Darwin Initiative Main: Final Report

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

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

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

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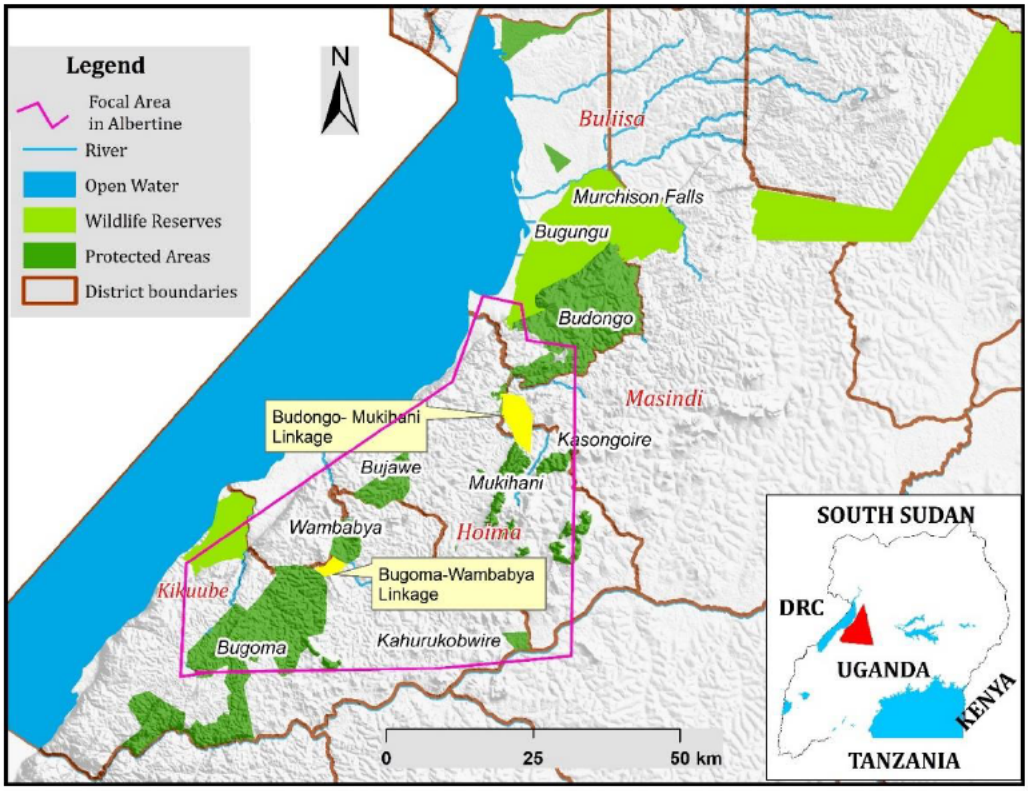
Darwin Initiative Project Information

Project reference	27-017
Project title	Community-led approaches to reforestation benefitting chimpanzees and livelihoods in Uganda
Country(ies)	Uganda
Lead Partner	Fauna & Flora International (FFI)
Project partner(s)	Jane Goodall Institute; Uganda Wildlife Authority (UWA); National Forest Authority (NFA); Private Forest Owners' Associations (PFOAs) from Bulyango, Kidoma & Kasenene Parishes.
Darwin Initiative grant value	GBP 357,873.39
Start/end dates of project	01/04/2020 - 31/03/2023
Project Leader name	Cath Lawson
Project website/blog/social media	www.fauna-flora.org/countries/uganda
Report author(s) and date	Niwamanya Rogers M; Kukundakwe Mazimakwo; Cath Lawson; Emma Scott; Kiran Mohanan – 30 June 2023

1 Project Summary

The project is in two linkage areas between four Central Forest Reserves (CFRs): Linkage 1 between Budongo and Mukihani CFRs in the north; and Linkage 2 between Wambabya and Bugoma CFRs in the south. This incorporates two districts (Hoima and Masindi) and three parishes (Kidoma-Bulimya, Bulyango, Kasenene).

Habitat degradation, forest fragmentation and human-wildlife conflict (HWC) are well-documented problems in the project area. Forest cover used by chimpanzees for movement, food and nesting is regularly encroached upon by community members for subsistence farming. At the same time, agricultural yields are too low to ensure food security for the local population, and agriculture's contribution to the economy is further hindered by a lack of value addition and market development. Local farmers are highly vulnerable to the impacts of climate change, such as changing rainfall patterns impacting rain-fed staple crops; the threat of catastrophic crop loss looms large, lowering farmer tolerance towards chimpanzee crop raiding.



Since 2014, Fauna & Flora International (FFI) has been active in the project area and observed that conversion of forested land to agriculture destroys chimpanzee habitat, breaking connectivity between remaining viable forest blocks, and increasing HWC as chimps and other primates move across agricultural land. Maintaining and reforesting corridors between forest reserves is a Ugandan government priority and is essential for preserving local biodiversity, including the genetic diversity of chimpanzees and other species.

Private Forest Owners Association (PFOA) members, that FFI has been working with in the project area, requested technical assistance with managing HWC, as well as with increasing native tree cover along chimp movement paths, improving the productivity and sustainability of local farming systems and diversifying income generation sources. This project addresses these requests directly by providing PFOA members in the Budongo-Mukihani and Bugoma-Wambabya corridors with training and access to appropriate indigenous tree seedlings for reforestation of riverine corridors, agroforestry seedlings and training to help place them sustainably and strategically on-farm, support in the creation of local and individual land use plans, access to commercially valuable agroforestry crop inputs, enterprise development assistance, and the knowledge to help mitigate HWC.

2 Project Partnerships

Project partners were Jane Goodall Institute (JGI); Uganda Wildlife Authority (UWA); National Forest Authority (NFA); and the Private Forest Owners' Associations (PFOAs) from Bulyango, Bulimya-Kidoma and Kasenene Parishes. These partnerships, all of which were Uganda based, were identified through an initial stakeholder analysis, and then partners were selected based on expertise, mutual interest, and/or influence. Partners were involved in project design, but we recognise that there was scope for greater involvement at the design stage, which is learning that will be taken into future partnerships.

Over the project period, the relationships between FFI; JGI, UWA, NFA and the PFOAs from Bulyango, Bulimya-Kidoma and Kasenene Parishes have been positive, and formal and informal communications have been maintained throughout. This effective partnership working has enabled the project to draw on a range of expertise and learning, which has enabled more effective project implementation. Partners have been involved in preparing this Final Report, including representatives from JGI and UWA joining an after-action review process during the project reporting period.

JGI's role within the project has focused on providing technical expertise in surveying chimpanzees to establish and repeat population estimates in Wambabya, Bugoma and Budongo CFRs, as well as evidencing chimpanzee presence outside of formally protected areas (Annex 1, 2). JGI has also supported some activities to enhance the governance of PFOA structures (e.g., Annex 3). At the field level, FFI and JGI have shared an office space throughout project implementation, which has enabled regular informal engagements. FFI and JGI will continue to share an office space post-project, allowing for future collaboration.

UWA's role within the project has focused on supporting information sharing activities on HWC mitigation strategies (e.g., Annex 8b), providing technical advice on chimpanzee ecology (e.g., Annex 8a), and supporting multi-stakeholder processes to develop ginger value chains (e.g., Annex 22e), as well as providing necessary project permissions. UWA assigned a focal person who oversaw UWA's input into project implementation throughout the project period, and all UWA communications were channelled through her. She will remain FFI's focal point at UWA beyond project end, enabling the strong working relationships that have been established to continue.

NFA's role within the project has focused on supporting the provision of indigenous tree seedlings for on-farm agroforestry planting by PFOA members (e.g. Annex 16h). NFA has also been responsible for the provision of necessary project permissions, in particular for chimpanzee surveys within the CFRs.

Kidoma-Bulimya, Bulyango, and Kasenene PFOAs have been engaged in the following activities: HWC management; community-based monitoring for chimpanzee threats and sightings; indigenous species restoration and agroforestry; land use planning; enterprise development; and PFOA and VSLA governance strengthening. Beyond the project lifetime, FFI will continue to work in partnership with the three PFOAs consolidating and building on the progress made under this project.

Although not formal partners, drawing on Memorandums of Understanding established in Yr1, District Authorities in Kikuube, Masindi and Hoima Districts have also played an important role in supporting project implementation. For example, District Authorities have shared general conservation messaging through district NGOs forums and natural resources committee meetings, which has supported the sharing of project messaging with a wider stakeholder group (Annex 4a). District technical staff in Hoima District have also supported community sensitisation activities for good financial management for the VSLA groups under Bulyango PFOA (Annex 5).

Given the ongoing investment and shared interest in the project location, project partners will maintain a relationship after project completion. Project partners are already jointly engaging in wider processes; for example, FFI, JGI, and UWA are part of a consortium organised by China National Offshore Oil Corporation Company and Hersun Consult Ltd (CNOOC/HERSUN) to develop strategies to collectively address biodiversity loss/degradation in the Albertine region

(Annex 6). Coordinated partnership working is also anticipated as the implications of the Tilenga and East African Crude Oil Pipeline (EACOP) projects continue to impact the landscape.

3 Project Achievements

3.1 Outputs

Output 1: PFOA members have the knowledge and skills to support peaceful co-existence with chimpanzees in 2 forest corridors, increasing secure habitat contiguous to 4 protected areas.

At project end, 334 (232M;102F) community members, from across both corridors, were provided with training in HWC management (Annex 8c, 8d; Indicator 1.1). Additionally, 66 PFOA members (53M;13F) took park in knowledge exchange visits to learn about successful HWC mitigation strategies (Annex 7a, 7b; Indicator 1.1) and two radio talk shows (Annex 8a, 8b), which included messaging on HWC mitigation, have been held over the course of the project on radio stations that have a listenership of 80,000. A total of 136 (116M:20F) community members, from across both corridors, have been trained in threat identification and threat monitoring (Annex 41).

Overall, 536 PFOA members (401M:135F) were trained in HWC management, threat identification and monitoring. The target of 1,000 was not met in part because restrictions associated with the Covid-19 pandemic prevented training events in Yr1 of the project. The bulk of training occurred in Yr2, when PFOA numbers were not sufficient to reach the target planned. In Yr3, once PFOA membership had further increased, there were insufficient resources to conduct further training activities. Training of trainers approaches have been regularly used, so we are optimistic that the target will be reached, and exceed, after the project end.

In Yr1, attitudes to coexistence with chimpanzees reported by 298 PFOA members (214M:84F) were as follows: very negative = 6%, negative = 31%, neutral = 14%, positive = 24%, and very positive = 25% (Annex 9a). In Yr3, repeat household survey shows that the attitudes of 306 PFOA members (147M:159F) towards coexistence with chimpanzees have improved and are now as follows: very negative = 0%, negative = 12% neutral = 17%, positive = 50%, very positive = 21% (Annex 9b; Indicator 1.2). Repeat household surveys in Yr3 also show that 82% of respondents reported that their capacity in human-chimp conflict mitigation strategies had improved over the past 3 years (Annex 9b; Indicator 1.3).

Chimpanzee sighting rates, and rates of sighting of other primates, have remained stable or slowly increased throughout the duration of the project (Annex 10; Indicator 1.4). Limitations of the data (see Section 5) do not allow for a comparison between chimpanzee use of agricultural/agroforestry land and riverine corridors.

Output 2: Critical riverine areas on private lands reforested with native species by PFOA members, trained and knowledgeable in reforestation techniques

A total of 199 PFOA members (136M:63F) have been formally trained in reforestation techniques (Annex 13c; Indicator 2.1). Again, training of trainers approaches were used and, as such, a further 1,393 PFOAs and non PFOA members (905M:488F) have also received lighter-touch training on reforestation, which was provided at the start of the implementation of restoration activities (Annex 13d, e, f, g, h, I, j, k). Involvement of women was lower than the target (32% / 35%, compared to a target of 45%). Reforestation has historically been a very male-dominated activity so, although the representation is lower than the target, this is still considered good progress.

By end of project, 89ha (target 90ha) of private land has been planted with indigenous tree species, with a further 75ha left for natural regeneration (Annex 13d, e, f, g, h, i; Indicator 2.2). However, on-the-ground spatial assessment at the end of the project shows that, of the 89ha, only 51.8ha of planted areas still had trees growing (Annex 12). This change only became apparent after Yr2 survival monitoring, and Yr3 survival monitoring indicates that the cause was primarily seasonal flooding, with pests (termites, aphids) and weeds further contributing to the problem (Annex 17c). Given the propensity for flooding, the affected area (37.2ha), is now being left for Assisted Natural Regeneration (ANR), in addition to the 75ha originally set aside for that purpose. In total, 103,585 indigenous tree seedlings have been planted by PFOA members on riverine buffer land (Annex 13d, e, f, g, h, i; Indicator 2.3).

Output 3: PFOA member capacity built in agroforestry systems and land use planning

Over the project period, a total of 728 (356M:372F) PFOA members have been training in one or more relevant agroforestry system(s) (Annexes 8d, 11, 19a, 19b, 19c, 19d, 22iv, 25f). This accounts for 67.3% of the PFOA membership (1082 [495M:587F]; Indicator 3.1). The target % has not yet been met because of the rapid growth in PFOA membership; PFOA membership has increased from 620 to 1,082 during the course of the project. Train the trainer approaches have been used, so it is anticipated that additional PFOA members will be trained by their peers after project end.

A total of 200 PFOA members (132M:68F) have been directly trained in land-use planning (Annex 11). Of those trained, as at project end, 90% (target 95%) of the farmers (180; 128M:52F) were implementing their farm plans (Annex 21; Indicator 3.2). Whilst this percentage is slightly below the target, train the trainer approaches were again used and uptake of land-use planning has significantly expanded beyond those provided with training by the project. In Yr2 and Yr3, trained trainers continued to support additional community members on the use of Participatory Land Use Plans (PLUP) and at project end, 342 (223M:119F) community members from across the three parishes were using farm plans at household level (Annex 37).

Crop yields from combined agroforestry-staple crop systems was measured against the Yr1 baseline (Annex 9a), which was derived from surveying 298 PFOA members (215M:83F). In Year 3, based on a survey of 306 PFOA members (147M:159F) staple crop yields increased by 14.39% compared to the baseline (Annex 9b; Indicator 3.3). Certain cash crop yields declined (coffee, banana), but others increased (sugarcane, ginger) (Annex 9b).

In terms of fuelwood / fodder / charcoal self-sufficiency, of the 306 respondents, 282 (135M:147F) have planted trees in their land in the past 3 years to supply timber, fuel or fodder, 76.5% reported an improvement in their ability to supply timber/fuel/fodder in the past 3 years (Annex 9b; Indicator 3.4). Almost 80% of men, and 73.5% of women reported an improvement. Of the 76.5% of respondents who reported an increase in fuelwood / fodder / charcoal self-sufficiency, 70.1% of women and 71.8% of men reported being able to secure 20% or more fuelwood / fodder / charcoal from their land, compared to three years ago (Annex 9b; Indicator 3.4). Whilst targets have not quite been met, which is likely because of the long timeframe it takes for trees to establish and be able to supply products, there has been very good progress. It is anticipated that self-sufficiency will further increase in the coming years as trees mature.

Output 4: PFOA members involved in agroforestry-based market development report improved wellbeing and increased income from diversified livelihood activities

Over the project period, although initially delayed by the impacts of Covid-19, Steps 1-7 of the Participatory Market Systems Development (PMSD) roadmap have been completed with 1,082

PFOA members (495M:587F) and 3 possible buyers, and a mutually agreed action plan has been developed (Annex 22e; Indicator 4.1).

Based on end of project household surveys, agricultural income increased by 21% (target 15%) over the course of the project, from an annual average per household of 3,375,881 UGX to 4,070,385 UGX (Annex 9b; Indicator 4.3). It is unlikely, however, that the increase can be attributed entirely to this project as the most significant gain came from sugarcane production to sell as part of an out-grower scheme, which was not linked to project activities. That said, the project has contributed to increased incomes. For example, household income has been diversified through the sale of an additional cash crop (ginger), bringing an average additional income of 54,960 UGX.

One enterprise, procuring and marketing ginger, has been established (Annex 10a, 10b; Indicator 4.2). One company (African Spices Uganda Ltd) has entered into a buyer contract with the PFOAs to supply dried and clean ginger (Annex 23b; Indicator 4.4). A second company (Biofresh) is working with PFOA members through a certification process for organic farmers before contracting them, and a third company (Amri) has been identified.

Over the project period, 126,858 economically beneficial trees have been planted on-farm (Annex 16a, 16b, 16c, 16e, 16d, 16f, 16g, 16h; Indicator 4.5).

Output 5: Capacity and governance of three PFOAs are improved; PFOAs document experiences and participate in learning exchanges with other actors of NARCG across the Northern Albertine Rift.

Over the project period, the majority (target 70%) of PFOA members perceive that there has been a positive improvement in the management of the PFOAs: in Kasenene PFOA, 98% of males perceive a positive improvement, and 100% of females; in Kidoma-Bulimya PFOA, 95% of males and 97% of females; and in Bulyango PFOA 81% of males and 80% of females (Annex 9b; Indicator 5.1)

In total, seven farmer exchange days took place over the project period (Indicator 5.2). This included, a two-day exchange visit for 30 (19M:11F) pilot ginger farmers, visiting a ginger growing business in Wakiso District (Annex 28b) and, across two visits totalling four days, a total of 66 PFOA members (53M:13F) visiting Kasongoire Parish to exchange knowledge with Kasongoire Community Development Association (KACODA) members on buffer zoning and other HWC mitigation strategies (Annex 7a, 7b). A one-day peer-to-peer village farmer exchange was also conducted between 11 model farmers (9M: 2F) from Bulyango and Kasenene PFOAs (Annex 28c).

Annual progress summaries have been shared with the Northern Albertine Rift Conservation Group (NARCG) members, NFA, UWA and focal point within the Ministry of Agriculture (Annex 39a, b, c; Indicator 5.3, 5.4).

3.2 Outcome

The project outcome is: *Critical riverine forest restored via indigenous-species reforestation, facilitating chimp movement throughout 2,710 ha of forest corridor; local communities benefit from diversified incomes and reduced HWC via agroforestry and enterprise development.*

In large part, this outcome has been achieved and there have been very positive results in relation to improved attitudes towards chimpanzees, reduced crop loss from HWC, increased income from sustainable enterprise activities, and improved PFOA governance and membership.

Community based-monitoring of chimpanzee sightings also indicates stable, or slightly increasing, chimpanzee use of the corridor areas. The extent of threat reduction and hectares reforested achieved was not as great as anticipated, although good progress has been made.

Baselines were established against Outcome indicators 0.1-0.5 (Annexes 9a) in Yr1, and early in Year 2, a baseline for Outcome indicator 0.6 was also established (Annex 9c). In Year 2, Outcome indicator 0.1 was further clarified through activities to determine the area available for reforestation. During project development, the area of riverine buffer for reforestation was measured to be 190 hectares, based on the Uganda Government's recommended buffer of 30 metres on each side of the river; it was subsequently clarified that 25 hectares of that area was boggy and therefore not suitable for reforestation, (Annex 42) and that the project would target 90 hectares for restoration. The remaining 75 hectares would be left for natural regeneration during the project life.

Over the project period, the total riverine area planted was 89 hectares (using 103,585 tree seedlings) (Annex 12). However, on-the-ground spatial assessment at the end of the project shows that, of the 89ha, only 51.8ha of planted areas still had trees growing (Annex 12). This change only became apparent after Yr2 survival monitoring, and Yr3 survival monitoring indicates that the cause was primarily seasonal flooding, with pests (termites, aphids) and weeds further contributing to the problem (Annex 17c). Given the propensity for flooding, the affected area (37.2ha), is now being left for ANR, in addition to the 75ha originally set aside for that purpose.

In Yr1, attitudes to coexistence with chimpanzees reported by 298 PFOA members (214M:84F) were as follows: very negative = 6%, negative = 30% neutral = 14%, positive = 24%, very positive = 5% (Annex 9a). In Yr3, repeat household survey shows that attitudes 306 PFOA members (147M:159F) towards coexistence with chimpanzees have improved and are now as follows: very negative = 0%, negative = 12% neutral = 17%, positive = 50%, very positive = 21% (Annex 9b; Indicator 0.2).

Compared with the 2017 baseline, by project end chimpanzee sightings by community monitors increased substantially in both corridors (Annex 10; Indicator 0.3). The increase was seen in both corridor areas, although it was larger in the Budongo-Mukihani corridor than in the Bugoma-Wambabya corridor. Whilst this is a seemingly positive result, there are a number of potential explanations for it. The large increase may reflect a true increase in chimpanzee numbers in the corridor areas, but also may reflect increased awareness of chimpanzees among the community monitors. There have also been efforts to refine the methodology for community-based monitoring of chimpanzee sighting during the project, and, with the benefit of hindsight, it is likely that the 2017 baseline is an underrepresentation of chimpanzee presence in the corridors and, as such, comparisons to that baseline are not as informative as originally thought. Data from within the project lifetime, where there is more confidence in the robustness of community-based monitoring, suggests that chimpanzee sightings are stable or slightly increasing (Annex 10).

Results from community-based chimpanzee threat monitoring suggest that overall reports of threats have declined by only 38% during the lifetime of the project (8.8 vs 5.5. incidences per transect per month for the first and last 12 months), (Annex 8e; Indicator 0.3). The most-commonly recorded threat was bush clearance (45% of records), and this did not decline at all during the project lifetime, while the next two most-frequently recorded threats (tree felling and charcoal burning) declined substantially (by 62% and 88% respectively). Most threat records were related to habitat loss – there were very few records (n=3) of hunting recorded. There was a difference between the two corridors, with a non-significant decline of 13% in threat incidences

in the Bugoma – Wambabya corridor (6.7 vs 5.8 incidences / transect / month), whereas the Budongo – Mukihani corridor saw a decline of 44% (9.2 vs 5.2). This is due to the majority of threat records in Bugoma-Wambabya (67%) being of bush clearance.

Agricultural income increased by 21% (target 15%) over the course of the project, from an annual average per household of 3,375,881 UGX to 4,070,385 UGX (Annex 9b; Indicator 0.4). It is unlikely, however, that the increase can be attributed entirely to this project as the most significant gain came from sugarcane production to sell as part of an out-grower scheme, which was not linked to project activities. Despite this, farmers earned income from an additional source, due to the project's introduction of ginger to local farmers, bringing 54,960.83 UGX annual income in 2023. Of those engaged, 100% of women in the Kasenene PFOA, 97% in Kidoma-Bulimya PFOA and 80% in Bulyango PFOA, perceived an increase in income (Annex 9b; Indicator 0.4).

Membership across the 3 PFOAs in the project area has increased from 620 in Yr1 to 1,082 in Yr3 (Annex 27d; Indicator 0.5). Membership of women is now greater than that of men (495M:587F / 46%:54%; Indicator 0.5) and 32% of all group members are considered youth (18-35 years). At project end, PFOA members are also reporting an improved sense of wellbeing (material, physical and subjective). Baseline results on wellbeing were as follows: 8% M and 9% F report wellbeing as very good; 47% M and 48% F report wellbeing as good; 38% M and 35% F report wellbeing as neutral; 7% M and 8% F report wellbeing as bad; and 1% M and 1% F report wellbeing as very bad (Annex 9c). At project end, 90% of women reported an improvement in wellbeing, 9% reported that their wellbeing stayed the same, and 1% reported a decrease in wellbeing. For men, 86% reported an improvement and 14% reported that it stayed the same (Annex 9b; Indicator 0.6).

3.3 Monitoring of assumptions

Outcome and Output level assumptions were monitored throughout the course of the project, with the following observations:

Assumption 1: Total critical riverine buffer area in target corridors equals 190ha: This assumption has not changed. Areas within the 190ha that are boggy (25ha) were measured so as to determine the areas that would be left for natural regeneration (Annex 42). It was determined that 90ha were available for restoration, and 75ha were left for assisted natural regeneration. Subsequently, an additional 37.2ha of the 90ha has been allocated for natural regeneration, given seasonal flooding (Annex 12).

Assumption 2: Communities maintain willingness to devote part of their private land to reforestation with indigenous tree species: This has held true. Throughout the project, communities have remained committed to devoting some part of their land for tree planting, as evidenced by proactive tree planting requests from community members (Annex 11 and 37).

Assumption 3: Communities maintain willingness to engage in sustainable agroforestry practices: This holds true. All community members (trained trainers, plus the community members they trained) who were trained in agroforestry practices remain engaged in project activities.

Assumption 4: Government remains supportive of the efforts to reforest the corridors: This assumption holds true as there hasn't been communication indicating a change in approach.

Assumption 5: Chimpanzees stick to current patterns of moving through the landscape between Budongo-Mukihani and Bugoma-Wambabya forests corridors: This holds true. Monitoring data on chimpanzee sightings indicate that chimpanzee movements across the forest corridors have continued with similar spatial distribution (Annex 10).

Assumption 6: Typical survival rate of seedlings remains at around 70% in this region: This assumption holds true. By end of the project, seedling survival rate was 73% in reforested riverine areas (Annex 17c), which is above the 70% average survival rate for the region (Stangeland *et al.* 2011[1]).

Assumption 7: The proposed infrastructure from the new oil pipeline development does not impact reforestation efforts or targeted land areas: To date, infrastructure development has not impacted reforestation efforts. Ongoing infrastructure in the project region does not currently impact any plots identified for either tree planting or agroforestry farms. That said, associated road development and other future infrastructure developments do have impacts for connectivity in the wider landscape (see section 8).

Assumption 8: Two established nurseries in the landscape are available for use, and construction of a third is possible with NFA support: This assumption holds true. Four nurseries have been established/expanded during the project period (Annex 40). NFA has been able to provide the necessary support required.

Assumption 9: Successful interventions will be replicated within the project area: Too early to test, but there is no evidence to suggest that this assumption does not hold.

Assumption 10: Plot sizes are large enough to support various, desired productive uses: This assumption holds true. The review of land-use planning activities showed 90% of those trained were implementing farm plans and used their plans to manage multiple uses (crops, trees, livestock) on-farm (Annex 21).

Assumption 11: Seeds of target tree species are available, and seeds are of good quality: This assumption largely holds true. Seeds that were unavailable at the National Tree Seed Centre were sourced through local gatherers from the CFRs with the help of NFA staff. However, there were some issues in terms of the quantities and the viability of the seeds available. This required the sourcing of seeds from seed gatherers from other CFRs, which NFA facilitated.

Assumption 12: Weather will be favourable for staple crop growing and tree planting: This assumption has not held true. Over the project period, the weather has been not favourable for tree and crop growing, and rain has not arrived as expected. Tree seedling survival rates have been affected by prolonged drought, uncontrolled free-range livestock, and fire outbreaks. However, during the rainy seasons, flooding was also a problem. Despite this, survival rates have been encouraging (Annexes 17a, b, c). In the case of crops, most of the respondents suffered some loss of their dried yield to moisture/rot, to insects, or to rodent pests during the last long and short rain seasons (Annex 9b). Training in improved post-harvest storage was delivered during the project period (Annex 22iv, 25d) to help reduce losses, and we will continue to build on this under future funding opportunities.

Assumption 13: PFOA members remain interested in non-palatable crops to chimpanzee that can diversify and increase incomes: This assumption partially holds true. PFOA members have adopted ginger as a new (unpalatable to chimpanzees) crop to diversify their production while benefitting from increased incomes (Annex 9b, Annex 31). However, over the same period farmers have received increased income from sugarcane outgrowing schemes (from activities outside of the project), which is a high-conflict crop with chimpanzees (Annex 9b).

Assumption 14: Women have access to land and are motivated to join the enterprises: This assumption holds true. Anecdotally, women have increasing access to land, although this remains less than male access. Both men and women have engaged in the enterprise work developed under this project.

[1] Stangeland, T., Tabuti, J. & Lye, K.A. (2011) The framework tree species approach to conserve medicinal trees in Uganda. *Agroforest Syst* 82, 275–284

Assumption 15: Markets remain accessible, prices are relatively stable, and no new externalities or barriers disrupt demand for products: This assumption largely held true. Despite the COVID-19 pandemic and resulting market and supply chain disruptions, through adaptive management it was possible to identify markets that were still accessible during the pandemic, and to ensure that communities got fair prices for their products. Risks were reduced by identifying three potential buyers, rather than relying on one, so that there was a back-up if a buyer were to default.

Assumption 16: No crop failure or infestation: Although most of the respondents suffered from losses of their dried yield to moisture/rot, insects, or rodent pests, this assumption still holds, as in general, regardless the gender, there was a reduction in the percentage of losses during both long and short rainy seasons, compared to the baseline (Annex 9b).

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

This project has directly contributed to the following stated impact: *Well-managed and restored forests in the Albertine Rift conserve biodiversity, improve and sustain the conservation status of chimpanzee populations, enhance resilience, and contribute to local communities' sustainable livelihoods and well-being.*

Contributions at impact level will be achieved over a longer time frame, but important progress has been made over the project period:

Higher-level impact on biodiversity conservation (Relevant Outcome indicators 0.1, 0.3): Reforestation efforts under this project have contributed to sustaining habitat connectivity in two corridors between four protected areas (Budongo and Mukihani CFRs in the north; and Wambabya and Bugoma CFRs in the south). To date, 89ha of riverine forest has been planted and, of that, planted trees continue to grow in 51.8ha (Annex 12). A further, 112.2ha (75ha + 37.2ha) have been managed through ANR (Annex 12). In the long-term, this will support chimpanzees' movement across the landscape, which will help to maintain genetic diversity and support a viable chimpanzee population for the future. Chimpanzee sighting data indicates that the forest corridors remain important habitat for chimpanzees, with sightings during the project period stable or slightly increasing (Annex 10).

Higher-level impact on human development and wellbeing (poverty alleviation) (Relevant Outcome indicators 0.4, 0.6): By end of the project, average PFOA member household income from agricultural and agroforestry products increased by 21%, from an annual average per household of 3,375,881 UGX to 4,070,385 UGX (Annex 9b). Within this, income from staple crops increased at an average of 15%. Yield retention for staple crops has improved through reduced crop losses due to crop-raiding, as well as reduced losses to rot / pests during post-harvest storage (allowing farmers to retain more of their yield and sell it on the market) (Annex 9b). Cash crop incomes increased at an average of 35%, however most of this increase is attributed to involvement in sugarcane outgrowing schemes. Household income has been diversified through the sale of an additional cash crop (ginger), bringing an average additional income of 54,960 UGX. Additionally, at project end, 90% of women reported an improvement in wellbeing, 9% reported that their wellbeing stayed the same, and 1% reported a decrease in wellbeing. For men, 86% reported an improvement and 14% reported that it stayed the same (Annex 9b).

4 Contribution to Darwin Initiative Programme Objectives

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

This project has supported Uganda in the fulfilment of its obligations under the CBD by supporting both the conservation of biodiversity in the Albertine Rift (as part of its *Strategic Plan for the Northern Albertine Rift of Uganda 2011-2020*; updated plan in draft) and the sustainable use of natural resources by local people.

By reducing forest pressure (Annex 8e) and fostering sustainable practices, the project has helped to lessen the impact of communities and other actors on forest habitats, and developed robust and diversified livelihoods that do not encroach upon forest conservation zones (Annex 9b). Therefore, the project has directly supported CBD Strategic Goal B (*Reduce the direct pressures on biodiversity and promote sustainable use*), targets 5 and 7, and C (*Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity*). The project has also helped to ensure that wider society, beginning with the most vulnerable communities, can benefit from healthy ecosystems and ecosystem services (*Goal D: Enhance the benefits to all from biodiversity and ecosystem services*) by working to reduce the direct pressure on biodiversity caused by land clearance for agriculture (Target 14).

The project worked to ensure that community members are aware of the value of biodiversity and are equipped with the knowledge and practices that will enable them to co-exist alongside chimpanzee populations (Aichi Target 1; Output 1), (Annex 8a, 8b, 8c, 8d, 9b). Sustainable land-use strategies through improved agricultural practices have also been implemented (Aichi Target 7; Output), (Annex 21). Additionally, the project aimed to improve the conservation status of the endangered eastern chimpanzee (*Pan troglodytes schweinfurthii*), which is a key CITES-listed species (Annex 2).

4.2 Project support to poverty reduction

The direct beneficiaries of this project are landowning members (and their household members) of Bulyango, Kidoma-Bulimya and Kasenene Private Forest Owners' Associations, who are situated in and around Wambabya-Bugoma and Mukihani-Budongo wildlife corridors. There are indirect benefits for the wider community also.

By end of the project, the average PFOA member household income from agricultural and agroforestry products increased by 21%, from an annual average per household of 3,375,881 UGX to 4,070,385 UGX (Annex 9b). Household income has been diversified through the sale of an additional cash crop (e.g. ginger brought 54,960.83 UGX annual income in 2023), and increased (15% increase in staple crop incomes) through reduced loss due to crop-raiding, as well as reduced losses during post-harvest storage, allowing farmers to retain more of their yield and sell it on the market (Annex 9b). There was also an improvement in food security with fewer respondents reporting that they have had to skip meals (Annex 9b). An increase in food and personal security is also indirectly evidenced by 83% of 306 PFOA members (147M:159F) reporting that their ability to deal with chimpanzee conflict has improved over the past 3 years (Annex 9b), and improved attitudes to coexistence with chimpanzees (Annex 9b). At project end, 90% of women and 86% of men reported an improvement in wellbeing (material, physical and subjective) (Annex 9b).

Beyond direct benefits, community governance was also strengthened through project activities. Over the lifetime of the project, PFOA membership increased from 620 to 1,082 (Annex 27d),

and membership of women is now greater than that of men (495M:587F / 46%:54%). Over the project period, the majority (target 70%) of PFOA members perceive that there has been a positive improvement in the management of the PFOAs: in Kasenene PFOA, 98% of males perceive a positive improvement, and 100% of females; in Kidoma-Bulimya PFOA, 95% of males and 97% of females; and in Bulyango PFOA 81% of males and 80% of females (Annex 9b).

4.3 Gender equality and social inclusion

Gender has been a key project consideration, and the project has been deliberate in considering and integrating gender into activity design and implementation.

To build capacity to ensure that a gender sensitive approach could be implemented, in-country FFI staff were provided with dedicated and contextualised gender training from FFI's Senior Technical Specialist, Gender (Annex 32a). Building on the skills developed through this training, a country-specific gender analysis and action plan were developed (focusing around: legal and customary rights and practices; roles and responsibilities; resource access and control; social norms, beliefs and practices; representation, participation and power; environmental stressors and vulnerability) (Annex 32), and have guided subsequent implementation, as well as being integrated into FFI's wider programme of work in Uganda.

Data collection tools, such as meeting attendance registers and agricultural input distribution lists, were refined during project implementation to enable the collation of gender-disaggregated data. This enabled the project team to monitor the participation of men and women and adapt activities as necessary. For example, recognising a need for affirmative action, women were intentionally targeted and selected for agricultural input support (Annex 34). Gender considerations have also been factored in crop choice; for example, sugarcane is a heavily male-controlled crop and so not favoured by women, whereas maize and beans are preferred by women as they deliver household-wide benefits.

Participation of women in PFOAs has significantly increased during the project period and women now make up 54.25% of the PFOA membership (previously 40%; Outcome indicator 0.5; Annex 27d). There has also been increased representation of women in the PFOA leadership structures: of 10 executive leaders for Kasenene PFOA, 3 are women; of the 11 executive members for Kidoma PFOA, 6 are women; of 12 executive leaders for Bulyango PFOA, 5 are women (Annex 27b). A structure of women representatives has also been created with the PFOAs, who cascade first-hand project activity information to fellow women. In the majority, when asked during female-only meetings, female members of the PFOAs report that the representation of women is sufficient, and their opinions are respected (Annex 27b). However, this view is not unanimous and some more senior roles within the PFOAs are still viewed as being 'only for men'. As noted above, involvement of women in reforestation activities was lower than the target (32% / 35%, compared to a target of 45%) but reforestation has historically been a very male-dominated activity so, although the representation is lower than the target, this is still considered good progress. Having embedded the gender action plan into FFI's wider work in Uganda, we will continue to address inequalities whilst being cognisant of the wider cultural context and the risk of provoking conflict.

Please quantify the proportion of women on the Project Board[2].	7 out of 11 project board members

[2] A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women[3].	3 out of 7 project partners

4.4 Transfer of knowledge

Throughout the project period, annual progress summaries and learnings have been shared with the Northern Albertine Rift Conservation Group (NARCG) members, which is a regional coordination platform. Project staff have also visited operations of the International Gorilla Conservation Programme (IGCP) in Rwanda and Uganda to share knowledge and project learning. In March-April 2023, learning from this project was presented during a Speed Talk session at the International Conference on Human-Wildlife Conflict & Coexistence (www.hwcconference.org) (Annex 36).

4.5 Capacity building

In part as a result of the leadership shown in spearheading in-country implementation of this project, Rogers Niwamanya (male; Uganda) was promoted from FFI's Programme Officer, Uganda to FFI's Landscape Manager, Albertine Rift. This is a more senior role, with greater responsibility. Within the project lifetime, Rogers Niwamanya has also been invited to be part of the committee contributing to a National Eastern Chimpanzee Conservation Action Plan in Uganda, and to advise the Ministry of Tourism, Wildlife & Antiquities on implementation of the recommendations from the Africa Protected Areas Congress (APAC) in Uganda.

5 Monitoring and evaluation

There were no significant changes to the M&E plan over the project period. Indicators of achievement at Outcome level are: (0.1) measurement of total land reforested via photographic evidence, farmer testimony and GIS mapping; (0.2) knowledge and attitude assessments of PFOA membership towards chimpanzee presence; (0.3) chimpanzee population counts and monthly monitoring reports; (0.4) household surveys; (0.5) records of PFOA membership; and (0.6) Participatory Impact Assessment of wellbeing. M&E was led by FFI, with JGI providing technical expertise in chimpanzee monitoring. M&E results were shared with project partners through regular project updates, informing adaptive management where necessary.

Over the course of the project, some refinements were made to how the baseline for Outcome Indicator 0.4 (household income from a subset of key agricultural products) was calculated. Initially, this figure was calculated based on income from maize, beans and 'all other staple crops' however the 'other' category makes like-for-like comparison difficult and so the subset of key agricultural products was changed to include maize, beans, rice and groundnuts specifically. There has also been a shift from measuring 'total average income' to 'weighted average income', essentially weighting the income by the number of people who grew the crop.

Monitoring of chimpanzees and threats in the corridors using a network of community monitors has overall proved an effective means of monitoring and a good way to engage communities in the project. However, a lack of technical capacity among the community monitors has restricted the spatial data that it was possible to collect, meaning that it has not been possible to report on chimpanzee usage of different land covers (Output Indicator 1.4). This issue is being resolved in future work by the purchase of GPS enabled smartphones for the community monitors to use. Furthermore, data collection methods changed between the 2017 baseline (relevant to Outcome

[3] Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

Indicator 0.3) and the project. Chimpanzee sighting rates are far higher under the revised methods, and after several years of consistent sighting rates we are confident in these methods. The substantial increase from the baseline suggests that the 2017 data was flawed and in hindsight this data is not a useful comparison for the data collected during the project.

6 Actions taken in response to Annual Report reviews

All feedback raised during the reviews of your Annual Reports have been addressed. Comments and recommendations provided were fair and helpful and have been discussed with partners, as appropriate.

Feedback on the Yr2 annual report was as follows:

- In any future issues of the logframe the typo under Assumption 1 should be corrected from 109ha to 190ha of land to be restored. *Response:* actioned.
- As Year 3 approaches the project leaders might consider how the good relationships with their partners can be developed further to ensure that the existing ownership and collaboration continues beyond the end of the funded project period. *Response: Outside of the project, there is already good coordination between some project partners through the NARCG. Additionally, initiatives being championed by the EACOP project are seeking to coordinate stakeholders engaging in chimpanzee conservation in the Budongo-Bugoma landscape. FFI continues to work with the PFOAs from Bulyango, Kidoma & Kasenene Parishes, with funding from other sources, and is exploring opportunities for future joint fundraising opportunities with the other partners of this project. FFI adopts a partnership-led conservation model and we are exploring how to further strengthen this approach in Uganda through establishing partnership agreements and improved coordination mechanisms.*
- The longer-term impact of this project can also be measured by whether the activities can be replicated in other parts of the Albertine Rift where connectivity between protected areas is threatened by human activity. It is hoped in Year 3 and beyond that the project actively disseminates learning to these other areas, and that FFI or other conservation partners can instigate similar projects at other priority sites. *Response: FFI and partners are seeking to secure additional funds that would enable the scaling up of the approaches implemented under this project. Additionally, within the project period there was already evidence of the approaches being replicated in Buhumuriro village which is adjacent to Kidoma Parish, but outside of the project area. This included the establishment of a community nursey to aid a tree planting campaign, and the establishment of two Village Savings and Loans Associations (VSLAs).*
- It is unclear from the report whether the tree nurseries are project dependent or whether they can be established to operate in a manner that sustains them beyond the project. Some comment on this would be of relevance. *Response: Community nurseries were established with the intention of being self-sustaining and, so far, this is proving possible. Funding from this project ended in March 2023, but the nurseries continue to operate, albeit at a slightly lower scale. FFI continues to work with these communities on other projects and so also provides ad hoc technical advice as needed.*

7 Lessons learnt

Lessons learnt from this project have been documented, discussed between partners, and used to inform future planning, including beyond the lifetime of this project.

What has worked well:

- Establishing community nurseries has proven highly effective and efficient. Proximity to the communities that receive the seeds has allowed for more timely planting. It has also reduced the cost of transportation and reduced the risk of seedling damage during transportation. This approach will be adopted in future reforestation activities by project partners and would be a recommendation for similar projects.
- In Ugandan law (Wetlands, Riverbank and Lake Shores Management Regulations No.3/2000), there is a requirement for 30 meters from a river centre to be protected and not cultivated. However, this law is not well socialised or enforced. Attempts to demarcate this area have the potential to create conflict and raise issues of land ownership if not managed well. To mitigate this potential for conflict, there has been a significant investment of effort in the sensitisation of communities on the importance and sustainable use of riverine forests, as well as ensuring communities feel a sense of ownership for reforestation efforts.
- Underpinning conservation action with financial incentives has proved highly effective. Engaging in reforestation activities and biodiversity monitoring required community members to invest time and effort. To encourage community members to make this investment, financial incentives from conservation were built into the project design. These incentives included developing a market for chimpanzee compatible products, such as ginger, and, with funding from other sources, microcredit systems through Village Savings and Loans Associations (VSLAs). These activities thus contributed to an increase in income, and positive attitude towards conservation efforts, as well as a noticeable increase in the number of community members joining PFOAs.
- The project was able to initiate sustainable financing mechanism for conservation activities. For example, having helped PFOAs to establish an additional source of income from the sale of ginger, it was then agreed between ginger farmers and PFOA leaders that a proportion of the profit would be reinvested to support conservation activities and PFOA operating costs.
- The project was successful in leveraging private sector investment in community-led enterprise. Use of the PMSD approach, in which FFI was the facilitator only, have helped to ensure that the market linkages established are sustainable and not dependent on FFI.
- An increase in PFOA numbers was something that the project sought to achieve and was very successful in doing. That said, the rapid growth in PFOA numbers created significant additional demand for repeat meetings, sensitisations, and training, whilst also needing to support and monitor original members. Repeated use of training of trainers approaches greatly helped to address this challenge.

What would you do differently:

- In assessing the area for tree planting along the riverine reforestation area, it is important to identify and exclude boggy areas and areas prone to seasonal flooding as they are not favourable for tree seedling survival. In future it will be important to support the communities further with ANR, particularly to support reforestation in areas which are less suitable for planting trees. Rates of natural regeneration were high (Annex 17c), meaning ANR could offer a locally suitable method for reforestation at scale. In addition, more focus could be put on training and time for seedling management, to reduce losses to pests and grazing livestock.
- It is important to involve private agribusiness companies in the initial design stage of conservation enterprises to ensure the produced products meet their requirements.

During the PMSD multi-stakeholder workshop, for example, it was discovered that the companies that had been engaged would only buy products of a specific quality. This created the need for value addition.

- See comments on M&E under Section 5.

8 Risk Management

Projects for the development of the oil and gas resources of the Lake Albert region and the cross-border pipeline are situated in and around the project area. Of most relevance to the project area is the EACOP project, which consists of the construction of a buried 1,443 km oil pipeline between the town of Kabaale in Uganda and the port of Tanga in Tanzania. This project has been under development for some time so is not a new risk within the last 12 months, but a greater understanding of the impacts of this project on the project area has been established. In the immediate term, the most concerning risk is the impact of an associated road upgrade, which bisects part of the linkage area between Bugoma-Wambabya CFRs. We have reviewed the mitigation plans in detail and they do not currently address the impacts of the road on connectivity for biodiversity. Over the last year, with the support of FFI's Corporate Sustainability team, we have established good working relationships with the EACOP project team and we continue to engage with them to advocate for better mitigation of impacts.

During implementation of a Darwin Innovation Project (DARNV010), which operates in the same landscape and with two of the same PFOAs, our understanding of the legal structures associated with PFOAs operating microloan schemes (via VSLAs) has developed. Having consulted legal advice and experts in the inclusive finance space in East Africa, registration of the PFOAs as Savings and Credit Cooperative Societies (SACCOs) or Financial Services Associations (FSAs) have been recommended as appropriate options, but further clarity is needed. It will be important to evaluate the pros and cons of the suggested options, and to conduct consultation with local stakeholders before deciding on an appropriate PFOA loan legal structure. FFI is currently carrying out community consultations and developing a work plan for next steps.

9 Sustainability and Legacy

FFI remains committed to strengthening and developing the capacity of community-based organisations for the long-term conservation of the Albertine Rift biodiversity hotspot. Complementary grants have been secured that will allow for the continuation and further strengthening of activities beyond the project lifetime. This includes a grant from US Fish & Wildlife Service (USFWS) that focuses on addressing human-chimpanzee conflict (2022-4), and a grant from the Darwin Initiative Innovation Fund (2022-4) that focuses on strengthening VSLA operations. Additional funding sources, with a focus on sustaining and expanding reforestation activities, are being sought. Project staff and resources will remain in place and support implementation of these additional grants.

In addition to ongoing investment, sustainability has been built into project implementation in the following ways:

- FFI has entered into partnership with local government. With the support of project partners, this creates a significant opportunity to sustain project activities and priorities through integration into wider conservation and development planning.
- During the project life span, there has been an increase in the capacity of the three focal PFOAs, by improving governance (e.g. benefit-sharing rules established; AGMs held), expanding membership, and creating sustainable economic incentives for members (e.g. links to agribusiness companies). Well capacitated, inclusive and sustainable PFOAs are

the backbone to the sustainability of this project. A modest revolving fund operating with and through the PFOAs, has also been established. Part of the interest payments of these funds is now supporting the long-term conservation efforts of the PFOAs, as well as their general functioning.

- The use of training of trainers approaches is another important aspect of sustainability that will be continued post project. As demonstrated when Covid-19 restrictions limited FFI's direct access to communities, this approach is a means by which communities can be self-sufficient in terms of agroforestry and reforestation skills enhancement and monitoring.
- Sustainable financing mechanism for conservation activities have been initiated. For example, having helped PFOAs to establish an additional source of income from the sale of ginger, it was then agreed between ginger farmers and PFOA leaders that a proportion of the profit would be reinvested to support conservation activities and PFOA operating costs.
- The PMSD approach for enterprise development ensures that FFI plays the role of facilitator, encouraging PFOA members and market actors to see benefits and capitalise on the market opportunities themselves, for their own economic benefits. This facilitator role is important in avoiding any dependency on FFI for the supply chain operations and ensures the long-term sustainability of the conservation enterprise.

10 Darwin Initiative identity

The Darwin Initiative funded work has been recognised as a distinct project by all project partners. The Darwin Initiative has been acknowledged as a donor of this project, and its logo has been included in all community meetings/workshops and related reports. Quarterly project reports have been shared with project partners and other key stakeholders, including local government, and all have included the Darwin Initiative logo. Relevant project pages on FFI's website acknowledge the support of the Darwin Initiative. In September 2021, the project contributed an article for the Darwin Initiative newsletter. In March-April 2023, learning from this project was presented during a Speed Talk session at the International Conference on Human-Wildlife Conflict & Coexistence (www.hwcconference.org), and the contribution of the Darwin Initiative was acknowledged (Annex 36).

11 Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes. Safeguarding issues were to be raised with the project leader to enable identification and remediation of unintended negative impacts. Any grievances raised would be first resolved, where possible, by FFI and project partners; cases will be escalated to the relevant authorities and internally as required, in accordance with FFI's Safeguarding Children and Vulnerable Adults Policy and Procedure, and associated policies and procedures.

Has the focal point attended any formal training in the last 12 months?	Yes. FFI has an internal Learning Management System, which enables online training in policies and procedures and all FFI staff are required to attend compulsory safeguarding training, including: Safeguarding essentials; FFI's Safeguarding Children and Vulnerable Adults Policy.
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 100% of 10 FFI staff Planned: 0
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. No.	

12 Finance and administration

12.1 Project expenditure

Project spend (indicative) since last Annual Report	2022/23 Grant (£)	2022/23 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[redacted]			
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	**103,572**	**103,572**		

[redacted]

12.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
[redacted]	

Source of funding for additional work after project lifetime	Total (£)
[redacted]	

12.3 Value for Money

The project took a number of measures to be as cost effective as possible. FFI has an operational and financial system in place to ensure the most cost-effective, transparent, and efficient expenditures. This includes strict procurement measures to control costs and gain maximum value for money. All project expenditure was carried out in line with the Darwin Initiative's and FFI's financial policies and procedures, which have been designed to deliver value for money.

The project drew on in-house FFI technical expertise on enterprise development, agriculture, biodiversity monitoring, and GIS, which has been cost effective compared to using consultants. The training of trainers approach was favoured to ensure sustainability of impact after project end, and to minimise training costs both during, and beyond, the project. The Field Officer(s) are based in Hoima, and therefore were close to field sites, enabling cost-effective and regular local travel. The Project Manager was based in Kampala and travelled by road between Kampala and Hoima; cost effectiveness was maximised by ensuring that field missions were planned to enable the delivery of multiple activities per trip, reducing the need for repeated travel.

Work to deliver improved forest management and restoration was also highly impactful for relatively little cost. Construction of nurseries and transportation of seedlings are often the most expensive aspect of agroforestry interventions, however in this project, community nurseries were established, enabling PFOA members to collect their own seedlings, eliminating a significant expense that would have been incurred via the logistics of seedling distribution had the project not taken this approach.

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

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

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

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Well-managed and restored forests in the Albertine Rift conserve biodiversity, improve and sustain the conservation status of chimpanzee populations, enhance resilience, and contribute to local communities' sustainable livelihoods and well-being.			
Outcome: Critical riverine forest restored via indigenous-species reforestation, facilitating chimp movement throughout 2,710 ha of forest corridor; local communities benefit from diversified incomes and reduced HWC via agroforestry and enterprise development.	0.1 At least 90 ha of critical riverine land reforested, representing reforestation of approximately 80% of available riverine land in the target corridors. 0.2 At least 75% of PFOA members report a neutral or favourable attitude toward chimp presence in targeted corridors against baseline by end-of-project (EoP); PFOA leadership represents member experience to local authorities as emerging, local best practice for upscaling chimpanzee conservation efforts across 2,710 ha of critical forest corridor. 0.3 Chimpanzees' use of the corridors remains stable, if not growing, by EoP, compared with 2017 baseline, whilst threats to chimps in the corridors reduced by at least 75% against baseline. 0.4 15% increase in agricultural income at the household level for participating PFOA members, with at least 75% of the women engaged reporting an increase. 0.5 Membership across the 3 PFOAs is increased from 620 to 1,000 in total, of which membership by women increased from 40 to 45% of the total.	0.1 Summed measurement of total land reforested via photographic evidence, farmer testimony and GIS mapping. 0.2 Knowledge and attitude assessments of PFOA membership at beginning and end of project; documentation of results/lessons shared. 0.3 Baseline and EoP chimp population counts; monthly monitoring reports. 0.4 Household surveys, wellbeing assessment, reports. 0.5 Records of membership for three PFOAs. 0.6 Participatory Impact Assessment to assess wellbeing of beneficiaries in Yr 1 and repeated at EoP.	Total critical riverine buffer area in target corridors equals 190 ha. Communities maintain willingness to devote part of their private land to reforestation with indigenous tree species. Communities maintain willingness to engage in sustainable agroforestry practices. Government remains supportive of the efforts to reforest the corridors.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	0.6 70% of PFOA members, both male and female, report an improved sense of wellbeing (material, physical and subjective) by EoP.		
Outputs: **1**. PFOA members have the knowledge and skills to support their peaceful coexistence with chimpanzees in two forest corridors, increasing secure habitat contiguous to four protected areas.	1.1 At least 1,000 people across both corridors trained in HWC management, threat identification and threat monitoring. 1.2 At least 75% of the PFOA membership report a positive/better/improved perception of chimpanzees and about their coexistence in the landscape by EoP. 1.3 At least 75% of PFOA membership reports increased capacity in human-chimp conflict mitigation strategies by EoP. 1.4 Chimpanzees and other primates' use of the corridors remains stable for the duration of the project. Chimpanzees and other primates observed using agricultural/agroforestry land reduces by EoP, whilst their observed use of the corridors increases by EoP.	1.1 Training attendance records 1.2 & 1.3 PFOA membership surveys 1.4 Chimpanzee and primate monitoring data and reports, maps	Chimpanzees stick to current patterns of moving through the landscape between Budongo - Mukihani and Bugoma - Wambabya forests corridors
2. Critical riverine areas on private lands reforested with native species by PFOA members, trained and knowledgeable in reforestation techniques.	2.1 Capacity of PFOA members (45% women) increased through a series of (estimated) three trainings on reforestation techniques by the end Q2 Y2. 2.2 No. of ha (minimum target 90 ha) of private land reforested with indigenous tree species by EoP. 2.3 Number of indigenous tree seedlings planted by PFOA members on riverine buffer land by EoP.	2.1 Training course curriculum, attendance records. 2.2 PFOA member surveys on land availability and land reforested with indigenous tree species; field-level monitoring and verification of a sample by project staff. 2.3 Number of indigenous trees taken and transplanted by PFOA members; field level monitoring and verification of a sample by project staff.	PFOA members remain willing to plant indigenous trees on private land as stated in community meetings. The legally-required river buffer equates to around 190 ha of riverine forest. Typical survival rate of seedlings remains at around 70% in this region. The proposed infrastructure from the new oil pipeline development does not

Project summary	Measurable Indicators	Means of verification	Important Assumptions
			impact reforestation efforts or targeted land areas. Two established nurseries in the landscape are available for use, and construction of a third is possible with NFA support. Rainfall patterns support the growth of seedlings and saplings for the duration of the project.
3. PFOA member capacity built in agroforestry systems and land use planning.	3.1 By EoP, 85% of PFOA members have been trained in one or more relevant agroforestry system(s). 3.2 95% of trained PFOA members adopt land-use planning on their own lands by EoP. 3.3 By EoP crop yields from combined agroforestry-staple crop systems equal or exceed staple crop yields prior to the introduction of agroforestry trees. 3.4 80% of PFOA members participating in timber agroforestry report a 20% increase in fuelwood/fodder/charcoal self-sufficiency by EoP	3.1 Agroforestry curriculum, attendance records. 3.2 Survey on effectiveness of farm planning exercise; EoP survey on adoption. 3.3 Targeted yield data collection and farmer surveys. 3.4 Surveys of fuel needs and use (baseline, EoP).	Successful interventions will be replicated within the project area. Plot sizes are large enough to support various, desired productive uses. Seeds of target tree species are available, and seeds are of good quality. Weather will be favourable for staple crop growing.
4. PFOA members involved in agroforestry-based market development report an improved wellbeing and increased income from diversified livelihood activities.	4.1 By Year 1, Steps 1-7 of the PMSD roadmap (see references) completed with 450 women and 550 men, three traders and three buyers during various stages of activities, and mutually agreed action plan developed. 4.2 By Year 3, at least one enterprise that procures and markets at least one agroforestry product (likely ginger) from the PFOA members established.	4.1 Workshop reports, participants attendance records, participant feedback, action plan document. 4.2 Enterprise governance documents, membership records. 4.3 Semi-structured interview data. 4.4 Purchase agreements. 4.5 Number of economically beneficial trees taken and transplanted by PFOA	PFOA members remain interested in non-palatable crops to chimpanzee that can diversify and increase incomes. Women have access to land and are motivated to join the enterprises. Markets remain accessible, prices are relatively stable, and no new externalities or barriers disrupt demand for products. No crop failure or infestation.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	4.3 By Year 3, PFOA members involved in agroforestry and conservation enterprise see their agricultural income increase by 15%. 4.4 By the end of the project, there are at least three established buyers for the enterprise product. 4.5 Number of economically beneficial trees planted on agricultural land by EoP.	members; monitoring and verification of a sample by project staff.	
5. Capacity and governance of three PFOAs are improved; PFOAs document experiences and participate in learning exchanges with other actors of NARCG across the Northern Albertine Rift.	5.1 70% of men and 70% of women in each of the PFOAs perceive an improvement in the management of the PFOAs by Y3 against Y1 baseline. 5.2 Farmer exchange days take place (two in each corridor) with other farms with other corridor farmers in Y2 and Y3 to inform activities and share lessons. 5.3 Annual summary of progress is shared with NARCG for input and feedback. 5.4 Annual summary of progress is shared with local representatives of NFA, UWA and Ministry of Agriculture (MoA).	5.1 Three group governance assessment reports in Y1, PFOA member surveys on participation, transparency, accountability and equity in Y1 and Y3, governance documentation 5.2 Participant surveys; report on farmer exchange days and value of exchange to participants. 5.3 Annual summary of progress for NARCG. 5.4 Annual summary of progress for NFA, UWA and MoA representatives.	NARCG members remain interested in participating in learning exchanges MoA, NFA and UWA remain interested in project objectives; willing to transmit learning and better practices to other districts to support replication.
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 Support each PFOA to share lessons learned and approaches to HWC management (incl deterring buffer zones, native fruit trees attracting primates) 1.2 Training and raising awareness for each PFOA membership on specific HWC mitigation techniques (i.e. planting non-palatable crops for buffer, interactions human-primates, chimp scouts) 1.3 Regular & systematic community threat monitoring across the corridors 1.4 Household Survey (pre/post) which includes the perception of chimpanzees and their coexistence in the landscape 1.5 Monthly community chimpanzee/primate monitoring 2.1 Training of trainers of PFOA selected group for Participatory Land Use Planning activities 2.2 Baseline measurement of existing riverine forest cover			

Project summary	Measurable Indicators	Means of verification	Important Assumptions
2.3 Reforestation planning with communities and JGI 2.4 Purchase of indigenous tree seed 2.5 Establishment of indigenous tree seedlings 2.6 Seedling distribution 2.7 Seedling survival rate monitoring (@ 6 months post-distribution) 3.1 Design and roll out baseline household survey 3.2 Community co-design workshop for agricultural interventions 3.3 Participatory Land Use Planning (PLUP) training of trainers (with 2.1) 3.4 General agroforestry systems training curriculum delivered 3.5 Training of trainers on the PMSD approach (with 4.1) 3.6 Establish one additional seedling nursery 3.7 Establishment and growth of agroforestry tree seedlings 3.8 Targeted distribution of seedlings 3.9 Seedlings survival rate monitoring (@ 6 months post-distribution) 3.10 Monitoring of adoption of the participatory LUP through a random selection of PFOA members 3.11 EoP household (HH) survey to monitor change in yields, livelihoods and fuelwood use 4.1 Training of trainers on the PMSD approach 4.2 Series of workshops and PFOA meetings focusing on Product Selection (step 1 of PMSD). This would include prioritisation of staple crop interventions to maximise yields 4.3 Market research of the selected products focusing on district, national level and international market as appropriate 4.4 Cultivation of selected crop (most probably ginger) in demonstration plots to train farmers in cultivation technique and to see for themselves the crop yield 4.4 Preliminary supply chain mapping and analysis for the selected products (step 2 of PMSD) 4.5 Developing a strategic plan and design for market system development to integrate and balance conservation and sustainable livelihood activities (step 3 of PMSD) 4.6 Community level preparation and empowerment for multi-stakeholder workshop (step 4 for PMSD) 4.7 Engaging with the private actors along the supply chain through one-to-one meetings (step 5 of PMSD) 4.8 Multi-stakeholder workshop to bring PFOA members, traders, and companies together to share knowledge across the supply chain actors and recognise issues (step 6 of PMSD) 4.9 Formulation of participatory action plan – issues, what needs to be done and the benefits that will be accrued (step 7 of PMSD) 4.10 After having met supply chain actors (activity 4.8), interested PFOA members adopt cultivation of the selected product 4.11 Agriculture extension and support provided to PFOA members for cultivation of the selected crop			

Project summary	Measurable Indicators	Means of verification	Important Assumptions
4.12 Following up on activity 4.9, implementing the participatory action plan from the workshop			
4.13 Organising PFOA members under conservation enterprise to market the selected produce			
4.14 Developing a governance structure of the conservation enterprise with membership rules and benefit sharing among the PFOA members involved			
4.15 Training PFOA members on bookkeeping practices and management of the enterprise			
4.16 Facilitating meetings with potential buyers to establish market linkage for the selected product			
5.1 Governance assessment (incorporate with Household baseline)			
5.2 Capacity Needs Assessment – PFOA leadership (potential review of constitution to capture the enterprise and agricultural development coming under PFOA remit)			
5.3 Combine governance and capacity needs for action plan to enhance PFOA effectiveness			
5.4 Peer to peer village level farmer exchange			
5.5 Survey of non PFOA members as part of the inception phase and repeated by EOP to determine reasons why they are not joining			
5.6 Compile lessons learned in case studies to be shared with all relevant stakeholders			
5.7 Participatory Impact assessment to measure the impact of the project on household agriculture incomes.			

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

Project summary	Measurable Indicators	Progress and Achievements
Impact: Well-managed and restored forests in the Albertine Rift conserve biodiversity, improve and sustain the conservation status of chimpanzee populations, enhance resilience, and contribute to local communities' sustainable livelihoods and well-being.		See section 3.4: Reforestation efforts under this project have contributed to sustaining habitat connectivity in two corridors between four protected areas. To date, 89ha of riverine forest has been planted and, of that, planted trees continue to grow in 51.8ha (Annex 12). A further, 112.2ha (75ha + 37.2ha) have been managed through ANR (Annex 12). In the long-term, this will support chimpanzees' movement across the landscape. Chimpanzee sighting data indicates that the forest corridors remain important habitat for chimpanzees, with sightings during the project period stable or slightly increasing (Annex 10). Average PFOA member household income from agricultural and agroforestry products increased by 21% (Annex 9b). Household income has been diversified through the sale of an additional cash crop (ginger), bringing an average additional income of 54,960 UGX. 90% of women and 86% of men reported an improvement in wellbeing (Annex 9b).
Outcome: Critical riverine forest restored via indigenous-species reforestation, facilitating chimp movement throughout 2,710 ha of forest corridor; local communities benefit from diversified incomes and reduced HWC via agroforestry and enterprise development.	0.1 At least 90 ha of critical riverine land reforested, representing reforestation of approximately 80% of available riverine land in the target corridors. 0.2 At least 75% of PFOA members report a neutral or favourable attitude toward chimp presence in targeted corridors against baseline by end-of-project (EoP); PFOA leadership represents member experience to local authorities as emerging, local best practice for upscaling chimpanzee conservation efforts across 2,710 ha of critical forest corridor. 0.3 Chimpanzees' use of the corridors remains stable, if not growing, by EoP, compared with 2017 baseline, whilst threats to chimps in the corridors	See section 3.2: 0.1: Total riverine area planted was 89 hectares (using 103,585 tree seedlings) (Annex 12) however, on-the-ground assessment at the end of the project shows that, of the 89ha, only 51.8ha of planted areas still had trees growing (Annex 12). Survival monitoring indicates that the likely causes of death are pests (termites, aphids), weeds, and seasonal flooding (Annex 17c). 0.2: Attitudes of 306 PFOA members (147M:159F) towards coexistence with chimpanzees have improved and are now as follows: very negative = 0%, negative = 12% neutral = 17%, positive = 50%, very positive = 21% (Annex 9b). 0.3: Compared with the 2017 baseline, by project end chimpanzee sightings by community monitors, increased substantially in both corridors (Annex 10), but 2017 may not be a helpful baseline (see Section 3.2, above). During the project period, chimpanzee sightings remained stable / slightly increased (Annex 10). Community-based chimpanzee threat monitoring suggest that threats have declined by 38% during the lifetime of the project (8.8 vs 5.5. incidences per transect per month for the first and last 12 months) (Annex 8e).

Project summary	Measurable Indicators	Progress and Achievements
	reduced by at least 75% against baseline. 0.4 15% increase in agricultural income at the household level for participating PFOA members, with at least 75% of the women engaged reporting an increase. 0.5 Membership across the 3 PFOAs is increased from 620 to 1,000 in total, of which membership by women increased from 40 to 45% of the total. 0.6 70% of PFOA members, both male and female, report an improved sense of wellbeing (material, physical and subjective) by EoP.	0.4: Agricultural income increased by 21%, from an annual average per household of 3,375,881 UGX to 4,070,385 UGX (Annex 9b). It is unlikely, however, that the increase can be attributed entirely to this project as the most significant gain came from sugarcane production to sell as part of an out-grower scheme, which was not linked to project activities. Nevertheless, there was a 15% increase in income from primary staple crops during the project, due in most part to the increased maize income, and the project's introduction of ginger to local farmers also contributed with an additional 54,960.83 UGX to the annual income of 2023. Of those engaged, 100% of women in the Kasenene PFOA, 97% in Kidoma-Bulimya PFOA and 80% in Bulyango PFOA, perceived an increase in income (Annex 9b). 0.5: Membership across the 3 PFOAs has increased from 620 in Yr1 to 1,082 in Yr3 (Annex 27d). Membership of women is now greater than that of men (495M:587F / 46%:54%) (Annex 27d). 0.6 At project end, 90% of women reported an improvement in wellbeing, 9% reported that their wellbeing stayed the same, and 1% reported a decrease in wellbeing. For men, 86% reported an improvement and 14% reported that it stayed the same (Annex 9b).
Outputs 1: PFOA members have the knowledge and skills to support their peaceful coexistence with chimpanzees in two forest corridors, increasing secure habitat contiguous to four protected areas.	1.1 At least 1,000 people across both corridors trained in HWC management, threat identification and threat monitoring. 1.2 At least 75% of the PFOA membership report a positive/better/improved perception of chimpanzees and about their coexistence in the landscape by EoP. 1.3 At least 75% of PFOA membership reports increased capacity in human-chimp conflict mitigation strategies by EoP. 1.4 Chimpanzees and other primates' use of the corridors remains stable for the duration of the project. Chimpanzees and other primates observed using agricultural/agroforestry	See section 3.1: 1.1: 520 (367M:153F) community members, from across both corridors, have been trained in HWC management (Annex 7a, 7b, 8c & 8d). 66 PFOA members (53M;13F) took park in knowledge exchange visits to learn about successful HWC mitigation strategies (Annex 7a, 7b). 136 (116M:20F) community members have been trained in threat identification and threat monitoring (Annex 41). 1.2: 71% of 306 PFOA members (147M:159F) now report a positive (50%) or very positive (21%) perception of chimpanzees in the area (Annex 9b), compared to a baseline of 49% a positive (24%) or very positive perception (25%) (Annex 9a). 1.3; 82% of 306 PFOA members (147M:159F) report that their ability to deal with chimpanzee conflict has improved over the past 3 years (Annex 9b). 1.4 Chimpanzee sighting rates, and rates of sighting of other primates, have remained stable or slowly increased throughout the duration of the project (Annex 10). Comparison between chimpanzee use of agricultural/agroforestry land and riverine corridors has not been possible (see section 5).

Project summary	Measurable Indicators	Progress and Achievements
	land reduces by EoP, whilst their observed use of the corridors increases by EoP.	
Activity 1.1: Support each PFOA to share lessons learned and approaches to HWC management (incl deterring buffer zones, native fruit trees attracting primates)		Completed: Across two visits, a total of 66 PFOA members (53M:13F) visited Kasongoire Parish and exchanged knowledge with Kasongoire Community Development Association (KACODA) members on buffer zoning and other HWC mitigation strategies (Annex 7a, 7b)
Activity 1.2: Training and raising awareness for each PFOA membership on specific HWC mitigation techniques (i.e. planting non-palatable crops for buffer, interactions human-primates, chimp scouts)		Partially completed: Overall, 536 PFOA members (401M:135F) were trained in HWC management, threat identification and monitoring. 334 (232M;102F) community members, from across both corridors, were provided with training in HWC management (Annex 8c, 8d). 66 PFOA members (53M;13F) took park in knowledge exchange visits to learn about successful HWC mitigation strategies (Annex 7a, 7b) and two radio talk shows (Annex 8a, 8b), which included messaging on HWC mitigation, have been held on radio stations that have a listenership of 80,000. A total of 136 (116M:20F) community members, from across both corridors, have been trained in threat identification and threat monitoring (Annex 41). The target of 1,000 was not met in part because of restrictions associated with the Covid-19 pandemic, the rapid increase in PFOA member numbers and limited resources.
Activity 1.3: Regular & systematic community threat monitoring across the corridors		Completed: Since November 2020, systematic community-based monitoring of chimpanzee threats has been ongoing (Annex 8e).
Activity 1.4: Household Survey (pre/post), which includes the perception of chimpanzees and their coexistence in the landscape		Completed: Household surveys, including questions on perceptions of chimpanzees and coexistence in the landscape, were conducted in Yr1 (Annex 9a) and Yr3 (Annex 9b)
Activity: 1.5: Monthly community chimpanzee/primate monitoring		Completed: Since April 2021, 130 PFOA members (110M, 20F) have been undertaking systematic community-based monitoring of chimpanzee sightings (Annex 10).
Output 2: Critical riverine areas on private lands reforested with native species by PFOA members, trained and knowledgeable in reforestation techniques.	2.1 Capacity of PFOA members (45% women) increased through a series of (estimated) three trainings on reforestation techniques by the end Q2 Y2. 2.2 No. of ha (minimum target 90 ha) of private land reforested with indigenous tree species by EoP.	See section 3.1: 2.1: 199 PFOA members (136M:63F = 32% women) trained in reforestation techniques (Annex 13c). 2.2: 89ha of private land has been planted with indigenous tree species. However, due to pests, weeds and seasonal flooding, of the planted area, only 51.8ha had trees growing by end of project (Annex 12). A further 113.2ha under assisted natural regeneration (Annex 12).

Project summary	Measurable Indicators	Progress and Achievements
	2.3 Number of indigenous tree seedlings planted by PFOA members on riverine buffer land by EoP.	2.3: 103,585 indigenous tree seedlings have been planted by PFOA members on riverine buffer land (Annex 13d, e, f, g, h, i;).
Activity 2.1: Training of trainers of PFOA selected group for Participatory Land Use Planning activities		Completed: Training of trainers approach used to train 20 (15M:5F) PFOA members on Participatory Land Use Planning (PLUP) (Annex 11). Each person who received training then trained 10 additional community members. A total of 220 PFOA members (150M:70F) have been training in PLUP and progress of all trainees is being monitored on a monthly basis.
Activity 2.2: Baseline measurement of existing riverine forest cover		Completed: 190 hectares mapped: 25ha boggy, 90ha planned (initially) to be restored, and 75ha left for natural regeneration (Annex 42). Because of impact of seasonal flooding (Annex 12), an additional 37.2 hectares has now been allocated for natural regeneration.
Activity 2.3: Reforestation planning with communities and JGI		Completed: Initial planning for restoration was conducted in March 2021 with 95 PFOA members (68M:27F) (Annex 13a). From this, a reforestation plan was developed (Annex 13b).
Activity 2.4: Purchase of indigenous tree seed		Completed: Guided by the reforestation plan, tree seed for raising at the established community nurseries were purchased (Annex 13b, 14). This included: seven indigenous species: *Measopsis eminii* (15kgs), *Sesbania sesban* (15kgs), *Terminalia superb* (15kgs), and *Grevillea robusta* (5kgs). *Cordia diversforlia* (15kgs), *Chrysopylum alibidaum* (3kgs) and *Ficus exasperate* (3kgs).
Activity 2.5: Establishment of indigenous tree seedlings		Completed: Four community nurseries established and 211,072 tree seedlings raised for both agroforestry and reforestation planting (Annex 14, 15a, 15b, 15c).
Activity 2.6: Seedling distribution		Completed: 229,916 tree seedlings distributed for planting both on-farm and in riverine areas (Annex 16a, 16b,16c, 16e, 16d, 16f, 16g, 16h).
Activity 2.7: Seedling survival rate monitoring (@ 6 months post-distribution)		Completed: Seedling survival rate of 73% recorded, which is above the 70% average survival rate for the region (Annexes 17a, 17b, 17c).
Output 3: PFOA member capacity built in agroforestry systems and land use planning.	3.1 By EoP, 85% of PFOA members have been trained in one or more relevant agroforestry system(s). 3.2 95% of trained PFOA members adopt land-use planning on their own lands by EoP. 3.3 By EoP crop yields from combined agroforestry-staple crop systems equal	See section 3.1: 3.1: 728 (356M:372F) PFOA members trained in one or more relevant agroforestry system(s) (Annexes 8d, 11, 19a, 19b, 19c, 19d, 22iv, 25f). This accounted for 67.3% for PFOA members (1082[495M:587F]). 3.2: 90% of the 220 farmers trained (150M:70F) in implementing farm plans have adopted land-use planning on their own lands (Annex 21). Through training of the trainer approaches, uptake of land-use planning has significantly expanded beyond those provided with training. In total, 342 (223M:119F) community members are using farm plans at household level (Annex 36).

Project summary	Measurable Indicators	Progress and Achievements
	or exceed staple crop yields prior to the introduction of agroforestry trees. 3.4 80% of PFOA members participating in timber agroforestry report a 20% increase in fuelwood/fodder/charcoal self-sufficiency by EoP	3.3: Staple crop yields increased by 14.39% compared to the baseline, while cash crop yields varied dependent on the crop (Annex 9b). 3.4: 76.5% of PFOA members participating in timber agroforestry report an improvement in their ability to supply timber/fuel/fodder (Annex 9b). Of those, 70.1% of women and 71.8% of men report being able to secure 20% or more fuelwood/fodder/charcoal, compared to three years ago. Self-sufficiency is expected to continue to improve with time.
Activity 3.1: Design and roll out baseline household survey		Completed: A baseline household survey was conducted in Yr1 with 298 participants (214M,84F).
Activity 3.2: Community co-design workshop for agricultural interventions		Completed: In Yr1 a community workshop, attended by 191 (122M, 69F) members from across three parishes, was held to co-design agricultural interventions (Annex 18b). Additional community workshops to inform project planning were held in May 2021, involving 101 people (68M: 33F) from the three focal parishes to inform project planning (Annex 18c).
Activity 3.3: Participatory Land Use Planning (PLUP) training of trainers (with 2.1)		Completed: Refer to 2.1.
Activity 3.4: General agroforestry systems training curriculum delivered		Completed: 728 (356M:372F) PFOA members trained in one or more relevant agroforestry system(s) (Annexes 8d, 11, 19a, 19b, 19c, 19d, 22iv, 25f).
Activity 3.5: Training of trainers on the PMSD approach (with 4.1)		Completed: Training of trainers approach used to train 20 PFOA members (15M: 5F). on participatory market system development (PMSD) (Annex 20).
Activity 3.6: Establish one additional seedling nursery		Completed: Four community tree nurseries were established (Annex 40).
Activity 3.7: Establishment and growth of agroforestry tree seedlings		Completed: Refer to 2.5, 2.6, 2.7.
Activity 3.8: Targeted distribution of seedlings		Completed: Refer to 2.5, 2.6.
Activity 3.9: Seedlings survival rate monitoring (@ 6 months post-distribution)		Completed: Refer to 2.7.
Activity 3.10: Monitoring of adoption of the participatory PLUP through a random selection of PFOA members		Completed: A total of 220 PFOA members (150M:70F) have been trained in PLUP and progress of all trainees is being monitored on a monthly basis (Annex 11). By end of the project, 342 (223M, 119F) community members from the three parishes were using farm plans at household level.
Activity 3.11: EoP household (HH) survey to monitor change in yields, livelihoods and fuelwood use		Completed: An EOP household survey was conducted in Yr3 with 306 participants (147M:159F).
Output 4. PFOA members involved in agroforestry-based market development report an improved wellbeing and	4.1 By Year 1, Steps 1-7 of the PMSD roadmap (see references) completed with 450 women and 550 men, three traders and three buyers during various	See section 3.1: 4.1: Steps 1-7 completed with 813 PFOA members (422M, 391F) and a mutually agreed action plan has been developed (Annex 22e).

Project summary	Measurable Indicators	Progress and Achievements
increased income from diversified livelihood activities.	stages of activities, and mutually agreed action plan developed. 4.2 By Year 3, at least one enterprise that procures and markets at least one agroforestry product (likely ginger) from the PFOA members established. 4.3 By Year 3, PFOA members involved in agroforestry and conservation enterprise see their agricultural income increase by 15%. 4.4 By the end of the project, there are at least three established buyers for the enterprise product. 4.5 Number of economically beneficial trees planted on agricultural land by EoP.	4.2: One enterprise, procuring and marketing ginger, has been established (Annex 10a, 10b). One company (African Spices Uganda Ltd) has entered into a buyer contract with the PFOAs to supply dried and clean ginger (Annex 23b). A second company (Biofresh) is working with PFOA members through a certification process for organic farmers before contracting them, and a third company (Amri) has been identified.4.3: Agricultural income increased by 21% over the course of the project, from an annual average per household of 3,375,881 UGX to 4,070,385 UGX (Annex 9b). Likely that the increase can only be partly attributed to this project (see Outcome Indicator 0.4, above). 4.4: One company (African Spices Uganda Ltd) has entered into a buyer contract with the PFOAs to supply dried and clean ginger (Annex 23b). A second company (Biofresh) is working with PFOA members through a certification process for organic farmers before contracting them, and a third company (Amri) has been identified. 4.5: 126,858 economically beneficial trees have been planted on-farm (Annex 16a, 16b,16c, 16e, 16d, 16f, 16g, 16h).
Activity 4.1: Training of trainers on the PMSD approach		Completed: Refer to 3.5.
Activity 4.2: Series of workshops and PFOA meetings focusing on Product Selection (step 1 of PMSD). This would include prioritisation of staple crop interventions to maximise yields		Completed: Meetings with 191 PFOA members (122M:69F) were conducted to select and prioritise staple crops and commercial crops (Annex 18).
Activity 4.3: Market research of the selected products focusing on district, national level and international market as appropriate		Completed: Rapid market study conducted in Hoima, Masindi and Kikuube districts central markets (Annex 22a). Data from this informed the value chain development process.
Activity 4.4: Cultivation of selected crop (most probably ginger) in demonstration plots to train farmers in cultivation techniques and to see for themselves the crop yield		Completed: 30 PFOA members (14M:16F) were provided with training and ongoing support for ginger cultivation, and each supported with two sacks of ginger seed (Annex 25a). Additional technical support provided during cultivation and harvesting. By the end of March 2021, all farmers were drying ginger in preparation for the market.
Activity 4.5: Developing a strategic plan and design for market system development to integrate and balance conservation and sustainable livelihood activities (step 3 of PMSD)		Completed: an initial stakeholders meeting was conducted in Yr1, but attendance limited by Covid-19 restrictions (Annex 22d). In Yr2, when restrictions eased, a multi-stakeholder workshop (28 participants; 20M:8F) was organised to create the strategic action plan (Annex 22e).
Activity 4.6: Community level preparation and empowerment for multi-stakeholder workshop (step 4 for PMSD)		Completed: 24 PFOA members (16M:8F) from the conservation enterprise market committees were trained on conservation enterprise buyer contract negotiation

Project summary	Measurable Indicators	Progress and Achievements
		(Annex 23a), which enabled them to negotiate and sign a contract with Africa Spices Uganda Limited (Annex 23b).
Activity 4.7: Engaging with the private actors along the supply chain through one-to-one meetings (step 5 of PMSD)		Completed: Nine agribusiness companies were engaged (Annex 24a, 24b, 24c, 24d) and three expressed clear interest in establishing market linkages with the PFOAs. Additionally, two regional markets (Masindi/Hoima main markets) (Annex 2a), and two individual bulk buyers of ginger from Kampala Owino main market have been engaged (Annex 24g). In May 2022, additional market linkages meetings were held with agribusiness companies (KK Produce Exporters, Tropical Dynasty Fresh Produce Exporters, Altus Foods, and Jay Fortune Company) (Annex 24e, 24f, 24g). Beyond the project lifetime, there is an ambition to develop an international supply chain that provides a fair price for sustainably sourced produce.
Activity 4.8: Multi-stakeholder workshop to bring PFOA members, traders, and companies together to share knowledge across the supply chain actors and recognise issues (step 6 of PMSD)		Completed: Refer to 4.5
Activity 4.9: Formulation of participatory action plan – issues, what needs to be done and the benefits that will be accrued (step 7 of PMSD)		Completed: A multi-stakeholder workshop (28 participants; 20M:8F) was organised to create the strategic action plan (Annex 22e).
Activity 4.10: After having met supply chain actors (activity 4.8), interested PFOA members adopt cultivation of the selected product		Completed: Refer to 4.4
Activity 4.11: Agriculture extension and support provided to PFOA members for cultivation of the selected crop		Completed: Refer to 4.4
Activity 4.12: Following up on activity 4.9, implementing the participatory action plan from the workshop		Completed: Actions from the PMSD plan action plan has been implemented. Farmer recruitment into organic farming was initiated by BioFresh (Annex 25g). African Spices Ltd trained train 15 ginger farmers (12M:3F) in post handling (Annex 25d). On buying of ginger, negotiation meetings with African Spices were held and prices agreed (Annex 25h).
Activity 4.13: Organising PFOA members under conservation enterprise to market the selected produce		Completed: The three PFOAs have formed marketing committees (Annex 26a), each comprising of five members: two ginger farmers, two PFOA executive members, and one committee member. The 15 committee members (12M:3F) were trained on their roles and responsibilities and the requirements of contract farming agreements for future negotiations with agri-business (Annex 26a, 26b, 26c).
Activity 4.14: Developing a governance structure of the conservation enterprise with membership rules and benefit sharing among the PFOA members involved		Completed: Governance structures (Annex 26a) and benefit sharing rules (Annex 26b) have been agreed for the marketing committees.

Project summary	Measurable Indicators	Progress and Achievements
Activity 4.15: Training PFOA members on bookkeeping practices and management of the enterprise		Completed: 151 PFOA members (96M:55F) were provided with training to improve knowledge and capacity to maintain financial records (Annex 26d). Responding to growth in PFOA membership, in Yr3 311 new VSLA members (176F, 135) from across the three PFOAs were trained in the VSLA methodology (Annex 26e).
Activity 4.16: Facilitating meetings with potential buyers to establish market linkage for the selected product		Completed: Over 10 market linkage meetings for ginger product have been conducted with potential buyers in Hoima, Masindi and Kampala Markets (Annex 24a, 24b, 24c, 24d, 24e,24f, 24g).
Output 5. Capacity and governance of three PFOAs are improved; PFOAs document experiences and participate in learning exchanges with other actors of NARCG across the Northern Albertine Rift.	5.1 70% of men and 70% of women in each of the PFOAs perceive an improvement in the management of the PFOAs by Y3 against Y1 baseline. 5.2 Farmer exchange days take place (two in each corridor) with other farms and corridor farmers in Y2 and Y3 to inform activities and share lessons. 5.3 Annual summary of progress is shared with NARCG for input and feedback. 5.4 Annual summary of progress is shared with local representatives of NFA, UWA and Ministry of Agriculture (MoA).	See section 3.1: 5.1: In Kasenene PFOA, 98% of males perceive a positive improvement in PFOA management, and 100% of females; in Kidoma-Bulimya PFOA, 95% of males and 97% of females; and in Bulyango PFOA 81% of males and 80% of females (Annex 9b). 5.2: 6 farmer exchange days took place over the project period (Annex 28b, 7a, 7b). 5.3 / 5.4: Annual summaries of progress have been shared with NARCG members, NFA, UWA and focal points within the Ministry of Agriculture (Annex 39a, b, c).
Activity 5.1: Governance assessment (incorporate with Household baseline)		Completed: Annual assessments conducted for all the three PFOAs using the code of good governance self-assessment tool (Annex 27a, 27b, 27bi). Assessments involved: 31 PFOA members (23M:8F) in Yr1; 55 PFOA members (41M:14F) in Yr2; and 137 PFOA members (78M:55F) in Yr3.
Activity 5.2: Capacity Needs Assessment – PFOA leadership (potential review of constitution to capture the enterprise and agricultural development coming under PFOA remit)		Completed: Capacity needs assessments were undertaken as part of governance assessments (Annexes 27a, 27b).
Activity 5.3: Combine governance and capacity needs for action plan to enhance PFOA effectiveness		Completed: Action plans were agreed for each PFOA (Annex 27a, b). Resulting actions included a review of the constitution of Kidoma PFOA (Annex 27c), and training in record keeping and book-keeping (Annex 26d).
Activity 5.4: Peer to peer village level farmer exchange		Completed: 30 (19M:11F) pilot ginger farmers, visited a ginger growing business in Wakiso District (Annex 28b) and, across two visits, a total of 66 PFOA members (53M:13F) visited Kasongoire Parish and exchanged knowledge with Kasongoire

Project summary	Measurable Indicators	Progress and Achievements
		Community Development Association (KACODA) (Annex 7a, 7b). A peer-to-peer village farmer exchange was also conducted between 11 model farmers (9M: 2F) from Bulyango and Kasenene PFOAs (Annex 28c).
Activity 5.5: Survey of non PFOA members as part of the inception phase and repeated by EOP to determine reasons why they are not joining		Completed: Surveys undertaken in Yr1 (Annex 29a) and Yr3 (Annex 29b). In Yr1, a lack of information on PFOAs was the main reason cited for non-membership. In Yr3, whilst membership has significantly increased, main reasons for non-membership were an inability to save money and limited land to plant trees on.
Activity 5.6: Compile lessons learned in case studies to be shared with all relevant stakeholders		Completed: Compilation of lessons learnt have been finalised and shared with different stakeholders at national level (Annex 39a, b, c). Dissemination of the lessons learnt will continue post project.
Activity 5.7: Participatory Impact assessment to measure the impact of the project on household agriculture incomes.		Completed: A Participatory Impact Assessment was undertaken at the end of Yr3 with selected PFOA members (15M:15F) to evaluate the impact of the project on community wellbeing (Annex 31).

Annex 3 Standard Indicators

Table 1 Project Standard Indicators

Indicator number	Darwin Initiative Standard Indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A01	Number of people from key national and local stakeholders completing structured and relevant training	Number of people across both corridors trained in HWC management, threat identification and threat monitoring.	People	Gender	136 (96M:40F)	66 (53M:13F)	334 (232M:102F)	536 PFOA members (401M:135F)	1,000
DI-A03	Number of local/national organisations with improved capability and capacity as a result of project.	Men and women in each of the PFOAs perceive an improvement in the management of the PFOAs by Y3 against Y1 baseline.	Local organisations	None	N/A	N/A	3	3	3
DI-A05	Number of trainers trained reporting to have delivered further training by the end of the project	Number of trainers trained in Participatory Land Use Planning delivery further training	People; number trained	Gender	20 trainers trained (15M, 5F)	N/A	220 PFOA (150M:70F) members trained by trainers	20 trainers trained (15M, 5F) 220 PFOA (150M:70F) members trained by trainers	20 N/A
DI-A12	Annual turnover of established sustainable livelihood enterprises in the project's final year	Average annual income (per person) from the chimpanzee compatible ginger enterprise	UGX/year	None	0	147,817.89 UGX	54,960.83 UGX	n/a	n/a
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e.,	PFOA membership	People	Gender	620 (372M: 248F)	193 (52M:141F)	269 (71M 198F)	1,082 (495M:587F)	1,000

Indicator number	Darwin Initiative Standard Indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	participation in Governance/citizen engagement).								
DI-B10	Number of individuals / households reporting an adoption of livelihood improvement practices as a result of project activities	Percentage of those training in land use planning, implementing designed farm plans	%	None	N/A	90%	N/A	90%	95%
DI-D15	Net change in incidences of human wildlife conflict	Perceptions of chimpanzees living in the area	% people	Gender	Very positive: F 26%/ M 24% Positive: F 23% / M 25% Neutral: F 13% / M 14% Negative: F 32% / M 31% Very negative: F 6% / M 6%	N/A	Very positive: F 23% / M 19% Positive: F 52% / M 47% Neutral: F 14% / M 20% Negative: F 11% / M 14% Very negative: F 0% / M 0%	N/A	75% of PFOA members report a neutral or favourable attitude
DI-D12	Area of degraded or converted ecosystems that are under active restoration	Area of critical riverine land reforested	Hectares	N/A	0	72	17	89 (58.1)	90

Indicator number	Darwin Initiative Standard Indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-D16	Number of households reporting improved livelihoods.	Average increase in annual agricultural household income	Income in UGX % increase	Crop type (cash crop vs staple crop)	Cash: 913,588.26 UGX Staple: 2,462,292.31 UGX	Cash: 1,108,253.12 UGX Staple: 2,514,357.74 UGX	Cash: 1,234,961.32 UGX Staple: 2,835,423.45 UGX	% increase Y1-Y3: Staple: 15% Cash: 35%	15% increase overall

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Community-led sustainable finance mechanism for conservation in Uganda	Oryx	Rogers Niwamanya, Silver Tumwa, Cath Lawson, Kiran Mohanan (2022)	Male	Ugandan	Cambridge University Press	https://www.cambridge.org/core/journals/oryx/article/communityled-sustainable-finance-mechanism-for-conservation-in-uganda/7261998B0EC7E65A76EE1AE3FA77444E

Annex 5 Supplementary material (optional but encouraged as evidence of project achievement)

See Dropbox link:

Checklist for submission

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