

## Darwin Initiative Main and Post Project Annual Report

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

**Submission Deadline: 30<sup>th</sup> April 2019**

### Darwin Project Information

Project reference	25-020
Project title	Supply and Demand: Restoration in Uganda for People and Biodiversity
Host country/ies	Uganda
Lead organisation	Botanic Gardens Conservation International
Partner institution(s)	Tooro Botanical Gardens International Union for Conservation of Nature
Darwin grant value	£318,076
Start/end dates of project	01/07/2018 – 31/03/2021
Reporting period (e.g., Apr 2018 – Mar 2019) and number (e.g., Annual Report 1, 2, 3)	July 2018 – March 2019 Annual Report 1
Project Leader name	Kirsty Shaw
Project website/blog/Twitter	<a href="http://www.bgci.org">www.bgci.org</a>
Report author(s) and date	Kirsty Shaw and Said Mutegeki, 30 <sup>th</sup> April 2019

## 2. Project rationale

The Uganda Forest Landscape Restoration (FLR) Opportunity Assessment, published by the Ugandan government and IUCN (2016), states that 17% of Uganda’s land is severely degraded, 30% highly degraded and 31% moderately degraded. This has serious implications for Uganda’s long-term development and causes the loss of 4-12% of Uganda’s GDP annually (Bolwig, 2002). Average monthly household income in rural Uganda is US\$45 (UBOS, 2014). There is limited job creation for the poorest households, and employment opportunities for women are particularly restricted (World Bank, 2016).

Under the Bonn Challenge, Uganda has pledged to restore 2.5 million ha of land by 2020. The Uganda FLR report aims to plant 200 million trees in priority areas to improve human well-being and ecological productivity.

This pledge represents a huge opportunity for delivering species conservation, increasing biodiversity on farms, and delivering genetically and taxonomically diverse ecological restoration that benefits people and wildlife. Uganda has 849 native tree species; 30 are globally threatened.

However, currently there is:

- i) Little understanding of the benefits of delivering genetically biodiverse FLR (and the risks of not doing so)
- ii) High demand for, and availability of, exotic species

- iii) Limited availability of native seeds and seedlings due to a lack of knowledge about how to propagate native species among community nurseries, farmers and government
- iv) No up-to-date forest policy, and hence, no mandate for planting indigenous species.

As a result, there is a risk that exotic species from government nurseries will be used instead, delivering species-poor FLR that misses biodiversity conservation and employment opportunities for rural people.

This risk was identified by project partners who have extensive knowledge and experience from working on forest conservation and restoration projects in Uganda.

To overcome this risk, the project has set up four nurseries next to areas identified as priorities for forest restoration in the FLR Opportunity Assessment. Locations of the nurseries are given below. This project will deliver biodiversity conservation and livelihood improvements by employing people from rural areas to collect seed and cultivate native seedlings in the four nurseries, that will produce a diverse mix of indigenous seedlings. Outreach activities throughout years 2 and 3 will drive demand for native species, making the nurseries self-sustainable by the end of the project.

Nursery site	Latitudes	Longitudes	Elevation
Mbale nursery site	N01.06411	E034.19161	1154m
Lwamunda nursery site	N03.34430	E032.34861	1215m
Kagadi nursery site	N020.1847	E035.04732	1206m
Kirimirire nursery site	N02.19799	E099.83833	1375m

### 3. Project partnerships

This project is co-led by Botanic Gardens Conservation International (BGCI), Tooro Botanical Gardens (TBG) and the International Union for Conservation of Nature (IUCN). Additional project partners include the National Forestry Authority (NFA), the Ministry of Water and Environment (MOW&E) and the National Environment Management Authority (NEMA). Representatives from all partner organisations sit on the project Steering Committee and help with project planning and monitoring and evaluation.

BGCI and TBG have worked together on forest restoration projects in Uganda since 2012 and both parties have been involved in all project activities in year 1. IUCN and MOW&E were brought into the current project as they produced the FLR Opportunities Assessment for Uganda and are therefore key implementing partners. In year 1, IUCN and MOW&E helped with selection of sites for nursery establishment.

TBG is situated on land owned by NFA and has a close working relationship with them. In year 1, NFA helped with selection of sites for nursery establishment, helped to deliver training on seed collection and propagation and nursery management. Representatives from their GIS team also participated in the exercise to delineate seed collection zones.

IUCN and NEMA will be more fully involved in the project in years 2 and 3, by helping to deliver the national and regional forums on use of native species, and advising on how this project can serve as a model that can be applied in other countries that have made Bonn Challenge pledges to ensure they are delivering species diverse FLR.

Additional partners were also identified as important stakeholders, including the Uganda Wildlife Authority, who manage protected areas in Uganda. Meetings have been held with them to inform them of project aims and activities, as some protected areas are target areas for seed collection. In addition, representatives from the Botany Department of the University of Makerere have participated in the project, by contributing to the workshops on nursery siting and delineating seed zones. These partners will continue to be involved in the project in years 2 and 3.

## **4. Project progress**

### **4.1 Progress in carrying out project Activities**

*Output 1: Improved information generated on more than 150 native tree species, including improved information on distribution, wild populations and seed availability and propagation protocols improved / developed.*

Measures were put in place to ensure the project got off to a good start. This included holding a project launch workshop in October 2018 with 23 participants, including project partners, government representatives and NGOs involved in tree planting. During the launch event, the project plan was communicated and the project team received feedback on proposed actions and proposed location of nurseries. Relevant authorities from the MOW&E and NFA attended, and follow up meetings were held to secure consent to carry out project activities. A report from the project launch is provided in Annex 1.

Representatives from the MOW&E, NFA and NEMA were invited to, and attended, the first Steering Committee meeting, which took place in October, following the project launch. At the Steering Committee meeting, representatives agreed upon a methodology for project monitoring and evaluation, which will involve regular meetings of the Steering Committee and monitoring progress against the project activities and the logframe. Additional representatives were invited to sit on the Steering Committee. The committee will help resolve any problems that arise in project implementation or meeting targets. A report from the Steering Committee meeting is provided in Annex 2. The BGCI project leader had to cancel a scheduled trip to Uganda in February 2019, so the next meeting of these groups was postponed to June 2019.

To ensure successful delivery of year 1 activities, detailed briefs were written for consultants. Two consultants were appointed by BGCI: a Plant Conservation Project Consultant in the BGCI Africa office, Nairobi, to help manage the project, and Andrew Bower, a geneticist from the United States Forest Service (USFS), to help delineate seed collection zones in Uganda. Two consultants were appointed by TBG: Kaahwa Alex from Mpanga Growers Tea Factory, an agribusiness consultant, to carry out a baseline survey of demand for native tree species, and Professor Moses Muhumuza lecturer at Mountains of the Moon University (MMU) and director of the Centre for Action and Applied Research for Development (CARD) Uganda Limited, to carry out a baseline socio-economic survey.

Andrew Bower, spent one week in Uganda with the project team. Meetings were held with NFA to review existing climatic maps for GIS work. The team also visited degraded and “pristine” forest areas and training was provided by Andrew to the project team on identifying and mapping mother trees for seed collection. (Activities of the consultants appointed by TBG are reported under Outputs 3 and 4). Preliminary seed zone maps were produced by the consultant (see Annex 4). These will be refined and used to guide seed collection.

NFA and TBG produced a list of target species based on suspected / known presence in forests targeted for seed collection, historic presence in priority restoration areas, suitability for restoration (focusing on pioneer species for initial plantings), conservation value (IUCN status) and utility to people. Existing propagation information for these species was collated from literature and TBG nursery staff. The list of species is provided in Annex 5 and propagation information is provided in Annex 6, and will be refined and protocols improved throughout the project.

*Output 2: Genetically diverse seedlings of 150 native tree species available for purchase from nurseries established in high priority restoration areas*

TBG conducted prospective site visits to degraded areas for pilot studies and collected information from each site, based on a set of defined criteria for selecting sites for nursery establishment. The results of the site visits were then presented and discussed by a nursery siting working group which included representation from BGCI, TBG, NFA, IUCN, NEMA, MOW&E and NGOs. The final sites for nursery establishment were selected as follows; Mbale Central Forest Reserve, Lwamunda Central Forest Reserve, Kagadi Central Forest Reserve and Kirimirire Local Forest Reserve. The report on candidate site assessment is provided in Annex 3. Visits to selected sites were then conducted to hold meetings with community members and local leaders, to identify people who would be trained and employed through this project.

With guidance from appointed contractors, 40 people from rural communities constructed the four nursery infrastructures. This included site clearance and levelling, construction of barbed wire perimeter fences, construction of pit latrine facilities, construction of mud and wattle stores, construction of shaded areas with metallic poles and making germination beds.

*Output 3: Increased demand for genetically and species diverse seedlings*

All activities contributing to this activity will take place in years 2 and 3. In year 1, a baseline survey of demand for native seedlings within a 10km radius of the four nursery sites was undertaken (see Annex 7 for the consultant's report).

*Output 4: 104 people have increased capacity and improved livelihoods.*

A total of 60 people received training in seed monitoring and collection, at TBG, Kibale National Park and the NFA National Tree Seed Centre. Trainers were Noelia Roman and Kirsty Shaw from BGCI, Alislam Said Musa Mutegeki from TBG, Ochwo Joseph and Mugisha Alex from the NFA National Tree Seed Centre. For the remainder of the project, these people will receive payments to monitor seed set and collect seed from Central Forest Reserves, Local Forest Reserves, other forested areas and community farmlands.

Following the selection of appropriate sites for nurseries, 10 people from rural communities near each site (40 people in total) were trained in nursery establishment and propagation skills. Trainers included Alislam Said Musa and Richard Muhumuza from TBG, Christine Mugenyi from NFA and Herbert Migiro Ongubo from Brackenhurst Botanic Garden in Kenya. These trainings were held at the nursery sites in Mbale, Lwamunda and Kagadi Central Forest Reserves and Kirimirire Local Forest Reserve. Four nursery managers were identified from the trainees. These people were trained in business skills and marketing by Godfrey Ruyonga and Alislam Said Musa Mutegeki from TBG and Mr. Alex Kaahwa from Mpanga Growers Tea Factory, the marketing consultant for this project. The training was held at TBG, and TBG satellite sites.

Following training, 40 people of the trainees received payments for nursery construction, under the guidance of contractors. A report on training activities conducted is provided in Annex 8. A baseline socio-economic study was carried out to enable the impact of the project to be measured, which aims to employ 104 people at more than the average rural household rate. The report is being finalised and will be submitted following submission of the annual report.

## **4.2 Progress towards project Outputs**

Overall progress made to date is outlined for each project Output and evidence is provided in accompanying annexes.

*Output 1. Improved information generated on more than 150 native tree species, including improved information on distribution, wild populations and seed availability and propagation protocols improved / developed.*

During year 1, the baseline situation has been identified for this Output. This includes developing a target list of 150 species and gathering existing information on propagation protocols (see Annexes 5 and 6). In addition, 60 people have been trained to monitor seed set and to produce seed collecting calendars for target species. Areas for seed collection are being identified, based on preliminary seed zone maps that were produced in year 1 (see Annex 4). This will enable improved information to be generated for target species throughout the rest of the project.

In years 2 and 3, seed monitoring and collection teams will improve information on distribution and wild populations of target species, as well as record seed availability throughout the year.

Also in years 2 and 3, nursery teams will test existing propagation protocols and record alternative propagation methods used. Improved protocols will be published for species with existing information, and new protocols developed for species with no propagation information currently available.

The project team is happy with progress under this Output in year 1 and do not wish to add additional or alternative indicators at this stage. We consider the progress made to provide a good baseline against which project progress will be measured.

*Output 2: Genetically diverse seedlings of 150 native tree species available for purchase from nurseries established in high priority restoration areas*

In year 1, sites for nursery establishment were selected and four nurseries were constructed by community members, in collaboration with appointed contractors. Over the remainder of this project, seedlings will be produced from these nurseries.

The project team is happy with progress under this Output in year 1 and do not wish to add additional or alternative indicators at this stage.

*Output 3: Increased demand for genetically and species diverse seedlings*

All activities contributing to this activity will take place in years 2 and 3. In year 1, a baseline survey of demand for native seedlings within a 10km radius of the four nursery sites was undertaken, which found that most people obtain their seedlings from nurseries rather than collecting material themselves. It therefore it is recommended that the prices of the native tree seedlings produced should be made affordable. Among the native trees most demanded currently were *Prunus africana*, *Citropsis articulata*, *Melicia exelsa*, *Albizia coriaria* and *Markhamia lutea* (see Annex 7). This report establishes the baseline against which change in demand over the remainder of the project will be recorded.

The project team may wish to add additional or alternative indicators in years 2 and 3, when the main activities contributing to this Output will take place.

*Output 4: 104 people have increased capacity and improved livelihoods*

During year 1 of this project, 100 people received training (60 people including 25 women in seed collection and 40 people including 24 women in nursery techniques). Of the 40 people trained in nursery techniques, four were identified to be nursery managers and received additional training in business skills. Some of these people (40 people) obtained employment opportunities to construct nurseries in year 1. In years 2 and 3, trainees will continue to be employed through the project, to receive performance-based payments for seed monitoring, collection, propagation and seedling sales. Four additional people were identified to be trained as plot managers in years 2 and 3.

The project team is happy with progress under this Output in year 1. We may want to add an additional indicator that is linked to improved livelihoods as a result of people planting more indigenous species on their land. This indicator will be proposed and discussed at the next Steering Committee meeting.

### **4.3 Progress towards the project Outcome**

*Outcome: Supply and demand for genetically and species diverse planting material is increased through nurseries and seed collecting networks that employ >100 people, for biodiverse Forest Landscape Restoration in Uganda.*

The project team is satisfied with progress that has been made towards the project Outcome in year 1. Existing information has been gathered for target species, providing the baseline for measuring progress against Outcome indicator 0.1. Seed collectors and nursery workers have been trained to gather additional species-related information, including on species distribution, seed availability and optimum propagation techniques. This will enable improved information to be generated throughout the rest of the project.

Nursery infrastructures have been put in place to enable propagation of a genetically diverse supply of seedlings in years 2 and 3 (Output indicator 0.2).

As a first step towards increasing demand for genetically and species diverse seedlings (Output indicator 0.3) relevant government authorities and NGOs involved in restoration or tree planting in Uganda were invited to a project launch workshop to ensure they are aware of the project aims and activities, and that a supply of seedlings will be available to purchase from the nurseries. This group will be expanded and awareness raised further through years 2 and 3 of the project, when a national publicity campaign will be launched to promote the use of native species and availability of seedlings from the four nurseries. This will include a national forum and four regional forums.

104 people were identified in year 1 to be employed through this project, 51 of which were women, showing good progress towards Outcome indicator 0.4. 100 people received training

and the remaining four people will receive training in early year 2. From the total number of trainees, 40 people were involved in construction of the nurseries, ensuring trained community groups began to obtain an income from the project early on.

The project team is happy with the indicators in place and confident that the Outcome will be achieved by the end of the funding as a result of good groundwork being put in place during year 1.

#### **4.4 Monitoring of assumptions**

*Assumption 1: Technical challenges can be overcome for difficult species (BGCI's network of experts will help solve problems)*

An expert from the BGCI network was appointed to delineate seed collecting zones in year 1 and the consultant also provided training in identification and mapping of mother trees. Additional experts will be appointed in years 2 and 3 to help address technical challenges for propagating difficult species.

*Assumption 2: Employment opportunities (seed monitors, seed collectors and nursery workers) are appealing to communities.*

Community groups were keen to join seed monitoring, collecting and nursery groups, which indicates that employment opportunities will likely continue to be appealing to communities for the duration of the project and beyond.

*Assumption 3: Sustainable sources of wild seed can be identified for all target species. Propagation information can be obtained or new protocols developed for species that do not have protocols (up to half of target species). Propagation experts from BGCI's network will be mobilised to work on difficult species (in-kind support).*

This will be determined in years 2 and 3. Experts from BGCI's network will be brought in to support the project where needed.

*Assumption 4: New communities are receptive to nursery establishment.*

Community groups were receptive to nursery establishment. Sites were identified with the support of local forest officers, and communities to be involved in nursery groups were identified with the help of local leaders.

*Assumption 5: Demand can be created, to the extent that all seedlings are sold, and*

*Assumption 6: Seed sales are sufficient to continue employment.*

This will be determined in years 2 and 3. We are confident that this will be the case, as we have an exit strategy in place, which includes development of business plans for all nurseries and a national publicity and marketing campaign that will commence in year 2. The project is also already supported by a strong group of partners, both government and non-governmental.

#### **4.5 Impact: achievement of positive impact on biodiversity and poverty alleviation**

Activities have been carried out in year 1 to ensure that this project has a positive impact on both biodiversity conservation and poverty alleviation.

In relation to biodiversity, a list of target species for the project was developed in year 1, which includes 23 threatened species (Activity 1.3, see Annex 5). The project aims to collect seed from these species in years 2 and 3, to enable propagation of seedlings. This will enable expansion of conservation collections and recovery programmes to be initiated for threatened species. By producing a supply of species diverse and genetically diverse planting material, this project will enable restoration of resilient forests in Uganda, which will secure benefits for animal as well as plant diversity.

In relation to poverty alleviation, 104 people have been identified to receive paid employment opportunities through this project, 100 of them have received training so far (Output 4). This will have a direct positive impact on their income. The impact will be measured against the year 1 baseline, established by the socio-economic consultant (that report is being finalised and will be shared following submission of the annual report).

## **5. Contribution to the Global Goals for Sustainable Development (SDGs)**

The focus on creating a supply of and demand for biodiverse material for FLR by establishing nurseries and seed collecting networks, means that the project also contributes to several of the United Nation's Sustainable Development Goals (SDG).

*SDG 1 (no poverty) by improving the livelihoods of >100 people and SDG 8 (decent work and economic growth) through the creation of non-agricultural employment in rural communities:* In year 1, under Output 4, people were trained in seed monitoring and collection and nursery establishment and management, equipping them with the skills to be employed through the rest of the project. Payments were received by communities for nursery construction.

*SDG 13 (climate change) through facilitating the creation of more biodiverse landscapes which will have a greater capacity to adapt to a changing climate and SDG 15 (life on land) through delivering biodiverse FLR:* In year 1, under Output 1, a list of target native species was developed and propagation information gathered for these species. Under Output 2, four nurseries were established, and under Output 4, people were trained in seed collection and propagation techniques. In years 2 and 3, trainees will be employed to produce a diverse supply of native seedlings, which will be marketed and sold (Output 3) for biodiverse restoration which restores degraded land and decreases biodiversity loss.

*SDG 5 (gender equality) by ensuring that women are employed and empowered by the project.* In year 1, 51 women were trained (Output 4), who will be employed through this project in years 2 and 3.

## **6. Project support to the Conventions, Treaties or Agreements**

The project, with its key objective to increase capacity for biodiverse FLR in Uganda, directly supports the Convention on Biological Diversity. The project contributes to addressing several Aichi Biodiversity Targets including: Target 5 by reversing land degradation and fragmentation and Target 14 by improving landscape resilience to ensure that essential ecosystem services are secured, Target 15 by increasing carbon sequestration through the planting of trees and woody plants, Target 12 by improving the conservation status of threatened species by reducing barriers for their inclusion in FLR, Target 9 by decreasing reliance on exotic species and Target 1 by demonstrating the value of the inclusion of native species in FLR.

In year 1, the project has taken steps to prepare for delivery of biodiverse FLR, and shift away from reliance on exotic species, by mapping seed collecting zones and developing a list of target species (Output 1), by establishing nursery infrastructures (Output 2) and by building capacity for seed collection and propagation (Output 4). NEMA (the CBD focal point) is part of the project Steering Committee. They will have a larger role in years 2 and 3 of the project, through their involvement in delivering national and regional forums to promote the use of native species in tree planting and restoration.

## **7. Project support to poverty alleviation**

The expected beneficiaries in this project are 104 people from rural communities close to sites where nurseries have been established. During year 1, 40 people from these communities received payments to help with nursery construction. 100 people received training in seed monitoring and collection (60 people, 25 women), propagation and nursery techniques (40 people, 24 women) and 4 people (2 women) were identified to receive training in management of demonstration plots early in year 2. This will enable the 104 people to receive payments for project activities (seed monitoring, collection, propagation, sales and plot management) in years 2 and 3, which will have a direct impact on their income. A socio-economic baseline survey was conducted in year 1, which will enable impact of the project to be measured at the end of year 3.

## **8. Project support to gender equality issues**

There is limited non-agricultural job creation for the poorest households in Uganda, and employment opportunities for women are particularly restricted. This project has identified 104

people to be employed through the project, including 51 women (25 women received training in seed monitoring and collection, 24 women were trained in propagation and nursery techniques and 2 women were identified to be plot managers). Employment opportunities will be provided to these women for the rest of the project, contributing to achievement of Output 4 of the project and Output indicator 0.4. A report from the year 1 training courses is provided in Annex 8.

## **9. Monitoring and evaluation**

The project team is primarily responsible for project monitoring and evaluation. Project members from BGCI and TBG are in touch every week via phone or email to ensure the project is on track. In addition, BGCI staff have travelled to Uganda on 3 separate occasions during year 1 (three visits from the Project Leader, who travelled to Uganda for a third visit in April 2019, as well as two visits from the consultant working with BGCI on project management).

The project team is ensuring that the suggested means of verification in the logframe are in place to demonstrate progress against the indicators and Outputs. In addition, a project Steering Committee was established in October 2018 to help monitor and evaluate progress. Following the initial meeting in October, TBG has kept Steering Committee members up to date with project progress by regularly meeting with representatives. At the first Steering Committee meeting, it was recommended that an International Technical Advisory Committee be put in place to help ensure that project Activities and Outputs are contributing towards the Outcome, and that the project is establishing a model that is globally relevant and can be applied in other countries carrying out FLR. The BGCI project leader had to cancel a scheduled trip to Uganda in February 2019, so the next meeting of these groups was postponed to June 2019. Project monitoring and evaluation will be improved through fuller engagement of the Steering Committee and establishment of the International Technical Advisory Committee in years 2 and 3.

## **10. Lessons learnt**

The project team has worked very well together which has helped secure good progress in year 1. This is the result of strong existing partnerships, including for example between BGCI and TBG, between TBG and NFA and between BGCI and NEMA.

Engagement of forest officers and environment officers was essential for nursery site selection, and engagement of local leaders greatly helped with selection of people to be involved in nursery and seed collecting groups. For example, the District Forest and Environment Officers of Ibanda District helped in the selection of most of the trainees from Ibanda for Kirimirire nursery and the district local government for Kagadi councillors also helped with identification of the local community people to be involved in the project at that site.

## **11. Actions taken in response to previous reviews (if applicable)**

The following actions have been taken in response to comments from the Darwin Expert Committee:

*Comment 1: It seems that aiming for 2020 targets may be overambitious: it would be good to see a realistic target for the project, rather than trying to fit the project into a timescale that appears too short.*

The project team discussed this comment and agreed to continue to work towards the seedling production and sales targets included in the application for funding. When seed collection and propagation activities commence, it will become clear if these targets are overambitious and they will be adjusted accordingly.

*Comment 2: It would have been useful to understand if indigenous seedlings can be sold for the same price as exotic seedlings and, if more expensive, how this risk will be mitigated.*

The indigenous trees need to be sold at a higher price than the exotic ones because the cost of raising the indigenous trees is far higher than the exotic trees. The marketing and outreach initiatives in years 2 and 3 will explain this and aim to increase demand for native species. If possible, the project may choose to lower the prices of native species initially, or provide some seedlings for free, so people can witness the benefits of planting native species, which will hopefully lead to increased demand for native species in future. The marketing survey shows an existing expectation that native seedlings will be sold at higher prices.



*Comment 3: It would be useful to include an Outcome indicator which reflects roll-out and uptake by others*

A consultant has been appointed to measure how demand for native species changes over the duration of the project. The project team discussed adding an additional Outcome indicator, but it was thought that uptake of others (which is understood to mean production of a higher number of indigenous seedlings by other nurseries that currently stock only exotic or a small number of indigenous seedlings) would likely not occur within the timeframe of the project. However, we agreed that this would be a good thing to monitor beyond the project timeframe. We also did not want to add another reporting indicator, due to comment 4 about the number of outputs and indicators already in the logframe.

*Comment 4: The logframe contains a large number of outputs and indicators, which may make project reporting burdensome.*

This report represents the first time that outputs and indicators have been reported against. It was not burdensome for the reporting team on this occasion, but many of the activities are not scheduled until years 2 and 3. It is not thought that reporting will become too burdensome in future, as many activities will be reported as completed in year 1. However, if the Darwin Expert Committee members reviewing this proposal also consider there to be too many outputs and indicators, or too much repetition of activities across Outputs, we will review the logframe at the next Steering Committee meeting.

## **12. Other comments on progress not covered elsewhere**

Discussions on the best way to make payments for seed monitoring and collection were held in year 1, and three different methods were put forwards including i) mobile money payments from TBG to seed collectors ii) payments made to nursery managers and distributed to seed collectors, or iii) cash payments direct to each seed collector from TBG. However, the best way to pay these groups still needs to be decided upon and approved by the TBG board of directors, to ensure a fair method is implemented throughout the project. Seed monitoring efforts were also hindered by a lack of GPS units, which need to be purchased to enable them to carry out monitoring effectively. This requirement was overlooked when planning expenditure. These factors have resulted in an underspend of staff time budget intended for community groups to initiate seed monitoring in the final quarter of year 1. It is unlikely that this will have resulted in a loss of engagement of group members (but that may become evident in year 2) as some of these people have received payments for nursery construction and TBG continued to communicate and update groups to assure them that a decision will be made on payment method soon. A record of number of days spent has been kept and the payment methodology will be defined by mid May 2019 at the latest. We do not anticipate there being an underspend on this budget line for years 2 and 3, when the payment methodology will have been fully defined.

There is also an underspend for staff time contributed by IUCN. The international IUCN staff member to support this project did not visit Uganda during the project period, as per the initial project plan, and the end of year 1 Steering Committee meeting was postponed, which the local IUCN representative would have attended. Both the local Uganda IUCN office and the nominated international staff member to support this project are committed to providing more support to the project in years 2 and 3 and have already been involved in planning meetings for year 2, during April 2019.

A consultant was appointed by BGCI to support implementation of this project, acting as the Project Manager. The intention was to then take this person on as a BGCI staff member after the trial consultancy period. However, the appointed consultant did not spend as much time on this project as initially intended. This has resulted in an underspend in lead partner consultancy costs. A new person with more experience in project management will be appointed as a BGCI staff person, to ensure the intended amount of time is put into the project and risks to successful project achievement are minimised. Risks were mitigated in year 1 as the Project Leader spent more time on the project than initially planned. Interviews will take place in May 2019 and the appointed person will work under the Project Leader. An assessment of the new person's appointment will be included in the next six-month report.

### 13. Sustainability and legacy

The main effort to promote this project in Uganda in year 1 was the project launch, which introduced the project aims and activities to government and NGO representatives. Promotion will be scaled up greatly from year 2 onwards, when a national campaign will be launched to promote the planting of native species and purchase of diverse seedlings from the four nurseries established in this project. The project team will meet during the first quarter of year 2 to discuss content, messaging and promotion mechanisms. This will include a national forum and four regional forums, and promotional and marketing materials will be produced by the project team and nurseries, which will be disseminated widely.

Training materials used in year 1 were all provided to trainees in printed and soft copy to allow for continued reference and learning.

The project team deem the exit strategy to still be valid. Changes may be proposed in future project years.

### 14. Darwin identity

Recognition of funding has been made and the Darwin Initiative logo has been used in all presentations about this project, including a presentation delivered by the Project Leader at the Sub-Saharan Africa Forest Genetic Resources Programme (SAFORGEN) regional workshop in Ghana in April 2019, and presentations during the project launch in Uganda. There is a good understanding of the Darwin Initiative within Uganda, which is further helped through this project. The logo is also used on the project page on the BGCI website: <http://www.bgci.org/where-we-work/uganda/>. The logo will continue to be used in all promotional materials produced through the remainder of this project.

### 15. Project expenditure

**Table 1: Project expenditure during the reporting period (1 April 2018 – 31 March 2019)**

Project spend (indicative) since last annual report	2018/19 Grant (£)	2018/19 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
<b>TOTAL</b>				

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2018-2019

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
<p><b>Impact</b></p> <p>Forest Landscape Restoration in Uganda provides long term biodiversity conservation and sustainable employment benefits</p>		<p>A list of target species for the project was developed in year 1, which includes 23 threatened species. 100 people were trained in seed collection (60 people) and propagation and nursery techniques (40 people) to ensure a supply of target species is available from nurseries in years 2 and 3.</p> <p>In relation to poverty alleviation, 40 of the trainees have been employed so far to construct nurseries (Output 4).</p>	
<p><b>Outcome</b></p> <p>Supply and demand for genetically and species diverse planting material is increased through nurseries and seed collecting networks that employ &gt;100 people, for biodiverse Forest Landscape Restoration in Uganda.</p>	<p>0.1 Improved information available for 150 native tree species – information on distribution, populations, seed availability improved by the end of year 2, information on propagation protocols and growing conditions made available / developed / improved by the end of year 3.</p> <p>0.2 300,000 genetically diverse seedlings of 100 native tree species available for purchase from four nurseries established in high priority restoration areas, by end of year 2 and an additional 500,000 genetically diverse seedlings of 150 native tree species available by end of year 3.</p> <p>0.3 Increased demand for genetically and species diverse seedlings, sufficient that by the end of year 3 the nurseries are fully-funded by seedling sales.</p> <p>0.4 104 people (including at least 50% women) have increased capacity and</p>	<p>0.1 Existing information has been gathered for target species (see Annex 5 and 6). Draft seed zone maps have been produced (Annex 4).</p> <p>0.2 Four nursery infrastructures have been put in place.</p> <p>0.3 A baseline survey of demand for native species was carried out in the areas where the new nurseries have been established (Annex 7).</p> <p>0.4 104 people were identified to receive employment through this project and 100 people received training during year 1, 49% of which were women. 40 people were employed to help with nursery construction.</p>	<p>0.1 Seed collectors and nursery workers have been trained to gather additional species-related information (Output 4). Improved information will be generated throughout the rest of the project.</p> <p>0.2 Propagation of a genetically diverse supply of seedlings will take place in nurseries in years 2 and 3.</p> <p>0.3 A public awareness campaign will be launched. The consultant to help with this will be appointed in May 2019, following a planning meeting held in April 2019.</p> <p>0.4 A methodology for paying seed collectors will be defined by mid May 2019. Trainees will receive payments throughout the rest of the project.</p>

	improved livelihoods years 1 – 3, and after the project ends.		
Output 1. Improved information generated on more than 150 native tree species, including improved information on distribution, wild populations and seed availability and propagation protocols improved / developed.	<p>1.1. Project infrastructure established, including project management, employment of experts, full stakeholder engagement, acquiring Prior Informed Consent and Monitoring &amp; Evaluation methodology defined.</p> <p>1.2 Seed collection zones defined using forest and degradation maps (Figs 8 and 9, Uganda FLR report, p16 &amp; 17  <a href="https://portals.iucn.org/library/sites/library/files/documents/2016-076.pdf">https://portals.iucn.org/library/sites/library/files/documents/2016-076.pdf</a>) and working with a geneticist from BGCI network, within the first six months of the project.</p> <p>1.3 150 target species identified depending on suspected / known presence in collecting zones, historic presence in priority restoration areas, suitability for restoration (focus on pioneer species for initial plantings), conservation value (IUCN status – target 20 species) within first 9 months of project.</p> <p>1.4 Seed collecting calendars produced for 150 target species (end of year 2).</p> <p>1.5 Existing propagation protocols published online and new protocols developed / improved and published online for 150 target species (end of year 3), including 20 globally threatened species.</p>	<p>1.1 Project consultants were appointed by BGCI and TBG. Stakeholders were brought together for a project launch meeting that set out the aims of the project to NGO and government representatives (evidence provided in section 3.1 of report and report from project launch in Annex 1). The launch was followed by the first meeting of the project Steering Committee, during which the methodology for project monitoring &amp; evaluation was agreed upon (see report from Steering Committee meeting in Annex 2).</p> <p>1.2 Andrew Bower, a geneticist from USFS, worked with TBG and NFA to produce preliminary maps that delineate seed zones in Uganda. Preliminary maps are provided in Annex 4.</p> <p>1.3 A target species list was produced by TBG (see Annex 5).</p> <p>1.4 60 people were trained to develop seed collecting calendars (see training report in Annex 8). Calendars will be produced in year 2.</p> <p>1.5 Existing propagation information was compiled by TBG for target species (see Annex 6).</p>	
Activity 1.1 Inaugural Project Workshop held with all stakeholders' present. Project plan communicated, refined and all necessary mechanisms for acquiring permits and Prior Informed Consent defined and implemented.		<b>Complete.</b> A project launch workshop was held on 23 <sup>rd</sup> October 2018 with 23 participants from government and NGOs involved in tree planting. The project plan was communicated and	The project team continue to keep relevant authorities updated, through meetings, email and phone communication. Project launch participants will be invited to national

	<p>the project team received feedback on proposed actions and proposed location of nurseries. Relevant authorities from the Ministry of Water and Environment (MOW&amp;E) and the National Forest Authority (NFA) attended, and follow up meetings were held to secure consent to carry out project activities.</p>	<p>and regional forums that will take place in years 2 and 3.</p>
<p>Activity 1.1 Project Steering Committee established, including all existing stakeholders (national and local authorities, communities, NGOs, academics etc.).</p>	<p><b>Complete.</b> Representatives from the MOW&amp;E, NFA, NEMA and the University of Makerere University were invited to, and attended, the first steering committee meeting, which took place on 23<sup>rd</sup> October, following the project launch. Additional representatives were invited to sit on the steering committee and a decision was made to put an international technical advisory committee in place in addition to the national steering committee.</p>	<p>The next meeting of the steering committee and international technical advisory committee will take place in June 2019.</p>
<p>Activity 1.1 Detailed briefs written for external consultants</p>	<p><b>Complete.</b> Two consultants were appointed by BGCI: a Plant Conservation Project Consultant in the BGCI Africa office, Nairobi, to help manage the project, and Andrew Bower, a geneticist from the United States Forest Service (USFS), to help delineate seed collection zones in Uganda. Two consultants were appointed by TBG: Kaahwa Alex, an agribusiness consultant from Mpanga growers Tea Factory, to carry out a baseline survey of demand for native tree species, and Professor Moses Muhumuza, from Mountains of the Moon University and Centre for Action and Applied Research for Development (CARD) Uganda Limited to carry out a baseline socio-economic survey.</p>	<p>The baseline surveys carried out by the marketing (agribusiness) consultant will be repeated in years 2 and 3 and the socio-economic baseline survey will be repeated in year 3.</p>

<p>Activity 1.1 Monitoring and evaluation methodology defined and implemented.</p>	<p><b>Ongoing.</b> At the steering committee meeting, representatives agreed upon a M&amp;E methodology, which will involve regular meetings of the steering committee and international technical advisory committee and monitoring progress against the project activities and logframe. The committees will help resolve any problems that arise in project implementation or meeting targets.</p>	<p>The next meeting of the steering committee and international technical advisory committee will take place in June 2019.</p>
<p>Activity 1.2 Geneticist works with NFA and TBG to map wild seed collection zones, using forest and degradation maps.</p>	<p><b>Ongoing.</b> Andrew Bower, a geneticist from the United States Forest Service (USFS), spent one week in Uganda with the project team. Meetings were held with NFA to review existing climatic maps for GIS work. The team also visited degraded and “pristine” forest areas and training was provided by the consultant on identifying and mapping mother trees for seed collection.</p>	<p>The seed zone maps will be refined and used to guide seed collection. A request has been made to USFS to provide further in-kind support to refine these maps and provide further GIS support throughout the project.</p>
<p>Activity 1.2 Seed collecting zone maps produced to guide wild seed collection.</p>	<p><b>Ongoing.</b> Following the visit preliminary maps delineating seed collection zones in Uganda were created.</p>	<p>The seed zone maps will be refined and used to guide seed collection.</p>
<p>Activity 1.3 TBG, BGCI and NFA develop target list of 150 species, based on suspected / known presence in collecting zones, historic presence in priority restoration areas, suitability for restoration, conservation status.</p>	<p><b>Complete.</b> A list of target species was produced by TBG.</p>	<p>The full target list will be broken down to produce a target list per nursery and seed collecting group. It may be further refined based on species demand in future years.</p>
<p>Activity 1.4 Seed surveys carried out by trained seed monitors (trained in activity 4.1)</p>	<p><b>Not started.</b> This activity is scheduled for year 2.</p>	<p>Trained seed monitors will commence this activity in year 2.</p>
<p>Activity 1.4 Seed collecting calendars produced for 150 target species (by people trained in activity 4.1).</p>	<p><b>Not started.</b> This activity is scheduled for year 2.</p>	<p>Trained seed monitors will commence this activity in year 2.</p>
<p>Activity 1.5 Existing propagation information gathered from literature and TBG nursery staff.</p>	<p><b>Complete.</b> Existing propagation information was compiled by TBG for target species.</p>	<p>This information will be used by nursery workers.</p>

Activity 1.5 New protocols developed / improved through propagation trials at nurseries (established in activity 2.2)	<b>Not started.</b> This activity is scheduled for years 2 and 3.	Nursery workers will refine propagation protocols throughout the rest of the project.
Activity 1.5 Protocols published online for 150 target species by end of year 3, including 20 globally threatened species.	<b>Not started.</b> This activity is scheduled for year 3.	Nursery workers will refine propagation protocols throughout the rest of the project.
Output 2. Genetically diverse seedlings of 150 native tree species available for purchase from nurseries established in high priority restoration areas	<p>2.1 Sites selected for nursery establishment, working with IUCN, Ministry of Water and Environment, and NGOs working on restoration.</p> <p>2.2 Four nursery infrastructures established close to high priority restoration areas by end of year 1.</p> <p>2.3 Seed collected from 150 target species, initiated in year 1 (as part of training), 100 species by end of year 2 and 150 species by end of year 3, by 60 seed trained seed collectors (see Output 4).</p> <p>2.4 300,000 seedlings produced by nursery workers and available for purchase from 100 target species by end of year 2 and an additional 500,000 seedlings from 150 species by end of year 3.</p>	<p>2.1. Four nursery sites selected for establishment (see Annex 3 - siting nursery report)</p> <p>2.2. Four nursery infrastructures have been established close to high priority restoration areas</p> <p>2.3 This activity is scheduled for years 2 and 3 by trained seed collectors</p> <p>2.4 This activity is scheduled for years 2 and 3 by the trained nursery workers</p>
Activity 2.1. Working group established to identify sites for nursery establishment: BGCI, TBG, IUCN, NEMA, MoW&E, NGOs by end of first quarter.	<b>Complete:</b> Four nursery sites identified for project implementation by the working group and project team	All nursery work will continue on these sites for the rest of the project
Activity 2.1 Visits to candidate sites to hold meetings with community members by end of year 1.	<b>Complete:</b> Community meetings held in candidate sites	Nursery workers and the project team will keep community members engaged throughout the project
Activity 2.1 Working group meeting to finalise siting of nurseries by end of year 1.	<b>Complete:</b> Final selection of the four nursery sites done.	Raising of the tree species will be done by nursery workers at the sites for the rest of the project
Activity 2.2 Four nursery infrastructures built by nursery workers by end of year 1.	<b>Complete:</b> Four nursery infrastructures built by community members with technical guidance from a contractor	These infrastructures will be used by nursery workers for the rest of the project

<p>Activity 2.3 40 nursery staff (trained in activity 4.5) employed to construct nurseries, propagate and sell seedlings.</p>	<p><b>Ongoing:</b> 40 nursery workers trained, and employed to construct nurseries, propagate and sell seedlings</p>	<p>Trained nursery workers have commenced work and will propagate and sell seedlings for the rest of the project</p>
<p>Activity 2.4 60 seed collectors (trained in activity 4.3) employed across Uganda.</p>	<p><b>Ongoing:</b> Trained seed collectors employed across Uganda</p>	<p>Seed collectors will commence their work fully in year 2</p>
<p>Activity 2.4 Seed collected from 150 target species, initiated in year 1 (as part of training), 100 species by end of year 2 and 150 species by end of year 3.</p>	<p><b>Ongoing:</b> Seeds collected as part of training</p>	<p>Seed collectors will commence their work fully in year 2</p>
<p>Activity 2.4 300,000 seedlings produced and available for purchase from 100 target species by end of year 2 and an additional 500,000 seedlings from 150 species by end of year 3.</p>	<p><b>Not yet started:</b> This activity is scheduled for years 2 and 3</p>	<p>Seed collectors will collect the seeds and the nursery workers will raise the seedlings</p>
<p><b>Output 3.</b> Increased demand for genetically and species diverse seedlings</p>	<p>3.1 National forum held to increase understanding by government ministries, tree planting NGOs (incl. International Tree Foundation partners) and farmer associations (incl. Rainforest Alliance and Agroforestry Alliance for Africa partners) of the importance of biodiverse and genetically diverse FLR and the diverse range of species available in Uganda, led by BGCI, IUCN and NEMA in year 2.</p> <p>3.2 Four regional workshops held in high priority restoration areas to increase understanding of local government, tree planters and farmers of the importance of biodiverse and genetically diverse FLR and the diverse range of species available by end of year 3.</p> <p>3.3 National campaign launched to promote planting a diverse range of native species, in years 2 and 3.</p> <p>3.4 Four forest restoration demonstration plots set up, 1 per nursery, to demonstrate planting</p>	<p>All activities contributing to this output are scheduled for years 2 and 3.</p> <p>Under 3.6, a baseline survey was carried out to measure current demand for seedlings. Summary results are provided in section 3.2 of this report and the baseline survey report is provided in Annex 7.</p> <p>Activities 3.1 – 3.5 and 3.7 are not included below, but information will be provided in the next report.</p>



	<p>techniques and growth rates by end of year 2.</p> <p>3.5 10-year business plan produced by each nursery, including marketing strategies, opportunity areas and partners for sales.</p> <p>3.6 Demand for native species increased by at least 50% by end of year 3, based on baseline level identified during year 1 survey to farmers, NGOs and other tree planters and repeated in year 3.</p> <p>3.7 800,000 native tree species seedlings sold by end of year 3, enough that by the end of year 3 the nurseries are fully-funded by seedling sales.</p>		
<p>3.6 Year 1 baseline survey to farmers, NGOs and other tree planters carried out by marketing consultant in 10km radius around nurseries, and repeated in year 3 to measure demand for / planting of native species.</p>		<p>A baseline survey was carried out in year 1, by an agribusiness consultant. This survey measured demand for seedlings. The survey highlighted that most people get their planting materials / seedlings from nurseries and therefore it is recommended that the prices of the native tree seedlings should be made affordable to encourage demand for these species.</p>	<p>The survey will be repeated in years 2 and 3, to assess change in demand for native tree seedlings.</p>
<p>Output 4. 104 people have increased capacity and improved livelihoods.</p>	<p>4.1 Following mapping of seed collecting zones (1.2 above), 60 people, at least 50% women, will be trained as seed monitors to track seed set and develop seed collecting calendars, and as seed collectors, by end of year 1.</p> <p>4.2 60 trainees will be employed as seed monitors and collectors for years 2 and 3 of the projects.</p>	<p>4.1 60 people trained as seed monitors and collectors (see report on trainings in Annex 8)</p> <p>4.2 60 trainees will be employed for year 2 and 3 of the project</p> <p>4.3. 40 people trained in propagation, nursery management and records keeping (see report on trainings in Annex 8)</p> <p>4.4 Four nursery managers identified from the 40, and trained in business skills (see report on trainings in Annex 8)</p> <p>4.5 40 people identified to be employed in nurseries through the project</p>	

	<p>4.3 40 people, at least 60% women, trained in propagation, nursery management and records keeping, by BGCI network, by end of year 1.</p> <p>4.4 Four nursery managers identified (from the 40 trained) and trained in business skills by end of year 1.</p> <p>4.5 40 trainees employed in nurseries by end of year 1.</p> <p>4.6 Four people, at least 50% women, trained as demonstration plot managers by TBG in year 1.</p> <p>4.7 Four people employed as demonstration plot managers by end of year 1 and four demonstration plots set up by end of year 2 to support species selection.</p> <p>4.8 104 people employed at more than the average rural household income rate (initially part supported by the project and fully supported by seed sales at end of year 3) and livelihood impact measured through baseline socio-economic survey in year 1, repeated in year 3.</p>	<p>4.6 Four people identified as demonstration plot managers, and will receive training in May 2019</p> <p>4.7 Four people will be employed as demonstration plot managers in year 2</p> <p>4.8 A socio-economic baseline survey was carried out so progress towards this target can be measured</p>	
<p>4.1 Following mapping of seed collecting zones (1.2 above), 60 people, at least 50% women, trained by BGCI, TBG and NFA as seed monitors to track seed set and develop seed collecting calendars and as seed collectors by end of year 1.</p>		<p><b>Complete:</b> 60 people trained as seed monitors and collectors</p>	<p>The trainees will carry out monitoring and collection of seeds and develop seed calendars for the rest of the project</p>
<p>4.2 60 trainees employed as seed monitors and collectors by end of year 1.</p>		<p><b>Ongoing:</b> Following training in seed monitoring and collection, 60 trainees were appointed as seed monitors and collectors</p>	<p>Collectors and monitors will continue work on collection and developing calendars for the target species</p>
<p>4.3 40 people, at least 60% women, trained in propagation, nursery management and records keeping, by BGCI network by end of year 1.</p>		<p><b>Complete:</b> 40 people trained in propagation, nursery management and records keeping</p>	<p>The trained people will be employed in the nursery work across the four sites for the rest of the project</p>
<p>4.4 Four nursery managers identified (from the 40 trained) and trained in business skills by end of year 1.</p>		<p><b>Complete:</b> Four nursery managers identified and trained in business skills</p>	<p>The trained people will lead operations in the nurseries</p>

4.5 40 trainees employed in nurseries by end of year 1.	<b>Complete:</b> 40 trainees identified to be employed through the project and received payments for nursery construction in year 1	Raising of the target species and seedlings will be done by the nursery workers
4.6 Four people, at least 50% women, trained as demonstration plot managers by TBG by end of year 1.	<b>Not yet:</b> This will be done in May 2019	Following training, demonstration plot managers will establish restoration demonstration plots
4.7 Four people employed as demonstration plot managers by end of year 1 and four demonstration plots set up by end of year 2 to support species selection.	<b>Not yet:</b> Following training of demonstration plot managers, they will be employed	Establishment and management of the demonstration restoration plots will be carried out by the managers for the rest of the project
4.8 Baseline socio-economic study carried out in year 1 and repeated in year 3, to measure impact of employing 104 people at more than the average rural household income rate (initially part supported by the project and fully supported by seed sales at end of year 3).	<b>Ongoing:</b> Year 1 baseline socio-economic study complete and will be repeated in year 3	The reports from the studies will be used to measure the impact of employing 104 people at more than the average rural household income rate

## Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Impact:</b> Forest Landscape Restoration in Uganda provides long term biodiversity conservation and sustainable employment benefits (Max 30 words)</p>			
<p><b>Outcome:</b> (Max 30 words)</p> <p>Supply and demand for genetically and species diverse planting material is increased through nurseries and seed collecting networks that employ &gt;100 people, for biodiverse Forest Landscape Restoration in Uganda.</p>	<p>0.1 Improved information available for 150 native tree species – information on distribution, populations, seed availability improved by the end of year 2, information on propagation protocols and growing conditions made available / developed / improved by the end of year 3.</p> <p>0.2 300,000 genetically diverse seedlings of 100 native tree species available for purchase from four nurseries established in high priority restoration areas, by end of year 2 and an additional 500,000 genetically diverse seedlings of 150 native tree species available by end of year 3.</p> <p>0.3 Increased demand for genetically and species diverse seedlings, sufficient that by the end of year 3 the nurseries are fully-funded by seedling sales.</p> <p>0.4 104 people (including at least 50% women) have increased capacity and improved livelihoods years 1 – 3, and after the project ends.</p>	<p>0.1 Distribution maps, seed collecting calendars, open access propagation protocols.</p> <p>0.2 Nursery records, nursery website showing locations and seedling availability.</p> <p>0.3 Posters and painted buildings, nursery records and accounts, workshop reports, Biodiverse FLR implementation report.</p> <p>0.4 Workshop reports, training certificates, payslips (or equivalent), socio-economic survey report.</p>	<ul style="list-style-type: none"> <li>• Technical challenges can be overcome for difficult species (BGCI's network of experts will help solve problems)</li> <li>• Employment opportunities (seed monitors, seed collectors and nursery workers) are appealing to communities.</li> </ul>
<p><b>Outputs:</b></p> <p>1. Improved information generated on more than 150 native tree species, including improved information on distribution, wild populations and seed availability and propagation protocols improved / developed.</p>	<p>1.1. Project infrastructure established, including project management, employment of experts, full stakeholder engagement, acquiring Prior Informed Consent and Monitoring &amp; Evaluation methodology defined.</p> <p>1.2 Seed collection zones defined using forest and degradation maps (Figs 8 and 9, Uganda FLR report, p16 &amp; 17</p>	<p>1.1 Employment contracts, Workshop minutes, Steering Committee minutes, consultant contracts, permits, M &amp; E reports.</p> <p>1.2 Maps of seed collection zones.</p> <p>1.3 Target species list.</p> <p>1.4 Seed collecting calendars.</p>	<ul style="list-style-type: none"> <li>• Sustainable sources of wild seed can be identified for all target species. Propagation information can be obtained or new protocols developed for species that do not have protocols (up to</li> </ul>

	<p><a href="https://portals.iucn.org/library/sites/library/files/documents/2016-076.pdf">https://portals.iucn.org/library/sites/library/files/documents/2016-076.pdf</a>) and working with a geneticist from BGCI network, within the first six months of the project.</p> <p>1.3 150 target species identified depending on suspected / known presence in collecting zones, historic presence in priority restoration areas, suitability for restoration (focus on pioneer species for initial plantings), conservation value (IUCN status – target 20 species) within first 9 months of project.</p> <p>1.4 Seed collecting calendars produced for 150 target species (end of year 2).</p> <p>1.5 Existing propagation protocols published online and new protocols developed / improved and published online for 150 target species (end of year 3), including 20 globally threatened species.</p>	<p>1.5 Nursery log books, propagation protocols printed and available online (using BGCI template).</p>	<p>half of target species). Propagation experts from BGCI's network will be mobilised to work on difficult species (in-kind support).</p>
<p><b>2. Genetically diverse seedlings of 150 native tree species available for purchase from nurseries established in high priority restoration areas</b></p>	<p>2.1 Sites selected for nursery establishment, working with IUCN, Ministry of Water and Environment, and NGOs working on restoration.</p> <p>2.2 Four nursery infrastructures established close to high priority restoration areas by end of year 1.</p> <p>2.3 Seed collected from 150 target species, initiated in year 1 (as part of training), 100 species by end of year 2 and 150 species by end of year 3, by 30 seed trained seed collectors (see Output 4).</p> <p>2.4 300,000 seedlings produced by nursery workers and available for purchase from 100 target species by end of year 2 and an additional 500,000 seedlings from 150 species by end of year 3.</p>	<p>2.1 Report from site visits and working group meeting</p> <p>2.2 Infrastructures and consumables in place.</p> <p>2.3 Seed collecting data forms, nursery records.</p> <p>2.4 Nursery records, seedling sales.</p>	<ul style="list-style-type: none"> <li>• Employment opportunities (seed monitors, seed collectors and nursery workers) are appealing to communities.</li> <li>• New communities are receptive to nursery establishment.</li> </ul>

<p><b>3. Increased demand for genetically and species diverse seedlings</b></p>	<p>3.1 National forum held to increase understanding by government ministries, tree planting NGOs (incl. International Tree Foundation partners) and farmer associations (incl. Rainforest Alliance and Agroforestry Alliance for Africa partners) of the importance of biodiverse and genetically diverse FLR and the diverse range of species available in Uganda, led by BGCI, IUCN and NEMA in year 2.</p> <p>3.2 Four regional workshops held in high priority restoration areas to increase understanding of local government, tree planters and farmers of the importance of biodiverse and genetically diverse FLR and the diverse range of species available by end of year 3.</p> <p>3.3 National campaign launched to promote planting a diverse range of native species, in years 2 and 3.</p> <p>3.4 Four forest restoration demonstration plots set up, 1 per nursery, to demonstrate planting techniques and growth rates by end of year 2.</p> <p>3.5 10-year business plan produced by each nursery, including marketing strategies, opportunity areas and partners for sales.</p> <p>3.6 Demand for native species increased by at least 50% by end of year 3, based on baseline level identified during year 1 survey to farmers, NGOs and other tree planters and repeated in year 3.</p> <p>3.7 800,000 native tree species seedlings sold by end of year 3, enough that by the end of year 3 the nurseries are fully-funded by seedling sales.</p>	<p>3.1 Forum report, evidence of attendance list.</p> <p>3.2 Workshop reports, attendance lists.</p> <p>3.3 Leaflets promoting the benefits of native trees, painted houses and shops, transcripts of radio and TV programmes.</p> <p>3.4 Photos of demonstration restoration plots.</p> <p>3.5 Baseline and year 3 native species survey figures, records of seedling sales and orders.</p> <p>3.6 Records of seedling sales and orders.</p>	<ul style="list-style-type: none"> <li>• Demand can be created, to the extent that all seedlings are sold. Confident that this will be the case (see exit strategy and letters of support)</li> </ul>
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<p><b>4.</b> 104 people have increased capacity and improved livelihoods.</p>	<p>4.1 Following mapping of seed collecting zones (1.2 above), 60 people, at least 50% women, will be trained as seed monitors to track seed set and develop seed collecting calendars, and as seed collectors, by end of year 1.</p> <p>4.2 60 trainees will be employed as seed monitors and collectors for years 2 and 3 of the project.</p> <p>4.3 40 people, at least 60% women, trained in propagation, nursery management and records keeping, by BGCI network, by end of year 1.</p> <p>4.4 Four nursery managers identified (from the 40 trained) and trained in business skills by end of year 1.</p> <p>4.5 40 trainees employed in nurseries by end of year 1.</p> <p>4.6 Four people, at least 50% women, trained as demonstration plot managers by TBG in year 1.</p> <p>4.7 Four people employed as demonstration plot managers by end of year 1 and four demonstration plots set up by end of year 2 to support species selection.</p> <p>4.8 104 people employed at more than the average rural household income rate (initially part supported by the project and fully supported by seed sales at end of year 3) and livelihood impact measured through baseline socio-economic survey in year 1, repeated in year 3.</p>	<p>4.1 Attendance list, trainee certificates.</p> <p>4.2 Payslips (or equivalent).</p> <p>4.3 Attendance list, trainee certificates.</p> <p>4.4 Payslips (or equivalent).</p> <p>4.5 Attendance list, trainee certificates.</p> <p>4.6 Attendance list, trainee certificates.</p> <p>4.7 Payslips (or equivalent).</p> <p>4.8 Payslips, socio-economic baseline survey, repeated in year 1 and 3.</p>	<ul style="list-style-type: none"> <li>• Employment opportunities (seed monitors, seed collectors and nursery workers) are appealing to communities.</li> <li>• Seed sales are sufficient to continue employment (see exit strategy and letters of support)</li> </ul>

**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. Inaugural Project Workshop held with all stakeholders present. Project plan communicated, refined and all necessary mechanisms for acquiring permits and Prior Informed Consent defined and implemented.

1.1. Project Steering Committee established, including all existing stakeholders (national and local authorities, communities, NGOs, academics etc.).

1.1. Detailed briefs written for external consultants

1.1. Monitoring and evaluation methodology defined and implemented.

1.2 Geneticist works with NFA and TBG to map wild seed collection zones, using forest and degradation maps.

1.2 Seed collecting zone maps produced to guide wild seed collection.

1.3 TBG, BGCI and NFA develop target list of 150 species, based on suspected / known presence in collecting zones, historic presence in priority restoration areas, suitability for restoration, conservation status.

1.4 Seed surveys carried out by trained seed monitors (trained in activity 4.1)

1.4 Seed collecting calendars produced for 150 target species (by people trained in activity 4.1).

1.5 Existing propagation information gathered from literature and TBG nursery staff.

1.5 New protocols developed / improved through propagation trials at nurseries (established in activity 2.2)

1.5 Protocols published online for 150 target species by end of year 3, including 20 globally threatened species.

2.1 Working group established to identify sites for nursery establishment: BGCI, TBG, IUCN, NEMA, MoW&E, NGOs by end of first quarter.

2.1 Visits to candidate sites to hold meetings with community members by end of year 1.

2.1 Working group meeting to finalise siting of nurseries by end of year 1.

2.2 Four nursery infrastructures built by nursery workers by end of year 1.

2.3 Seed collected from 150 target species, initiated in year 1 (as part of training), 100 species by end of year 2 and 150 species by end of year 3.

2.4 300,000 seedlings produced and available for purchase from 100 target species by end of year 2 and an additional 500,000 seedlings from 150 species by end of year 3.

3.1 Hold national forum to increase understanding by government ministries, tree planting NGOs (incl. International Tree Foundation partners) and farmer associations (incl. Rainforest Alliance and Agroforestry Alliance for Africa partners) of the importance of biodiverse and genetically diverse FLR and the diverse range of species available in Uganda, led by BGCI, IUCN and NEMA by end of year 2.

3.2 Hold four regional workshops in high priority restoration areas (where nurseries are located) to increase understanding of local government, tree planters and farmers of the importance of biodiverse and genetically diverse FLR and the diverse range of species available by end of year 3.

3.3 Design and launch national campaign to promote planting a diverse range of native species, in collaboration with public outreach expert from BGCI's network, years 2 and 3.



- 3.4 Set up four forest restoration demonstration plots, 1 per nursery, to demonstrate planting techniques and growth rates by end of year 3.
- 3.5 10-year business plan produced by each nursery, including marketing strategies, opportunity areas and partners for sales by end of year 3.
- 3.6 Year 1 baseline survey to farmers, NGOs and other tree planters carried out by marketing consultant in 10km radius around nurseries, and repeated in year 3 to measure demand for / planting of native species.
- 3.7 Nurseries supported to sell 800,000 native tree species seedlings by end of year 3, enough that by the end of year 3 the nurseries are fully-funded by seedling sales.
- 4.1 Following mapping of seed collecting zones (1.2 above), 60 people, at least 50% women, trained by BGCI, TBG and NFA as seed monitors to track seed set and develop seed collecting calendars and as seed collectors by end of year 1.
- 4.2 60 trainees employed as seed monitors and collectors by end of year 1.
- 4.3 40 people, at least 60% women, trained in propagation, nursery management and records keeping, by BGCI network by end of year 1.
- 4.4 Four nursery managers identified (from the 40 trained) and trained in business skills by end of year 1.
- 4.5 40 trainees employed in nurseries by end of year 1.
- 4.6 Four people, at least 50% women, trained as demonstration plot managers by TBG by end of year 1.
- 4.7 Four people employed as demonstration plot managers by end of year 1 and four demonstration plots set up by end of year 2 to support species selection.
- 4.8 Baseline socio-economic study carried out in year 1 and repeated in year 3, to measure impact of employing 104 people at more than the average rural household income rate (initially part supported by the project and fully supported by seed sales at end of year 3).

## Annex 3: Standard Measures

**Table 1 Project Standard Output Measures**

Cod e No.	Description	Gender of people (if relevant)	Nationalit y of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planne d during the project
6A	Training courses provided in seed monitoring & collection, propagation & nursery management, and demonstratio n plot management.	Seed monitoring & collection: 50% women. Propagation & nursery management: 60% women. Demonstratio n plot management: 50% women.	Ugandan	100			100	104
6B	2-3 day courses per training topic and per group provided.			Total: 19 days			19 days	Addition al training will be delivered as needed
7	Materials developed or adapted for the training courses were provided to participants in printed and soft copy.  Propagation protocols to be published for target 150 species.	Gender balance of training course participants is noted above.  Made publically available to all by end of project.	Ugandan	3 powerpoint presentation s and 5 GTC guidance briefs shared  0			3 powerpoint presentation s and 5 GTC guidance briefs shared	Addition al training materials will be provided as needed  150 protocols
9	Species recovery plans for threatened species			0			0	Target: 20 species
10	Resources required by seed monitors & collectors will be identified in year 2			0			TBD	TBD
13 A	Species not currently in TBG will be added to living collection for <i>ex situ</i> conservation.			0			0	Est. 30 new species

13 B	Herbarium collections for all target species improved.  Living collections of species in TBG expanded to represent new provenances.			0			0	150 species  Est. 40 species
14 A	Project launch workshop, national & regional forums to promote planting of native species			1			1	6
14 B	Presentation of project at global & regional conferences			0				4
20								
21	Community nursery & seed collector groups	Seed collectors: 50% women. Nursery workers and plot managers: 60% women.		4				4
22	Demonstration plots at nurseries			0 (sites identified)			4	4
23								

**Table 2 Publications**

<b>Title</b>	<b>Type</b> (e.g. journals, manual, CDs)	<b>Detail</b> (authors, year)	<b>Gender of Lead Author</b>	<b>Nationality of Lead Author</b>	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. weblink or publisher if not available online)
N/A for year one						

## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	Yes
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<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	