Darwin Initiative Main & Extra Annual Report

To be completed with reference to the "Project Reporting Information Note":
(https://www.darwininitiative.org.uk/resources/information-notes/)

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

Submission Deadline: 30th April 2025

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

Darwin Initiative Project Information

Scheme (Main or Extra)	Main
Project reference	30-013
Project title	Better livelihoods for shifting-cultivators from conserving and restoring Malagasy forests
Country/ies	Madagascar
Lead Organisation	Missouri Botanical Garden
Project partner(s)	Fikambanana Bongolava Maitso
Darwin Initiative grant value	£304,036
Start/end dates of project	Apr 2023 – March 2026
Reporting period (e.g. Apr 2024 – Mar 2025) and number (e.g. Annual Report 1, 2, 3)	Apr 2024 – Mar 2025 (YR2)
Project Leader name	Chris Birkinshaw
Project website/blog/social media	[redacted]
Report author(s) and date	Chris Birkinshaw, Cyprien Miandrimanana, Marie Waï Line, 1st May 2025

1. Project summary

Madagascar's dry-deciduous forests are now being destroyed rapidly through slash-and-burn agriculture for maize and beans for export/industry. Profits are mainly kept by entrepreneurs and farmers gain little. In the short term we will combat this destructive and abusive relationship by enabling farmers close to Bongolava Forest to gain better income from conserving and restoring their traditional lands and, in the longer term, access viable livelihoods from the propagation and sale of native trees in support of Madagascar's ambitious reforestation targets

2. Project stakeholders/ partners

Missouri Botanical Garden's Madagascar Research and Conservation Program (MBG) is committed to maximising our impact by, among other actions, facilitating the work of reputable partners in the domains of botanical discovery and plant conservation. In the context of this Project, we used our proven financial track record and administrative credibility to help the small, struggling but brave and committed grassroots NGO *Fikambanana Bongolava Maitso* (FBM) to access a significant grant from the Darwin Initiative. Specifically, MBG staff manage the grant for FBM and also provide technical assistance and help with reporting at no cost to the donor nor FBM. Thus almost 100% of the grant is used by FBM for project implementation. MBG accesses a small amount of funding for travel to the site and for subsistence costs during work to provide monitoring and training. Whiie the aim of FBM's work at Bongolava is the successful conservation of this much threatened forest, the focus of this project is improve the perceptions of the protected area among the local community by using green employment to improve the livelihoods of a significant number of local farming families (see Evidence O.4: in YR2 372 locals gained income from the project amounting to total of £57,912). We hope too that this collaborative work will improve mutual understanding between locals and the PA Managers and create the basis for a more trusting relationship.

2.1 Progress in carrying out project Activities

The project activities listed in the Application are listed below – each with information concerning progress in YR2.

1.1. Research by Project Manager to identify the project zone where local farming families are concerned about the loss of the forest and are willing to engage with an alternative greener vision of their landscape
Completed in YR1.

1.2. 60 farmers in the host landscape identified and recruited as community rangers by local radio broadcasts and individual interviews
Completed in YR1.

1.3. 60 local farmers trained by Assistant Project Manager- Patrols in community patrolling and the recording and reporting of infractions
Continued in YR2: The community rangers were organised into four teams and each team works under the direction and coaching of one of four experienced rangers who have long worked for FBM. The list of rangers is shown in Evidence Activity 1.3.

1.4. Local rangers systematically patrol ca. 500 ha target zone to detect and report infractions under the direction of the Assistant Project Manager (patrols)
Continued in YR2: Compensation was provided so that an area of 19,000 ha within the protected area could be patrolled. .

1.5. Infractions treated by the local management committee or the Forest Service (depending on severity)
Continued in YR2: five major infractions were detected and reported to the Forest Service whose staff dealt with them (Evidence Output 1.2)

2.1. 60 farmers (mostly women) identified and recruited as nurserywomen by local radio broadcasts and individual interviews
Completed in YR1.

2.2. 60 women trained by the Assistant Project Manager-Nurseries in best practice for the collection of seeds and the propagation and nurturing of seedlings of native woody plant species
Completed in YR1.

2.3. 5 village nurseries installed in the target landscape by nursery women assisted by rangers, under the guidance of a consultant
Three nurseries were installed in YR1 (less than anticipated due to the high cost of the necessary materials, a change request was accordingly made and approved) and these were maintained in YR2. Unfortunately poor quality shade netting was unknowing purchased in YR1 and this ripped when subjected to wind and consequently needed to be replaced. Our disappointment with the plastic netting encouraged us to seek a more resilient and more natural alternative and we settled on the petiole/rachis of the leaves of the *Raphia* palm (see photo in Evidence Activity 2.3). To cover and an area of 2.40 m^2 with this material costs about £2.50. *Raphia* palm is not native to Madagascar and the petiole/rachis is a waste product from the production of fibre.

2.4. Under the guidance of the Assistant Project Manager-Nurseries, each nursery propagates 40,000 seedlings of native woody plants
On-going: The three nurseries operated to produce 145,759 seedlings of native trees (Evidence Output 2.3). The short fall will be made good in YR3.

2.5. Under the guidance of the Assistant Project Manager-Nurseries and direction of the Project Manager, the nurserywomen out-plant 200,000 seedlings of native woody plants (some being planted within the framework of experiments to identify best practice)

Between November 2024 and February 2025, large number of local people were mobilised to prepare the land designated for restoration (i.e. clearing smothering herbs and alien invasive plants), to dig planting holes, to transport seedlings from the nurseries to the restoration plots, and then to outplant they young plants.

2.6. Out-planted seedlings provided with post plantation care by nursery women
Not applicable to YR2.

2.7. Samples of the out-planted seedlings monitored to determine survival and growth.
It is essential for the long term success of this project that we are able to not merely supply clients with seedlings of native trees for use in restoration but also advise them about which species perform best in which circumstance and also what interventions can be used to improve the performance of out-planted seedlings. To this end, in YR2, we established a trial of the performance of an array of different species planted under different conditions. Specifically the trial consisted of 20 seedlings of four different species planted on two soil types (sand and clay), and with four different treatments. More details of this work with photos are presented in Evidence Activity 2.7.

4.1. Project staff and business consultant develop a business plan for a native tree value chain.
This plan is currently under development and will be available in June 2025.

Note: Activities 3.1 - 3.3 and 4.2 - 4.6 are applicable only for YR3.

2.2 Progress towards project Outputs

1. Infractions in target forest rapidly detected and controlled by local farmers with help of forest service

1.1 Annually all 0.1 km² cells within target zone visited by local rangers bimonthly and infractions noted and reported
Policing of the 19,000 ha of the protected area is ensured by 58 rangers under the direction of 4 policing coordinators (Evidence Activity 1.3). In total 124 patrols were completed with a tota distance of 372 km covered (Evidence Activity 1.3). The trajectories taken by the rangers is shown in the map presented in Evidence Outcome 1.1. It should be noted that the target zone is much larger than that proposed in the application (750 ha) because we realised that with the person-power available it was possible to adequately patrol a much larger area.

1.2 All infractions treated either by local management committee or, for more serious offenses, by Forest Service
In YR2 five infractions were detected within the target zone and all these were reported to the Forest Service. Four of the five cases has already been treated by the courts while the one remainder are currently being treated (in the meantime the accused is being held in prison) (Evidence Output 1.2)

2. Farmers launch reconstructive restoration on old fields within protected area

2.1 At end of 6 months 5 village nurseries have been installed, equipped and are functional.
In YR1, three nurseries were installed and of these two are already producing seedlings (Evidence Output 2.1). No more nurseries will be installed because of the high cost of providing this infrastructure.

2.2 At the end of 6 months 60 local people have the knowledge, skills and motivation to work as effective nursery staff
Completed in YR1.

2.3 During YR2 200,000 plants of native species are available in 5 village nurseries for out-planting
To date a total of 145,759 seedlings of 32 different tree native species have been produced (Evidence Output 2.3). The short fall will be made good during YR3.

2.4 By YR2, 75 hectares of land that was formerly forest but recently cut and burnt for maize/bean cultivation have been planted with a total of ca. 200,000 young plants of (i.e. a mean of 2800 plants per hectare).

In YR2 restoration was launched over 46.54 ha by out-planting 109,997 seedlings. The short fall will be addressed in YR3.

2.5 In YR3 out-planted plants have a mean 12-month survival rate of 80% and a mean annual growth rate of 25 cm.
No progress at present.

3. Best practices for the restoration of degraded dry deciduous forest defined and shared

In YR2 the PI and Project Manager designed an experimental protocol that will provide information needed to inform best practice for reconstructive restoration of dry deciduous forest. The experiment aims to compare the survival and growth of seedlings of 4 species of native tree under a range of treatments including: sandy soil versus clay soil, fertiliser and no fertiliser, and shade versus no shade: in total 12 different treatments will be used - each in replicates of three. This experiment was installed, during the wet season between January to March 2025 and the results will become available in YR3.

4. Local farming families gain improved livelihoods through engagement with the project.

4.1. In YR1, YR2 and YR3 60 farming families (60 men and 60 women) gain average compensation of £80 per month for their participation in the project including work as rangers, and for the propagation, out-planting and nurturing of young trees, and monitoring
During YR2 372 local people gained total compensation of £57,912 for their contributions to the project as forest rangers (62 people) and as nursery staff (99 people) (Evidence O.4). The average annual compensation was thus £155.70 or £12.98 per month. While the average compensation gained per person was less that stated in the indicator, the number of beneficiaries was much greater.

2.3 Progress towards the project Outcome

The Outcome of this project, as stated in the application, was: Local farming families at Bongolava mobilised to effectively conserve and restore their forest and thereby access improved livelihoods. It was further proposed that progress towards achieving this outcome would be monitored using five indicators. Of these three are relevant to YR2, and these are listed below.

Outcome indicator 0.1 In YR1, YR2 and YR3 of the project the annual number of infractions within the 500 hectare target zone falls respectively by 50%, 75% and 90% from baseline.
In YR2 the total number of infractions (for charcoal production and for cutting trees) was 20. This was a disappointing result because it was higher than the number of infractions reported for YR1 and similar to that reported prior to the project. It may be that these poor results are due to the current poor relationship between agents of the Forest Service and FBM's staff. However, the total impact of the infractions, in terms of number of charcoal ovens, number of trees felled and area converted to fields was either similar to previous years or less. It is particularly encouraging that the no forest was converted to fields (Evidence O.1).

Outcome indicator 0.2 In YR2 and YR3 no forest is lost to agriculture within the 500 hectare target zone.
As stated above in YR2 no forest was converted to fields.

Outcome Indicator 0.3 By YR3 all old fields in the 500 ha target zone are regenerating forest.
In Year 2, two large former fields one at Beserasera and one at Ambilaha (Evidence O.3), with a total area of 46.54 ha were out-planted with 109,997 seedlings of native trees. We decided to work at theswe sites because in each the land was so degraded that natural regeneration would be very slow and likely derailed by other pressures,

Outcome Indicator 0.4 In YR1, YR2 and YR3 the average annual income received by the farming families participating in this project increased by at least 25% over pre-project baseline
In YR2, local people shared compensation amounting to £57,912 or, on average, £155.70 per person for the 12 month period. This is equivalent to a mean of £12.98 per person per month (Evidence O.4). Given that most of these people are subsistence farmers it is difficult to define what their average monthly salary would be but it £35 per month is an average compensation for agricultural workers in

Madagascar as a whole (https://wagecentre.com/salary/africa/madagascar). Given all the project participants work part-time (and continue their farming activities) the project' compensation contributes to an increase of around 37% to monthly income.

Outcome Indicator O.5. By YR3 the project participants value their forest more than at baseline
The results of the survey of local perceptions of the Bongolava Forest, of conservation and about the site manager (FBM) have now been analysed and these results are presented in Evidence O.5. These contain both positive and negative information for FBM. In general, locals perceive that the forest is being destroyed, understand the reasons for its degradation and regret this change. Most also understand the work of FBM. However, 28% of responses stated that there should be no bans on the use of natural goods extracted from the forest. When asked about FBM, 20% of replies were that they did not know who FBM was and 15.6% said that they did not like the work of FBM. The employment opportunities provided by FBM, as part of this project, were appreciated and all those who replied when questioned about the reasons they worked for the project stated that it was for the compensation, nevertheless 83% of replies suggested that the reason they worked for the project was to support biodiversity conservation and forest restoration (note: one person can give more than one reply). While we may be sceptical about the some of these replies and sometimes unsure about how replies should be interpreted, the value of this study will be how the proportions of different replies changes over time.

2.4 Monitoring of assumptions

Assumption 1: Local farming families trust FBM sufficiently to engage in this process
Comments: To date this assumption is confirmed: while the social survey (see Outcome O.5) shows that some local people do not trust FBM, in general locals are highly motivated to gain compensated employment.

Assumption 2: Local office of Forest Service have sufficient resources and motivation to fulfil their responsibilities concerning the treatment of infractions
Comments: This assumption must be rejected because during the YR2 the local representative of the Forest Service accepted compensation to provide control services (i.e. investigating and processing infractions) but then only partly implemented the agreed work. On one occasion he accepted compensation for 8 days of work but, in reality, only worked for three days. Unfortunately when Cyprien complained and refused full payment, the personal relationship between the two parties worsened to the extent that currently it is not possible to engage with this person.

Assumption 3: native tree species can be identified that can be propagated easily and that survive and grow well in the challenging conditions (poor soils, high exposure to wind and sun) of former fields
Comments: The trials were launched at the start of the year and are described elsewhere in this document. However it is too early to monitor results and therefore this assumption cannot yet be evaluated.

Assumption 4: wild fires can be controlled with firebreaks so they do not burn restoration plots nor regenerating forest
Comments: During the wet season, at the start of the year, young native trees were out-planted over restoration zones totalling 46.54 ha. The fire season is typically begins at the start of June and prior to this time, firebreaks will be installed. Following this action it will be possible to evaluate this assumption.

Assumption 5: free ranging cattle can be controlled by project participants by soliciting collaboration of the neighbours, so that they do not trample or browse the newly out-planted young plants
Comments: Not confirmed: during the dry season some seedlings were lost due to cattle but this loss much diminished during the wet season when the cattle could access green pastureland elsewhere.

Assumption 6: at least some of the principles of best practice identified at Bongolava will be applicable to the restoration of dry deciduous forests elsewhere.
Comments: This assumption is not yet relevant

Assumption 7: by YR2 of the project robust markets exist in the region to young plants of native trees can be sold for landscape restoration

Comments: We were pleased to observe an apparent up-surge in interest in the use of native tree species for tree planting projects in Madagascar. However, the translation of this interest into action seems to be limited by the availability of seeds and seedlings of native trees to use in this work. Thus we are optimistic that markets for the young trees produced by this project do exist and can be accessed. An outstanding question is whether those implementing tree planting projects want to buy seedlings or seeds. This question will be among those being addressed by the consultant developing the business plan.

2.5 Impact: achievement of positive impact on biodiversity and multidimensional poverty reduction

The anticipated impact of this project as stated in the application was: "*A model project shows how Malagasy ecosystems can be successfully conserved and restored by the large-scale mobilisation of local people through creation of new "green" employment opportunities*". While a large number of compensated "green" jobs were created in YR2 of this project (= 372 beneficiaries receiving a total income of £57,912, see Evidence O.4) there is no evidence yet that these benefits have translated into reduced pressure on the protected area (excepting perhaps the cessation of the conversion of forest into fields). The challenge of this project is to maintain benefits with a new value chain based on the local production and sale of seedlings. It is premature to evaluate our chance of succeeding and succeeding at what level, but success (even partial) will be very significant as to how conservation organisations conceive their work.

3. Project support to the Conventions, Treaties or Agreements

In YR2 this project responded to one of the CBD main goals i.e. 'the conservation of biological diversity' by reducing degradation of the dry-deciduous forest at Bongolava including, compared to previous years, reducing the area lost to shifting cultivation and wild fires, reducing incidents of charcoal production, while maintaining a low level of timber exploitation Evidence X)

The vision of Madagascar's NBSAP 2015-2025 (https://www.cbd.int/doc/world/mg/mg-nbsap-v2-en.pdf) is « By 2025, effective measures are set-up to effectively reduce the loss of biodiversity, to ensure the provision of essential ecosystem services and equitable sharing of benefits from biodiversity, for social welfare, economic and environmental development of current and future generations ». In YR2 this project responded to this by reducing threats to the forest while providing both compensated employed for 372 local people of total value £57,912.

Madagascar has pledged to reforest 4-million hectares of land by 2030 under its Bonn Challenge/AFR100 commitment. This project will make a minor direct contribution to this goal with the reconstructive restoration of forest to at least 75 hectares. In YR2 we launched this restoration work by planting 46.54 ha with 109,997 seedlings of native trees (evidence Output 2.2. and 2.3).

In YR2 The project made direct contributions to the following SDGs: (Goals 1/2) by providing paid employment (372 vulnerable local people provided with total compensation of £57,912); (Goal 3) by launching the restorative process over 46.54 ha; (Goals 5) by providing paid employment to 251 women (Evidence Outcome 0.4); (Goal 8) by developing the capacity (human and material) that ultimately will sustain a value chain based on the sale of seedlings of native trees; (Goal 13) by launching forest restoration over 46.54 ha; (Goal 15) by conserving the highly biodiverse Bongolava Forest by reducing the conversion of forest to fields (Evidence O.1, O.2); and (Goal 17) by MBG supplementing and building FBM's capacity in key areas (especially safeguarding).

4. Project support for multidimensional poverty reduction

In YR2 we are proud that all of the financial support provided by the Darwin Initiative for this project was spent in Madagascar and of this, £57, 912 was used to compensate 372 local people for the services they provide to the project (such as nursery staff or rangers). Nearly all these people are from farming families and the extra income will, to them, be significant (30.4% of respondents to our survey reported that this income had changed their life – Evidence O.5 "Table 10"). Ultimately we expect that this project will have an enduring impact on the well-being of a significant number of rural people living around the Bongolava Forest Corridor Protected Area by enabling them to access a lucrative market for young plants of native trees. In YR2 we made good progress to this ambitious goal by consolidating the process of collecting seeds and producing large numbers of seedlings. It should be noted that we believe that the income generated for locals by this project is additional to their existing economic

activities because work for the project is just part time and beneficiaries continue their past employment (i.e., typically as subsistence farmers or herders).

Gender Equality and Social Inclusion (GESI)

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	X
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

Typically in Madagascar nursery staff are male and therefore it is empowering of women that in this project 67 of the 95 people who worked in the nursery in YR2 were female. Also among the day labourers out-planting the seedlings, 53 were women out of a total of 211 people. However, other types of employment that require physical strength were dominated by males and, overall, more men gained compensation as part of this project than women (Evidence Outcome O.4). A major achievement in YR2 was to fully launch the safeguarding process as part of FMB's operations: staff were trained and the complaints process re-launched (Evidence "Safeguarding"). The implementation of safeguarding should help to protect women in the communities where FBM works from those who are more powerful.

5. Monitoring and evaluation

The FBM team is small and thus lacks a dedicated MEL Officer. Hence data on work and the results of work are collected by those leading the implementation of activities (e.g. the Head Nurseryman/women or the Head Rangers) and then the raw data passed to the FBM leaders (Cyprien and Wai-Line) for analysis. This approach has both advantages and disadvantages. Both the senior management and those leading the implementation of activities are clearly informed of progress, however, the workload of the senior managers means that often data analysis is tardy and its value in informing adaptive management thereby compromised. The information collected concerning the implementation of activities and progress towards achieving results can be seen in the "Evidence" presented as part of this report and we judge this to be both comprehensive and pertinent. For the first time FBM collected and analysed information on local perceptions of the Bongolava Forest, conservation and FBM (see Evidence O.5) and, despite certain reservations concerning how the respondents interpreted the question, this study was powerfully informative. FBM clearly have a lot of work to do to win the hearts and minds of locals!

6. Lessons learnt

An important lesson learnt is that good quality seeds of native trees are not necessarily there just waiting to be collected when you need them – indeed there are times when it is very difficult to find any seeds at all to collect. During times of seed rarity, work in the tree nursery may be impacted. Hence we now appreciate that, for a project such as this, a system is required whereby seeds are collected when they available and then stored in appropriate conditions until they are needed.

7. Actions taken in response to previous reviews (if applicable)

1 Proposed reduction in nursery establishment from five to three. It is not clear whether this is formal and final or whether a proposed Change Request will propose budget re-distribution to reach five, but a permanent reduction may impact on out-planting number (200,000) and subsequent sales.

The change in number of nurseries from five to three was the subject of a formal change request that was accepted. The three nurseries have, together, a larger total capacity than was planned for the five nurseries, and thus we are in a better position to attain the target of producing 200,000 seedlings of native trees.

2 Seedling production (currently just under 24,000). It will be important to obtain an update on progress in the half year report.

To date 145,759 seedlings of native trees have been produced

3 The project aims to widen the restoration area from 75 ha to 130 ha. Is it appropriate to spread limited seedlings (given major pressure on seedling propagation numbers) over double the area?

To date we have launched restoration over 46.54 ha using 109,997 seedlings (i.e. on average 2,363 seedlings per ha). As a minimum we are confident of producing another 90,000 seedlings which would enable another 38 ha to be out-planted, and hence, at the end of the project, we anticipate that restot5atyion will have been launched over a total of at least 85 ha.

4 The AR notes that MEL process development and evidence progress has been limited with a project meeting happening in June. This is important to rectify, along with understanding whether any beneficiary family income baseline activity did actually take place.

We are pleased to report that a local graduate (Hortense) has been trained in best practice for social monitoring and then supported to collect information on perceptions of the protected area, FBM and the project, from among a representative sample of locals (beneficiaries and non-beneficiaries). The summary results of this fascinating study are available in Evidence Outcome O.5.

5 Safeguarding progress on staff and community training as appropriate will be necessary.

We addressed this suggestion by recruiting a consultant who: a) improved the FBM's safeguarding policy, b) trained FBM staff in the concept of safeguarding and the application of the policy, and c) reanimated the system for making and treating complaints (see Evidence "Safe-guarding").

6 The project notes that a budget Change Request will be made for continued employment of the Seed Collector.

A Change Request, that included a change to the distribution of funds between budget lines to allow the retention of this professional botanist, was made on 11/07/24, and accepted on 15/07/24

8. Risk Management

The updated risk register for this project is included as an appendix to this report. A risk that was not anticipated during the conception of this work, but that now has become significant, is the severely deteriorating relationship between FBM and the Forest Service. The project relies on the Forest Service generally to support our work at the site and, especially, treat serious infractions within the protected area that are detected by the rangers. The relationship broke down because FBM staff agents of the forest service were accepting compensation for certain agreed services but then these services were not forthcoming to an adequate standard. The subsequent withdrawal of payments resulted in a major conflict. At the moment this relationship remains antagonistic and FBM are developing an alternative method of treating infractions. This method consists of a collaboration with the Major in which the Communal Office would treat the infractions – especially those concerning fire. The agreement between FBM and the Major is presented in Evidence Output 1.2.

9. Scalability and durability

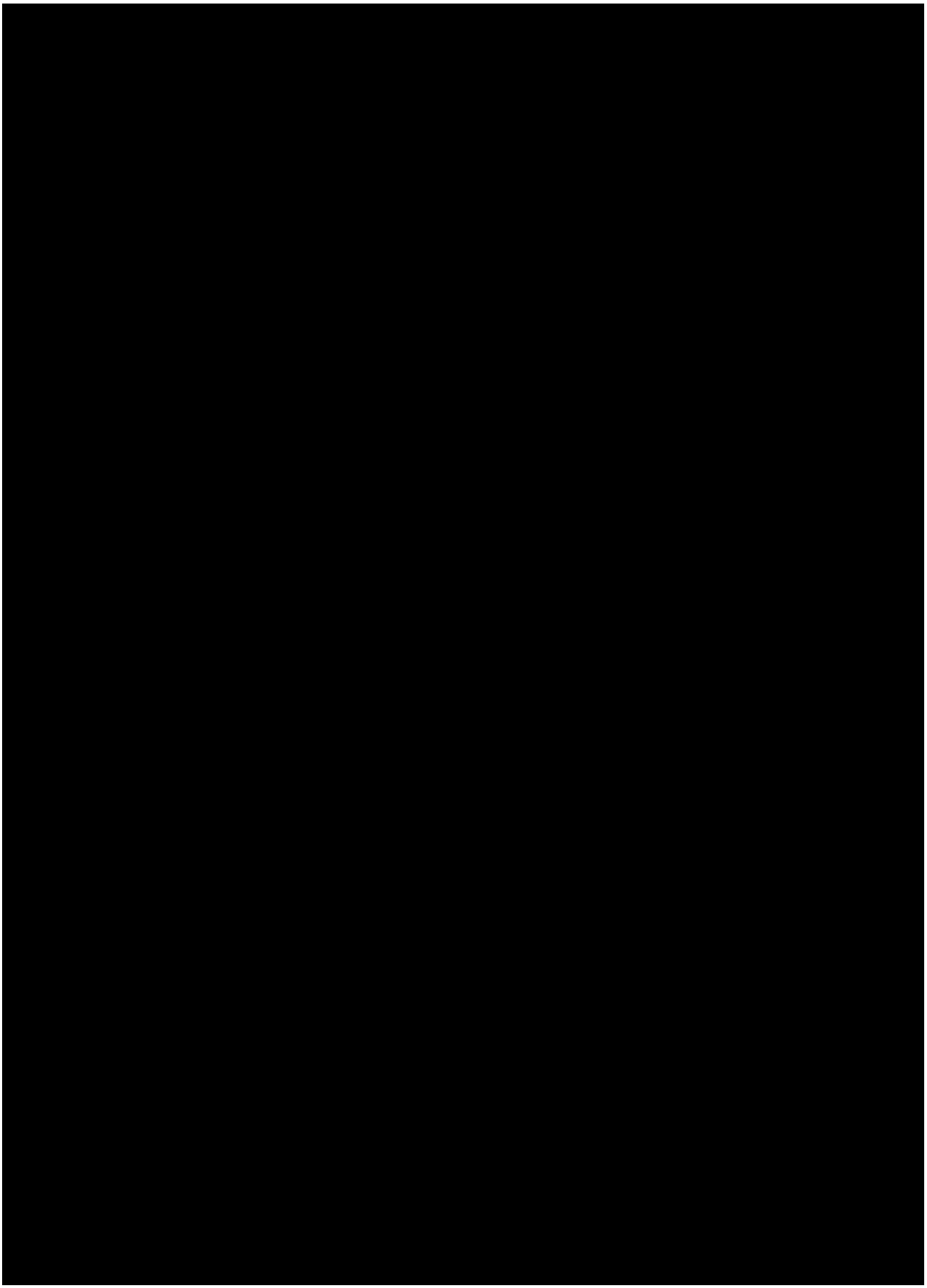
Currently, with local support, the project is successfully and efficiently collecting seeds of native trees, propagating these to provide robust seedlings, and then out-planting these as part of active restoration. The process is working well and, in YR3, we will begin sales. However, the current success is due to substantial grant support. While the work could certainly not have been launched without such support, there is a risk now that locals are familiar with receiving reliable and quite generous compensation for their efforts. At least initially, immediately after the project (YR4), it is unlikely that the proposed value chain will yield such motivation for such a large number of people as is currently the case, and neither will it be able to support compensation for an experienced field botanist who not only leads a team in the collection of high quality seeds of native trees but also ensures the scientific identification of the parent tree. Thus to ensure the legacy of the project we will need to initially scale down to a level coherent with the actual market. Rather than paying the seed collectors and the nursery staff a fixed monthly compensation a paradigm shift will be required in which they will be paid in-line with productivity. Also, rather than support the field botanist (who has collected seeds from all and every fruiting tree encountered) we will need to identify a small number of native trees that are both valuable and that performed well in our out-planting trials and focus collection on only there species. Training will be provided to local seed collectors to identify these target tree species..

Looking further into the future, we are currently in discussions with the Director of the *Silo Nationale des Graines Forestière* (the Malagasy Government's body that is tasked with supplying forestry projects with seeds) to explore whether this project, together with a number of other community seed collecting projects that MBG supports elsewhere in Madagascar, might supply SNGF with seeds in return to payments for the community.

10. Darwin Initiative identity

All signs erected and equipment purchased by this project has been labelled with the Darwin Initiative logo (Evidence Communication). During YR2, the Twitter account "@c_birkinshaw" was closed and a new account opened on Bluesky https://bsky.app/profile/chrisbirkinshaw.bsky.social. Two posts concerning the project were posted here but the number of followers on this platform is much less than those obtained on Twitter. Sadly the neither the Biodiverse Landscape Fund nor the Darwin Initiative appear to have an address on this platform. Interestingly, given that the UK has little economic interest in Madagascar (excepting in connection with the Rio Tinto multinational mining company), the multiple Darwin Initiative Projects, coupled with the Biodiverse Landscape Fund project, are central to Malagasy perceptions of the UK. The former British Ambassador invested significantly in nurturing this perception and generally supporting DEFRA funded work in the country. The orientations of the new British Ambassador have yet to become apparent.

11. Safeguarding



12. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2024 – 31 March 2025)

Project spend (indicative) since last Annual Report	2024/25 Grant (£) Total = £92,53	2024/25 Total Darwin Costs (£) Total = £92,535.78	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				

Table 2: Project mobilised or matched funding during the reporting period (1 April 2024 – 31 March 2025)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)	[redacted]	[redacted]	Conservation Allies
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)	[redacted]	[redacted]	Expertise France

13. Other comments on progress not covered elsewhere

Nothing to add.

14. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes.

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here).

Madagascar's dry deciduous forest, with its towering baobab trees and sifaka lemurs, is one of the country's most iconic vegetation types. However, it is also an ecosystem that is severely threatened by rampant deforestation. The forest is cleared by impoverished farmers who seek land to grow maize and back-eyed beans whose harvests are sold to entrepreneurs who seek lucrative export markets. The

farmers gain little and their landscape is destroyed. Dry deciduous forest urgently needs to be conserved but now, in some areas, it is so fragmented that effective conservation requires action to increase ecosystem integrity. Unfortunately almost nothing is known about which native trees are most effective in the enabling the restoration of this ecosystem nor what constitutes best practice for nurturing out-planted trees to maximise their performance in this challenging environment. To contribute to addressing these gaps in knowledge, the Malagasy NGO Fikambanana Bongolava Maitso (or FBM) is has launched the active restoration of 85 hectares (using 200,000 native trees) within the much abused forest Bongolava Forest, in northwest Madagascar. An experimental approach is being used to inform best practice for restoration of this ecosystem. Success at this site will provide a convincing model to inspire others to launch much-needed efforts to restore dry deciduous forest elsewhere in Madagascar.

File Type	**File Name or File Location**	**Caption**	**Social media accounts and websites to be tagged (leave blank if none)**	**Consent of subjects received**
Video	https://drive.google.com/file/d/1GX2aIsKJKzGAeIRe4dh81otV7mIzHA6Y/view?usp=sharing	Drone video showing community restoration at Bongolava (Cyprien Miandrimanana)	None	N/A
Image	https://drive.google.com/file/d/15YYJbrUuHc7fjdC8sNjbYbc6nL7UjAPX/view?usp=sharing	Drone image of restoration plot in the Bongolava Forest (Cyprien Miandrimanana)	chrisbirkinshaw@bsky.social	N/A

Annex 1: Report of progress and achievements against logframe for Financial Year 2024-2025

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Impact: Model project shows how Malagasy ecosystems can be successfully conserved and restored by the large-scale mobilisation of local people through creation of new "green" employment opportunities.	The project is not yet functioning as a "model" because the value chain for the sale of seedlings is not yet functional. However, as a result of the DI-supported intervention, the threats to the PA were clearly reduced, the credibility of FBM increased and over a hundred "green" employment posts created.	
Outcome: Local farming families at Bongolava mobilised to effectively conserve and restore their forest and thereby access improved livelihoods		
Outcome indicator 0.1 In YR1, YR2 and YR3 of the project the annual number of infractions within the 500 hectare target zone falls respectively by 50%, 75% and 90% from baseline.	Increased from 6 infractions in 2023-24 to 20 in 2024-25: (Evidence O.1, and Activity 1.2). However the impact of infractions was generally similar in YR2 compared to YR1, and less than prior to the project.	Continue patrolling and endeavour to develop a professional relationship with agents from the Forest Service.
Outcome indicator 0.2 In YR2 and YR3 no forest is lost to agriculture within the 500 hectare target zone.	Forest lost due to shifting cultivation in 19,000 ha target zone was 0 ha 2024-25 compared with 49 ha in 2023 and 145 ha in 2022 (Evidence Impact)	Continue patrolling
Outcome Indicator 0.3 By YR3 all old fields in the 500 ha target zone are regenerating forest	Not applicable in YR2	Monitoring of state of forest probably using drone
Outcome Indicator 0.4 In YR1, YR2 and YR3 the average annual income received by the farming families participating in this project increased by at least 25% over pre-project baseline	372 people accessed a mean compensation £155.70 per person for the 12 month period. This is equivalent to a mean of £12.98 per person per month and an estimasted increase in their income of 37%	Transition to new business model.
Outcome Indicator O.5. By YR3 the project participants value their forest more than at baseline	Baseline study now available and reveals both concern about the loss of the forest but also a desirable to be able to access its natural resources (preferably without controls)	Repeat social survey at end of YR3 to provide information on the change in perceptions during the period of this project.

Output 1 Infractions in target forest rapidly detected and controlled by local farmers with help of forest service		
Output indicator 1.1. Annually all 0.1 km² cells within target zone visited by local rangers bimonthly and infractions noted and reported	124 patrols were made that covered a total of 372 km	Continue
Output indicator 1.2. All infractions treated either by local management committee or, for more serious offenses, by Forest Service	5 infractions detected and treated satisfactorily by Forest Services (Evidence Output 1.2) but then break down in relationship between FBM and the local agent of the Forest Service	Repair relationship with the Forest Service or develop alternative approaches to the treatment of infracdtions.
Output 2. Farmers launch reconstructive restoration on old fields within protected area		
Output indicator 2.1. At end of 6 months 5 village nurseries have been installed, equipped and are functional	Three nurseries were maintained and remain functional (Evidence 2.1)	Continue to maintain nurseries and ensure that the “shop front” nursery close to the road retains a professional appearance attractive to potential customers.
Output indicator 2.2. At the end of 6 months 60 local people have the knowledge, skills and motivation to work as effective nursery staff	No further training was provided but motivation, in the form of salaries, was maintain.	Transition to new business model.
Output indicator 2.3 During YR2 200,000 plants of native species are available in 5 village nurseries for out-planting	145,759 seedlings of 32 woody plant species already produced. (Evidence 2.3)	Out-planting in YR2
Output indicator 2.4. By YR2, 75 hectares of land that was formerly forest but recently cut and burnt for maize/bean cultivation have been planted with a total of ca. 200,000 young plants of (i.e. a mean of 2800 plants per hectare).	Restoration launched over 46.54 ha	Prepare zones ready for out-planting
Output indicator 2.5. In YR3 out-planted plants have a mean 12-month survival rate of 80% and a mean annual growth rate of 25 cm	Not applicable	Out-planting begins in YR2
Output 3. Best practices for the restoration of degraded dry deciduous forest defined and shared		
Output indicator 3.1. 3.1 By YR3, the knowledge of the project participants combined with the results of trials exploring best practice for reconstructive restoration of dry deciduous forest is summarised into a well- illustrated booklet that is shared with others endeavouring to restore this vegetation type	Performance trials established consisting of 20 seedlings of four different native trees species planted on two soil types (sand and clay), and with four different treatments (Evidence Activity 2.7).	Monitor trials and analyse, interpret and share results.
Output 4. Local farming families gain improved livelihoods through engagement with the project.		

Output indicator 4.1. In YR1, YR2 and YR3 60 farming families (60 men and 60 women) gain average compensation of £80 per month for their participation in the project including work as rangers, and for the propagation, out-planting and nurturing of young trees, and monitoring	372 people accessed a mean compensation £155.70 per person for the 12 month period. This is equivalent to a mean of £12.98 per month which represents an increase in their income of around 37%.	Endeavour to maintain additional financial gains for nursery staff during transition of seedling production to a business.
Output indicator 4.2. In YR3 farmers are able to generate an extra mean income of at least £25 per month through the sales of native tree seedlings for other restoration projects	Not applicable until YR3	Launch the sale of seedlings

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

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: Model project shows how Malagasy ecosystems can be successfully conserved and restored by the large-scale mobilisation of local people through creation of new "green" employment opportunities.			
Outcome: Local farming families at Bongolava mobilised to effectively conserve and restore their forest and thereby access improved livelihoods	0.1 In YR1, YR2 and YR3 of the project the annual number of infractions within the 500 hectare target zone falls respectively by 50%, 75% and 90% from baseline. 0.2 In YR2 and YR3 no forest is lost to agriculture within the 500 hectare target zone. 0.3 By YR3 all old fields in the 500 ha target zone are regenerating forest 0.4 In YR1, YR2 and YR3 the average annual income received by the farming families participating in this project increased by at least 25% over pre-project baseline 0.5. By YR3 the project participants value their forest more than at baseline	0.1 Analysis of log books of forest rangers 0.2 Analysis of "forest watch" images 0.3 Audit of young trees that are produced and out- planted, and monitoring of samples of young trees of each species, under each condition, to estimate survival and growth rates. 0.4 Household surveys among project' participants at baseline and then annually 0.5 Analysis of open interviews with a sample of participants at baseline and again at end YR3.	- Local farming families trust FBM sufficiently to engage in this process
Outputs: **1**. Infractions in target forest rapidly detected and	1.1. Annually all 0.1 km² cells within target zone visited by local rangers bimonthly and infractions	1.1 Analysis of observations and GPS readings recorded in log books of rangers	- Local office of Forest Service have sufficient resources and motivation

controlled by local farmers with help of forest service	noted and reported 1.2. All infractions treated either by local management committee or, for more serious offenses, by Forest Service	 1.2 Reports from Management Committee and Forest Service concerning treatment of infractions	to fulfil their responsibilities concerning the treatment of infractions
2. Farmers launch reconstructive restoration on old fields within protected area	2.1 At end of 6 months 5 village nurseries have been installed, equipped and are functional 2.2 At the end of 6 months 60 local people have the knowledge, skills and motivation to work as effective nursery staff 2.3 During YR2 200,000 plants of native species are available in 5 village nurseries for out-planting 2.4 By YR2, 75 hectares of land that was formerly forest but recently cut and burnt for maize/bean cultivation have been planted with a total of ca. 200,000 young plants of (i.e. a mean of 2800 plants per hectare). 2.5 In YR3 out-planted plants have a mean 12-month survival rate of 80% and a mean annual growth rate of 25 cm	2.1 Photos of nurseries 2.2 Evaluation of competence of nursery staff 2.3 Analysis of nursery log books with photographic proof of condition of nurseries 2.4 Use of GPS units to map areas of deforested land where natural regeneration is adequate to ensure restoration and areas where reconstructive restoration (i.e. tree planting) has been launched. 2.5 Monitoring of survival and growth of samples of out-planted plants representing different species planted under different conditions following protocol described here: https://mobot.mg/conservation/ecological_restoration/	- native tree species can be identified that can be propagated easily and that survive and grow well in the challenging conditions (poor soils, high exposure to wind and sun) of former fields - wild fires can be controlled with firebreaks so they do not burn restoration plots nor regenerating forest - free ranging cattle can be controlled by project participants by soliciting collaboration of the neighbours, so that they do not trample or browse the newly out-planted young plants
3. Best practices for the restoration of degraded dry deciduous forest defined and shared	3.1 By YR3, the knowledge of the project participants combined with the results of trials exploring best practice for reconstructive restoration of dry deciduous forest is	3.1 Number of booklets distributed to named recipients 3.2 Feedback from recipients concerning the value of booklet	- at least some of the principles of best practice identified at Bongolava will be applicable to the restoration of dry

	summarised into a well- illustrated booklet that is shared with others endeavouring to restore this vegetation type		deciduous forests elsewhere.
4. Local farming families gain improved livelihoods through engagement with the project.	4.1. In YR1, YR2 and YR3 60 farming families (60 men and 60 women) gain average compensation of £80 per month for their participation in the project including work as rangers, and for the propagation, out-planting and nurturing of young trees, and monitoring 4.2. In YR3 farmers are able to generate an extra mean income of at least £25 per month through the sales of native tree seedlings for other restoration projects	4.1 Accounts of payments made to participating faming families 4.2 Accounts of sales of young trees	- by YR2 of the project robust markets exist in the region to young plants of native trees can be sold for landscape restoration
Activities 1.1. Research by Project Manager to identify the project zone where local farming families are concerned about the loss of the forest and are willing to engage with an alternative greener vision of their landscape 1.2. 60 farmers in the host landscape identified and recruited as community rangers by local radio broadcasts and individual interviews 1.3. 60 local farmers trained by Assistant Project Manager- Patrols in community patrolling and the recording and reporting of infractions 1.4. Local rangers systematically patrol ca. 500 ha target zone to detect and report infractions under the direction of the Assistant Project Manager (patrols) 1.5. Infractions treated by the local management committee or the Forest Service (depending on severity) 2.1. 60 farmers (mostly women) identified and recruited as nurserywomen by local radio broadcasts and individual interviews 2.2. 60 women trained by the Assistant Project Manager-Nurseries in best practice for the collection of seeds and the propagation and nurturing of seedlings of native woody plant species 2.3. 5 village nurseries installed in the target landscape by nursery women assisted by rangers, under the guidance of a consultant			

2.4. Under the guidance of the Assistant Project Manager-Nurseries, each nursery propagates 40,000 seedlings of native woody plants
2.5. Under the guidance of the Assistant Project Manager-Nurseries and direction of the Project Manager, the nurserywomen out-plant 200,000 seedlings of native woody plants (some being planted within the framework of experiments to identify best practice)
2.6. Out-planted seedlings provided with post plantation care by nursery women
2.7. Samples of the out-planted seedlings monitored to determine survival and growth.
3.1. The Project Manager analyses results of monitoring to inform best practice for the reconstructive restoration of degraded dry deciduous forest
3.2. The Project Manager and Assistant Project Manager-Nurseries organises a workshop with project participants (and representatives from other organisations working to restore this habitat elsewhere) to present the results of monitoring of the survival and growth of out-planted seedlings and, partly informed by this information, to debate their perceptions on best practice for reconstructive restoration in the vegetation type
3.3. The Project Manager conceives and drafts a publication (could be booklet or perhaps poster) describing the principles for best practice for the restoration of dry deciduous forest, then shares this publication with others engaged in this activity
4.1. Project staff and business consultant develop business plan for a native tree value chain
4.2. Business plan implemented including development of webpage to attract potential buyers of young plants of native trees and to enable express interest in placing an order
4.3. Nursery women organised and legalised as an association and helped to develop a manual of procedures
4.4. Assistant Project Manager-Nurseries coaches the association of nurserywomen in the application of their manual of procedures
4.5. Assistant Project Manager-Nurseries places potential buyers in contact with one or more groups of nurserywomen where the buyer can seek their advice about which species may best satisfy their needs and then directly negotiate the purchase of these plants
4.6. Assistant Project Manager-Nurseries facilitates communication between buyers and the association of nurserywomen.

Annex 3: Standard Indicators

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A01	E.g. Number of people in eligible countries who have completed structured and relevant training	People	Men	3	3		3	3
DI-A01	E.g. Number of people in eligible countries who have completed structured and relevant training	People	Women	1	1		1	1
DI-A03	Number of local/national organisations with improved capability and capacity as a result of project.	Number of organisations	Local NGO (FBM)	1	1		1	1
DI-A05	Number of trainers trained reporting to have delivered further training by the end of the project.	people	Men	3	3		3	3
DI-A05	Number of trainers trained reporting to have delivered further training by the end of the project.	people	Women	1	1		1	1
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).	people	Men	69	252		252	69
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).	people	Women	60	121		121	60
N/A	Social Media presence	Number/year	Social media posts	4	6		6	20
DI-D01a	Hectares of habitat under sustainable management practices	Area (ha)	Protected area	19,000	19,000		19,000	19,000
DI-D01b	Area improved through restoration	Area (ha)	Restoration zones	0	46.54		46.54	75

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-D03	Number of households reporting improved livelihoods	households	Assuming no households with two participants	129	372		372	129
DI-D02	Ecosystem Degradation Avoided (ha) (DEFRA / ICF KPI 8)	Area in hectares (ha)	Dry deciduous forest	19,000	19,000		19,000	19,000

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, scheme, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	√
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	√
Is your report more than 10MB? If so, please consider the best way to submit. One zipped file, or a download option, is recommended. We can work with most online options and will be in touch if we have a problem accessing material. If unsure, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	√
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.	√
Have you provided an updated risk register? If you have an existing risk register you should provide an updated version alongside your report. If your project was funded prior to this being a requirement, you are encouraged to develop a risk register.	√
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see Section 16)?	√
Have you involved your partners in preparation of the report and named the main contributors	√
Have you completed the Project Expenditure table fully?	√
Do not include claim forms or other communications with this report.	