, 1.4, 1.5.

SDG 2: Zero hunger: Our interventions in improving soil fertility, the FFS demonstrations, soil and water conservation practices and livestock support aimed at improving household food production hence improved nutrition and enhanced livelihoods. Targets 2.1, 2.3, 2.4

SDG 5 Gender equality: Our established community groups are well represented by gender. Overall group members constitute 21% males and 79% females reflected the traditional activities for women such as food production, sourcing for water and sourcing for energy (firewood) for cooking. Target 5.4, 5.5

SDG 6 Clean water and sanitation: We supported wetland restoration and other related soil and water conservation initiatives sustain water sources and soil erosion prevent siltation of water sources. Target 6.5, 6.6

SDG 13: Climate Action: We emphasised wise-use of wetlands and restoration and stopped exposure of peat, a major source of CO2 and action plans for CCA provide targets for wetland conservation and landscape sustainable landuse practices. Target 13.1, 13.3

SDG 15 Life on Land: We conducted biodiversity surveys on five major taxa birds, mammals, plants, hertiles and insects. Indicator species were selected and monitored and Lake Bunyonyi and associated wetlands have been approved as a Ramsar site. Monitoring of Cranes indicate breeding success during project. Target 15.1, 15.5

# 4.2 **Project support to poverty reduction**

The project contributed to poverty alleviation and wellbeing by facilitating the establishment of 10 CCAs and FFS where communities are building income through enterprises and training in skills for improving agricultural production. Two CCAs belong to MECDA and BECLA. In a previous project, NatureUganda had provided seed funding to the VSLAs of Ush 6,000,000 (US\$1600) and by 2022 BECLA and MECDA had increased capital to Ush 11,364,800

(US\$3080)o Ush 46,312,900 (US\$12,350) respectively. This means that there is available income to provide loans to other members of the group. With training provided and governance systems set up, the capilisation of the community savings scheme will live beyond the project. In addition, members of the group were provided with animals (sheep and goats). In one group (Katembe farmers) there are 83 animals from 36 given and five ram sold to other groups fetching Ush 450,000 for the community. In Nyamatembe group, they were given 34 pigs and they have 36 but have sold 63 piglets fetching Ush 8,880,000 for the members. This will be in addition to manure for gardens that will increase food production. We provided 200 beehives to the community association (Apiary group). Communities already harvest 4000kg from existing beehives raising US\$10,000. If all hives become colonised in net two years, the community will received additional 8000kgs raising Ush 80 million (US\$23,000). This will be a big change in the community even after the project is finalised. We provided 100 energy saving stoves to reduce biomass consumption but also improve on health of community especially mothers in kitchen.

We have also helped communities to establish improved pasture on terraces and trenches for animals and this will in long-term support animals and further improve livelihoods even when the project is finished. From the VSLA, members are able to borrow funds at low interest rate (5%) and invest in enterprises for income generation. The VSLA has been a game changer for the community, not only as a sustainability strategy but has now attracted other supporters including local government, to providing additional funds. The community groups are targeting a new government programme called Parish Development Model funds potential for more funds.

# 4.3 Gender equality and social inclusion

We note that the social norms and laws in the Kigezi region have imposed differentiated powers, roles, and responsibilities on women and men in all aspects of life. Women and girls bear the sole responsibility for securing food, water, energy, and caring for the young and sometimes for the elderly. They bear the burden of traveling farther to look for water in the valleys, looking for firewood in the forests and to look for food if gardens fail. This in addition to limited say on land matters. We identified groups to work with in this project through participatory and inclusive of gender, age, dis/ability. The community associations were already established and we facilitated the CCA process. However the FFS newly constituted. Women because of the activities and skills development targeted dominate the FFS (70% women and 30% male). Project meetings had men and women participating to review activities, make plans and resolve all issues. The two savings schemes in the project area were established for the community and membership consists of females and males with 45% females and 55% males in leadership/ executive positions.

The project was overseen by the Board of NatureUganda	4 females and 5 males
Please quantify the proportion of project	BirdLife, Wetlands Management
partners that are led by women, or which have	Department are led by females and Kabale
a senior leadership team consisting of at least	and Rubanda district have vice
50% women	chairpersons as females.

# 4.4 Transfer of knowledge

Although formal qualifications was not part of the project, the data generated from the project is shared with global data (World Birds data base hosted by BTO and BirdLife International and at national level, the data is shared with the national Biodiversity Database.

# 4.5 Capacity building

The Team leader for the project Mr Achilles Byaruhanga was nominated and received Prince William Award for Conservation in Africa, a life achievement award. Achilles was also invited to national delegations for CBD and Ramsar conventions. Mr. Jimmy Muhebwa a member of the project team was promoted from Project Manager to Director of Conservation and Partnership at NatureUganda. The Project Officer Mr. Julius has taken up a PhD programme at Kabale University.

# 5 Monitoring and evaluation

The project logframe did not change during the course of the project and the project targets remained as planned. The M&E system was kept practical but adaptive. The change on the project sites were evaluated with photos, measurements of biodiversity using indicator species such as the grey Crowned Cranes and reports from the stakeholders especially the FFS and CCAs. The District Natural Resources Officers for Kabale and Rubanda districts complimented out monitoring through the district processes since the project work had been integrated into the district development planning and monitoring. The baseline studies were conducted and provided quantitative data on biodiversity and ecosystem services including peat stocks. The change in biodiversity conservation was provided through monitoring birds and change in the livelihoods was provided by the data from the village saving and loan association (referred to as SACCO at community level) that show growth in finances (see section 4.5). Local community were trained as bio-monitors (referred to as Crane Custodians) who supported monitoring of cranes, a process and wetlands as habitat for the symbol of country. Following the Ramsar designation, government

will develop a Ramsar management Plan and it is expected the bio-monitors will be integrated into the M&E. Finally the district development plan has integrated the soil and water conservation practices and is expected that these will be scaled up to other areas. All monitoring and evaluation information was shared through various project communication channels. https://youtu.be/H2V9gtOdQz0 https://bit.ly/3XS4D1S

# 6 Actions taken in response to Annual Report reviews

NatureUganda received and responded to the Annual Report comments. However, the following are emphasised.

• Partnerships; NatureUganda worked and collaborated with various partners to implement the project. In biodiversity baseline studies, we worked with Makerere University experts (mammals, Insects, Plants, Herpetiles) and Uganda Fisheries Resources Institute who surveyed Fish and water quality. We also worked with consultants from Aberdeen University to conduct surveys on ecosystem services, Peat and upland Soil quality. The team generated the best information possible and the first for most taxa. All the information is contained in the information booklet. All the data generated from the surveys was shared with National Biodiversity Databank and the data for birds shared with the World Birds database hosted by BTO in UK.

• During the implementation of the project, Community Rural Development (CRD) supported the establishment of the farmer Field Schools based on rich experience and International Crane Foundation (ICF) still support the monitoring of the Cranes in the region.

• District Local Government provided support in the community mobilisation and integrating project intervention such as soil and water conservation in the District development Plans.

• Ministry of water and Environment together with RAMSEA support the Ramsar process from completing the RIS, to organising the national Ramsar Committee that approved the designation and approvals from Ministry top management.

• The information was completed and has been used in awareness meetings and was the source of the information that completed the Ramsar Information sheet (Annex....). It is important to note that different chapter of the book, which contains complete report on the taxa, have been shared separated with different experts.

• Ramsar site designation was approved by the National Ramsar Committee, which is the last process before submission (by Ministry of Foreign Affairs) to the Ramsar Secretariat. Since the Ramsar sites have been a big issue in the Oil exploration in the Albertine Rift in Uganda, Government has requested that further Ramsar site designation will require cabinet approval. Despite this delay, there is no reason to believe that that the designation will be rescinded. We also happy to note that a second site Kiyanja Wetlands on Shores of Lake Victoria was also proposed and approved.

• The district of Rubanda and Kabale Natural Resources Officers were involved and the Ministry of Water and Environment especially the national focal point for Ramsar Convention. Community groups especially those involved in the project under the MECDA and BECLA were involved in the discussion of the reviews.

# 7 Lessons learnt

The following were particularly noted in the project implementation

- Soil and water conservation initiatives digging trenches *fanya ju fanya chinis*, check dams and planting of grass bands to support the trenches and provide fodder for animals worked best.
- The Community conservation agreements (CCAs) approach coupled with Farmer Field Schools worked well. This is because it defined conservation actions which were equated with

the negotiated benefits. It provided the local communities with the platform to participate in the identification of environmental problems and solutions. Enforcement of the clauses of the agreements hence became easy and levels of compliance have been very high. Highly recommended for conservation outside protected areas systems

- Wetland Restoration was largely difficult because the community members resorted to wetland areas when the hillsides became less productive. While participation in wetland demarcation attracted the participation of hundreds of community members, active restoration by planting back with *Cyperus spp* on degraded sites didn't attract similar huge numbers because it was taking up agricultural Land.
- Biodiversity assessments at the beginning of the project provided good information to base conservation activities. It provided good background for partners such as local government to understand the importance of the site. It became easy in proposing the wetlands for Ramsar designation. Bassline studies highly recommended for such conservation projects.

The project duration is usually very short (in our case 3 years) and the conservation impact such as species changes, may not be visible to measure sustainability. However there are other projects where conservation interventions have stayed longer or enterprises have matured. Such project or interventions would provide learning lessons to new projects. I highly recommend learning visits to projects with success stories or where necessary failures (to be avoided).

Family size for ordinary households are high considering small sizes of land holdings with reduced soil fertility. I would recommend that population, health and environment (PHE) is emphasised in similar conservation projects, taking into considerations culture and traditions of various communities.

The project was implemented through two major disruptions; i) covid pandemic 2029-2021 and Uganda national elections (2021). However it was mainly Covid that caused major disruptions. Such emergencies happen during the project implementation and such assumptions need to be carefully monitored.

# 8 Risk Management

COVID-19 affected a series of community group meetings and trainings. For some time, the country came under complete lockdown and travels to community groups were stopped and hence training constrained. However, later limited movements were allowed under strict observance of Standard Operating Procedures (SOPs). Whereas training of community delayed but field work such as soil and water conservation and soil fertility improvement, and sustainable farming practices resumed. Subsequently SOPs allowed limited number of people to travel in car (3 people) and we used this opportunity to reach community members directly. Although it took more time but we maintained project progress.

We prioritized meetings hence holding those that were very crucial but under strict observance of SOPs by Ministry of health. Where possible such as district meetings, we adopted Small gatherings and followed guidelines of travelling (only three people allowed in each car) and therefore reach directly to our community members.

We followed all the SOPs as advised by government health workers and no one in the project team or community members as known was infected with the virus.

https://www.youtube.com/watch?v=KzJZn5SwspQ.

The wellbeing of the communities is an essential health booster and we exposed our target and even non-target communities to awareness, and explaining in local languages the SOPs as guided by ministry of Health.

Although Corona pandemic has subsided, we shall continue to practice SOPs and encouraging immunisation. Indeed virtual meetings have become part of the new normal.

### 9 Sustainability and Legacy

- The project provide a best practice in community mobilisation for conservation and advocacy especially at local community level. The Community strongly campaigned against peat extraction in their areas and government suspended the programme. Secondly, the Management Plan for Nyamuriro wetland was reviewed and approved, and this will support conservation of the wetlands in the long-term. However the high-level achievement (locally, national and internationally) for the conservation of Lake Bunyonyi and associated wetlands was the approval for designation as Ramsar site. Although the process was not fully completed by end of the project, all the national processes had been completed. Also climate smart interventions such soil and water conservation, income generation activities have already been adopted as priorities by the districts development plans and will be scaled up (from Rubanda District development plan 2023).
- The exit strategy has not changed. The project empowered the communities and established 10 community groups (Community Conservation Association) and established Farmer Field Schools that will provide community with more training and capacity building to carry on with skills gained from the project especially Climate smart interventions in wetlands and uplands. The livelihood initiatives established will continue to enhance their productivity and continued economic benefit and those involved in the saving scheme will continue to get capital to invest in other development ventures. The involvement of Local government will continue to provide technical support and streamlining some project interventions such as soil and water conservation may result in more resources. The approval of Lake Bunyonyi as a Ramsar site ensures that central government through Wetlands management department, Ministry of water and environment remains engaged with project area.
- Our exit plan was and is still that the project activities will be carried on by the local government existing structures especially the technical staff District Natural Resources Officers, District Environment Officers, District Community Development Officers and similar structures at the sub-county levels. The staff that worked on the project have been integrated in other NatureUganda project work

# **10** Darwin Initiative identity

In all communications, meetings, publications, the project has been recognised as a project funded by the UK Darwin Initiative. The project publicised the UK Darwin Initiative logo, website and print materials.

https://natureuganda.org/portfolio/secure-wetland-ecosystems-to-improve-livelihoods/

Project banners were produced and used at all project meetings. Other materials included Pullup stands, T shirts for staff, partners and communities, posters and NU Planner 2022.

The outstanding contribution is in the contribution to the Ramsar listing of Lake Bunyonyi and the associated wetlands as an important local, national and international achievement. Community members have applauded all the above and requested for conspicuous signage on the project supported items, the local leadership have graced occasions for support handover and applauded the Darwin Initiative work.

Different cases aroused different forms of recognition of the Darwin Initiative Fund. In some cases, the DI fund has been recognised in its distinctness – cases such as stakeholder meetings on the Ramsar listing process, those of biodiversity, economic valuation, peat quantification, uplands soil and the socio-economic assessment reports to the district councillors. The project banner would be used to flag out distinctly the supporting organisation. Surprisingly, local communities were quick to note that Darwin Initiative and NatureUganda shared a more or less similar logo –

the bird. It was standard to recognise Darwin Initiative at NatureUganda events such as public talks, nature walks, AGMs or other Planning meetings.

Darwin Initiative is well known to the local communities, local governments (Kabale, Rubanda and Kisoro), central government through the Ministry of water and Environment that we collaborated with.

Yes we have twitter account and we used The twitter and YouTube were effected but for a small number of people. Our community members don't have ';smart phones' and not educated enough to follow social media. However we used twitter and YouTube to reach other members of the society especially policy makers and members of NatureUganda

# 11 Safeguarding

Has your Safeguarding Policy been updated ir	Yes		
Have any concerns been investigated in the pa	ast 12 months	No	
Does your project have a Safeguarding focal Yes. point? Achilles Brunnel Byarul		hanga	
Has the focal point attended any formal training in the last 12 months?	No. However attended workshop organised to partner organisation BirdLife International an NatureUganda was provided with support fro RSPB during development.		
What proportion (and number) of project staff have received formal N/A			
All the members of staff have respected the safeguard policy requirements. The safeguard policy was reviewed by the Board (Executive Committee) and no chanllenges so far with the staff or the Board			

# 12 Finance and administration

Project finances

# 12.1 Project expenditure

Project spend (indicative) since last annual report	2020/21 Grant (£)	2020/21 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs	-			
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
Audit costs				
TOTAL	90,039.00	89,949.10	89.90	

Staff employed	Cost
(Name and position)	(£)



#### 12.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)

Source of funding for additional work after project lifetime	Total (£)
TOTAL	

#### 12.3 Value for Money

NatureUganda focus in this area is conservation of critical species, sites and investment in community development. The project therefore focussed on investment in community development, capacity building and training for over 1500HHs to sustainably manage wetland resources, monitoring of cornerstone species and activities that deliver long term environmental benefits to biodiversity and people. Over 60% of the budget was spent on operating costs at field level to ensure maximum impact of the project. Local governments in Kabale and Rubanda contributed time inkind to support the project the project, and NatureUganda leveraged other programmes in the area such as Echuya Forest Conservation in terms of transport, workshops and inkind salary and time from the project leader. We ensure low capital low capital cost for all items purchased during the project and those provided for partners and communities will remain for ongoing use. I therefore strongly believe that the project provided good value for money invested by the Darwin Initiative.

# 13 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes.

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

I agree for the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

Uganda's wetlands have declined from 15% to 8% in the last 40 years and in the same period of time, the Grey Crowned Crane, Uganda's national bird has declined from 100,000 to 10,000 in 2022, thus loosing 90% of the population, now considered Endangered by CITES. Since 1998 NatureUganda with support from Darwin Initiative has worked with government to stem off this loss of habitat by promoting designation of wetlands as Ramsar sites, wetlands of international importance. Today Uganda has 12 Ramsar sites and NatureUganda has support 11 sites. With support from Darwin Initiative through a project "Secure Wetland Ecosystems to improve livelihoods through Community Conservation Agreements", we have successfully supported approval of one new site, Lake Bunyonyi and associated Wetlands, as the 13<sup>th</sup> Ramsar site in Uganda. This wetland is the only high altitude wetland designated. It has the deepest deposits of

peat in Uganda that has previously attracted interest to exploit for energy production. Designation as Ramsar site provides security and insurance for its long-term conservation in future. Darwin project has also inspired another site Kiyanja wetland which NatureUganda has presented for approval as the 14<sup>th</sup> Ramsar site. Together all the Ramsar sites in Uganda constitute over 500,000 ha of wetlands.

The project also supported community in livelihood improvement initiatives. Over 220 goats, sheep and pigs to provide organic manure to households, 200 beehive for honey production for income generation and an assortment of garden tools to support soil and water conservation in the hilly landscape to improve food production. This effort will improve livelihoods, reduce natural disasters like floods and landslides and thus save property and lives, improve productivity in the upland, therefore reduce pressure on wetlands encroachment, and finally contribute to conservation of biodiversity rich wetlands on Kigezi.

The legacy and the footprint of Darwin support to wetlands conservation has been engraved in the conservation history of Uganda.

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
JPG	Awareness	Education and awareness of local communitiesin lake Binyonyi Landscape		Yes
JPG	Lake Bunyonyi in Uganda	Lake Bunyonyi landscape in Uganda with largest Crane population in Uganda		Yes
JPG	Grey Crowned Crane	Grey Crowned Crane on Marshes of Lake Bunyonyi		Yes / No
JPG	Training	Environment Officer Kabale District, training community Conservation Association members		Yes / No
				Yes / No

#### Image, Video or Graphic Information:

# Annex 1 Project's original (or most recently approved) logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions		
Impact: Conserved wetlands with restored habitats for threatened species sustainably provide ecosystem services to improve the livelihoods of communities and mitigate against the causes of climate change					
Outcome: Outcome: 10,000 households benefit from the wise use of wetlands and ecosystem services, mainly water, biodiversity and secure long-term conservation of the three wetlands in Kabale.	<ul> <li>0.1. 40% of 10,000 households show improved wellbeing (eg. access to water, better health, and benefits from wetlands etc) due to project intervention by end of project.</li> <li>0.2. Improved biodiversity scores as determined by IBA monitoring showing no further loss on baseline levels.</li> <li>0.3. Lake Bunyonyi and surrounding wetlands designated as Ramsar site BEOP.</li> </ul>	<ul> <li>0.1 Baseline, annual and end of project reports</li> <li>0.2. Baseline, annual and end of project biodiversity (IBA) monitoring reports.</li> <li>0.3. Minutes of the National Ramsar Committee endorsing the Ramsar designation of the Bunyonyi wetlands</li> </ul>	Stable political environment is maintained We think this will hold true because there has been political stability for over three decades Project interventions in sustainable farming practices, alternative incomes and CCAs will reduce the impact on wetlands. Holds true because with clearer rights, roles and responsibilities for communities, articulated through a CCA and supported by improved agricultural methods outside the wetlands and better methods to wise-use of wetlands will result in better wetland management.		
Outputs: Output 1. Wetland ecosystem values known and availed to local and national decision-makers	1.1. Comprehensive ecosystem valuation report available and shared with national lead agencies and Conventions Focal points to inform national policy implementation and reporting by end of yr1	<ul> <li>1.1. Valuation report available and shared</li> <li>1.2. Reports, graphics and leaflets depicting the wetland values.</li> </ul>	Wetland ecosystem values known and availed to local and national decision-makers Conduct ecosystem valuation of the three targeted wetlands; Kiruruma, Nyamuriro, Bunyonyi		

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<ul> <li>1.1 Conduct ecosystem valuation of the three targeted wetlands; Kiruruma, Nyamuriro, Bunyonyi</li> <li>1.2. Develop and disseminate materials for public awareness on the values of the wetland resources</li> <li>1.3. Organise dialogue meetings with local councils to raise awareness of wetland resources and their values</li> <li>1.4. Assess the quantity of peat carbon stocks in the project area</li> <li>1.5. Assess the impact of different farming practices and conservation activities on emissions</li> </ul>	<ul> <li>1.2. Synthesis and summary reports and graphics on the value of wetland services and 10,000 leaflets in local language distributed to residents by end of yr2.</li> <li>1.3. Local district council members discuss the valuation report to integrate results into local government development plans by end of yr2.</li> <li>1.4. The quantity of peat carbon stocks in the project area assessed by end of yr 1</li> <li>1.5. The relative impact of different farming practices and conservation activities on emissions assessed by end of yr 1.</li> </ul>	<ul> <li>1.3. Minutes of local and national assembly debates on wetlands management in Kabale</li> <li>1.4., 1.5. Report on peat carbon stocks and impact of conservation activities on emissions</li> </ul>	Develop and disseminate materials for public awareness on the values of the wetland resources

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<ul> <li>2. Output 2. Wetlands biodiversity assessed, indicator species monitored and data obtained and used to evaluate Ramsar status of the sites to enable designation</li> <li>2.1. Assess biodiversity of the wetlands and identify the indicator species</li> <li>2.2. Synthesise and analyse data against Ramsar criteria and complete the Ramsar Information Sheet (RIS) for the National Ramsar Committee</li> <li>2.3. Develop a monitoring framework for indicator species to provide information on impact of project on biodiversity throughout the project period.</li> </ul>	2.1. Biodiversity assessment reports available and indicator species identified by end of Yr2 2.2. Synthesis and analysis of the data against Ramsar criteria and support the Govt with completion and submission of the Ramsar Information Sheet (RIS) to the Ramsar Secretariat 2.3. A monitoring framework for biodiversity developed and administered throughout the project period to provide information on impact of project on biodiversity.	<ul> <li>2.1. Baseline and biodiversity reports highlighting international significant elements of the wetlands</li> <li>2.2. Ramsar Information sheet (RIS) completed and submitted to the national Ramsar focal point</li> <li>2.3. Minutes of the National Ramsar Committee (NRC)</li> <li>2.4 Monitoring reports for indicator species eg. Grey-crowned Crane</li> </ul>	National government remains committed to wetlands conservation We think this will hold true because government is in process of reviewing wetlands policy and laws and wetlands agencies has committed to providing support to the project implementation.
<ul> <li>3. Output 3. Community stakeholders engaged in the implementation of Community Conservation Agreements to sustainably manage and use of wetlands</li> <li>3.1 Train ten community groups in the setup, management and governance of Community Conservation Agreements (CCAs)</li> <li>3.2 Organise a workshop for every community group covering at least 500 community group members to</li> </ul>	<ul> <li>3.1 Ten community groups trained in the setup, management and governance of Community Conservation Agreements (CCAs) by end of Yr1</li> <li>3.2 At least 500 community group members have a good understanding of the laws and regulations regarding protection and wise-use of wetlands by end of yr 2</li> </ul>	<ul> <li>3.1a Training and evaluation reports showing disaggregation of gender involvement</li> <li>3.1b Charter describing the governance and management of CCAs and action plans on achieving the targets of CCAs</li> <li>3.2 Reports on Training and pre and post training interview</li> <li>3.3 Signed CCAs documents between community groups</li> </ul>	Local politics remain conducive We think this will hold true because local councils have been supportive of NatureUganda and community stakeholders and local government have provides support letters to the project which indicates commitment to conservation of wetlands. Also the clearer rights, roles and responsibilities for communities, articulated through a CCA with

Project summary	Measurable Indicators	Means of verification	Important Assumptions
promote good understanding of the laws and regulations regarding protection and wise-use of wetlands 3.3 Facilitate development of CCAs and ten MOUs signed between communities and district authorities 3.4 Facilitate and support ten community groups (ten workshops) to develop and implement Conservation action plans	<ul> <li>3.3 Ten CCAs representing ten community groups signed between communities and district government authorities by EOP</li> <li>3.4 Ten community groups implementing conservation activities and biodiversity monitoring guided by Conservation Action Plans by end of yr 2</li> </ul>	engaged and local government authorities 3.4a Conservation action plans in place 3.4b Biodiversity (IBA) monitoring reports re: indicator species	oversight from local government to ensure its enforcement coupled with improved agricultural methods outside the wetlands and better methods to wise-use of wetlands will result in better wetland management
<ul> <li>Output 4. Wise use/sustainable use strategies and plans developed, demonstrated and adopted to improve community livelihoods</li> <li>4.1. Assess the baseline of upland soil quality in the study area, prior to the establishment of the farmer field school by end of Yr1</li> <li>4.2. Establish three farmer field schools and demonstrating benefits of soil and water conservation (SWC) and soil improvement activities</li> <li>4.3 Train ten community groups (1000 HH) in using appropriate SWC methods</li> <li>4.4. Train 1500 farmers to adopt soil</li> </ul>	<ul> <li>4.1 A baseline report on upland soil quality in the study area assessed to inform establishment of FFSs by end of Yr1</li> <li>4.2. Three farmer field schools established and demonstrating benefits of soil and water conservation (SWC) and soil improvement activities by end of yr2.</li> <li>4.3 Ten community groups (1000 HH) trained in and using appropriate SWC methods</li> <li>4.4. 1500 farmers adopt soil fertility improvement practices, establish fodder banks in the uplands to reduce their</li> </ul>	<ul> <li>4.1 Baseline study report</li> <li>4.2 Farmer field schools reports showing demonstration activities</li> <li>4.3, 4.4, &amp; 4.5 Training manual/reports on SWC, SFI &amp; SFP</li> <li>4.6a. Project enterprises support reports</li> <li>4.6b Monitoring reports showing improved soil productivity as a result of manure from goats and Soil and water conservation activities</li> <li>4.7. Report on tourism related interventions by the project.</li> </ul>	The rainfall patterns remain conducive for farming Communities are receptive to mew methods of farming and alternative livelihoods: We think this will hold true as recent experience show it will especially working with local experts with support from local government relevant departments, affirmative action in enterprise selection and learning visits to support communities Political stability allows foreign tourists to visit the region We think this will hold true because
fertility improvement practices and establish fodder banks in the uplands to reduce their dependence on wetland-based livelihoods.	dependence on wetland-based livelihoods BEOP		tourism is critical foreign exchange earner for the country and all efforts are made to ensure security and safety of visitors.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<ul> <li>4.5 Train 1,000 HH (5,000 people) in sustainable farming practices that do not expose peat wetlands to oxidation and excessive drying</li> <li>4.6 Support at least 20% community</li> </ul>	4.5 1,000 HH (5,000 people) trained and practicing sustainable farming practices that do not expose peat wetlands to oxidation and excessive drying. BEOP		With improved status of wetlands as Ramsar site, increased publicity, sufficient tourists visit the area and provide employment opportunities for the tourism operators.
<ul> <li>group members to establish sustainable enterprises, in particular ten 'zero-grazing' goat rearing units and ten modern beekeeping units.</li> <li>4.7 At least 10 tourism guides trained and a tourism development association registered to support tourism services BEOP</li> </ul>	<ul> <li>4.6 At least 20% community group members establish sustainable enterprises, in particular ten 'zero- grazing' goat rearing units and fourteen modern beekeeping units by end of yr2.</li> <li>4.7 At least 10 tourism guides trained and a tourism development association registered to support tourism services BEOP</li> </ul>		We think this will hold true because tourism is a well-developed activity based on neighbouring forests in the catchment (Bwindi Mgahinga National Park for Mt Gorillas and Echuya Forest for bird watching) and tourism based on open water and wetland biodiversity will be an added quality and product to the tourist experience.
Output 5. Lessons from management of wetlands in Kabale shared at	5.1 Project communications plan in place end of yr1.	5.1a Communications plan and its monitoring and evaluation schedule	Lessons learnt from project inspire wetlands conservation in the region
<ul><li>national, regional and international levels for future replication to protect peat wetlands</li><li>5.1 Develop a communications plan for the project</li></ul>	5.2. At least 2 Learning visits annually to/from other communities outside the project area to share expertise and experiences throughout the project	<ul><li>5.1b Materials and scripts used in communications</li><li>5.2 Reports of learning visits</li><li>5.3 Reports on forums attended and</li></ul>	We think this holds true because of government commitment to conservation of wetland and also the realisation of the decline of ecosystem services such as water
<ul> <li>5.2 Organise learning visits to other communities outside the project area to share expertise and experiences</li> <li>5.3 Share project outcomes, experiences and lessons in at least 5 meetings and forums</li> <li>5.4 Publish at least one paper on wotlands</li> </ul>	<ul> <li>5.3 Project outcomes and lessons shared in at least 5 forums, local radio/TV programmes in local language and print media BEOP</li> <li>5.4 At least one paper on wetlands management through Community Conservation Agreements published in a refereed journal</li> </ul>	radio programmes aired 5.4 Article accepted by a refereed journal 5.5. Publicity materials produced and available	when such habitats are lost

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Community Conservation Agreements in a refereed journal	5.5. Publicity materials on the project results including		
5.5. Develop and disseminate publicity materials on the project results including newsletters, posters, policy briefs	newsletters, posters and policy briefs circulated BEOP		
5.6. Raise awareness on the outcomes and results of the project through radios, TVs and public print media			
Activities			
Output 1. Wetland ecosystem values k	nown and availed to local and nationa	l decision-makers	
1.1 Conduct ecosystem valuation of th	e three targeted wetlands; Kiruruma,	Nyamuriro, Bunyonyi	
1.2. Develop and disseminate material	s for public awareness on the values o	f the wetland resources	
1.3. Organise dialogue meetings with I	ocal councils to raise awareness of we	tland resources and their values	
1.4. Assess the quantity of peat carbor	n stocks in the project area		
1.5. Assess the impact of different farm	ning practices and conservation activit	ies on emissions	
Output 2. Wetlands biodiversity asses designation	ssed, indicator species monitored and	d data obtained and used to evaluate	Ramsar status of the sites to enable
2.1. Assess biodiversity of the wetland	s and identify the indicator species		
2.2. Synthesise and analyse data again	st Ramsar criteria and complete the Ra	amsar Information Sheet (RIS) for the N	lational Ramsar Committee
2.3. Develop a monitoring framework	for indicator species to provide inform	ation on impact of project on biodivers	ity throughout the project period.
Output 3. Community stakeholders en	gaged in the implementation of Comm	nunity Conservation Agreements to sus	tainably manage and use of wetlands
3.1 Train ten community groups in the	setup, management and governance	of Community Conservation Agreemen	ts (CCAs)
2.2 Organica a workshan for avery are	www.with.com.com.com.com.com.com.com.com.com.com		and understanding of the lower and

3.2 Organise a workshop for every community group covering at least 500 community group members to promote good understanding of the laws and regulations regarding protection and wise-use of wetlands

Project summary	Measurable Indicators	Means of verification	Important Assumptions		
3.3 Facilitate development of CCAs and	ten MOUs signed between communi	ties and district authorities	<u>.</u>		
3.4 Facilitate and support ten commun	ity groups (ten workshops) to develor	and implement Conservation action p	lans		
Output 4. Wise use/sustainable use str	ategies and plans developed, demons	trated and adopted to improve commu	unity livelihoods		
4.1. Assess the baseline of upland soil of	quality in the study area, prior to the $\epsilon$	establishment of the farmer field schoo	l by end of Yr1		
4.2. Establish three farmer field school	s and demonstrating benefits of soil a	nd water conservation (SWC) and soil in	mprovement activities		
4.3 Train ten community groups (1000	HH) in using appropriate SWC method	ds			
4.4. Train 1500 farmers to adopt soil fe based livelihoods.	4.4. Train 1500 farmers to adopt soil fertility improvement practices and establish fodder banks in the uplands to reduce their dependence on wetland- based livelihoods.				
4.5 Train 1,000 HH (5,000 people) in su	4.5 Train 1,000 HH (5,000 people) in sustainable farming practices that do not expose peat wetlands to oxidation and excessive drying				
4.6 Support at least 20% community gro beekeeping units.	4.6 Support at least 20% community group members to establish sustainable enterprises, in particular ten 'zero-grazing' goat rearing units and ten modern beekeeping units.				
4.7 At least 10 tourism guides trained and a tourism development association registered to support tourism services BEOP					
Output 5. Lessons from management of wetlands in Kabale shared at national, regional and international levels for future replication to protect peat wetlands					
5.1 Develop a communications plan for	r the project				
5.2 Organise learning visits to other co	5.2 Organise learning visits to other communities outside the project area to share expertise and experiences				
5.3 Share project outcomes, experiences and lessons in at least 5 meetings and forums					
5.4 Publish at least one paper on wetlands management through Community Conservation Agreements in a refereed journal					
5.5. Develop and disseminate publicity materials on the project results including newsletters, posters, policy briefs					
5.6. Raise awareness on the outcomes and results of the project through radios, TVs and public print media					
5.6. Raise awareness on the outcomes	and results of the project through rad	los, i vs and public print media			

Project summary	Measurable	Progress and Achievements
	indicators	
Impact: Conserved wetlands with restored habitats for threatened species sustainably provide ecosystem services to improve the livelihoods of communities and mitigate against the causes of climate change		The project achieved long-term protection of Lake Bunyonyi and associated wetlands og Nyamuriro, Kiruruma and Bunyonyi through designation as Ramsar site. Whereas the process has not been finalised, all national approval have been completed (it will be completed soon). This will protect the wetlands integrity forever, protect the endangered species including the Grey Crowned Crane which have already started showing recovery based on monitoring report. The designation will will also raise the profile of the wetlands at local, national and international levels. The peat stock assessment also concluded that there are heavy deposits of peat and designation will prevent further appetite for mining since it would require international participation, thus avoid emission of carbon and therefore mitigation of climate change. The project established 10 CCAs and 5 FFS covering over 1500 HHs that will continue to support communities in management of land, increased food production, livelihood support and income generation, which has increased, based on deposits into the VSLAs. The review of management plan for Nyamuriro wetland and integrating some project activities into district development plans was an impactful achievement of the project.
Outcome: Outcome: 10,000 households benefit from the wise use of wetlands and ecosystem services, mainly water, biodiversity and secure long-term conservation of the three wetlands in Kabale.	Indicators: 0.1. 40% of 10,000 households show improved wellbeing (eg. access to water, better health, and benefits from wetlands etc) due to project intervention by end of project. 0.2. Improved biodiversity scores as determined by IBA monitoring showing	<ul> <li>Rubanda (602,000) and Kabale (532,000) together have a population of over one million and all the people are dependent on Lake Bunyonyi and its associated wetland system. Although the project target was 40% of 10,000 households, the impact of the project will be much more in terms of good water quality and ecosystem services benefits. The clarity of water based on secchi tube measurement in 2022 was better than in baseline studies conducted in 2019.</li> <li>Using the Nyamuriro wetland, which has a management plan, the wetland coverage has increased along the river banks and using the Grey Crowned Crane as an indicator species shows that the numbers have become stable but with increased breeding success (from 1.5 to 2.0). This may indicate stability of the habitat and reduced persecution from the community. Biodiversity scores will further be enhanced by the Ramsar designation.</li> <li>Lake Bunyonyi and surrounding wetlands designation as Ramsar site has been approved by local governments and the National Ramsar committee. This is the final</li> </ul>

# Annex 2 Report of progress and achievements against final project logframe for the life of the project

Project summary	Measurable Indicators	Progress and Achievements
	no further loss on baseline levels.	technical process at the national level. What remained is a Cabinet endorsement and final submission to the Ramsar Secretariat. We therefore consider this fully achieved.
	0.3. Lake Bunyonyi and surrounding wetlands designated as Ramsar site BEOP.	
Outputs: Output 1. Wetland ecosystem values known and availed to local and national decision-makers		Three different ecosystem assessments were conducted; the Wetland Ecosystem services, Peat stock assessment and Upland hills survey. The three reports provided good understanding of the status of the land, wetlands and peat to inform subsequent project activities. The information in the valuation reports was use to inform project implementation, and were disseminated in variously communications and meetings. They also informed community action plans and community members are at the forefront at protecting the lake and wetlands. Evidence in section 3.1 Annexes 2,3,10
1.1 Conduct ecosystem valuation of the three targeted wetlands; Kiruruma, Nyamuriro, Bunyonyi	1.1. Comprehensive ecosystem valuation report available and shared with national lead agencies and Conventions Focal points to inform national policy implementation and reporting by end of yr1	The production 5000 leaflets and a 2000 Newsletters and distributed to stakeholders. In addition, banners (4), pull-up stands (4), posters (500) and 500 t-shirts were produced and used in meetings or workshops and other public awareness events. The valuation and biodiversity assessment reports were useful in completion of the Ramsar Information Sheet (RIS) an important step in the Ramsar listing process. The beauty of Lake Bunyonyi will be better maintained and enhanced with international recognition and efforts for conservation. Annex 6
1.2. Develop and disseminate materials for public awareness on the values of the wetland resources	1.2. Synthesis and summary reports and graphics on the value of wetland services and 10,000 leaflets in local language	As guided by the communication plan, NU produced and disseminated such publicity items as a banner, 500 posters, 400 T-shirts, 5000 leaflets and a Newsletter for awareness raising on the values of the Lake Bunyonyi and associated wetlands

Project summary	Measurable Indicators	Progress and Achievements
	distributed to residents.	
1.3. Organise dialogue meetings with local councils to raise awareness of wetland resources and their values	1.3. Local district council members discuss the valuation report to integrate results into local government development plans	The district councils received the reports and discussed in the council meetings. The report was instrument in supporting the discussion for Ramsar designation that was approved by the district council for Kabale and Rubanda districts
1.4. Assess the quantity of peat carbon stocks in the project area	<ul><li>1.4. The quantity of peat carbon stocks in the project area assessed by end of yr</li></ul>	The quantity of peat carbon stocks in the project area was assessed by experts from University of Abardeen and the wetlands were found to be very rich in peat, in some areas up to 7m with estimated carbon at 19, 095 t C ha <sup>-1</sup> . With such information, we continue to raise awareness to communities and local leaders the dangers of peat extraction Annex 2. This carried the implication that there is a lot of carbon sequestrated in the ground at these sites which when opened up – commonly through unsustainable agricultural practices will cause an increase in the greenhouse gases at the site, and nationwide. We further explained to the communities the dangers of peat on exposure to the atmosphere. Currently there is no sign that peat rich areas are about to be opened up.
1.5. Assess the impact of different farming practices and conservation activities on emissions	1.5. The relative impact of different farming practices and conservation activities on emissions assessed by end of yr 1.	We continue to campaign to the communities and the local leaders the need for sustainable use the importance of dangers of exposing peat to the atmosphere. To-date there has not been any steps towards the excavation for peat and the empowered communities are not in position to allow any excavation for peat by any intending private sector developers.
Output 2. Wetlands biodiversity assessed, indicator species monitored and data obtained and used to evaluate Ramsar status of the sites to enable designation		Wetlands biodiversity surveys were conducted. Higher taxa was considered as good indicators including Birds, Mammals, Insects, Herpetiles, Plants and Fish. Water quality was also surveyed as a key indicator of the ecosystem health and a good indicator of the improved integrity of the system after project intervention. Ramsar designation process supported and completed together with national focal point at Ministry of water and Environment See section 3 Annexes 5,6

Project summary	Measurable Indicators	Progress and Achievements
2.1. Assess biodiversity of the wetlands and identify the indicator species	2.1. Biodiversity assessment reports available and indicator species identified by end of	Biodiversity assessment focusing on five higher taxa including Birds, mammals, Plants, Herptiles, Insects and Fish. In addition water quality was also assessed to determine the levels of pollution and siltation. The information generated by the research assessments was used in identifying the key (flagship) species for the wetlands and the project team selected key species for monitoring, eg Grey Crowned Cranes.
	Yr2	The information generated helped a lot in in the several steps towards the designation of Lake Bunyonyi and the associated wetlands a Ramsar site. Also to make the communities and their leadership aware of the richness of the ecosystem they live in and make informed choices when developing themselves.
2.2. Synthesise and analyse data against Ramsar criteria and complete the Ramsar Information Sheet (RIS) for the National Ramsar Committee	2.2. Synthesis and analysis of the data against Ramsar criteria and support the Government with completion and submission of the Ramsar Information Sheet (RIS) to the Ramsar Secretariat	Reports from the assessments supported the completion of the Ramsar Information Sheet (RIS) a tool by the Ramsar Convention that compiles justification for Ramsar designation. The RIS was submitted, discussed and approved by National Ramsar Committee who in turn submitted to Cabinet (new procedure by government of Uganda) for final endorsement.
2.3. Develop a monitoring framework for indicator species to provide information on impact of project on biodiversity throughout	2.3. A monitoring framework for biodiversity developed and	A monitoring framework for biodiversity was developed and administered throughout the project period to provide information on impact of project on biodiversity; Basing on the assessments, key species that are representative of the landscape were identified and are being monitored regularly.
the project period.	administered throughout the project period to provide information on impact of project on biodiversity.	One indicator species being monitored is the Grey Crowned crane (national bird for Uganda and an endangered species). It is being monitored once every two months along determined transects. We also conduct monitoring for breeding pairs to determine the breeding success. So far data obtained indicates recurrent crane numbers along transects across the months of the year. The breeding success (ratio of breeding pairs to the fledging juveniles) for the season 2020/21 was 2.0 indicating that at least each breeding pair fledged

Project summary	Measurable Indicators	Progress and Achievements
		an average of two juveniles. The success is a product of many factors at play – routine monitoring, impact of our local champions (crane custodians and the awareness campaigns we have conducted.
Output 3. Community stakeholders engaged in the implementation of Community Conservation Agreements to sustainably manage and use of wetlands		<ul> <li>Community Conservation Associations (CCAs) established and 5 Farmer Field Schools</li> <li>Over 1500 HHs (extended reach to over 7500 people) trained in various climate smart interventions including soil and water conservation, agroforestry, enterprises such as Apiary and energy saving technologies. Annexes 7, 8, 9</li> </ul>
		<ul> <li>3.1 Ten community groups were identified, trained in group formation, representation of different resource users, and governance. The trainings resulted into development of Action Plans to guide implementation of the project activities (see 3.4 below)</li> <li>3.2. Working together with Ministry of Water and Environment, Wetlands management Department and Distict Local governments of Kabale and Rubanda, carried out 2 training sessions on wetland</li> </ul>
		laws and regulations. 438 TOTs were trained and are now agents of change in all CCAs. <b>3.3.</b> In a participatory manner, 10 agreements were developed together with community members with support from Local governments. In a function witnessed by the district and local leadership, MOUs were signed. CCAs have committed the communities on action to conserve the lake, associated wetlands and management of Landscapes (see section 3 achievements)
		<b>3.4</b> Together with all the ten community groups, action plans were developed that are operationalizing the conservation agreements.
3.1 Train ten community groups in the setup, management and governance of Community Conservation Agreements (CCAs)	3.1 Ten community groups trained in the setup, management and governance of Community	Ten community groups were identified, trained in group formation, representation of different resource users, and governance. The trainings resulted into development of Action Plans to guide implementation of the project activities (see 3.4 below) The trainings caused a remarkable change in their perception especially on all-inclusiveness in gender, youths and persons with disabilities. Women participation is conspicuously

Project summary	Measurable Indicators	Progress and Achievements
	Conservation Agreements (CCAs) by end of Yr1	outstanding in even arduous activities like excavating check-dams and trenches. Groups have embraced the concept of holding regular committee meetings and an Annual General Meeting (AGM) and conducting elections for office bearers. Teamwork has been enhanced and encouraged community members to willingly participate in project activities.
3.2 Organise a workshop for every community group covering at least 500 community group members to	3.2 At least 500 community group members have a good	Working together with Ministry of Water and Environment, Wetlands management Department and Distict Local governments of Kabale and Rubanda, carried out 2 training sessions on wetland laws and regulations. 438 TOTs were trained and are now agents of change in all CCAs.
promote good understanding of the laws and regulations regarding protection and wise-use of wetlands	understanding of the laws and regulations regarding protection and wise-use of wetlands by end of yr 2	Basing on the results of the study on quantification of peat, the scope of training in wetland laws was extended to include facts on the dangers of exposing peat to the atmosphere
3.3 Facilitate development of CCAs and ten MOUs signed between communities and district authorities	3.3 Ten CCAs representing ten community groups signed between communities and district government authorities by EOP	In a participatory manner, 10 agreements were developed together with community members with support from Local governments. In a function witnessed by the district and local leadership, MOUs were signed. CCAs have committed the communities on action to conserve the lake, associated wetlands and management of Landscapes (see section 3 achievements). To operationalize the Conservation Agreements, NatureUganda engaged the community groups in developing action plans that guide the timing and implementation of the conservation actions. Each community group is required to stabilise trenches with elephant/ napia grass (also serving as stops for runoffs and livestock fodder), dig trenches and check-dams among, wetland restoration and other activities. These activities continue beyond the lifetime of the project.
3.4 Facilitate and support ten community groups (ten workshops) to develop and implement Conservation action plans	3.4 Ten community groups implementing conservation activities and biodiversity monitoring guided by Conservation Action Plans by end of yr 2	<ul> <li>Together with all the ten community groups, action plans that are operationalize the conservation agreements. Conservation actions have been explained in 3.3 above. The implemented conservation actions include:</li> <li>Soil and Water Conservation initiatives (trenches and check dams on steep slopes) – all groups</li> </ul>

Project summary	Measurable Indicators	Progress and Achievements
		<ul> <li>Elephant/ Setaria grass bands along the garden edges supporting the trenches, and along the set boundary along the Lake Bunyonyi shores. The grass also serves as fodder for livestock – all groups except Kigezi Women group</li> <li>Wetland demarcation and restoration: Nyombe – Biringo Hakabungo and Ruhuuma groups</li> <li>Species and habitat monitoring</li> <li>Clean-up (fortnightly) operations especially for the cleanliness of the Tour Guides landing site at Harutindo .</li> </ul>
Output 4. Wise use/sustainable use strategies and plans developed, demonstrated and adopted to improve community livelihoods.		<ul> <li>5 Farmer field schools established and governance for peer to per learning put in place</li> <li>Input including 100 ESS, 200 beehives, assorted 600 garden tools (hoes, spades, pick axes, pangas), an engine and boat for tour guides, books and binoculars, all worth over BP 31000 to support community livelihood initiatives. Annexes 10,11, 12, 13, 14, 15</li> </ul>
4.1. Assess the baseline of upland soil quality in the study area, prior to the establishment of the farmer field school by end of Yr1	4.1 A baseline report on upland soil quality in the study area assessed to inform establishment of FFSs by end of Yr1	A study on upland soil quality was completed. The recommendation supported the development of the FFS through which we demonstrated best practices of soil and water conservation and livelihood interventions. FFS serve as learning centres for the farmers in the landscape. A study was conducted to assess the ecosystem services of the uplands – results of which indicated that poor agricultural practices that didn't incorporate soil and water conservation in them had led to serious erosion uphill, and deposition in the wetlands and Lake Bunyonyi itself. Farmers had been compelled to "follow" their soils deposited in the wetlands – hence encroachment and degradation of wetlands; The recommendations of the study led to the establishment of five FFS that would demonstrate better practices and serve as learning centres for the farmers in the landscape. Initially the intention was to establish three FFSs but due to distances that the farmers would travel to access the services at FFS sites, it was agreed upon that five be set up, hosts for the FFS be identified and supported; but also sub-host farmers be identified and upgraded gradually to reach the level of the host farmers.

Project summary	Measurable Indicators	Progress and Achievements
4.2. Establish three Farmer Field Schools and demonstrating benefits of soil and water conservation (SWC) and soil improvement activities	4.2. Three farmer field schools established and demonstrating benefits of soil and water conservation (SWC) and soil	Five FFS were established and are now used to demonstrate to best farming practices that enhance soil fertility, reduce water and soil loss and improve household livelihoods. The FFS include Ruhuuma Wetland Conservation and Crane Monitoring, Katembe Bigyegye Turinde Eitaka Community Group, Nyamatembe Turinde Eitaka Community Group, Nyombe Biringo Group and Nyamiryango Barema Group. Ruhuma Wetland Conservation and Crane Monitoring Group Farmer Field School: Host
	improvement activities by end of yr2.	farmer Karabebire Vailoti: Group members converge monthly at the host farmer's place to work (as a group) and learn; the site has a goat house, fully stocked with goats and livestock pasture was planted nearby for easy collection. Manure is regularly collected and spread in the gardens as demonstrations of organic manure use as opposed to artificial fertiliser use. Soil and water conservation structures have been constructed and are regularly cleared of accumulated silt. There are 6 sub host farmers in the group whose activities are a reflection of what is seen at the host farmer site. Katembe Bigyegye Turinde Eitaka Community Group Farmer Field School: Barwaneza Justin is the host farmer. Group members converge monthly at the host farmer's place to work as a team and learn; the site has a sheep house, fully stocked with sheep. Elephant grass and Setaria grasses have been planted to act as deterrence for speedy run-offs. Manure is regularly collected from the pig house and spread in the gardens as demonstrations of organic manure use as opposed to artificial fertiliser use. Agroforesry trees have been planted at the site. Soil and water conservation structures (trenches and check dams) were constructed on a steep slope adjacent to the FFS. The site is regularly cleared of accumulated silt. There are 8 sub host farmers whose activities are a reflection of what is seen at the host farmer site.
		is the host farmer. Group members converge monthly at the host farmer's place to work as a team and learn; the site has a pig house, fully stocked with pigs. Elephant grass and Setaria grasses have been planted to act as deterrence for speedy run-offs. Manure is regularly collected from the pig house and spread in the gardens as demonstrations of organic manure use as opposed to artificial fertiliser use. Soil and water conservation structures (trenches and check dams) were constructed on a steep slope adjacent to the FFS. The site is regularly cleared of accumulated silt. There are 8 sub host farmers in the group whose activities are a reflection of what is seen at the host farmer site.

Project summary	Measurable Indicators	Progress and Achievements
		Nyombe Biringo Group Farmer Field School: group members converge monthly at the host farmer's place to work as a team and learn; the site has a sheep house, fully stocked with sheep. Elephant grass and Setaria grasses have been planted to act as deterrence for speedy run-offs. Manure is regularly collected from the pig house and spread in the gardens as demonstrations of organic manure use as opposed to artificial fertiliser use. Bee hives have been set up below the FFS site and these act as deterrence from further encroachment into the Nyombe wetland. Soil and water conservation structures (trenches and check dams) were constructed on a steep slope overlooking the FFS. The site is regularly cleared of accumulated silt. There are 5 sub host farmers in the group whose activities are a reflection of what is seen at the host farmer site. Communities continue with the excavation of these structures and the practice has been copied by the adjacent communities
		Nyamiryango Barema Group Farmer Field School: Baregire Wilson is the host farmer. Group members converge monthly at the host farmer's place to work as a team and learn; the site has a sheep house, fully stocked with sheep. Elephant grass and Setaria grasses have been planted to act as deterrence for speedy run-offs. Manure is regularly collected from the pig house and spread in the gardens as demonstrations of organic manure use as opposed to artificial fertiliser use. Elephant grass have been planted at the boundaries with the Lake Bunyonyi. Soil and water conservation structures (trenches and check dams) were constructed on a steep slope adjacent to the FFS. The site is regularly cleared of accumulated silt. There are 11 sub host farmers whose activities are a reflection of what is seen at the host farmer site. Similarly, the best management practices are being imitated and practiced by the neighbouring communities
4.3 Train ten community groups (1000 HH) in using appropriate SWC methods	4.3 Ten community groups (1000 HH) trained in and using appropriate SWC methods	We reached to over 1500 households with trainings on Soil and Water Conservation practices that emphasized, among others contour trenching, terracing, check dams, etc. These have only been learnt but practiced both at the FFS and replicated at household levels Working with the farmers in the landscape, we found out that the most common danger to the soils in the region was soil erosion. Through which many hectares of cropland have become unproductive as top soil gets eroded away. We hence conducted training to the communities on the various aspects of soil and water conservation initiatives. We

Project summary	Measurable Indicators	Progress and Achievements
		emphasized the need for soil and water conservation initiatives in farming systems because they are indispensable for the existence and survival of all terrestrial life.
		We note that less soil is being eroded and carried away where trenches have been excavated; however, there is need for massive engagement so that we don't only have pockets of well managed and others on non – managed plots.
4.4. Train 1500 farmers to adopt soil fertility improvement practices and establish fodder banks in the uplands to reduce their dependence on wetland-based livelihoods	4.4. 1500 farmers adopt soil fertility improvement practices, establish fodder banks in the uplands to reduce their dependence on wetland-based livelihoods BEOP	During the project time, 438 farmers were trained as Trainers of Trainees (TOTs) in SWC methods, soil fertility improvement, and establishment of fodder banks and sustainable farming practices. Subsequently, the trained TOTs have reached over 2000 farmers in the project landscape through the FFS and monthly peer-to-peer learning. This knowledge transfer is witnessed through uptake and adoption of the initiatives: digging trenches in their fields, planting Napier grass and Calliandra (fodder to feed animals and stabilisation of trenches to stop soil erosion). Adoption is also observed in the non-target communities. We considered soil and water conservation as well as agricultural sustainability as priority for income and food security. Each of the FFS groups and members that subscribe to it have constructed trenches ( <i>fanya chini – fanya juus</i> ) and check dams. We supported them to construct livestock houses for zero grazing where manure is now being collected and used in the gardens. Crop performance is observed in greening of the crops where manure has been applied as compared to where manure is not applied. Each Farmer Field School group that is practicing the zero-grazing was supported and has now established gardens and lines of elephant grass and other fodder plants such as Setaria grass and Calliandra.
4.5 Train 1,000 HH (5,000 people) in sustainable farming practices that do not expose peat wetlands to oxidation and excessive drying	4.5 1,000 HH (5,000 people) trained and practicing sustainable farming practices that do not expose peat wetlands to oxidation and excessive drying. BEOP	Based on the study on quantifying the peat in the wetlands, we continued to raise awareness on the dangers of exposing peat and carbon emissions to the atmosphere. No peat excavation has taken place. Communities have agreed on farming methods that do not expose peat including flood regimes and sections of the wetlands restored and reserved. A Management Plan for Nyamuriro wetland was reviewed to integrate new knowledge (see 4.4 above and Annex 4)
4.6 Support at least 20% community group members to establish	4.6 At least 20% community group	Livestock support beneficiaries included Nyamiryango Barema group (65 members), Nyamatembe Turine Eitaka Group (35 members), Katembe - Bigyegye Group (35

Project summary	Measurable Indicators	Progress and Achievements
sustainable enterprises, in particular ten 'zero-grazing' goat rearing units and ten modern beekeeping units	members establish sustainable enterprises, in particular ten 'zero- grazing' goat rearing units and fourteen modern beekeeping units by end of yr2.	<ul> <li>members), Nyombe- Biringo Hakabungo Group (35 members), Ruhuuma Group (20 members). Kigezi Women Group members all female received 5 tailoring machines. Nyamiringa FAL Class members with 74 members (females and 1 male) received Music and dance equipment and training. Farm equipment (hoes, pangas, mattocks) were given to Nyamatembe group (35 members), Katembe Group members (35 members), Nyamiryango Group members (65 members), Nyombe Biringo group (35 members), Ruhuuma group (20 members). Nyamiryango Barema group (65 members) received pigs and farm equipment (hoes, pangas, mattocks). Nyamatembe group (35 members) received sheep and farm equipment (hoes, pangas, mattocks). Nyamatembe group (35 members) received sheep and farm equipment (hoes, pangas, mattocks). Katembe Group members (35 members) received sheep and farm equipment (hoes, pangas, mattocks). Nyombe-Biringo Hakabungo group (35 members) received sheep and farm equipment (hoes, pangas, mattocks). Nyombe-Biringo Hakabungo group (20 members) received sheep and farm equipment (hoes, pangas, mattocks). Ruhuuma group (20 members) received goats and farm equipment (hoes, pangas, mattocks). Ruhuuma group (20 members) received goats and farm equipment (hoes, pangas, mattocks). Ruhuuma group (20 members) received goats and farm equipment (hoes, pangas, mattocks). Ruhuuma group (20 members) received goats and farm equipment (hoes, pangas, mattocks). Ruhuuma group (20 members) received goats and farm equipment (hoes, pangas, mattocks). Ruhuuma group (20 members) received goats and farm equipment (hoes, pangas, mattocks). Ruhuuma group (20 members) received goats and farm equipment (hoes, pangas, mattocks).</li> </ul>
4.7 At least 10 tourism guides trained and a tourism development association registered to support tourism services BEOP	4.7 At least 10 tourism guides trained and a tourism development association registered to support tourism services BEOP	Lake Bunyonyi Tour Guides Association received a boat and a boat engine, 12 life jackets, 5 Bird Guide books and five binoculars and 25 members of the team were trained various aspects of guiding (customer care, visitor handling, book keeping and other aspects to fieldwork including identification of birds
Output 5. Lessons from management of wetlands in Kabale shared at national, regional and international levels for future replication to protect peat wetlands		<ul> <li>A Communication plan clarifies how important information reaches all stakeholders. Although Covid interrupted full implementation but provided good guidance on communicating goals and objectives of the project.</li> <li>We note that Exchange visits are important as communities learn more from each other</li> </ul>

Project summary	Measurable Indicators	Progress and Achievements
		<ul> <li>Sharing lessons at national and international level is critical especially when dealing with international importance themes such as Ramsar sites. Important to note that team Leader was invited by government to be a member of the national delegation to the Ramsar Convention COP 14. Although he did not go due to other commitments, (he was in UK for Tusk Awards) but it was an important recognition of the work achieved nationally. See section 3 Lessons</li> </ul>
5.1 Develop a communications plan for the project	5.1 Project communications plan in place end of yr1.	Communication Plan was developed and followed in project implementation. With the developed communication plan, we have reached out to top targeted audiences through mass media, through public talks, through music, dance and drama, through publication materials and physical meetings. The passing of a resolution by district councils to have Lake Bunyonyi listed for Ramsar designation was the climax and community acceptance and engagement in wetland demarcation, restoration activities and withdrawal from wetland crop growing. Also sub-counties have begun to develop bylaws on wetland wise-use, and communities are independently engaging in awareness activities.
5.2 Organise learning visits to other communities outside the project area to share expertise and experiences	5.2. At least 2 Learning visits annually to/from other communities outside the project area to share expertise and experiences throughout the project	Covid 19 pandemic affected this activity since some years were spend in lockdown. However following SOPs of Ministry of Health, one exchange visit involving representatives from Katembe and Nyamatembe were facilitated to visit Nyamiryango (PWDs) Group on skills development on crafts. Having been challenged by the exemplary performance by the Nyamiryango group of the disabled), the team from Katembe Bigyegye Turinde Eitaka and Nyamatembe Turinde Eitaka groups have doubled their strengths and now dominating in aspects of conservation actions and group leadership/ governance styles
5.3 Share project outcomes, experiences and lessons in at least 5 meetings and forums	5.3 Project outcomes and lessons shared in at least 5 forums, local radio/TV programmes in local language and print media BEOP	Media platforms engaged include radio (5 talk shows on Voice of Kigezi), posts on Twitter, and Facebook, and NatureUganda community WhatsApp group. Two Public Talks were held, one attended by members of Biodiversity Conservation Forum (BCF) held in the Kigezi region which brought together all stakeholders in Kisoro, Rubanda and Kabale Districts and another held online featuring the head of NEMA and the project activities have

Project summary	Measurable Indicators	Progress and Achievements
		featured on national and international TV and media channels. <u>https://www.youtube.com/watch?v=0TN_uvUloa4</u>
		https://www.newvision.co.ug/news/1525704/bunyonyi-ramsar-site
5.4 Publish at least one paper on wetlands management through Community Conservation Agreements in a refereed journal	5.4 At least one paper on wetlands management through Community Conservation Agreements published in a refereed journal	A paper on 'An analysis of the heperetofauna community structure in the last pristine highland wetlands of Uganda' was submitted and accepted by Wetlands. It will be shared widely when published. Another paper that will bring together all biodiversity assessments is being developed (The state of biodiversity of Lake Bunyonyi and associated wetlands). However materials from the project appeared on various national publications (Annex 18).
5.5. Develop and disseminate publicity materials on the project results including newsletters, posters, policy briefs	5.5. Publicity materials on the project results including newsletters, posters and policy briefs circulated BEOP	The following were produced; 400 T-shirts used for Crane Festival and World Wildlife Day celebrations where community members exhibited products; Banner used for workshops and meetings; 500 fliers distributed at Wildlife day; NatureUganda Newsletter (2000 copies) shared during NatureUganda events at national and local events, 1500 calendars (planners) and 500 posters
5.6. Raise awareness on the outcomes and results of the project through radios, TVs and public print media		The project appeared in print and electronic media. It was in national newspaper 2, on TV more than 10 times (local TV and national TV) and trending on social media. If you search for 'Lake Bunynyo Ramsar site) on the web, you will get over 3000 hits. Therefore project outcomes and lessons were shared many forums, local radio/TV programmes in local language, print media and schools. <u>https://www.youtube.com/watch?v=H2V9gtOdQz0</u> ; <u>https://www.youtube.com/watch?v=seFkdhwPlm0</u>
		https://www.independent.co.ug/lake-bunyonyi-endorsed-as-ramsar-site/
		https://www.talkuganda.com/news/lake-bunyonyi-certified-to-be-a-ramsar-site/

# **Annex 3 Standard Indicators**

C o d e Tra	Description	Total	Natio nality	Gen der	Title or Focus	Lang uage	Comme nts
1a	Number of people to submit PhD thesis						
1b	Number of PhD qualifications obtained						
2	Number of Masters qualifications obtained						
3	Number of other qualifications obtained						
4a	Number of undergraduate students receiving training						
4b	Number of training weeks provided to undergraduate students						
4c	Number of postgraduate students receiving training (not 1-3 above)						
4d	Number of training weeks for postgraduate students						
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification (e.g., not categories 1-4 above)						
6a	Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above)	1500 HHs	Ugan da	Male /fem ale	Group dynami cs, agricult ure best practice s, landsca pe/ wetland s restorat ion/ conserv ation		
6b	Number of training weeks not leading to formal qualification	8	Ugan da	Male /fem ale	As above		
7	Number of types of training materials produced for use by host country(s) (describe training materials)	2	Ugan da	Male /fem ale	Posters , manual s (FFS)		

Res	earch Measures	Total	Natio nality	Gen der	Title	Lang uage	Comme nts/ Weblink if availabl e
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies)	1	Ugan da			Engli sh	Particip atory
10	Number of formal documents produced to assist work related to species identification, classification and recording.	2	Ugan da			Engli sh	Particip atory
11 a	Number of papers published or accepted for publication in peer reviewed journals						
11 b	Number of papers published or accepted for publication elsewhere						Location ?
12 a	Number of computer-based databases established (containing species/generic information) and handed over to host country						
12 b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country						
13 a	Number of species reference collections established and handed over to host country(s)						
13 b	Number of species reference collections enhanced and handed over to host country(s)						

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### **Table 1 Project Standard Indicators**

Indicator number	Darwin Initiative Standard Indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Eg. DI-A01	Eg. Number of people from key national and local stakeholders completing structured and relevant training	E.g. Number of officials from national Department of Environment who attended training on CBD Reporting Standards	People	Women	20			20	60
E.g. DI-C17	E.g. Articles published by members of the project team	E.g. Number of unique papers published in peer reviewed journals	Number	None	1			1	4

# Table 2Publications

Disse	mination Measures	Total	Nationality	Gender	Theme	Language	Comments
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	5	Uganda		Species and site conservation	English	Natureuganda organises monthly public meetings and it hosted several project dialogues (BCF, 2 public talks, 2 district council meetings

Dissemination Measures		Total	Nationality	Gender	Theme	Language	Comments
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	4	Uganda		Conservation and restoration of habitats	English	Other partners meetings

Physic	al Measures	Total	Comments	
20	D Estimated value (£s) of physical assets handed over to host country(s)		I motorcycle, I boat engine, 1 wooden boat, 600 assorted garden too (hoes, spades, pick axes), 2 guidebooks, 200 beehives, 100 ESS, 2 animals (sheep, goat, pigs), 2 computers, 1 camera, 50 life jackets, sewing and knitting machines, assortment of agroforestry trees	
21	Number of permanent educational, training, research facilities or organisation established	N/A		
22	Number of permanent field plots established	5	Farmer field schools. However these are established at host farmers (members of the community)	

Financ	ial Measures	Total	Nationality	Gender	Theme	Language	Comments
23	Value of additional resources raised from other sources (e.g., in addition to Darwin funding) for project work (please note that the figure provided here should align with financial information provided in section 9.2)		Uganda		binoculars		Provided from NatureUganda stock

### **Checklist for submission**

	Check
Is the report less than 10MB? If so, please email to <u>BCF-Reports@niras.com</u> putting the project number in the Subject line.	V
Is your report more than 10MB? If so, please discuss with <u>BCF-Reports@niras.com</u> about the best way to deliver the report, putting the project number in the Subject line.	
If you are submitting photos for publicity purposes, <b>do these meet the outlined</b> requirements (see section 10)?	$\checkmark$
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
<b>Do you have hard copies of material you need to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 10)?	$\checkmark$
Have you involved your partners in preparation of the report and named the main contributors	$\checkmark$
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	