Darwin Initiative: Final Report

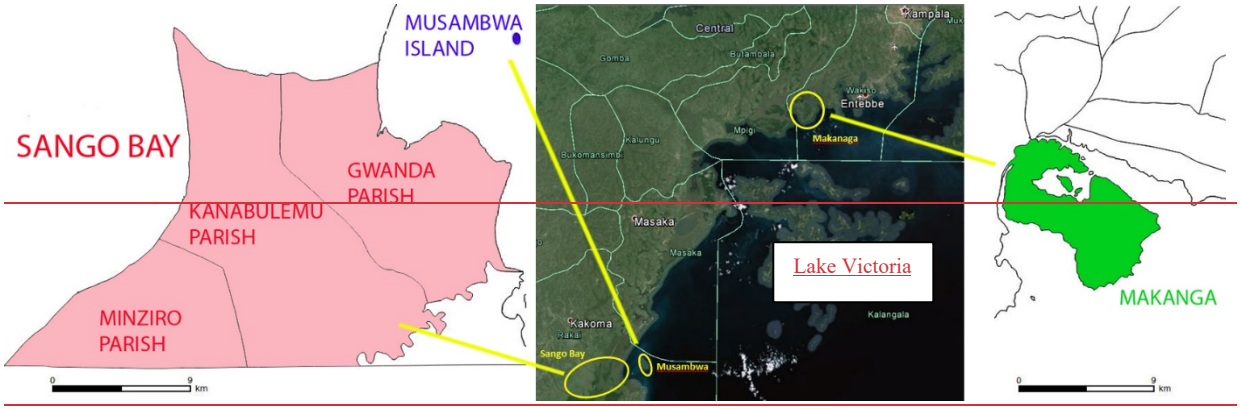
*To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)*

Darwin Project Information

Project reference	22-019 ref 2792
Project title	Supporting Community Conserved Areas in Uganda for biodiversity and livelihoods
Host country(ies)	Uganda
Contract holder institution	Fauna & Flora international
Partner institution(s)	1. Ecological Christian Organization, Uganda (ECO Uganda) 2. Nature Uganda
Darwin grant value	GBP 293,993
Start/end dates of project	1 April 2015, End date: 31 March 2018
Project leader's name	Stephen Asuma
Project website/blog/Twitter	
Report author(s) and date	Stephen Asuma, Rogers Niwamanya M., & Stella Ajilong Date: 30th June 2018

1 Project Rationale

The project - *Supporting community conserved areas inUganda for biodiversity and livelihoods*, was implemented at three sites; Sango Bay and Musambwa Islands in Rakai, now Kyotera District and Makanaga in Wakiso District, on the western fringes of the highly biodiverse Lake Victoria Basin, in Southern Uganda as shown in the map below.



The Lake Victoria basin contains wetlands and forests of international importance and has over 300 endemic fish species. The project site, also known as Sango Bay wetlands & forest ecosystem (Sango Bay –Musambwa–Kagera (SAMUKA) wetland Ramsar site) at the western fringes of Lake Victoria, is a biodiversity hotspot. The site has 14% of Uganda's fish species and 41% of the country's bird species **(USAID, 2017-Annex 66).** At the mouth of Kagera River in the project area, which contributes 33% of the

water in Lake Victoria (LVBC,) **Annex 67**, the forests contain *Podocarpus* spp. and other tree species usually restricted to montane forests. The Sango Bay forests, measuring 578km^2 are the only extensive lowland swamp forest in Uganda (at an altitude of about 1140 m, just above the lake). This *Baikiaea-Podocarpus* swamp forest type is not found anywhere else in tropical Africa, hence, its global importance for biodiversity conservation. The project site contains three mammal species considered threatened, i.e. the African Elephant, Straw coloured fruit bat and African Leopard. The endangered Shoebill stork (*Balaeniceps rex*), nationally threatened Sitatunga ((*Tragelaphus spekii*), 14 species (8 butterflies, 2 birds, 3 trees and 1 moth) not found in any other forests in Uganda occur in Sango Bay (WCS, 2017) **Annex 63.**

The project site has 5,691 HHs, 28% of which are female headed. 40% of population live more than 5 km from a public health facility, 10% have less than two meals a day. 85% have no access to safe water, obtaining water from open sources like the lake, rivers, streams and swamps in the area. About 32% of the population between 6-30 years are not in school (**National census, 2014-Annex 68).**

Rain fed subsistence farming is the main economic activity engaging more than 80% of the population (**National census, 2014-Annex 68),** followed by livestock rearing. Most of the cattle is owned by immigrant pastoralists from other pastoral communities in the Southern, Southwestern and Western Uganda. The pastoralists are attracted to Sango Bay area due to the large expanses of grassland and availability of water, especially during the dry seasons. Fishing is another important socio economic activity in the area. An estimated 30,000 people in the district depend on fishing as their main source of livelihood. (Kyotera District Local Government Development plan-2017/18-2019/20) **Annex 8, pg 32.** Other than direct income and employment it offers, fisheries here is also important for improved nutrition and food security for the lake edge communities in the project area. The economic activities earn the households on average annual income of about 235 GBP **(Annex 69, pg. 37).**

Despite supporting important biodiversity and providing local and regional ecosystem services, the project site, a Key Biodiversity Areas within Uganda, has limited legal protection and is under increasing pressure from growing agricultural activities, unsustainable resource use and habitat degradation. According to government reports, 75% of the wetlands at the sites have been significantly damaged and annual forest cover loss averages 1.7%. Fish catch dropped by 2.3 metric tonnes in Rakai between 2014 and 2015, causing a loss in income of about 890,000USD, mainly attributed to illegal fishing (NAFIRRI, 2016) **(Annex 51, pg. 3).** These changes and poor natural resources use practices like draining wetlands for agriculture, clearing forests and burning, as well as fishing near breeding zones using illegal gear have reduced agricultural productivity, denuded fisheries and reduced water quality at the project site. This significantly affects the 5,691 predominantly farming and fishing households at the project site, who depend heavily on ecosystem services, such as food, fuel wood (>90 %) and water purification, through loss of employment, poor nutrition and reduced socio economic development. The situation is exacerbated by the disempowerment and lack of involvement of the local communities around the Lake Victoria basin in the management of and decision making regarding these natural resources. This disempowerment is compounded by unclear land tenure, and risks of land expropriation to external parties.

Working with the lake edge local residents, their local governments, central government environmental agencies, civil society organizations and cultural institutions, and using the TESSA tool previously developed with support from the Darwin Initiative, the project was to assess ecosystem services important to the residents and use this information to identify and delineate areas for better protection and sustainable use. Through awareness raising and trainings, the project was to empower the lake edge households to participate in the governance and protection of these ecosystems and natural resources and derive sustainable benefits, like increased fisheries and improved agricultural productivity. The project was to introduce a new mechanism of community based conservation of important ecosystems and natural resources, the Community Conserved Areas (CCA) approach. Through a staged, participatory approach, and working with relevant central government ministries, departments and agencies (MDAs), cultural institutions and other civil society organizations, the project was designed to cause the gazzettement and community based management of three CCAs which would work as a model for grassroots development of community conservation areas elsewhere in Uganda. In order to incentivize sustainable resource use amongst the target community, demonstrate the dependence of community livelihoods on ecosystems services provided by nature and contribute to poverty reduction amongst the target communities, the project was to support alternative means of income generation, as a decoupling strategy. Another project interventions was to enhance contemporary and traditional processes to reverse or reduce degradation of the ecosystems, and strengthen measures towards regeneration of the degraded areas and conservation of critically endangered species such as Singidia tilapia (*Oreochromisesculentus*), Victoria tilapia (*Oreochromis variabilis*) and Shoebill (*Balaeniceps rex*).

2 Project Partnerships

FFI, as the project lead institution, took a deliberate step, in line with her operational policy to identify national and local civil society organizations and other partners to deliver this project. Partnerships are central to all our operations and in this project we were resolute on the fact that to contribute to sustainable use of resources in this high biodiversity area, we had to work with others, and particularly those who live and work closest to the threatened species and ecosystems in the Lake Victoria basin. This collaborative and partnership approach was to bring on board and transfer our global experiences, lessons learnt, skills, knowledge and international best practise to the local partners and also enable FFI to better understand the context for the project and operation details, as these partners and organisations had the best understanding of the threats to the biodiversity in the project area and the complex processes underpinning these threats. These partners are also better placed to cause meaningful change. The project benefitted from the relationships already subsisting between these local partners and project beneficiaries, as it eased project start, avoided delays, focussed the project activities better, increasing relevance of the project which all translated to cost savings and effectiveness.

The project partners included Ecological Christian Organisation-Uganda (ECO-Uganda) and Nature Uganda (NU). Nature Uganda, a leading agency in bird monitoring and on the ground in the project area on KBA activities focused on monitoring the status of the project targeted species, the Shoebill stork, and other bird populations in both Makanaga/Mabamba Bay and Sango Bay. Though NU was indicated in the project document as the technical partner responsible for developing baselines for target species and designing and implementing the monitoring, we later established that they had limited capacity in monitoring water quality, fisheries and other biodiversity, which were important components for the project. We therefore engaged consultants to undertake these.

ECO-Uganda was to lead on forest and wetland conservation outcomes, especially management of the community livelihood component of the project, rapid assessments to establish key parameters within the community and monitor changes over time. They were also to support engagement of the community members and other local stakeholders. ECO-Uganda had been working with Pathfinder International on the MacArthur Foundation/USAID funded HOPE project in the project area. However, during early planning meetings, it was established that ECO Uganda didn't have resident field presence necessary to sustain frequent engagement with the community and other local stakeholders. It was therefore agreed that ECO Uganda concentrates on agro forestry and fish breeding zones activities, while other roles were executed by FFI through the field based site coordinators.

As key implementation partners, ECO Uganda and Nature Uganda were engaged in regular work planning sessions and frequent consultative meetings. They were involved in routine supervisory field visits with FFI and always worked alongside FFI field coordinators to improve information sharing, skills transfer and project effectiveness and efficiency. FFI coordinated the monitoring of project outputs and evaluation of project implementation, feeding findings into adapting project management. Working with Nature Uganda and ECO Uganda, we designed monitoring protocols that were used throughout the project by Nature Uganda for bird monitoring and by other consultants and community monitors for other biodiversity and water quality monitoring. Progress reports from these partners were used in the preparation of project progress reports, as well as this report.

Other project partners and beneficiaries were:

a. Wakiso and Kyotera District Local Governments, who participated in the project initiation workshops to focus the project and also during subsequent planning and assessment of project performance and adapting implementation strategies and plans. They were instrumental in mainstreaming project objectives and outputs into sub county and district development agenda. They were also members of the CCA forum and committee.
b. Best Practice Resource Management Groups (BPRMGs): Constituted by lake-edge community members. These groups were instrumental in project achievements. They worked closely with project site coordinators, local government staff and other stakeholders to refine and guide planning at grassroots, and implement project activities. These groups had representatives at all levels of project implementation meetings.
c. Uganda Wildlife Authority (UWA), the national agency responsible for wildlife, guided on incorporation of wildlife components in the CCA model and participated in development of the CCA management plans.
d. The Buganda Kingdom, within which the project site is located, collaborated on raising awareness on the cultural values in relation to conservation at all the project sites. The local Kingdom structures were important mobilization avenues for the project.
e. The Department of Culture in the Ministry of Gender, Labour and Social Development (MGLSD) supported capacity building in inventorying of cultural heritage and integrating cultural values into project activities. They have continued to participate as members of the CCA forum and the National CCA committee which feeds into the forum.
f. The Ministry of Water and Environment (MWE) and Ministry of Tourism, Wildlife and Antiquities (MTWA) are members of the CCA committee. They advised on policy and opportunities for the

creation and management of CCAs. They were instrumental in sensitization of the communities and other stakeholders, especially on the relevant policies and guidelines in their dockets.

In Year 3, the partnership with ECO Uganda had to be terminated due to concerns regarding financial management, delivery of field work, and submission of project reports. These concerns were observed in Years 1 and 2 and efforts were made by FFI to ameliorate them through regular meetings and training sessions but with minimum improvement. In order to ensure the project deliverables, FFI applied for and obtained permission from the donor to terminate the partnership and take on the remaining activities **(Annex 70)**. This change did not materially affect delivery of project outputs, as most of the field work had been completed and capacity was now available within the FFI site coordinators to provide backstopping, whenever required.

FFI values partnerships and will keep those established in this project because they eased entry into the area, used their long term knowledge to guide project implementation and we benefitted a lot from the various mandates and wide experience brought on board by the governmental and cultural institutions. We recommend and will definitely explore more partnerships in future. We shall however undertake more rigorous due diligence to avoid some of the unfortunate experiences we had with some of the partners.

Some of the lessons we learnt in this project working with the wide range of partners is that each of them brings on board different aspects and adds value. All put together, functional partnerships widen the knowledge base, remove perceptions and build stronger bonds and networks that facilitate sustainability.

It's also important to recognize that organizations have their own cultures and ways of working. These are important factors to understudy before partnerships arrangements are finalized.

3 Project Achievements

3.1 Outputs

Output 1: Legal gazettement notices of 3 CCAs published or in process, district government plans include specific actions to ensure material and non-material contributions made by CCAs are maintained, and communities and cultural institutions recognize contributions of CCAs to wellbeing:

Status: Largely achieved.

Though no national level CCA gazzettement was attained, five CCA management plans were produced, one for each of the CCA, and approved by the sub county and district local government councils **(Annexes 4a-e).** The formal CCA gazzettement at national level could not happen during this project due to the multiple land tenure within the CCAs and the various institutional mandates on the different ecosystems involved. The protocols for the national level gazzettement required significantly longer time than the project period. However, we are confident that approvals secured at the local government levels are adequate for the functioning of the CCAs at this point in time.

The processes leading to the development of the management plans started from the assessment of ecosystem services at the project sites (**Annexes 1a & 1b).** Through these assessments, that were highly participatory and interactive**,** the local community, local leaders, and other stakeholders at the project site learnt more about the ecosystems services in the area and the implications of continued degradation of the ecosystems to the livelihood and wellbeing of the local, national and regional communities. In both Makanaga and Sango Bay landscapes, the community identified water for domestic use, fish, fish breeding areas, rain, clean air, medicine, timber, charcoal, transportation and tourism as some of the important ecosystem goods and services derived from the forests, wetlands and lakes in the project area. The community recognized the declining state of the natural resources and feared that 10-20% of their forests and wetlands could be lost in the next 10-15 years to agriculture, settlement and commercial plantation forestry **(Annex 1a & b).**

The project also conducted cultural values and institutional analysis, aimed at identifying key cultural values and resources important for the local community, threats to these values and the institutional set up in place for the management of these resources under a CCA approach **(Annex 5).** The report also showed that though relations between cultural and natural resources management are now better understood, practical conservation through culture, was still weak.

Information from the ecosystems services assessment and cultural values analysis guided the creation of the five CCAs (31,929 hectares, 26,000 inhabitants) and informed the management planning process for the five CCAs**, (Annexes 2 & 3).**

As a result of the recognition of the material and non-material contributions of the CCA resources to their wellbeing, the community and other stakeholders ensured that appropriate provisions were made in the CCA management plans **(Annexes 4a-e)** to mitigate the potential negative impacts of unsustainable use

of these resources and improve their governance. The district and sub county local governments also ensured that the provisions in the CCA management plans were integrated into the respective local government development plans. For example tree planting, energy saving technologies, sensitisation on sustainable use of natural and cultural resources, wetland management and restoration activities have been integrated into the Kyotera District Development plan, 2015-2020 **(see Annex 8, pgs. 45-64, 95).**
The cultural assessment result informed community sensitization efforts and caused elements of cultural values to be included in the CCA management plans.
While the Buganda Kingdom has not formally recognized the CCAs, the institutions' staff were fully involved during the cultural values awareness raising events with the communities at project sites.

Output 2: Multi-stakeholder governance and management structures for CCAs in place and functional

Status: Largely achieved

At the start of the project, natural resources management structures in place were Beach Management units (BMUs) [1]for fisheries and only one inactive Collaborative Forest Management (CFM) group in Minziiro parish, in addition to the government structures. There were other community based groups mainly focussed on livelihoods but none on conservation.

To introduce the CCA approach, six participatory awareness meetings, attended by 708(336M; 272F) people, were conducted across the project site. Five meetings were on Ugandan forestry, wetland and fisheries policies, regulations and guidance on sustainable utilisation of products from forests, wetlands and the lake, as well as the roles and responsibilities of the various actors in the management of the natural resources (**Annexes 9, 10)**. We increased awareness among fishers (145 {101M; 44F}) on the importance and characteristics of fish breeding zones (FBZs) and trained them on how to protect the FBZs (**Annex 11)**. Information from the ecosystem services assessment and cultural values analysis **(Annexes 1a, 1b and 5)** were integrated into the awareness programme and all together increased awareness on the community roles and responsibilities in sustainable natural resource use, benefits therefrom and implications of inaction to contain degradation on their side. The community used the knowledge obtained from the assessments and during the sensitization meetings to identify five CCAs **(Annex 2)** and key values and requirements for CCA management **(Annex 7).**

The project evaluated 48 existing community groups, and selected six to create Best Practise Resource Management Groups (BPRMGs). These BPRMGs provided the interim management structures for the CCAs and worked closely with project site coordinators, local government staff and other stakeholders to effectively deliver project outputs, for example development of CCA management plans and formation of CCA committees, responsible for implementing the management plans. For each CCA, a steering committee and five other committees[2] in charge of the key ecosystems services were participatorily selected by the local community, with guidance from partners like the local government at the district and sub county level, representatives of cultural institutions and project staff **(Annex 12).** At the community meeting in Annex 12, the Terms of Reference (ToR) of the CCA committees were generated **(Annex 61).**The 155 CCA committee members(107M;48F), were trained on their roles, given skills for executing these roles and linked to the relevant government and cultural structures to achieve more sustainable conservation **(Annex 14).**

Because the formation of the CCA committees and their training took place towards the end of the project, we aren't yet in a position to report on their performance here. However, as mentioned earlier, these roles were performed by the BPRMGs, in the interim. Formation of the CCA committees delayed because the CCA management plans needed to be approved first, as the management plans stipulate the substantive CCA management arrangements.

The project also formed a national level CCA forum**, (Annex 29)** consisting of organisations with common vision in conservation and livelihood improvements. These included NGOs, central government Ministries, Departments and Agencies (MDAs) and community representatives, drawn from the BPRMGs. The forum was beneficial because it provided a platform for sharing information on the CCA approach and also guided the project implementation.
The forum met three times during the project to provide guidance to the project and ensure that issues to do with community based conservation were shared with the wider stakeholders' base. This eased the CCA process, especially the development of the CCA management plans.

[1] These were suspended by the government in November 2016 but in the project area, their duties were continued by the BPRMGs formed by the project.
[2] These include wetlands committee, forests and wildlife committee, tourism committee, cultural resource committee, production and marketing committee.

Each CCA management plan **(Annexes 4a-e)** has an activity plan, with time frames allocated. Going forwards, we expect the various CCA committees to use these activity plans to extract annual operation plans.

We are happy to report that the project rejuvenated a dormant agreement between Minziiro Collaborative Forest Management (CFM) group and National Forest Authority (NFA) **(Annex 55)** and revitalized the CFM, which has since played a pivotal role in the governance of Minziiro CCA and contributed to reducing deforestation activities in the area **(Annex 52).**

We relied on Global Forest Watch (GFW) data **(Annex 52),** mainly on forest cover because neither the project nor the government undertook annual forest and wetland cover assessments in the area. However, we undertook two biodiversity assessments which also include tree species surveys on specific transects **(Annexes 15, 16).**

Output 3: Wetland and forest resource management best practice groups established and functioning to regulate access to and use of wetland and forest ecosystems and resources including fish breeding and nursery grounds and monitor resources including biodiversity.

Status: Fully achieved.

As reported under Output 2 above, six BPRMGs, i.e. Sango Bay Twezimbe farmers group, Kasensero fishers group, Kigazi Tukwatirewamu forest group, Kanabulemu Tourism Conservation Organization (KATOCO), Bwamija CCA group comprised of Musambwa Island Joint Conservation Association and Kasensero fishers group were established in Gwanda, Minziiro, Kanabulemu, Bwamija parishes respectively, all in Kyotera district. Makanaga Twezimbe farmers group is in Balabala parish, Wakiso district. These BPRMGs were fully engaged in the CCA management plans development process and formed the interim CCA management structures before formation of substantive CCA committees. Eighteen (16M; 2F) members of the BPRMGs were selected and trained as community fish catch monitors **(Annex 35b).** They collected daily fish catch data, used to monitor fish stock and species assemblages during the project. The community monitors continue to provide monthly fish catch data to the Local government fisheries office. The community later appointed these monitors as task force members to patrol fish breeding zones and enforce compliance with good fishing practices on the lake. Another eighteen (15M; 3F) BPRMG members were trained and worked with Nature Uganda as volunteer community bird monitors **(Annex35a).** They continue to work with Nature Uganda on periodic bird censuses. Engaging community members in monitoring these resources, using community-based monitoring protocols **(Annexes 17 and in Annex 62)** developed by the project, enabled them to understand the ecological dynamics of these species, their roles as environmental indicators, their cultural relationships with some of these species and the threats to them.

To support improvement in natural resources governance, 155 (48F; 107M) CCA committee members were trained on their roles and responsibilities **(Annex14).** The impact of this training is expected later since it took place in January 2018
A monitoring system was developed basing on the M&E framework within the project Log frame **(Annex 19).** This tracks the project indicators and informs work planning and adaptive management.

Output 4: Fisheries, agricultural, cash-crop, agro-forestry, and forest and wetland resource production and storage improvements adopted by participating households and the wider community

Status: Largely achieved

The project supported diversification of livelihood options, improved current sources of income and contributed to addressing identified skills gaps within target communities in agronomy, silviculture, livestock husbandry, governance and sustainable natural resources management. The project trained 2005(1280M; 725F) community members in the five CCAs to enable them to optimize livelihood benefits introduced by the project and increase their effectiveness in the governance of natural resources. The list of all training events supported by the project is provided as **Annex 13.**

At project start, most fishers at landing sites in project area were complacent on sustainable fisheries and engaged in illegal fishing. This drove down the fish stocks, leading to poverty, loss of jobs and poor nutrition. The project trained 110 (M: 95; F: 15) fishers in sustainable fisheries **(Annex 20b)** and sensitized 640(170F;470M) fishers and other community members on importance of fish breeding zones, as well as how to identify, demarcate and protect FBZs(**Annexes 20 a, b, c & d**). In the meetings

between the fishers, local government technical and political leaders, the parties collaboratively agreed on the following strategies to ensure sustainable fisheries: a) continued sensitization b) Identification, mapping and marking fish breeding zones c) Patrolling the FBZs to ensure compliance with legal fishing regulations d) Monitoring fish offtake **(Annexes 20a and 20c).** As a result, ten FBZs, totalling 1,994 hectares, have been demarcated **(Annex 20)** and a 21-member task force setup to protect the FBZs **(Annex 20a).** The project also supported three joint patrols, conducted in collaboration with the mandated institutions like the marine police and sub county fisheries officers. **Annex 21.**

In agriculture and tree planting, the stakeholders agreed in a meeting on training, support with high quality seeds/seedlings for indigenous trees, fruit trees and coffee and agroforestry as ways of or strategies for improving productivity of the farmlands and diversifying incomes (**Annex 56).**
Under agroforestry, 217(105M; 112F) community members were trained on a) the recommended types of trees and fruits for the area and reasons for the recommendations b) field preparation c) planting and maintenance of seedlings and saplings d) pests and diseases and their control (Annex. The community members were also trained in soil and water management for agriculture. Start-up agricultural inputs, e.g. seedlings **(Annex 46),** seeds, potting bags and watering equipment **(Annex 23 a & b)** were provided. To date, 89,500 seedlings of assorted indigenous tree species 5,782 fruit trees and 174050 coffee were planted **(Annex 46).** 150 community members (62M; 88F) were trained in tree nursery establishment and management, as a business **(Annex 23a).** They supplied about 60% of the seedlings planted by the project and earned about 4,083USD from the external market through the sub county. Gwanda CCA supplied coffee seedlings a second time and they negotiated an agreement with the sub county to supply tree and fruit seedlings between 2016-2021 for the sub county tree planting programme.

We further trained 105 community members (56F; 49M) in good livestock husbandry **(Annex 24)** and gave them a start-up stock of 69 and 34 improved breed pigs and goats respectively **(Annex 46).** Topics covered included a) Breed types, characteristics and selection b) feed types, formulation and management c) shelter construction and management d) breeding and offspring management e) Diseases and their management f) general stock management e.g. spraying, detailing and dehoofing. Using skills from these trainings, the target households increased their stock of pigs and goats from 103 to 199, a 93% increase in asset base (**See Annex 46).** We also trained 130(61F; 69M) target household members in sustainable agriculture and land management, covering a) soil and water management b) Agroforestry and mixed agriculture c) integrated pest management, amongst other topics **(Annex 31)**. Since 2016, the percentage of residents giving conservation agriculture as the way to improve productivity increased from 74% to 91 %. 11% of the survey respondents attributed their improved wellbeing in 2017 to better farming methods **(See Annex 65)**

As a means of peer to peer learning, to inspire more adoption of new production methods, the project organized two exchange visits. The first focused on successful community forestry projects in western Uganda, 30 members (10F; 20M) participated. **(Annex 53)**. 6,636 indigenous trees were planted as a direct result. The second was for 52(29M; 23F) members to Lake Wamala, where FFI implemented a successful agroforestry and sustainable fisheries project. 50,435 indigenous trees species, 3,302 fruit trees, and 8,798 coffee seedlings were planted as a direct result. **(Annex 57).**

Output 5: CCA gazettement and management processes undertaken through participatory approaches, with special emphasis on women and youth, establish multi-stakeholder governance institutions.

Status: Fully achieved

As indicated under Outputs 1 and 2 above, the creation of the five CCAs and development of their management plans were undertaken through participatory engagements of all stakeholders. Both men and women were involved in fairly equal numbers **(Annexes 2 & 7).** The reports on ecosystems services assessments were shared with a wide range of stake holders including community members, local governments and other government and cultural institutions. For the target households, consultative meetings **(Annexes 2,7,9,10,11, 23a etc.)** were used for this purpose. This was intended to inform the process to develop interventions to improve the management of the natural and cultural resources within the CCAs. The meetings were supplemented with the production and distribution of 1800 posters and calendars carrying messages on ecosystem services and the role and responsibilities of the community, local governments and stakeholders in sustainable use of natural resources **(Annexes 26 &27).** We also produced a document on the CCA approach in biodiversity conservation in Lake Victoria basin **(Annex 58),** which was shared with more 500 people of different categories, ranging from MDAs, Local Governments, CSOs, the CCA committees and general public in the CCAs.

From the sensitization events, through delineation of the CCAs, development of the CCA management plans to setting up of CCA committees, efforts were made to encourage and include women and youth. For example, 38% of the participants during the initial sensitization on the CCA approach were women. Women constituted 47% of the BPRMGs and 43% of the participants during the identification of CCAs were women **(Annex 2b).** Women formed 29% of the CCA management planning committees (**Annex2)** and now occupy 31% of the positions on the CCA committees **(Annex12).** While youth fully participated in the project activities, it was difficult for us to register them separately due to difficulty and sensitivity amongst the rural community members in determining age.

The multi stakeholder CCA forum, composed of community representatives, local and central government staff and NGOs was also formed for information sharing and guidance **(See Annex 29)**. The forum selected a CCA committee to guide the project on all matters related to CCA approach. **(See Annexes 39c for minute of committee meetings).**

The key out assumptions in the project were that a) The presidential elections of 2016, would not introduce political instability, b) There would be no major environmental change to Lake Victoria c) There would be no epidemic outbreak d) There would be stable international relations within East Africa. Indeed all the assumptions came to pass.

3.2 Outcome

The expected outcome of our project was that ecosystem services and cultural values would support the establishment and participatory management of three CCAs, which conserve biodiversity, reduce ecosystem degradation and improve wellbeing of 1500 households.

Please, note that the number of beneficiary households was adjusted from 3000 to 1500 in the course of the project. The change request was based on the fact that at project design, it was envisaged that the project would involve most of the residents in the parishes under the project, hence the target of 3000 households. But during implementation, we determined that since this is the first time such an ecosystems services based, conservation focussed was implemented here, it would be more efficient to work through established local community groups. **(See Annex 36a).**

Having noted the change, this outcome was largely achieved, as demonstrated below by the attainment of most of the agreed outcome indicators.

Using information from ecosystems services assessment **(Annex 1a)** and cultural and institutional analysis results **(Annex 1b)**, and information obtained from central government MDAs, communities were sensitized on the values of the natural and cultural resources most important for their wellbeing and for national socio economic development. The community and other stakeholders were also sensitized on their roles and responsibilities towards arresting the degradation of the natural resources, as to deliver socio economic benefits and ensure conservation of the biodiversity and ecosystems in the area **(Annexes 1a&b, 5, 7, 2b, 9, 3, 20, 29, 39b, 37b, and 14,).**This is inspired them to create five CCAs- two more than promised **(Annex 2),** measuring 31,929 hectares in five parishes, four in Kyotera district and one in Wakiso district. The CCAs encompass protected and unprotected forests on public and private land, wetlands without legal protection status, rivers, streams, farm and fallow land and a portion of Lake Victoria, especially important as fish breeding zones. The community also developed management plans for the five CCAs that were approved by the local government councils **(Annexes 4a-e).** The communities also set up structures to manage their CCAs **(Annex 12).** This achievement laid a strong administrative foundation for the community based management of the CCAs and illustrated the impact of community involvement and empowerment, especially when they relate sufficiently with the subject matter**.** However, the formal recognition of the CCAs at the national level could not be achieved because it required a review or change of the subsisting enabling laws, as the CCAs contain ecosystems, named above, that are currently under various ministerial jurisdictions. But the approval of the CCA management plans by the respective local councils provides adequate legitimacy for the CCA operations in the meantime. Furthermore, though the Buganda Kingdom has not yet formally recognized the CCAs, there is a MoU with the Buganda Kingdom for the operation of the project **(Annex 60).**

In recognition of the importance of the CCAs and activities embodied in the CCA management plans, local governments at Sub County and District levels have integrated some of the CCA activities into their development plans, for example for Kyotera district **(Annex 8e.g. pgs. 45-64)**. Unfortunately the budgetary allocation to the natural resources department is still very minimal and doesn't reflect the importance the local government attaches to environment since most of the funds for natural resources department are subventions from the central government. For example, in 2017/18, the department was allocated an equivalent of 1,100GBP **(Annex 8 pg. xxix and 103).**

By creating the five CCAs, the community and other stakeholders helped to conserve 320km^2 of a Key Biodiversity Area, also a RAMSAR site which consists of the only large lowland forest in Uganda, wetlands, farmland, and Lake shoreline, important for lake fisheries. The improved protection of the project site has secured habitats for the endangered Shoebill stork*, (Balaeniceps rex)* and 180 other bird species which included four other globally recognized threatened species i.e. Grey- crowned Crane (*Balearica regulorum*), Blue Swallow ***(****Hirundo atrocaerulea)* and Papyrus Gonolek*(Laniarius mufumbiri)*.The shoebill stork sightings in the area increased from zero in 2016 to eight in 2018(**Annexes 16 & 36c).** The improved conservation through sustainable resource use in the five CCAs has also contributed to protection of other threatened IUCN Red List species, namely African Elephant (*Loxodonta Africana*) (Vulnerable)*,* Straw coloured fruit bat (Near Threatened), African Leopard (Vulnerable), the Grey cheeked Mangabey(endemic to Uganda) and Sitatunga (Nationally threatened) **(WCS 2016-Annex 63).**Three elephant observations were made during 2017 survey. Meanwhile four Sitatungas (*Tragelaphus spekii*) were reported in 2017 and three in 2016 **Annex 16.**

In respect to fisheries, the project has contributed to an overall increase in the total fish yield by 54% (**Annex 16 & 42b)**. However, there was a decline in the fish species diversity recorded from all project sites by between 45-50% (**16 & Annex 42b.)** The decline in the number of fish species per site is attributed to the low catches of the diverse haplochromine cichlids and possible seasonal fluctuations in localised habitats. The low catch of Haplochromines has been observed throughout Lake Victoria **(IUCN, 2018-Annex 64 & Annex 42b).** Although our monitoring has registered a decline in species richness, the species recovery increased with the capture of the riverine migratory cyprinid *Labeo victorianus* and Singidia tilapia (*Oreochromis esculentus*) **(Annex 42b).** Both species are endangered and locally vulnerable due to increased fishing pressure. These fish species were not recovered during the first monitoring survey **(Annex 15).** The species relative abundance was dominated by the Nile perch (40%) as in the first monitoring survey, followed by mormyrids *Marcusenius grahami* (14.5%), *Mormyrus kannume* – 9%, and the Marbled lungfish *Protopterus aethiopicus* – 8% while the least species recovered were the haplochromine cichlid *Neochromis sp*.**(Annex 16 & 42b.)**

In respect to degradation of forests and wetlands in the five CCAs, the project used two sources of information to establish performance. We used biodiversity surveys on transacts established across the project sites and also used data from the Global Forest Watch. We conducted a baseline biodiversity survey and two repeat surveys between 2016 and 2018. Data from Global Forest was analysed for 2000-2014 and 2016.
The baseline established using Global Forest watch data showed that a forest cover (>30% canopy cover) of 11,200ha for all the five CCAs, which was a gain of about 2,700ha from the 2000 figures. The same source reported a wetland coverage of 11,000ha, which represented a loss of about 20% since 2000**(Fig 2, Annex 52)**. The figures for specific CCAs for 2016 **(Fig 4, Annex 52)** show a 10% drop in forest loss in Zzinga (Makanaga) and maintained level for Minziiro. But it also shows a wild spike for Kanabulemu, Gwanda and Bwamijja CCAs. However, comparing the results of the biodiversity surveys we did at specified areas in 2016(baseline) and 2017(repeat), it reported 'no significant variations in resource utilization (exploitation of trees for use) based on what exists within each transect' **(Annex 16, pg. ii and 29).** This means that no major removal of species of trees monitored happened between baseline and end of project data set. Considering that the 10 tree species for monitoring were selected based on their ecological role in the ecosystem and use for the local community, this can be an indicator of positive project impact of awareness creation on sustainable resource use within the local community.
This project was about empowering people in influencing decisions on the use of natural resources, that are currently mainly under government control. We recognize that due to limited alternatives, most of the poor community in the area were relying on the extraction of the natural resources for livelihood, mostly in unsustainable ways. For this type of project, that depends on people changing attitude and way of life and also rearranging management structures, it was probably very ambitious to promise to deliver 25% reduction of rate of loss and degradation of forest and wetland ecosystems by 25% over three years. But if the level of engagement and interest across all stakeholders continues and legal frameworks for ownership, decision making and benefit sharing are instituted in near future, we are confident that ecosystem degradation will significantly reduce due to more sustainable use of the resources, thus improved conservation of biodiversity.

Furthermore, the project made concrete contributions towards improving the income and wellbeing of the local communities. The project registered a general annual household income increment from Uganda shillings (UGX) 2,128,203 (417GBP) in 2016(baseline) to UGX 3,708,018(727GBP) in 2018, a 74% increase, a change reflected evenly between men (78%) and women (75%). Note: We had to extrapolate the figure for 2018[3]. **(Annex 65 Table 4).** Due to the project's livelihood interventions through trainings

[3] The 2018 income is extrapolated by adding the reported income in 3 months of the year (respondents only gave

and input support, 2,199 households spread in 25 villages reported increased income from agriculture **(Annex 65, Table 13),** which represents a 10% growth from the baseline, and 47% gain beyond targeted number. The project also instigated 15% growth in agricultural activity, compared to the 2016 baseline **(Annex 65, Table 6).** We recorded an improvement in the average monthly household income from agriculture of 5%, from 27GBP to 30GBP **(Annex 65).** This modest improvement can be explained by the fact that most of the skills provided by the project were for management of fruit trees, coffee and improved livestock breed, selected as the preferred enterprises, which are yet to provide marketable produce. The future worth of the project investment in increasing agricultural productivity is demonstrated by 35% of respondents in 2018 reporting an increased agricultural activity **(Annex 65, Table 6).**) and 63% of females and 80% of males having made some change in their agricultural methods **(Annex 65, Table 7).**

Meanwhile 1337 households reported increase in income from fisheries **(Annex 65, Table 13).** But this is 11% lower than the baseline figure**(Annex 65, Table 13)** The reduced number of households reporting increased income from fisheries is explained by clamp down on illegal fishing instituted by government from January/February 2017, which took a number of the illegal fishers out of business. But for those doing legal fishing, annual income from fishing grew by 40% from Uganda shillings (UGX) 3,542,857(694 GBP) to UGX 4,953,333(971 GBP**),** which translates to 23.1 GBP per month **(Annex 65, Table 8).**

Due to sensitization on sustainable fisheries, demarcation and protection of FBZs and joint patrols on the lakes, including work by the UPDF marine unit, there has been an overall general increase in the total fish yield from experimental fish catches from the project areas by about 54% **(Annex 16).** But this increased fish stock did not necessarily increase household income throughout the project since most of the previous fish income had been from illegally caught fish, which is now being controlled. For example, in our 2016 household survey, monthly household income from fisheries averaged 63 GBP but fell to 32 GBP in 2017 **(Annex 65, Table 8).** We observed a 86% loss of fishing related income to women **(Annex 65, Table 8)** which is most likely due to the fact that the number of male fishers reduced, as those using illegal methods and gear were put out of business, and therefore services, e.g. food and alcohol usually provided by women also reduced. Furthermore, a lot of women were involved in processing immature fish. This too was curtailed during the operation on illegal fishing.

Overall, 79% of the agricultural community and 28% of the fisher community attributed their increased income between 2017 and 2018 to trainings provided by the project **(Annex 65)**

The input and training support provided for the livestock programme has significantly increased the asset stock for the beneficiary community. Between 2017 and March 2018, the stock size has increased from 69 to 148 for improved pigs and 34 to 51 for improved goats, reflecting an asset growth rate of 114.5% for pigs and 50% for goats over one year **(Annex 46).**

In order to incorporate financial sustainability into improving wellbeing of the target beneficiaries, the project introduced village savings and loans schemes (VSLAs). 240 CCA member (102F; 138M) CCA were trained in savings &credit, business planning and group governance. By the end of the project, the three CCA VSLAs, have mobilized a total of 122.3 million shillings (23,980 GBP) over two years of the project. The 41.5 million shillings (8,137GBP) is in group savings accounts and 80.8 million shillings (15,842GBP)given out to members in loans, invested in trading business at Kansensero landing site and farming. These investments are likely to increase household incomes.

The project also elected to work with traditional cultural institutions, local governments and community managed and community based structures and general community to empower the community to make all inclusive, informed decisions on conservation of resources, especially by ensuring that women and youth are heard in these processes. At the end of the project, 87% of both men and women felt that their voices were being heard in matters relating to their village, 27% more than the target of 50%. There was a modest increase of 7% in how the respondents felt their individual voices mattered in decisions in their village., compared to 16% increase in how people in groups felt their voices were heard **(Annex 65, Tables 14 & 15 respectively)** The percentages of influence of individual voices dropped by 2% and 9% for men and women respectively between baseline and 2017, and then picked up by 5% and 22 % respectively between 2017 and 2018**(Annex 65, Table 14).** It is important to note that in 2016, the project conducted a lot of consultations e.g. Ecosystem services assessment, cultural values assessment, creation of the CCAs, formation of the BPRMGs etc. But when the next Household survey was undertaken in September 2017, most of the project activities with the communities involved implementing agreed actions. Then between Oct 2017 and March 2018, major decision making events included the formation of CCA committees and validation of CCA management plans, which increased

their income between Jan and March 2018) to an adjustment of 2/3 because the main source of income in this area is from agriculture and fishing, both of which have two main 'harvesting' seasons. We know there is one more high season for agriculture and fishing before Oct 18, when the next household survey should ordinarily be taking place),

the level of consultation with the communities. This pattern likely explains the scores given by respondents during the three monitoring rounds. It is however good to know that there was no difference between males(88%; 93%) and females(87%; 92%) in how they felt they were being heard in 2018, whether individually or as members of a group, compared to previous periods, which had noticeable differences between the sexes. We also observe that while the individual male voice appreciation changed at the end of project by 3% from baseline, this change was a significant 13% for women over the same period **(Annex 65, Table 14).** This is an important outcome for gender inclusiveness and empowerment.

We also noticed a 16% positive change between baseline and end of project in the value of working in groups, as expressed by respondents **Annex 65, Table 15),** which is an important achievement in improving governance of natural resources management in the project site, as working as groups in their CCA is likely to deliver more conservation outcome and household benefits.

The project has achieved a general improvement in community wellbeing by 23% between end of project, 2018 and baseline, 2016, with 3,708 out of 5691 households in the CCA reporting an improved wellbeing **(Annex 65, Table 17).** At the end of project, 65% of both men and women reported an improved wellbeing, 15% more than promised **(Annex 65, Table 17).** This achievement can be attributed to increased participation in CCA activities**(Annexes 1a, 1b,2,5,7,9,10,11,12,13,14, 20, 20a-d,31,34,35a, 55, 57 etc.),** involvement in decision making on matters important to them**(Annex 2,7,12,41,56,55 etc),** trainings organized by the project **(Annex 13)** and other livelihood projects support**(Annex 46),** which have made a modest contribution to incomes, increased food security and with increasing fish stocks, better nutrition. Worth noting is the significant 17% change in wellbeing for women between 2016 and 2017, compared to 1% for men for the same period. In household surveys conducted by the project, the community ranking of the importance of cultural values to their wellbeing increased threefold, across gender between 2016 (baseline) and 2018. The increase was twice more for low wellbeing level community members than the high level category. The ranking of importance of wild food from the ecosystems also rose between 55% and 68% across the wellbeing categories**(Annex 65, Table 1)**, three times more for the 15-25 year age group**(Annex 65, Table 3)** and 48% more for women(Annex 65,Table 2) illustrating the importance the community attaches to these ecosystem values for their livelihood.

3.3 Impact: achievement of positive impact on biodiversity and poverty alleviation

Agreed project impact: **Uganda's Lake Victoria ecosystems are sustainably conserved through community-based management of biodiversity, improved local governance of wetlands and forest resources, equitable use and improved livelihoods.**

We delivered five designated CCAs, measuring 31,929 hectares, consisting of wetlands, private and public forests, rivers and a portion of Lake Victoria, cultural sites, farm and fallow land**(Annexes 2&3)** , which will be more sustainably managed through the CCA approach the project introduced and promoted. The project helped to develop management plans for the five CCAs **(Annexes 4a-e)** and set up management and governance structures and mechanisms, which were approved at local government levels **(Annex 12).** This approval affords the community based CCA structures legitimacy to operate, and assigns them roles and responsibilities to discharge and empowers them to participate in improving the governance of the forests, wetlands and other important resources in the area, and in the process deliver benefits to the community from the wise use of the natural resources. Through the afforestation programme, the project planted between 100-130 [4]hectares of indigenous trees **(Annex 46)**. These trees will make a considerable contribution to reducing impact of climate change and increasing biodiversity of the project area, as well as meeting some of the household fuelwood, herbal medicine, timber and other needs.

Through awareness on ecosystems services, active engagement of the local community and ensuring their involvement in all processes of the CCA, the project has lessened extent of illegal harvesting of forest resources, especially in Minziiro and Zzinga (Makanga) **(See Annex 52, fig 4 and Annex 16)**, reduced hunting of the sitatunga, mitigated the rate of reclamation of wetlands for agriculture and illegal fishing in the lake **(Annex 42b).** Anecdotal evidence from the NFA field staff and members of the CCAs esp. Minziiro indicate that fewer people under the CCA arrangement illegally cut trees in the forests anymore. But the illegal tree cutting is being done by people outside of the CCAs. By improving the sustainable use of the forest, wetland and lake resources, the project has ensured better habitat for other fauna and flora, beyond the project indicator species **(Annex 16, 42a & 42b),**

There is an increase in the use of legal fishing gear on Lake Victoria **(Annex42b).** The importance of FBZs is now better understood and easier to explain to other fishers. As a result, other agencies like the UPDF marine unit are working with the community members to protect the fish breeding grounds. Some

[4] The average planting density for indigenous tree species is 300 seedlings per hectare

landing sites which have strong FBZ like Gwanda were closed to open fishing by the UPDF marine unit **(Annex 42b).**

The CCA forum consisting of community representatives, local and central government staff and NGOs, appreciate the appropriateness of the CCA approach and its potential effectiveness in enhancing conservation, especially outside current protected areas **(Annex30).** We also observe that the local governments in the project area and other partner government institutions are incorporating the CCA activities into their work plans and or development plans**. Refer to Annexes 8, pgs 45-64 and 95 and Annex 32.**

Information from the biodiversity and household surveys as well as Ecosystem assessments and cultural value analysis is being frequently referenced by local government staff to illustrate the opportunity costs on community livelihood of losing the ecosystems and thus encouraging them to take more responsibility for their sustainable use (**See Annexes 1a&b, 5, 7, 2b, 9, 3, 20, 29, 39b, 37b, and 14,).**

The project registered an increased recognition of the voice of community residents in decision making on matters in their villages, more so the effective participation of women and youth **(Annex 65).** This will improve governance and increase the participation of women and youth in making decisions in matters affecting them.

Income of the project beneficiaries has increased in general by 37 **%(Annex 65, Table 4)** and agricultural productivity, the mainstay of the local economy has also improved by about 17 %**(Annex 65)** and other asset bases have grown through the support with livestock, coffee seedlings**,** fruit growing and tree growing (**Annex 46).** Fish stocks are increasing **(Annex 42b)** and income from fishing is also increasing **(Annex 65, Table 8).** These positive changes will ensure more money in the households to pay for education and health care, more food security, and improved nutrition, which will all reduce poverty and enhance wellbeing of the project beneficiaries.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Contribution to Global Goals for Sustainable Development (SDGs)

In line with the SDGs 1, 2, 3, 5, 7, 8, 10, 13, 14, 15, 16 and 17, this project has contributed to sustainable management of the biodiversity and natural resources in the western fringes of Lake Victoria by raising awareness of the community members on ecosystem services and their importance to community livelihood. The project mobilized the community and other stakeholders to create five CCAs, under a people centred approach to environment protection and established and enhanced capacity of committees for these CCAs to better manage and sustainably deliver ecosystem services to improve community livelihoods. By improving fisheries in Lake Victoria and its tributaries at the project site, we contributed to job creation **(Goal 1, 8),** improved nutrition **(Goals 2 & 3)** and household income (**Goal 1).** These income enhancing interventions will contribute to improved access to education and other basic services in the community **(Goal 3).** By supporting tree planting, the project contributed to climate change resilience and adaptation **(Goal 15, 13),** biodiversity enhancement (**Goal 13),** accessible energy (**Goal 7),** as well as poverty reduction **(Goal 1).** The above techniques contributed to creating healthier production environment that will enhance the resilience of forest patches and wetlands and their biodiversity, as well as reduce pressure from the fisheries resources.

Working in partnership with government, cultural institutions and other stakeholders **(Goal 17)** to mitigate effects of climate change**(Goal 15.),** we supported processes to create a framework and management arrangements for a community led protected area, where contemporary and traditional conservation methods are recognized, promoted and supported**(Goal 14, 15,).**

In all our interventions, we ensured active engagement of women and youth to access information, new production techniques and leadership roles. For example, women participation in all our activities averaged about 35 %**(Goal 5).**

4.2 Project support to the Conventions or Treaties (CBD, CITES, Nagoya Protocol, ITPGRFA)

The project contributed to three CBD objectives. ***1. To conserve biological diversity*****;** as project was directly targeting the conservation of three critically endangered species, i.e. Singidia tilapia (*Oreochromis esculentus)*, Victoria tilapia(*Oreochromis variabilis)* and the Shoebill stork(*Balaeniceps rex*), alongside the established five community conserved areas (CCA), which are Key Biodiversity Areas (KBAs). Through project efforts, contribution was made to conservation of various terrestrial and fresh water biodiversity associated wetlands and forest relicts. ***2. To use biological diversity in a sustainable way****:* Processes to identify and assess status of the ecosystem services in the area, the sensitization program with the community and other stakeholders to explain the broader value of these

resources and implication of unsustainable use on livelihood garnered support that lead to the identification and establishment of CCAs and development of management plans focusing on sustainable use , as well as setting up of management structures for the CCAs have supported sustainable use of biodiversity currently threatened by habitat degradation, fragmentation, pollution and unsustainable use**.** ***3. To share the benefits of biological diversity fairly and equitably;*** Community members within the CCAs have been empowered to co-manage natural and cultural resources within the established CCAs. Opportunities for enhancing benefits from the wise use of the natural and cultural resources have been elaborated to the community, more so the direct implication of ecosystem services to their livelihood.

4.3 Gender equality

During establishment of CCAs, gender equality was addressed by ensuring female representation in all meetings and other project activities. For example, 38% of the participants during the initial sensitization on the CCA approach were women **(Annex 2).** Women constituted 47% of the BPRMGs and 43% of the participants during the identification of CCAs were women **(Annex 2b).** Women formed 29% of the CCA management planning committees (**Annex2)** and now occupy 31% of the positions on the CCA committees **(Annex 12).**
We always considered gender roles in scheduling and planning project activities. Some activities like fishing were male dominated due to the culture within the Lake Victoria basin that barred women from fishing. However there were activities that targeted specific gender. For example during the selection of CCA committees, each CCA committee had to have at least two women on each subcommittee as a precondition. Still, during IGA support, women were selected for goat rearing to uplift them **(Annex 56).**

4.4 Programme indicators

- **Did the project lead to greater representation of local poor people in management structures of biodiversity?**

Yes, there were six community members on the national level CCA forum. Five CCA committees, with 155 members were also formed to implement the CCA management plans. All these were local community members

- **Were any management plans for biodiversity developed?**

Yes, five management plans were developed for the five CCAs created during the project.

- **Were these formally accepted?**

  All the five management plans were approved at the sub county level, and four approved at the district level.

- **Were they participatory in nature or were they 'top-down'? How well represented are the local poor including women, in any proposed management structures?**

The development of the CCA management plans were highly consultative and participatory. The project ensured that every step was preceded with a sensitization and followed by a feedback and validation process before proceeding to the next stage. All these activities were community led. For example, 38% of the participants during the initial sensitization on the CCA approach were women**.** Women constituted 47% of the BPRMGs **and** 43% of the participants during the identification of CCAs were women. 29% of the CCA management planning committees were women and women now occupy 31% of the positions on the CCA committees**.**

- **Were there any positive gains in household (HH) income as a result of this project?**

The project has increased the general annual income for 3,744 households in the project area from an average of 417GBP in 2016 to 727GBP in 2018, in similar amounts for both men and women. This shows an average growth in income of 74% over two years of the project.

- **How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?**

See above. These figures were obtained from Household surveys conducted annually by the project. See results in Annex 65.

4.5 Transfer of knowledge

The knowledge and lessons from a project implemented by FFI around Lake Wamala, and organizations, like ECOTRUST in community forestry and other conservation incentives was transferred to target communities through exchange visits. Knowledge on ecosystems services based conservation was transferred to the community beneficiaries, local government staff and other project partners (MDAs).
The project also supported training of community development officers and local community members in inventorying tangible and non-tangible cultural heritage. This training was new to many and will be valuable in the conservation of cultural values in the country.
However, there were no formal qualifications provided or attained.

4.6 Capacity building

There was no specific provision for capacity building for staff in this project.

5 Sustainability and Legacy

The CCAs are established and their management plans are in place. These are all locally owned by communities and local governments, therefore the project has a true legacy. More work is likely needed to increase community empowerment, strengthen governance capacity and ensure the financial sustainability of the CCAs.

The LVCP responded to poor natural resources use practices that had reduced agricultural productivity and denuded fisheries. For example, the fisheries decline caused loss of employment, poor nutrition and reduced socio economic development. In the final project evaluation, respondents scored the project's relevance to responding to community needs at 76% **(Annex 6).** The LVCP therefore responded to true needs in the community. When the evaluator asked how the various categories of stakeholders rated the CCA concept for potential to foster integrated sustainable development, the average score was 76%, **(see Annex 6),** indicating their belief in the approach and therefore higher chances of sustainability.

The philosophy and implementation of this project ensured project ownership to the local community, local governments and other stakeholders. More than a dozen mobilization meetings were held at all project sites ahead of key project activities. During ecosystem services assessment, cultural values analysis and household survey, community input was captured and used to develop the CCA management plans, which clarified the project goals. These efforts place the project on a fairly good sustainability position.
The communities were involved in project delivery, and we ensured that their representatives actively participated in planning and project review meetings to ensure continuity and facilitate future reference. This investment should ensure more sustainability.
The implementation of this project was premised on partnerships. While the project worked a lot with the communities, we involved different levels of government as well as local NGOs to make sure that there was no duplication and available resources were optimally used. The process of establishing the CCAs closely involved the local governments, Key Ministries Departments and Agencies (MDAs) and the influential Buganda Kingdom. Good working relationships were established between these agencies. We also made overtures to academic and research institutions that will become useful partners in the future. If these connections are maintained and grown, the partners should be able to connect the project to resources, expertise and networks, as well as influence others to support this noble cause.
VSLAs were set up to enable community members to mobilize local resources to invest in individual livelihood improvement projects. When they meet for the weekly group meetings, they deliberate other matters affecting them, including natural resources management and livelihood improvement. This is an important asset for the project work in the area.
The transparent, participatory, all-inclusive and consultative project approach increased the community feeling of ownership and confidence to manage the CCAs.

While the CCA approach is a very attractive complementary approach to biodiversity conservation and enlisting community participation, especially outside of government managed protected areas, the CCA approach is fairly new in Uganda. We required to collect more data and experiences to demonstrate to policy level actors more concrete added value. Unfortunately, in the three years of the project and considering that the ecosystems contained in the project area were under various government departments, we could not yet get this initiative to a policy brief. But there has been a great keenness in the approach and given more time and resources, there is no doubt that the approach will be adopted as a policy in Uganda and scaled up in the region.

Three staff were directly attached to the project and their contracts ran up to the end of the project. Only the project manager was maintained to ensure that follow ups are made on the progress and advisory to the CCAs groups and future plans for the CCA sites.

6 Lessons learned

Community entry through ecosystems services approach was crucial in the introduction of the CCA. This caught communities' interest because it's something that concerns every one. This made mobilisation easy and the local leaders also received the approach with ease and confidence.

Involvement of all stake holders in activity implementation and planning eased the processes of CCA establishment and approvals at the lower level local governments. This led to the buy-in of the approach from the local level to the ministry levels.

The gazzettement that was expected would have worked well if the land in question was owned by the government like in protected areas, but the combination of the land tenure with in the mentioned CCAs could not allow the gazzettement to take place within the lifespan of this project.

Lessons

- The partnerships in project implementation are key for leveraging technical capacities, providing policy guidance and technical information and building capacities of communities and also staff of other government Ministries, departments and agencies, as the project enable cross sectoral learning and information.
- Awareness creation and capacity building prior to introduction of conservation and income generating activities among communities reduces failure rate, costs and learning curve.
- Communities make choices of interventions over which they have more ownership and control to assure themselves of benefits and other incentives than those which lack these elements.
- The CCA concept is very rallying among the communities it makes them confident about the intricate relationships and interdependence between their actions and their environment. It has shown them that they have to manage problems at source without having to wait for other people.
- Culture and natural resources management or conservation are intricately inter-twined. Cultural beliefs that promote conservation such as having sacred trees that are not supposed to be cut and practices that the project came across, was all related to the natural resources
- Though CCAs are catered for with in other legal frame works, there is need for a specific legal frame work on CCAs in Uganda for it to function well. All the frame works have provisions that support components of the CCA approach but not as a whole.

6.1 Monitoring and evaluation

The M&E system was practical and helpful in that it helped the partners to identify that the target of 3000 households set originally would not be achieved and hence requested for a change in year 2 to 1500 households For change request and approval, refer to **(Annex 36a).** Indicators guided well on what was to be done to be able to contribute to the output or objective.

A mid-term project evaluation was conducted its recommendations helped on how best to implement activities up to the end. For example it recommended looking at beyond the membership of the CCA groups and involves non-members for the success of CCA establishment **(Annex 36b).** By the time of the midterm evaluation, through working with the none members the outreach of the project increased from 875 to 1475 which is approximately the set target for the project households (1500)

A final evaluation for the project was conducted in February to March 2018. It shows where the project did well and lacked and proposes what should be done in case we are to implement a similar project in future. **(Annex 36c)**

During the implementation of the project, the indicator on the number of households the project intended to reach out was changed and a change request submitted to Darwin and accepted. The target was 3000 HHs and changed to 1500HHs**. Annex 36a**

The original application included Activity 3.4, to support the beneficiary households under their appropriate groups to construct energy saving stoves as a means of reducing the amount of fuel used for

cooking, thereby reducing pressure on the vegetation (trees and shrubs) in the project area. At Stage 2, the project was re-developed and the rationale for this activity was then not articulated further in the project documents. This meant that funds were not allocated to this activity and neither was the activity related to, dependant on or influential to any other activity under Output 3, or any other output or outcome in the project document. A change request was submitted to Darwin to drop the activity and accepted. **See Annex 44**

6.2 Actions taken in response to annual report reviews

The reviewer's comments on last year's annual report are addressed in **Annex 51**

7 Darwin identity

In all activities conducted both at community, district and national level, the Darwin initiative was always acknowledged as a donor and extended appreciation for the invaluable technical and financial support to biodiversity conservation and livelihood improvement in the Lake Victoria basin.

All project related presentations at District and National level acknowledged the Darwin Initiative as a donor and documents like the CCA Management Plans **(Annexes 4a-e)** and other reports have the Darwin Initiative logo as a major partner and funder.

Awareness materials on ecosystems based approaches to conservation, like posters, calendars for both 2017 and 2018, and the CCA experiences have Darwin Initiative logo as a supporter of CCAs in Uganda to conserve biodiversity and improvement livelihoods. **(Annexes 27 & 58).** But no material has been posted or linked back to Darwin on social media accounts

8 Finance and administration

8.1 Project expenditure

Project spend (indicative) since last annual report	2017/18 Grant (£)	2017/18 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			-1%	
Consultancy costs			1%	
Overhead Costs			0%	
Travel and subsistence			0%	
Operating Costs			0%	
Capital items (see below)			0%	
Others (see below)			6%	
TOTAL			6%	

Staff employed (Name and position)	Cost (£)
Asuma Stephen (Team Leader)	
Niwamanya Rogers (Project Manager)	
Stella Ajilong (Finance & Admin)	
Rob Small (Technical Advisor)	
Helen Anthem (Livelihoods & governance Advisor)	
Joan Namakula (Site Coordinator- Musambwa)	
Achillies Byaruhanga (Technical advisor Nature Uganda)	

TOTAL	

Capital items – description	Capital items – cost (£)
0	
TOTAL	

Other items – description	Other items – cost (£)
Consumables Stationery Telephone & Internet Visa costs Midterm & Final evaluation UWA – Costs CCA gazzettement process Bank Charges	
TOTAL	

8.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
MacArthur Foundation	
TOTAL	

Source of funding for additional work after project lifetime	Total (£)
0	
TOTAL	

8.3 Value for Money

This project provided value for money in many ways. 2005 local people were trained in several fields, skills they have already started using to improve their wellbeing, for example, in terms of changing production systems and raising capital locally. Project resources were used to empower local community members who hitherto felt weak. Governance structures, mechanisms and tools were developed and strengthened, which has already demonstrated increased participation and accountability- aspects that will be enhanced within the project area and also scaled up beyond the project area. Voices of the marginalized has been accentuated by this project, with more women rising up to participate and take leadership positions. This is likely to have a wide and long lasting positive impact in the general socio economic wellbeing of the community. There has been a lot of keenness in this approach from several ministries. This interest is likely to translate to government financial and other investments in promotion of the CCA approach nationally. We see this project as a huge investment that will reduce degradation of the ecosystems, thus enhancing ecosystem services delivered to the people. The CCA approach introduced by this project will also in future reduce the cost of doing conservation, as local people will re connect natural resources management to their culture.

There was high financial discipline in implementing this project. The most efficient and effective ways were selected to achieve project outputs and outcomes reported here. This frugality contributed to value for money in this project.

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

Note: Insert your full log frame. If your log frame 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 log frame.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Uganda's Lake Victoria ecosystems are sustainably conserved through community-based management of biodiversity, improved local governance of wetlands and forest resources, equitable use and improved livelihoods			
Outcome: Ecosystem services and cultural values support the establishment and participatory management of three CCAs, which conserve biodiversity, reduce ecosystem degradation, and improve the wellbeing of 1500 households.			
Outputs: **1**. Legal gazettement notices of 3 CCAs published or in process, district government plans include specific actions to ensure material and non-material contributions made by CCAs are maintained, and communities and cultural institutions recognize contributions of CCAs to wellbeing	1.1 Three ecosystem service assessment reports published by end of year 1 1.2 Three CCA general management plans including information on values published by end of year 2 1.3 Three CCA gazettement notices published or in process by end of year 3 1.4 District budgets include funding for CCAS by end of year 3 1.5 Cultural institutions formally recognise CCAs and their contributions to community wellbeing by end of year 2.	1.1 Ecosystems Assessment Reports 1.2 CCA management Plans 1.3 District annual development Plans 1.4 Cultural Institution statement	1. No political instability in Uganda, especially related to the 2016 Presidential elections 2. No major environmental changes to Lake Victoria, such as invasion of water hyacinth or algae blooms having significant impacts on both fish populations and household incomes 3. No human or animal disease outbreaks in the project area (e.g. Ebola, Marburg virus, bird flu) 4. International relations within the East African Community remain stable and continue to support the Lake Victoria Basin Commission
2. Multi-stakeholder governance and management structures for CCAs in place and functional	2.1 Participatory process to identify key values and requirements for CCA management carried out by end of year 1	2.1 Field Reports 2.2 CCA ecosystem Assessment Reports	

	2.2 CCA management committees TORs prepared and ratified by end of year 2 2.3 CCA annual operational plans developed by end of year 3 2.4 Annual assessment of CCA forest and wetland cover published by end of year 1	2.3 Management Committee ToRs 2.4 CCA annual operations Plan 2.5 Habitat Cover Reports	
3. Wetland and forest resource management best practice groups established and functioning to regulate access to and use of wetland and forest ecosystems and resources including fish breeding and nursery grounds and monitor resources including biodiversity	3.1 Best Practice Resource Management Groups (BPRMG) established by year 1 3.2 Community-based monitoring protocol for assessing indicator species trends CCA management committees formed by end of year 2 developed by end year 1 3.3 Monitoring system in place by end of year 2	3.1 BPRMG reports 3.2 Monitoring protocol document 3.3 Monitoring reports	
4 Fisheries, agricultural, cash-crop, agro-forestry, and forest and wetland resource production and storage improvements adopted by participating households and the wider community	4.1 Sustainable fisheries management strategies collaboratively developed by end of year 1 4.2 Sustainable fisheries management strategies adopted by communities by end of year 2 4.3 Improved crop and cash crop production tools provided by end of year 1 4.4 CCA management committees formed by end of year 2	CCA ES assessment reports and distribution reports	
5 CCA gazettement and management processes undertaken through participatory approaches, with	5.1 Participatory process to establish and agree values of the proposed	5.1 CCA ES assessment reports and distribution reports	

special emphasis on women and youth, establish multi-stakeholder governance institutions	CCAs by end of year 1 5.2 CCA Ecosystems Assessments shared with all stakeholders by end of year 1 5.3 Multi-stakeholder group formed to discuss management of each CCA by end of year 1 5.4 Best Practice Resource Management Groups formed and linked to CCA governance by end of year 1 5.5 CCA management committees formed by end of year 2	5.2 CCA ES assessment reports and distribution reports 5.3 field reports 5.4 BPRMG reports 5.5 Project monitoring reports	

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

1.1 Carry out ecosystem services assessments at 3 sites using TESSA and GRACE and other tools

1.2 Publish ecosystem services reports and promulgate through community meetings, seminars with local and national government bodies, cultural institutions and other stakeholders

1.3 Develop and publish site-specific, locally appropriate CCA management plans

1.4 Support UWA to forward District Council resolutions and CCA management plans to the Minister for Wildlife and Tourism for legal gazettement.

1.5 Support communities to work with District Councils to make resolutions to effect the gazetting of 3 CCAs

1.6 Support Local Government planning processes to integrate CCAs into strategic and annual District Plans

1.7 Support development of specific District Government regulations to conserve ecosystem

1.8 Community Conservation Area Association (CCAA) established to link communities, local government administrations and conservation organisations, share information on CCAs values and ecosystem services, and provide guidance and capacity building for community-based management and conservation

2.1 Undertake baseline surveys of target species at 3 sites

2.2 Document ES assessments and link to stakeholder learning

2.3 Organise awareness campaigns at community and district levels.

2.4 Support monitoring of Critically Endangered bird species and diversity of fish assemblages at breeding sites (data collection reporting and management)

3.1 Organise training sessions on sustainable fisheries, agriculture, land use, agroforestry and biodiversity conservation

3.2 Support local capacity to conduct patrols to protect fishing sites and fish breeding zones

3.3. Support monitoring of fisheries activities (fisheries data collection, reporting and management - keeping track of landings and size of fish)

3.4 Facilitate energy saving groups to construct energy efficient stoves

3.5 Organise Natural Resource Management groups peer to peer exposure visits

3.6 Conduct trainings to BPRMGs on data collection, reporting and management of Critically Endangered bird species and diversity of fish assemblages at breeding sites

4.1 Support communities with designation and protection of 10 fish breeding areas/grounds (community-wide sensitization & demarcation of the breeding zones)

4.2 Support Fisher to Fisher community sensitizations

4.3 Facilitate community efforts on tree nursery development and tree planting

4.4 Support farmer group members with revolving credit for agricultural inputs

5.1 Conduct project inception and planning meetings with communities, local governments and cultural institutions to clarify roles and responsibilities, participation during project implementation

5.2 Design and disseminate information through public awareness campaign based on ecosystem services assessment reports

5.3 Convene multi-stakeholder CCA design workshops

5.4 Organize community mobilization to select CCA committees and determine roles and responsibilities

5.5 Undertake cultural institutional analysis

5.6 Organize governance and resource use policy seminars

5.7 Establish CCA management committees

5.8 Establish CCA gazzettement committees with relevant stakeholders including local and national government, community representatives and cultural institutions for 3 sites

5.9 Support local communities in the develop community byelaws, Popularise, promote and implement community bye-laws

Annex 2 Report of progress and achievements against final project log frame for the life of the project

Project summary	Measurable Indicators	Progress and Achievements
Impact: **Uganda's Lake Victoria ecosystems are sustainably conserved through community-based management of biodiversity, improved local governance of wetlands and forest resources, equitable use and improved livelihoods.**		The project laid foundation pillars to the achievement of the above impact in the long run rather than slowly in the lifespan of the project. Those pillars include zoning of 320 km2 for 5 CCAs in 5 parishes in Kyotera and Wakiso Districts, finalization of their management plans and approval, introduction of livelihood enterprises, involving men, women and youth in decision making and importantly, empowering them to know that they have a role to protect the natural and cultural assets and building their capacities. Annex 36a
Outcome: **Ecosystem services and cultural values support the establishment and participatory management of three CCAs, which conserve biodiversity, reduce ecosystem degradation, and improve the wellbeing of 1,500 households**	1 By end of project, the biodiversity and cultural significance of 3 sites is formally recognised by national and local governments, local communities and cultural institutions with legal gazettement of 3 CCAs completed or in process	The biodiversity and cultural value of the five CCAs created were recognized by the local governments at sub county and district levels in Kyotera and Wakiso districts by approving the Management plans for the 5 CCAs **(Annexes 4a-e).** The management plans, whose development was spearheaded by the local community, but only facilitated by the project staff and technical people from government, included and articulated the ecosystems services values of each CCA. However, the formal recognition at the national level could not be achieved because it required a review of the enabling laws, as the CCAs contained ecosystems that are currently under various ministerial jurisdictions. There is a MoU between the project and Buganda Kingdom on the project (**Annex 60).**
	2 By end of project the rate of loss and degradation of forest and wetland ecosystems protected by 3 CCAs is reduced by at least 25% against project baselines	The Baseline established using Global Forest watch data **(Annex 52)** showed that a forest cover (>30% canopy cover) of 11,200ha for all the five CCAs, which was a gain of about 2,700ha from the 2000 figures. The same source reported a wetland coverage of 11,000ha, which represented a loss of about 20% since 2000. The figures for specific CCAs for 2016 show a 10% drop in forest loss in Zzinga(Makanaga) and maintained level for Minziiro. But it also shows a wild spike for Kanabulemu, Gwanda and Bwamijja CCAs. However, comparing the results of the biodiversity surveys we did at specified areas in 2016(baseline) and 2017(repeat), it reported 'no significant variations in resource utilization (exploitation of trees for use) based on what exists within each transect'**(Annex 16, pg. ii and 29)**
	3 By end of project, annual incomes from fish and cash and crop sales for 1500 households in 25 villages around 3 CCAs are at least doubled, with both men and women reporting	The project has achieved a general increase in community wellbeing by 23% between end of project and baseline, with 3,708 out of 5691 households in the CCA reporting an improved wellbeing. At the end of project, 65% of both men and women reported an improved wellbeing, 15% more than promised **(Annex 65).**

	increased income	
	4 At project end, 50% of women, men and youth between the ages of 15 and 25 of 1500 participating households feel their voices are heard and represented in processes of CCA planning and management	At the end of the project, 87% of both men and women felt that their voices were being heard in matters relating to their village.
Output 1 Legal gazzettement notices of 3 CCAs published or in process, district government plans include specific actions to ensure material and non-material contributions made by CCAs are maintained, and communities and cultural institutions recognize contributions of CCAs to wellbeing	1.1 Three ecosystem service assessment reports published by end of year 1	While the initial idea was to create three CCAs and therefore three ecosystems services reports would be produced, during the project initiation period, the partners and other key stakeholders advised and we agreed that the sites are approached at Landscape level. Additionally, for better management of the CCAs in terms of the government administrative arrangements and for more effectiveness, the community and other stakeholders agreed to have five CCAs instead of three. Therefore, ecosystem services reports were produced for two landscapes, i.e. the Sango bay and Makanaga landscapes **(Annexes 1a&b)**
	1.2 Three CCA general management plans including information on values published by end of year 2	As indicated above, five CCAs were created. Therefore five CCA management plans for the five CCAs were developed and approved by the respective local governments. The management plans include the natural and social- cultural resources in the CCA, issues identified by the community and other stakeholders, a SWOT analysis for each CCA, stakeholder analysis, a budgeted list of planned activities and an M&E framework**(Annexes 4a-e)**
	1.3 Three CCA gazzettement notices published or in process by end of year 3	No gazzettement notice was published. We were unable to achieve CCA gazzettement, because there was no single government ministry to lead the process as the ecosystems covered in the CCAs fell under several mandates. For example, wetlands and public forests are under Ministry of Water and Environment, wild animals are under Ministry of Tourism and Wildlife, Culture is under Ministry of Gender, Labour and Social Development and Fisheries are under Ministry of Agriculture, Animal Industry and Fisheries and land is managed under the Ministry of Lands. Another legal framework needed to be designed to enable gazzettement at national level.
	1.4 District budgets include funding for	A number of CCA activities and those in the CCA management plans have been included into the sub county plans and subsequently captured in district development

	CCAS by end of year 3 1.5 Cultural institutions formally recognise CCAs and their contributions to community wellbeing by end of year 2	plans**. Refer to Annex 8(e.g. pgs 45-64).**The project approached the CCA creation and management planning process in an inclusive way, involving lower and higher level local governments. Because of this, CCA activities and those in the management plans feed directly into the sub count plans and the district development plans. There was no formal recognition by the cultural institution, in this case the Buganda Kingdom, but Kingdom staff were involved in all the CCA activities, e.g. trainings and sensitisations on cultural heritage conservation. A MoU was entered into with Buganda Kingdom for the implementation of the project**, (Annex 60).** However, the Ministry of Gender, Labour and Social Development, where issues of culture lie, included the identified cultural activities within its annual work plan 2017 – 2018 on inventorying of cultural intangible heritage – **refer to annex 32, Activity 6.**
Activity 1.1 Carry out ecosystem services assessments at 3 sites using TESSA and GRACE and other tools		Two ecosystems services assessments were conducted in Sango bay and Makanaga landscapes with in the two districts of Wakiso and Kyotera respectively. **Annexes 1a & 1b**. These two landscapes covered all the 5 CCAs. TESSA and Grace tools were used for the assessments.
Activity 1.2.Publish ecosystem services reports and promulgate through community meetings, seminars with local and national government bodies, cultural institutions and other stakeholders		The Ecosystems services assessment reports for Sango bay and Makanaga landscapes were shared with relevant Government Ministries, Departments and agencies, civil society organizations, representatives of local governments under the project and Best Practise Resource Management groups during two CCA forum workshops at the national level in November, 2016 and September, 2017**. Annexes 39b and 32**
Activity 1.3 : Develop and publish site-specific, locally appropriate CCA management plans		Five CCA management plans developed and published - **Annexes 4a-e**
Activity 1.4: Support UWA to forward District Council resolutions and CCA management plans to the Minister for Wildlife and Tourism for legal gazettement		Due to the multiplicity of mandates over the various ecosystems at the project sites, UWA was found out not to be most appropriate agency to present the CCA for gazzettement. However, UWA provided technical guidance on the development of CCA management plans and during the validation exercise of the management plans. - **Annexes 37a&b**
Activity 1.5 : Support communities to work with District Councils to make resolutions to effect the gazetting of 3 CCAs		Between 26th and 28th September, 2017, we supported the CCA interim committees in Kyotera district to present the four CCA management plans to the sub county councils for approval. In December 2017, we also supported the process for endorsement at the District Council. In Makanaga, we supported the community to present their management plan for approval at the sub county level on 14th

		September. We also supported them to host Wakiso district committee on natural resources on 6th March 2018, to enable the committee members to better understand the outcomes of the CCA approach in the parish. - **Annexes 38a&b.**
Activity 1.6: Support Local Government planning processes to integrate CCAs into strategic and annual District Plans		We worked through the District Natural Resources Officers for Kyotera and Wakiso, as project focal persons, and ensured that some CCA activities were included with in their departmental work plans and this fed into the general district development plan - **Annex 8,pgs 45-64,pgs 93-95**,
Activity 1.7: Support development of specific District Government regulations to conserve ecosystem		Refer to Activity 1.5 above
Activity 1.8: Community Conservation Area Association (CCAA) established to link communities, local government administrations and conservation organisations, share information on CCAs values and ecosystem services, and provide guidance and capacity building for community-based management and conservation		CCA forum, composed of communities, local government administrations, relevant government ministries, departments and agencies and conservation organisations was formed in 2016. The forum met twice –in November 2016 and September 2017 to share progress on the CCA formation and guide on the way forward. The forum also elected an executive committee to oversee implementation of their decisions. _ **Annexes 39a-d**
Output 2. Multi-stakeholder governance and management structures for CCAs in place and functional	2.1 Participatory process to identify key values and requirements for CCA management carried out by end of year 1	Six awareness meetings, attended by 708(336M; 272F) people, were conducted across the project site on CCA establishment. Five meetings, attended by residents of the prospective CCAs, technical and political leaders at all local government levels, representatives of key central government ministries, departments and agencies were on Ugandan forestry, wetland and fisheries policies and regulations also to facilitate and guide community members to identify CCAs with in the three sub counties of Kyebe, Kabira and Bussi **(See Annexes 2b, 9&10)** and one mainly for fishers on the importance and need for fish breeding zones(FBZs), attended by145(101M; 44F) community members. **See Annex 11.**
	2.2 CCA management committees TORs prepared and ratified by end of year 2	CCA committee ToRs were agreed upon in November 2017, with guidance and endorsement from all stake holders and partners. The delay to develop the ToRs was occasioned by the requirement to develop the CCA management plans and ensure that they are approved by the relevant authorities since the Management plans were to stipulate the substantive CCA management structures. The CCA committees were also trained on their roles and responsibilities and elements of governance. **See Annexes 12 & 14.**
	2.3 CCA annual operational plans	Each of the CCA management plans has a timed activity plan, and therefore provided for activities to be conducted annually. **See Annexes 4a-e**

	developed by end of year 3 2.4 Annual assessment of CCA forest and wetland cover published by end of year 1	The baseline assessment for forest cover was done in 2015, for the period 2000-2014, using publically available data set from Global Forest watch developed from Landsat Imagery (30m by 30m) resolution using supervised classification. **See Annex 52.** Annual biodiversity assessments were also conducted **(Annexes,15 &16)**
Activity 2.1. Undertake baseline surveys of target species at 3 sites		Baseline survey were conducted for project target species, viz Shoebill stork (*Balaeniceps rex*) and for Singidia tilapia (*Oreochromis esculentus)* Victoria Tilapia (*Oreochromis variabilis)* (**Annexes 15, 35b)**. We also undertook wider baseline biodiversity survey for medium to large mammalian species and tree diversity on specific transects as a measure of general ecosystem health. For trees, ten species were selected due to their ecological importance and various ecosystem services provided to the community. We also established baseline water quality status. Reports are **Annexes 15 pg. 15, 16 and 34.**
Activity 2.2. Document ES assessments and link to stakeholder learning		Two ES assessments reports were produced in 2015, one for the Makanaga Landscape**(Annex 1a)** and another for the SAMUKA landscape that encompasses the four CCAs in Kyotera district **(Annex 1b)** The information from the ecosystems services assessment was used during the CCA creation and delineation and informed the respective CCA management plans **(See Annex 7).** Furthermore, Ecosystem assessments and cultural value analysis was frequently referenced by local government staff to illustrate the opportunity costs on community livelihood of losing the ecosystems and thus encouraging them to take more responsibility for their sustainable use (**See Annexes 1a&b, 5, 7, 2b, 9, 3, 20, 29, 39b, 37b, and 14,).** 48 such meetings were held in the 5 CCAs, attended by a total of 7,256 people. The reports were also useful in identifying knowledge and skills gaps in biodiversity conservation and culture, which was later used in designing training modules and awareness packages. **Annexes – 35a-b, & 40.**
Activity 2.3: Organise awareness campaigns at community and district levels		Four initial meetings to introduce the project were held at the district and community levels (**Annexes 14)** and then awareness on environmental management policies, regulations and procedures, facilitated by staff from relevant ministries, departments and agencies. These were then followed by six awareness meetings on CCA establishment. A total of 1054(512M, 459F) participated and are aware of the project. This was supplemented by the distribution of Calendars and Ecosystems posters **(Annexes 41, 2a-b,7,9, 10,11,20a c d)**,
Activity 2.4: Support monitoring of Critically Endangered bird species and diversity of fish assemblages at breeding sites (data collection reporting and management)		Two Monitoring protocols for fish and birds were developed (**In Annex 17& Annex 35a and 18** respectively) and a total of 34 community data collectors trained in bird monitoring and fish data collection**(Annexes 35a & 35b).** Thereafter, two monitoring bird surveys were conducted led by Nature Uganda (**Annexes 42a & 62).** Daily fish data was collected at eight the fish landing sites from April 2017 to March 2018 and

		analysed – **Annexes – 35b, 42a-b, 35b, 16.** The community data collection was also supplemented with two experimental fish catch monitoring conducted by a consultant **(Annexes 16 & 42b).**
Output 3. Wetland and forest resource management best practice groups established and functioning to regulate access to and use of wetland and forest ecosystems and resources including fish breeding and nursery grounds and monitor resources including biodiversity	3.1 Best Practice Resource Management Groups (BPRMG) established by year 1 3.2 Community-based monitoring protocol for assessing indicator species trends CCA management committees formed by end of year 2 developed by end year 1 3.3 Monitoring system in place by end of year 2	Six BPRMGs were established in Makanaga, and Sango Bay landscapes, and they have been in the lead in CCA establishment, development of the CCA management plans and provided the interim leadership for the CCAs. Monitoring protocols for assessing the shoebill stork, tilapia as indicator species were developed and used during the project. We also added water quality monitoring because of the influence on fish productivity and as an indicator of terrestrial ecosystem health. **Annexes 17, 42b & 16.** Schedule surveys were conducted to obtain monitoring information.
Activity 3.1 Organise training sessions on sustainable fisheries, agriculture, land use, agroforestry and biodiversity conservation		The project trained 2005(1280M; 725F) community members in the five CCAs in various aspects including agro forestry, fisheries management, agriculture and land use to enable them to optimize benefits and increase their effectiveness in the governance of natural resources(**Annexes 31, 34**
Activity 3.2 Support local capacity to conduct patrols to protect fishing sites and fish breeding zones		Three major patrols with other stake holders were held and illegal fishing gears confiscated and destroyed. Since May 2017, the UPDF marines unit took over the patrolling role. **Annex 21.** The boat was also heavily used during the marking of FBZs, water quality analysis trips, bird population monitoring and for project related travels especially between Musambwa island and the mainland.
Activity 3.3 Support monitoring of fisheries activities (fisheries data collection, reporting and management – keeping track of landings and size of fish)		The Fish landings on a daily basis were collected by the trained community members effective April 2017 to March 2018 and data has been analysed – **Annex 42b**. Also in the biodiversity surveys , baseline and follow survey had components on the fish landings data which were collected and analysed **Annex 15 &16**
Activity 3.4 Facilitate energy saving groups to construct energy efficient stoves		This activity was not done. A change request was approved – **Annex 44**
Activity 3.5 Organise Natural Resource Management groups peer to peer exposure visits		In 2016, 31 community members from Makanaga were exposed to the sustainable fisheries, agriculture and land use practices around Lake Wamala in Mityana district. **Annex 57.** Another peer to peer exchange visit took place in 2017, where 29 community members from Minziiro and Kanabulemu went to Gwanda in Sango bay and learnt on sustainable fisheries, savings and credit, piggery and tree planting. Of these, 12 were females – **Annex 45b.** In March 2017, 30 members (10F; 20M) participated in an exposure visit to a successful community forestry projects in Western Uganda, **Annex 53**

Activity 3.6 Conduct trainings to BPRMGs on data collection, reporting and management of Critically Endangered bird species and diversity of fish assemblages at breeding sites		18 selected community members skills in fish data enhanced **Annex 35b** 17 selected site monitors skills in monitoring birds were enhanced and took part in the subsequent bird surveys **Annex 35a**
Output 4 : Fisheries, agricultural, cash-crop, agro-forestry, and forest and wetland resource production and storage improvements adopted by participating households and the wider community	4.1 Sustainable fisheries management strategies collaboratively developed by end of year 1 4.2 Sustainable fisheries management strategies adopted by communities by end of year 2 4.3 Improved crop and cash crop production tools provided by end of year 1 4.4 CCA management committees formed by end of year 2	The main sustainable fisheries' management strategies for the project sites to wit use of legal gear and protection of fish breeding zones were already in fisheries law and policy, but implementation was weak. The project, fishers and local leaders agreed to enhance awareness and involve the community members more in enforcement of the fisheries laws and guidelines and peer to peer learning. Fourteen awareness sessions/meetings on sustainable fisheries for fishers at all 9 landing sites were conducted. 640(170F;470M) fishers were sensitized all on sustainable fisheries and importance of fish breeding zones, as well as how to identify, demarcate and protect FBZs **(Annexes 20 & 20a b c &d, 21).** Two peer to peer exchange visits were also organized**(Annexes 45b&57)** Agroforestry and diversification of crops, improved soil and water management on the crop fields and improved livestock production were participatory identified as appropriate and priority intervention areas. Production skills were provided through targeted trainings. Some inputs were provided as start up investment to the community beneficiaries. 217(105M; 112F) community members were trained in agroforestry practices,**(Annex 22),**150 community members (62M; 88F) were trained in tree nursery establishment and management **(Annex 22, 23a & b).** They supplied about 60% of the seedlings planted by the project and earned about 4,083USD from the external market. 105 community members (56F; 49M) were trained in good livestock husbandry focussing on improved pig and goat breeds **(See Annex 24).** Using skills from these trainings, they increased their stock of pigs and goats from 69 to 176. 130(61F; 69M) were trained in sustainable agriculture and land management **(See Annex 25).** Since 2016, the percentage of residents giving conservation agriculture as the way to improve productivity increased from 74% to 91 %. 11% of the survey respondents attributed their improved wellbeing in 2017 to better farming methods CCA management committees were created for each of the five CCAs **(Annex 12).** This output was delayed because the substantive CCA management structures needed to be agreed on during the management planning process, which took a longer time because of the consultations that were required.
Activity 4.1: Support communities with designation and protection of 10 fish breeding areas/grounds (community-wide sensitization & demarcation of the breeding zones)		Ten FBZs, totalling 1,994 hectares, have been demarcated, at Musambwa, Sangobay, Kyabasimba, Kasensero, Kyondo , Kagera mouth , Balabala, Koja, Kivunyu. At sangobay, they are two breeding areas. **Refer to Annex 20**

Activity 4.2: Support Fisher to Fisher community sensitizations		Fourteen awareness meetings for 640(170F;470M) fishers were conducted on sustainable fisheries and importance of fish breeding zones, as well as how to identify, demarcate and protect FBZs raised **(Annexes 20a ,b, c & d).**
Activity 4.3: Facilitate community efforts on tree nursery development and tree planting		150 community members (62M; 88F) were trained in nursery establishment and management **(Annex 23a).** They were also supported with tools, potting bags, watering equipment and high quality seeds. They supplied about 60% of the seedlings planted by the project and earned about 4,083USD from the external market. To date, 100-130 hectares of assorted indigenous tree species and 5,782 fruit trees were planted **(Annexes 23a &b, 46)**
Activity 4.4: Support farmer group members with revolving credit for agricultural inputs		The project helped to establish three Village Savings and Credit Associations (VSLAs) for the community to act as a revolving credit scheme. 240(102F; 138M) CCA members were trained in savings &credit, business planning and group governance **(Annex 34).** By the end of the project, the groups had mobilized equivalent of 23,980 GBP which they have lent out to members for farming and small scale trade. Monitoring reports indicate average loan recovery rate of 82% **(Annex 46)**
Output 5: **5** CCA gazettement and management processes undertaken through participatory approaches, with special emphasis on women and youth, establish multi-stakeholder governance institutions	5.1 Participatory process to establish and agree values of the proposed CCAs by end of year 1	Refer to **progress against indicator** 2.1 above
	5.2 CCA Ecosystems Assessments shared with all stakeholders by end of year 1	The two ecosystems services assessment reports were initially shared by email to the local government officers in the two districts, the key central government ministries, departments and agencies, to representatives of the Buganda Kingdom and all members of the CCA forum. Later on, during the identification of the CCAs, attended by a total of 659 people (373M;286F) and development of the CCA management plans, with 570 attendees(317M;253F) , the reports were summarized and presented to the community members at meetings in all the 5 CCAs **(see Annexes 2b and 7).**
	5.3 Multi-stakeholder group formed to discuss management of each CCA by end of year 1	The CCA forum composed of community representatives, local and central government staff, NGOs and Buganda Kingdom staff was formed in 2016. This forum was for sharing information and ideas and also to advise the project on the establishment and operation of the CCAs.
	5.4 Best Practice Resource Management Groups formed and linked to CCA governance by end of year 1	**Refer to progress against indicator 3.1 above**

	5.5 CCA management committees formed by end of year 2	**Refer to progress against indicator 4.4.above**
Activity 5.1 Conduct project inception and planning meetings with communities, local governments and cultural institutions to clarify roles and responsibilities, participation during project implementation		Project inception meetings done at the district community and institutions levels (Annexes 41, 47)
Activity 5.2 Design and disseminate information through public awareness campaign based on ecosystem services assessment reports		Results of the ecosystems services disseminated during National CCA workshops in form of Presentations, Ecosystems posters for community Annexes 39c & d
Activity 5.3 Convene multi-stakeholder CCA design workshops		One CCA design multi stakeholder workshop conducted, 42 participants where 12 were females – Annex 39a
Activity 5.4 Organize community mobilization to select CCA committees and determine roles and responsibilities		Initial meetings conducted for the demarcation of CCAs, which led to mapping of the CCAs. Each CCA selected CCA committees and agreed up on their roles _ Annexes- 7, 12,& 14
Activity 5.5 Undertake cultural institutional analysis		Cultural values and institutional analysis conducted – Annex 5
Activity 5.6 Organize governance and resource use policy seminars		One workshop on the challenges and experiences of CCA implementation conducted at the National level – Annex 48
Activity 5.7 Establish CCA management committees		Refer to 5.4 – Annex 12
Activity 5.8 Establish CCA gazettement committees with relevant stakeholders including local and national government, community representatives and cultural institutions for 3 sites		Refer to 5.4 above Annex 12 and 14
Activity 5.9 Support local communities in the develop community byelaws, Popularise, promote and implement community bye-laws		This activity was left to be done by the CCAs with the help of the sub county authorities

Annex 3 Standard Measures

Code	Description	Total	Nationality	Gender	Title or Focus	Language	Comments
Training Measures							
1a	Number of people to submit PhD thesis	0					
1b	Number of PhD qualifications obtained	0					
2	Number of Masters qualifications obtained	0					
3	Number of other qualifications obtained	0					
4a	Number of undergraduate students receiving training	0					
4b	Number of training weeks provided to undergraduate students	0					
4c	Number of postgraduate students receiving training (not 1-3 above)	0					
4d	Number of training weeks for postgraduate students	0					
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification (e.g., not categories 1-4 above)	0					
6a	Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above)	2005	Ugandans	M&F	Sustainable fisheries and agric, tree raising and growing, savings and credit, species monitoring	Luganda (Local) and English	Training content and language were tailored towards the trainees capacity
6b	Number of training weeks not leading to formal qualification	8 weeks					On average, each training took 4 days and they were 18

7	Number of types of training materials produced for use by host country(s) (describe training materials)	14			Sustainable agric, monitoring of species, water quality testing	12 in English	

Research Measures		**Total**	**Nationality**	**Gender**	**Title**	**Language**	**Comments/ Weblink if available**
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies)	5			CCA management plan(s)	English	Participatory process. Five CCA management plans developed and approved by the district councils
10	Number of formal documents produced to assist work related to species identification, classification and recording.	0					
11a	Number of papers published or accepted for publication in peer reviewed journals	0					
11b	Number of papers published or accepted for publication elsewhere	0					
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	0					
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	0					
13a	Number of species reference collections established and	0					

	handed over to host country(s)						
13b	Number of species reference collections enhanced and handed over to host country(s)	0					

Dissemination Measures		**Total**	**Nationality**	**Gender**	**Theme**	**Language**	**Comments**
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	3	Uganda	M & F	Progress on CCA approach	English	
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.						

Physical Measures		**Total**	**Comments**
20	Estimated value (£s) of physical assets handed over to host country(s)	0	
21	Number of permanent educational, training, research facilities or organisation established	0	
22	Number of permanent field plots established		Please describe

Financial 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	USD 450000					From MacArthur foundation

Annex 4 Aichi Targets

	Aichi Target	Tick if applicable to your project
1	People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	✓
2	Biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	✓
3	Incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	
4	Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	✓
5	The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	
6	All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	✓
7	Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	✓
8	Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	
9	Invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.	
10	The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	
11	At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	✓
12	The extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	✓
13	The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	
14	Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking	✓

	into account the needs of women, indigenous and local communities, and the poor and vulnerable.	
15	Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	✓
16	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	
17	Each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	
18	The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	✓
19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	✓
20	The mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	

Annex 5 Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. web link, contact address etc)
None						

Annex 6 Darwin Contacts

Ref No	22-019 ref 2792
Project Title	Supporting Community Conserved Areas for biodiversity and livelihoods in Uganda
Project Leader Details	
Name	Stephen Asuma
Role within Darwin Project	Team Leader
Address	
Phone	
Fax/Skype	
Email	
Partner 1	
Name	Achilles Byaruhanga
Organisation	Nature Uganda
Role within Darwin Project	Technical Advisor
Address	
Fax/Skype	
Email	
Partner 2 etc.	
Name	Charles Kabiswa
Organisation	Ecological Christian Organization
Role within Darwin Project	Programme Manager, ECO-Uganda
Address	
Fax/Skype	
Email	