Applicant: Freeman, Karen Organisation: Madagascar Fauna and Flora Group Funding Sought: £314,523.00

DIR27S2\1039

Diverse agroforestry protects natural capital around Betampona and Vohibe, Madagascar

To enable the long-term conservation of biodiversity in the target protected areas, this project will provide rural Malagasy with tools, seedlings, training, technical assistance and market access to derive resilient, sustainable livelihoods that also build natural capital in the production landscapes surrounding two important but threatened protected areas. Diverse agroforestry methods will be used to sustainably increase crop diversity, household income and tree cover, thereby reducing susceptibility to extreme climate events and pressure on remaining local forests.

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title	Dr
Name	Karen
Surname	Freeman
Website (Work)	www.madagascarfaunaflora.or
	g
Tel (Work)	
Email (Work)	

Address



GMS ORGANISATION

Туре		Organisation
Name	Madagascar Fauna	a and Flora Group
Phone (Mo	bile)	
Email (Wor	k)	
Website (W	/ork)	
Address		

Section 2 - Title, Dates & Budget Summary

Q3. Project title:

Diverse agroforestry protects natural capital around Betampona and Vohibe, Madagascar

What was your Stage 1 reference number? e.g. DIR27S1\100123

DIR27S1\1592

Q4. Country(ies)

Which eligible host country(ies) will your project be working in? Where there are more than 4 countries that your project will be working in, please add more boxes using the selection option below.

Country 1	Madagascar	Country 2	No Response
Country 3	No Response	Country 4	No Response

Do you require more fields?

• No

Q5. Project dates

Start date:	End date:	Duration (e.g. 2 years, 3
01 July 2021	30 June 2024	months):
		3 years

Q6. Budget summary

Year:	2021/22	2022/23	2023/24	2024/25	Total request
Amount:	£110,502.00	£91,006.00	£92,631.00	£20,384.00	£
					314,523.00

Q6a. Do you have matched funding arrangements?

• Yes

What matched funding arrangements are proposed?

Equipment Christof den Biggelaar
Laptop MFG
MFG contribution to audit fee
MFG newsletters and radio emissions
Consultancy fees Christof den Biggelaar
MFG Project Leader international flights
MFG Project Leader internal Madagascar flights
MBG Project Leader salary
Salary PM MFG at
MFG ongoing monitoring of AF plots in subsequent 2 years
MBG ongoing monitoring of AF plots in subsequent 2 years
CRS, FVEE and MC Ingredients consultancy fees
TOTAL

Q6b. Proposed (confirmed and unconfirmed) matched funding as % of total project cost (total cost is the Darwin request <u>plus</u> other funding required to run the project).



Q7. Summary of project

Please provide a brief summary of your project, its aims, and the key activities you plan on undertaking. Please note that if you are successful, this wording may be used by Defra in communications e.g. as a short description of the project on <u>GOV.UK</u>.

Please write this summary for a non-technical audience.

To enable the long-term conservation of biodiversity in the target protected areas, this project will provide rural Malagasy with tools, seedlings, training, technical assistance and market access to derive resilient, sustainable livelihoods that also build natural capital in the production landscapes surrounding two important but threatened protected areas. Diverse agroforestry methods will be used to sustainably increase crop diversity, household income and tree cover, thereby reducing susceptibility to extreme climate events and pressure on remaining local forests.

Section 4 - Darwin Objectives and Conventions

Q8. Objectives for the Darwin Initiative

Please indicate which of the fund objectives (listed on p.8 of the guidance) you will be addressing.

- I To understand and tackle impacts of agriculture practices on biodiversity, livelihoods and climate
- \blacksquare To promote the responsible stewardship of natural assets
- ☑ To promote the sharing of the benefits arising from the use of biodiversity
- ☑ Contributing towards reversing the increase in threats of extinction to the world's flora and fauna

Q9. Biodiversity Conventions, Treaties and Agreements

Q9a. Your project must support the commitments of one or more of the agreements listed below.

Please indicate which agreement(s) will be supported and describe which objectives your project will address.

- ☑ Convention on Biological Diversity (CBD)
- ☑ International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
- ☑ Global Goals for Sustainable Development (SDGs)

Q9b. Biodiversity Conventions

Please detail how your project will contribute to the aims of the agreement(s) your project is targeting. You should refer to Articles or Programmes of Work here.

This proposed project clearly responds to one of the three main goals of the CBD i.e. the conservation of biological diversity. Specifically, it will contribute to Madagascar's National Biodiversity Strategy and Action Plan (2016) as follows:

Strategic Goal B: "Reduce the direct pressures on biodiversity and promote sustainable use of natural resources."

Objective 5: "By 2025, the rate of degradation, fragmentation and loss of habitats or ecosystems is reduced."

Objective 7: "In 2025, all zones allocated to agriculture, aquaculture and forestry are managed according to sustainable production plans, ensuring an integrated approach to biodiversity conservation."

Strategic Goal C: "Improve the biodiversity status by safeguarding ecosystems, species and genetic diversity."

Objective 11: "In 2025, 10% of terrestrial ecosystems . . . especially areas of particular importance for biodiversity and ecosystem services, are conserved adequately in ecologically representative systems and in protected areas and are managed effectively by different strategic approaches."

Objective 12: "By 2025, the extinction of endangered species is reduced and their conservation status improved."

Strategic Goal D: Enhance the benefits from biodiversity and the services provided by ecosystems.

The project addresses Target 6 of the CBD-linked Global Strategy for Plant Conservation (2011-2020), which concerns the sustainable management of production lands; and Article 6.2 of the ITPGRFA:

Article 6.2.a. "Pursuing . . . the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources;"

Article 6.2.e. "Promoting, as appropriate, the expanded use of local and locally adapted crops, varieties and underutilized species;"

Article 6.2.f. "Supporting, as appropriate, the wider use of a diversity of varieties and species in on-farm management, conservation and sustainable use of crops."

Q9c. Is any liaison proposed with the CBS / ABS / ITPGRFA / CITES / CMS / Ramsar / UNFCCC focal point in the host country?

• Yes

If yes, please give details.

This project will contribute to carbon sequestration by safeguarding and enabling the regeneration of forest vestiges as well as by promoting agroforestry. We will inform Mme Lovankanto, the UNFCCC Madagascar Coordinator at project launch and provide relevant and timely updates as the project evolves, especially in the context of up-scaling to new landscapes.

Q9d. Global Goals for Sustainable Development (SDGs)

Please detail how your project will contribute to the Global Goals for Sustainable Development (SDGs)

This project directly or indirectly contributes to SDGs 1, 2, 3, 5, 8, 11, 13, 15, and 17.

The introduction of new fruit/spice species and/or varieties will contribute to better nutrition, health and farm incomes, thereby reducing high rural poverty and malnutrition rates (SDGs 1, 2, 3, 8).

Farmer cooperatives for post-harvest handling, value-added processing/ marketing of their products directly to exporters/urban markets will create local employment, ensure better prices to farmers and more sustainable livelihood/incomes (SDGs 8, 11).

We aim to ensure gender balance in training, access to plant and other materials, technical assistance, and hiring local staff (SDG 5). Note that, female literacy rates are low in rural Madagascar, so gender equality in hiring rates may not be possible.

Tree crops are generally better able to deal with weather/climate variability than annual crops. Recent research shows that integrated tree/crop (agroforestry) systems can store more carbon, soil nutrients and

water, and are better able to restore degraded soils than separate plantings (SDG 13). They also provide a range of products (fruits, fodder, timber, fuelwood), reducing the need to convert/collect in remaining forest patches /protected areas.

The project will provide further training and support to villagers' ongoing participation in forest restoration, protection and management of remaining forest patches, resulting in safeguarding their biodiversity (SDG 15).

We have actively sought partnerships with existing organizations, Malagasy and international NGOs and small businesses to provide training, technical assistance, plant material, etc. to ensure success of the project and its future sustainability (SDG 17).

Section 5 - Lead Organisation Summary

Q10. Lead organisation summary

Has your organisation been awarded a Darwin Initiative or IWT Challenge Fund award before (for the purposes of this question, being a partner does not count)?

• Yes

If yes, please provide details of the most recent awards (up to 6 examples).

Reference No	Project Leader	Title
23-004 ref 3339	Karen Freeman	Ex-situ conservation of threatened plants from Ivoloina - lfontsy valleys
No Response	No Response	No Response
No Response	No Response	No Response
No Response	No Response	No Response
No Response	No Response	No Response
No Response	No Response	No Response

Have you provided the requested signed audited/independently examined accounts? If you select "yes" you will be able to upload these. Note that this is not required from Government Agencies.

• Yes

Please attach the requested signed audited/independently examined accounts.

A MFG response letter DIR27S2 1039

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- 10/02/2021
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Section 6 - Project Partners

Q11. Project partners

Please list all the partners involved (including the Lead Organisation) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development.

This section should illustrate the capacity of partners to be involved in the project. Please provide Letters of Support for the Lead Organisation and each partner or explain why this has not been included.

N.B: There is a file upload button at the bottom of this page for the upload of a cover letter (if applicable) and all letters of support.

Lead Organisation name:	Madagascar Fauna and Flora Group
Website address:	www.madagascarfaunaflora.org

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Details (including roles and responsibilities and capacity to engage with the project):	MFG is responsible for overall project leadership, administration, financial management and reporting as well as coordination of all project capacity, nursery establishment and animation of participating farmers around Betampona Strict Nature Reserve. MFG has over 35 years' experience working in Eastern Madagascar and 30 years working at Betampona. MFG has a well-developed programme based on the four main pillars of conservation, environmental education, capacity building and research. We have run a community-based reforestation/forest restoration programme for 14 years with an experienced and well-trained team, who has been delivering training and local farmer mentorship in sustainable eco-agriculture and agroforestry at our main sites of intervention for more than 12 years. MFG's team is well-respected by both local authorities and communities around Betampona due to our long-term commitment to this site and the positive relationships created by seeking mutually beneficial solutions to the many pressing challenges of biodiversity conservation. We have proven our ability to manage large projects in a transparent, efficient and effective way through the successful annual execution of a number of projects from a diverse range of respected international agencies such as Darwin Initiative, Critical Ecosystem Partnership Fund, Global Environment Facility and IUCN.
Have you included a Letter of Support from this organisation?	⊙ Yes
Have you provided a cover letter to address your Stage 1 feedback?	• Yes
Do you have partners involved in ④ Yes	n the Project?
1. Partner Name:	Missouri Botanical Gardens-Madagascar

Website address:

https://www.mobot.mg/

responsibilities and capacity to engage with the project):	years with a continuous in-country presence since 1983. MBG-Madagascar's focus has shifted in the past two decades from pure research and taxonomic work to also running proactive conservation programmes. MBG now manages 13 different protected areas across Madagascar, including Vohibe one of the target intervention sites in this proposed project. MBG has been involved since the inception of this project at Stage 1 in the choice of target sites, development of the project methods and proposal writing. MBG will be responsible for the administration and implementation of project around Vohibe. MBG has long experience from its field-based conservation initiatives in the promotion of agroforestry techniques as a potential tool for local development and the protection of forest fragments. The Conservation Site Project Supervisor at Vohibe is Fortunat Rakotoarivony, an agronomist by training specialising in forestry, rural development, sustainable management of renewable natural resources and community organisation. Fortunat has worked with the community living outside Vohibe since 2007, where he has already begun an agroforestry initiative. As such, Fortunat is perfectly placed to develop agroforestry and community conservation of the remaining forest fragments.
Have you included a Letter of Support from this organisation?	⊙ Yes

2. Partner Name:	SOAVINALA
Website address:	No Response

Details (including roles and responsibilities and capacity to engage with the project):	SOAVINALA is local stakeholder group created in 2008, now consisting of around 200 member farmers from the community around the Vohibe Forest, centred particularly on the two Fokontany (village groups) closest to the forest, including the village of Ampitabe. SOAVINALA is dedicated to the sustainable use and conservation of the Vohibe Forest. The group has received different types of training on natural resource management enabling them to ensure sustainable management of forest resources though the development and upholding of local rules (dina). Members join voluntarily to participate in various conservation activities such as regular patrols to control infringements of the locally agreed natural resource management rules, restoration, reforestation, and awareness-raising. Their role will mainly be in the coordination and animation of participating farmers to drive the planned agroforestry development (including provision of a site for the establishment of a tree nursery and members to be trained in native and fruit tree propagation techniques), participative active protection of remaining targeted forest fragments through joint patrols and enforcement of local bylaws (dina), and participative monitoring of the project's success in reducing negative impacts on the target forests in the landscape adjacent to the Vohibe New Protected Area.
Have you included a Letter of Support from this organisation?	⊙ Yes

3. Partner Name:	VOI LOVASOA
Website address:	No Response

Details (including roles and responsibilities and capacity to engage with the project):	VOI LOVASOA is an association of 53 local farmers/landowners (26 men and 27 women) living around 6 forest fragments which are collectively referred to as Ampasina, approximately 10km East of Betampona. VOI stands for Vondron'olona ifotony, which are community-based organisations set up across Madagascar to protect and manage remaining forests and resources in a more sustainable manner. The LOVASOA association was set up 4 years ago and is under the direction of the regional branch of the Ministry of the Environment and Sustainable Development (DREDD-Atsinanana), working in partnership with the University of Toamasina to organise forest patrols and conservation initiatives to protect the highly biodiverse and valuable fragment forests of Alahambana, Ampasimadinika, Angodrogodroka, Menagisa, Amparafaravahy, and Alaratsy, which total 90ha. The VOI LOVASOA led by their manager Alice Heliarisoa, will be responsible for coordinating Ampasina's participation in this project. The association will be responsible for animating and coordinating the activities of the project participants including establishment of a site and personnel for the project community nursery, supporting and encouraging the development of agroforestry parcels for participants, as well as ensuring participatory protection and
	monitoring of the target forests. Alice will also be responsible for the production of quarterly progress reports.
Have you included a Letter of Support from this organisation?	⊙ Yes

4. Partner Name:	Professor Christof den Biggelaar		
Website address:	No Response		

Details (including roles and responsibilities and capacity to engage with the project):	Dr. den Biggelaar has extensive field experience in teaching, research and extension in 7 African countries, including Madagascar as technical advisor for ecoagriculture and forestry for MFG since 2006. He has provided training courses for farmers and Malagasy university students in sustainable agriculture and agroforestry as well as technical advice to MFG staff to improve tree nursery operations, reforestation techniques, and forest inventory methods as a basis for forest management plans and monitoring of reforestation plots. He is familiar with the people and agricultural practices in the villages around the Betampona Reserve, and the challenges and opportunities to improve their farming practices and livelihoods. For 14 years, he has worked closely with Christian Rambeloson, the proposed coordinator for the Betampona site. Dr. den Biggelaar will provide expertise and training on agroforestry system design and management, train-the-trainers in participatory methods for village/individual farm landscape planning to meet conservation as well as farm production/food security goals and assist in developing a field monitoring & evaluation system to track the growth and performance of the trees and crops over time. Dr. den Biggelaar will help the project leader with the writing of quarterly technical reports for Darwin Initiative.
Have you included a Letter of Support from this organisation?	⊙ Yes

5. Partner Name:	The Fruits, Vegetables, and Environmental Education (FVEE) Program of the Church of Jesus Christ in Madagascar (FJKM)
Website address:	https://www.fjkm.mg

Details (including roles and responsibilities and capacity to engage with the project):	The FVEE Program was started in 2014 to help the people of Madagascar decrease poverty by growing fruits and vegetables and to help reduce the destruction of Madagascar's natural forests. It specializes in propagation of fruit trees, training of low-income farmers in how to grow/ graft fruit trees, establishment of self-sustaining fruit tree nurseries, and planting of native trees at schools/ other public spaces. FVEE established and operates the FJKM Fruit Centre at Mahatsinjo Maevatanana, the largest collection of mango varieties in Madagascar (80+) and over 100 varieties of other fruit trees. FVEE introduced many fruit varieties to Madagascar from Florida including many of the world's best mango varieties. FVEE staff helped people of Antanetibe Ankazobe start growing tangerines as a path out of poverty. Each year, FVEE teaches a course in fruit/ vegetable growing for students of FJKM's 5 seminaries. FVEE has numerous fruit and nut trees adapted to eastern Madagascar such as 'Ma'afala' and 'Ulu Fiti' breadfruit, 'Kohala' longan, mangosteen, pulasan, 'Magaña' and 'Pace' mamey sapote, 'Trompo' canistel, chocolate persimmon, jaboticaba, and macadamia. FVEE will be responsible for training, provision of new fruit/nut variety trees, establishment of source orchards for ongoing fruit tree production and follow-up technical support.
Have you included a Letter of Support from this organisation?	⊙ Yes

6. Partner Name:	Kew Madagascar Conservation Centre, Royal Botanic Gardens, Kew	
Website address:	https://www.kew.org	
Details (including roles and responsibilities and capacity to engage with the project):		

If you require more space to enter details regarding Partners involved in the project, please use the text field below.

Will also partner with:

• VOIs (villager associations) of the target villages of Antaranarana, Ambodirafia and Ambanitohaka, all of whom have already made commitments to protect forest fragments around the Betampona Strict Nature Reserve and who MFG has partnered with on various projects for at least 2 decades

• Catholic Relief Services on their "Securing and Protecting Investments & Capacities for Environmental Sustainability" or "SPICES" initiative, which seeks to increase the protection of native forest fragments through the promotion and facilitation of agroforestry systems to increase tree cover and reduce rural poverty. CRS will help MFG to develop the value chain of household production by connecting producers directly with buyers and exporters.

• MC Ingredients, a Toamasina-based spice exporter particularly interested in clove production as one of their main exports. Cloves are a particularly relevant crop for the Betampona area. By cutting out the middle-men it is a win-win situation as the farmers receive higher and more stable prices and the exporters receive better quality product.

• Agronomes & Vétérinaires Sans Frontières in Toamasina will be asked for assistance on marketing, establishment of value-added processing centres and cooperatives, focusing on fair-trade and organic products.

Please provide a cover letter responding to feedback received at Stage 1 if applicable and a combined PDF of all letters of support.

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Section 7 - Project Staff

Q12. Project staff

Please identify the core staff on this project, their role and what % of their time they will be working on the project. Further information on who should be classified as core staff can be found in the guidance.

Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. These should match the names and roles in the budget spreadsheet.

If your team is larger than 12 people please review if they are core staff, or whether you can merge roles (e.g. 'admin and finance support') below, but provide a full table based on this template in the pdf of CVs you provide.

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Karen Freeman	Project Leader	10	Checked
Christian Rambeloson	Betampona Project Coordinator	80	Checked
Arsene Razanadahy	Extension Agent	80	Checked
Honore-Alex Randanondraibe	Extension Agent	80	Checked

Do you require more fields?

• Yes

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Fortunat Rakotarivony	Project Coordinator Vohibe	50	Checked
Alice Heliarisoa	Project Coordinator Ampasina	80	Checked
Mamy-Tiana Rajaonah	Yam cultivation trainer	15	Checked
Lucien Rasoaviety	Site Manager Vohibe	100	Checked
Various at each site	Nursery Worker	100	Checked
Various at each site	Local animator	100	Checked
Jacques Razafimpiheno	Accountant MFG	10	Checked
Hanitra Rakotonandrasana	Accountant MBG	10	Checked

Please provide 1 page CVs (or job description if yet to be recruited) for the project staff listed above as a combined PDF.

Ensure the file is named clearly, consistent with the named individual and role above.

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Have you attached all project staff CVs?

• Yes

Q13. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and its relationship with poverty. For example, what are the drivers of loss of biodiversity that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems?

Please cite the evidence you are using to support your assessment of the problem (references can be listed in your additional attached PDF document which can be uploaded at the bottom of the next page).

Madagascar's biodiversity is rich, unique and very threatened (1% of remaining forest lost annually) (Harper et al 2007). In May 2015, the Malagasy government designated 94 sites as new protected areas so that now 7,205,203 hectares of Madagascar is designated to be managed primarily for biodiversity conservation (Gardner et al 2018). This is a major achievement but the real challenge now awaits: how to effectively conserve these sites from the major threats posed by the survival tactics of the country's rapidly-growing (2.7% annually) human population (27 M), 80% of whom are largely dependent on the exploitation of natural resources to generate livelihoods (World Bank 2020). While most of Madagascar's rural population rely on subsistence agriculture, the landscape surrounding most protected areas is severely degraded of natural capital and, according to our interviews with local farmers, is becoming ever less productive for agriculture (den Biggelaar pers. comm.). Moreover, our surveys indicate that crop diversity is remarkably low (Rapfilo Master's thesis (in prep.); Rakotondratandra PhD thesis (in prep.)) consequently, extreme and apparently increasingly frequent severe climatic events and crop disease outbreaks can plunge whole communities into poverty and famine. Such desperate people may rely even more heavily on remaining forested land (Borgerson et al. 2018; Merson et al. 2019), whether in protected areas or elsewhere, to survive through the exploitation of their relatively abundant stocks of fertile land and wood, as confirmed by our remote-sensing studies (Ghulam 2014). Thus, to enable the long-term conservation of Madagascar's protected areas it is necessary to identify and implement methods whereby rural Malagasy people can derive viable and sustainable livelihoods from the landscapes surrounding these conservation zones (Birkinshaw et al 2013). This proposed project recommends doing so by enabling local communities to apply a range of innovative and proven agricultural/forestry approaches (agroforestry) in the landscapes surrounding two important and highly threatened protected areas: Betampona and Vohibe. The methods will be specially adapted to local needs and circumstances, and will be coupled with proactive forest conservation and existing native forest restoration programmes in the target area. As pointed out by Di Sacco et al (2021) reforestation schemes should valorise and protect fragment native forest as part of larger reforestation efforts: we will aim to follow the 10 golden rules set out in that paper to maximise project impact for biodiversity conservation. The project will include the introduction of new fruit cultivars. In much of rural Madagascar, where transport infrastructure is limited or in very poor repair, it is very challenging for farmers to get their produce to market in a timely fashion (Rakotondratandra PhD thesis in progress). Individual farmers in rurally-isolated areas often need to sell their goods through intermediaries and generally get lower prices than the going rates paid by the exporters and buyers Rakotondratandra PhD thesis in progress). We will also work to develop the value chain of already-existing production in participating households and the wider community though support of farmer co-operatives and facilitation of direct access of growers to exporters and buyers.

Section 9 - Method, Change Expected, Gender & Exit Strategy

Q14. Methodology

Describe the methods and approach you will use to achieve your intended Outcome and Impact. Provide information on:

- How you have analysed historical and existing initiatives and are building on or taking work already done into account in project design. Please cite evidence where appropriate.
- The rationale for carrying out this work and a justification of your proposed methodology.
- How you will undertake the work (materials and methods).
- How you will manage the work (roles and responsibilities, project management tools, etc.).

Project builds on:

• Fruit/ spice species research at the Ivoloina Research Station in early 1900s, as well as fruit & banana research/ extension by IFAC (1960-1974) at Ivoloina. Farmers are familiar with co-ops (indigenous farmer co-op in 1930s in Ambodiriana to market coffee/ cloves; COFRUMAD/UCOFRUIT since 1960 to market bananas/litchis.

 \cdot Darwin Initiative Project 23-004 noted the conservation importance of forest remnants in proposed project intervention zone.

• Darwin Initiative Projects DAR22005 and EIDPO049, which developed yam culture within agroforestry systems to increase food security/household income in rural Madagascar.

· Abduwasit Ghulam's remote-sensing of forest degradation in/around Betampona Reserve, indicating high loss of remnant forests outside protected area.

 \cdot Angelo Lucah's Master's research to survey socio-economic status, agricultural practices and crop preferences around Betampona.

• Daorotiana Rakotondratandra's PhD dissertation research exploring household interest in/constraints to agroforestry adoption around Betampona, and value-added opportunities for agroforestry products and prospective markets.

 \cdot Experience and knowledge gained from MFG's 14-year community reforestation programme around Betampona.

 \cdot MBG's dynamic agroforestry programmes at three locations in Madagascar with staff trained by Bolivian experts - hence understand importance of local knowledge/ preferences in design of interventions.

· FOFIFA project to expand vanilla production in the Ivoloina valley, establishing 2 ha training/demonstration plot at Ivoloina; vanilla likely to be an important component in agroforestry plots.

Project initiation

• Preliminary identification of crop species of interest completed and interest in the initiative confirmed with target villages proposed for development into "model" agroforestry villages.

 \cdot Start-up meeting with project site coordinators /project partners to explain goals, methods and approaches of project.

• Meetings in target communities to explain/ debate agroforestry (integrating trees with annual crops) associated with commitment to sustainable use of remaining forest in their landscape. Assessment of existing crop tree rehabilitation needs and potential tree nursery sites. Identification of participants.

• Consult participants at each site to identify locally productive woody species of economic benefit for use in agroforestry plots, and specific desires for additional species/varieties. New fruit cultivars suitable for the area and judged likely to improve livelihoods under the site's environmental and socioeconomic conditions will be added to the list; potentially invasive species will be excluded.

 \cdot Sourcing of seeds or cuttings of target fruit/spice crops (FVEE, Kew and local sources), and collection of seeds of valued shade, timber, fuelwood spp. within each target area's remaining forest patches after obtaining permits.

Capacity building

• Selection/ training of extension agents and local animators (one male, one female per site for the latter) on project goals, tasks, duties and responsibilities by MFG/ den Biggelaar.

• Selection/training by MFG and FVEE of nurserymen/women in best practices for propagating/ nurturing trees, and record keeping using proven methods. Establishment of new nurseries/ upgrading existing ones by middle YR1 then propagation of 12,000 strong young plants of selected trees in total over next 18

months.

• Creation of local Agroforestry Association for motivated farming households in specified target villages (50 at Betampona, 30 at Vohibe and 20 at Ampasina) as interface for training in fruit tree cultivation, agroforestry techniques, tree management, financial management, benefits of farming co-operatives, crop preservation/ marketing, and forest patrols.

· Cascade-effect diffusion of methods from model villages to wider area

Agroforestry plot establishment

• Newly-trained farming families will be provided with plants they require and be guided/coached by extension agents to conceive, install and maintain their plots. Agroforestry is an approach that provides harvests throughout a succession of crops so, even during the early stages of this process, the farmers will obtain valuable harvests from donated annual plants/seeds (e.g. beans, yams). As early successional crops are harvested the plots will be enriched with woody plants as these become available. Value chain development

• Partners CRS and MC Ingredients will provide training for target households and the wider community in benefits of forming co-operatives, enabling direct access to buyers, removing the need for intermediaries. They will facilitate the value chain for existing production by connecting farmers directly with buyers where feasible and provide training in quality control, post-harvest handling and storage, value-added possibilities, and financial management.

Forest protection

 \cdot Contractual obligation of all participants to help protect target forest fragments through patrols/enforcing of

locally-approved resource-use agreements (dina)

Monitoring, evaluation and sharing

• Project Leader in consultation with local management teams will develop pragmatic monitoring protocols. Extension agents will be trained to work with project participants to collect tracking information as defined in log-frame. This information will inform local adaptive management, promote sustainable landscape management more widely, facilitate reporting.

Q15. Raising awareness of the potential worth of biodiversity

If your project contains an element of communications, knowledge sharing and/or dissemination please provide a description of your intended audience, how you intend to engage them, what the expected products/materials will be and what you expect to achieve as a result.

For example, are you expecting to directly influence policy in your host country or is your project a community advocacy project to support better management of biodiversity?

This project will focus on advocacy at the community level for our two target designated protected areas to promote integrated agroforestry methods coupled with obligatory participation in remnant forest stewardship (patrolling, monitoring and enforcing locally-agreed resource-use agreements or "dina"). Both MFG and Missouri Botanical Garden (MBG) have many years' experience working with local communities in chosen target areas and are very familiar with local village authority structures (both administratively through the local government Fokontany system and village elder structures known locally as Tangalamena). MFG/MBG have strong links with local leaders including the mayors, regional Ministry of the Environment personnel and, in the case of Betampona, Madagascar National Parks. We have built strong and trusting relationships with these communities and authorities over decades of mutually-beneficial interventions for these specific sites and well understand the formal procedures and communication methods required to successfully implement this project. We have specifically selected sites with existing villager associations to protect local forest fragments and have already ascertained participation interest through provision of support letters (supporting materials). The majority of our initial interventions will be held though village meetings and later through site-based workshops (with the exception of one off-site

training to be carried out at FVEE's training school). Our staff and project partners have extensive experience in this proven approach to rural training. The focus will be on in-situ hands-on training of practical skills and positive reinforcement of benefits. We will produce recorded transcripts and written minutes of village meetings and reports for each training session including feedback from oral evaluations of message efficacy (many rural farmers are illiterate so written quizzes are not appropriate). We will further share highlights of the project through our regular quarterly Malagasy newsletters and scheduled radio programmes.

Q16. Capacity building

If your project will support capacity building at institutional or individual levels, please provide details of what form this will take and how this capacity will be secured for the future.

This project has a strong capacity-building focus for participants and project staff with a planned coordinated series of hands-on practical workshops and follow-up technical support within their own nurseries/agroforestry plots over the project's duration. We will employ all local people as extension agents, nursery workers and animators to help ensure that training and knowledge gained through the project remains within the local communities beyond the end of the project. We aim to train nursery workers to not only gain the skills and source necessary plant stock for ongoing propagation of locally in-demand fruit and spice trees and to also learn how to manage a small business in a sustainable way to ensure the initiative longevity well beyond the funded three years. We will work with already-established village associations to build their capacity to protect the target forest fragments under their care and to prove that socio-economic development and biodiversity protection are not mutually exclusive. By focussing on low-tech, sustainable approaches using locally-abundant materials, we will ensure that the methods can continue to be implemented in perpetuity. Due to MFG, MBG's and Dr den Biggelaar's long-term commitment to these specific target areas we can ensure ongoing support and continued capacity building after project end. Through the proposed project, we would be able to access and introduce new partners to these areas, who have developed highly successful projects of their own at other sites across Madagascar (Kew, FVEE, Catholic Relief Services). The expertise brought by these leaders in agronomy, training and value chain development will provide a strong foundation of knowledge and practical skills for project staff and participants alike, which we feel could lead to long-term commitments to work in these areas and continue building capacity long-term.

Q17. Gender equality

All applicants must consider whether and how their project will contribute to reducing inequality between persons of different gender. Explain how your project will collect sex disaggregated data and what impact your project will have in promoting gender equality.

MFG, MBG and VOI LOVASOA will strive to hire equal numbers of males and females for any new posts in this project. This is not always possible due to lower levels of female literacy rates in rural Madagascar, which can present challenges for project written evaluation needs. However, this challenge can be overcome provided one of the two animators for a given site is literate. By intentionally planning to hire both a male and a female animator at each site we hope to engage members of both sexes equally to participate in the project. For each participating household both a male and female household member will be encouraged to attend each training session as we are aware that traditionally males and females often have quite different roles and responsibilities in rural Madagascar in terms of farming activities, childcare responsibilities and time availability. Only by encouraging active participation of both men and women can we hope to find sustainable, workable solutions for the long-term establishment of productive agroforestry systems that meet family and community needs. One of the animators' main roles will be to gauge and report on participant response to the training offered, challenges to implementation and desired

improvements or innovations. We will take care to collect sex- disaggregated oral evaluation data at the end of each training session and after follow-up support activities to enable analysis of understanding, uptake and reactions to ensure gender equality in our approaches based on key insights.

Q18. Change expected

Detail the expected changes this work will deliver. You should identify what will change and who will benefit a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended).

Please describe the changes for biodiversity and for people in developing countries, and how they are linked. When talking about people, please remember to give details of who will benefit and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used. If possible, indicate the number of women who will be impacted.

Like much of the world experiencing the global "Nature Crisis", Madagascar is suffering from unprecedented biodiversity declines. Tropical rainforest is one of the most threatened of all habitats. Agroforestry has been practised on a small scale across rural Madagascar for many centuries, however, due to the country's rapidly expanding population and increasing rate of deforestation, biodiversity loss and poverty are rising and there's never been a greater need for wider application of this method. It is a critical tipping point now when almost all remaining forest not within protected area boundaries (and also much within) is disappearing at an accelerating rate and will likely be gone in our target area within the next decade (Ghulam et al. 2014). Remnant patches provide vital ecosystem services; some contain critically endangered species not recorded within delimited protected areas.

If the status quo continues, the growing population will have no alternative but to convert remaining forest fragments into farmland, and then continue expanding into protected areas, consequently risking prison sentences. Imminent change is required to avoid further irreversible loss. For Betampona alone, there are 24 single-site endemic frog and 17 single-site endemic plant species. Loss of this forest could represent irreversible species-level biodiversity loss. Climate change further exacerbates the situation, leading to drier conditions, increased fire risk and higher frequencies of destructive cyclones. Combined with increasing rice crop pests due to reduced fallow periods, it means many people are experiencing increasing hardship. Local communities are aware of the need to protect forest fragments to prevent water courses drying, provide fuel/construction wood, animal fodder, medicinal plants etc. and are asking for help. We will encourage agroforestry to provide buffer zones around forest fragments and increase tree cover, by providing commercially-beneficial fruit, spice, N-fixing and timber trees (trialling some new varieties to the area). Within the duration of the project, we will help participants (a man and a woman, ideally, from 50 households at Betampona, 30 at Vohibe and 20 at Ampasina) to increase their income through dissemination of source material (yams/ inter-cropping annual seeds), providing training on benefits of farmer cooperatives and facilitating direct access to buyers/exporters, thereby increasing food security/profits within the project duration. Due to the intensive nature of the proposed training, we cannot successfully target a large enough number of households to make a difference across the whole region, so will instead aim to work with specific local communities to develop "model villages", showcasing how agroforestry can reverse deforestation and significantly improve local income. Through the training and infrastructure we provide, we will set foundations for long term local production of economically-beneficial fruit, spice and timber tree production in each target area that can continue providing trees for wider sale/distribution, encouraging local business and allowing a cascade-effect of local development from these important start-up sites. By facilitating new partnerships in the area with the likes of Catholic Relief Services and MC Ingredients we can influence economic improvement far beyond the target households even within the duration of the project lifetime.

Q19. Pathway to change

Please outline your project's expected pathway to change. This should be an overview of the overall project logic and outline how you expect your Outputs to contribute towards your overall Outcome and, longer term, your expected Impact.

Our combined approach of facilitating intensive training, provision of start-up trees and annual crop seeds, building long-term capacity to ensure the perpetuity of fruit, spice and timber tree production and coupling this with a contractual obligation of all participants to take part, on a rotational basis, in participative monitoring, patrols and enforcement of locally-developed forest use agreements for the target remnant forest patches, we believe that we can affect positive and lasting change within our target villages by increasing tree cover, providing buffer zones to the target forest patches, and ensuring a more sustainable level of harvest from the remnant forests, whilst simultaneously increasing household income for participants. Seeing the resulting improved standard of living in the "model villages", we are confident that villagers in neighbouring areas will take up the methods in a cascade-effect leading eventually to the desired impact of restoring natural capital in the landscape surrounding our two target areas of Betampona and Vohibe, and thereby reducing pressure on the natural goods within these reserves.

Q20. Exit Strategy

State how the project will reach a stable and sustainable end point, and explain how the outcomes will be sustained, either through a continuation of activities, funding and support from other sources or because the activities will be mainstreamed in to "business as usual".

Where individuals receive advanced training, for example, what will happen should that individual leave?

By training at least two nursery workers and multiple farming households (ranging from 40 individuals (men and women) at Ampasina to up to 60 individuals at Ampitabe (the Betampona households will be split between three locations)), we reduce the risks of losing expertise inferred from the intensive training programme from the area should any individuals move away during or after the duration of the project. At each of the 3 main target areas there is a long-term presence by MFG, MBG or LOVASOA, which will ensure that ongoing support and development of the initiative can continue beyond the end of the project duration. By setting up the nurseries in a self-sustaining fashion and also providing training in business management, we envisage that the network of small, local, grass-roots nursery businesses will expand to provide the growing demand for agroforestry trees in the target areas and beyond.

If necessary, please provide supporting documentation e.g. maps, diagrams, references etc., as a PDF using the File Upload below:

- ☆ SUPPORTING DOCUMENTS DIR27S2 1039
- ₿ 09/02/2021
- ③ 22:57:20
- pdf 1.64 MB

Section 10 - Budget and Funding

Q21. Budget

Please complete the appropriate Excel spreadsheet, which provides the Budget for this application.

Some of the questions earlier and below refer to the information in this spreadsheet. Note that there are different templates for projects requesting over and under £100,000 from the Darwin budget.

- Budget form for projects under £100,000
- Budget form for projects over £100,000

Please refer to the Finance for Darwin/IWT Guidance for more information.

N.B.: Please state all costs by financial year (1 April to 31 March) and in GBP. The Darwin Initiative cannot agree any increase in grants once awarded.

Please upload your completed Darwin Budget Form Excel spreadsheet using the field below.

- 2020 Darwin DAF proposal time table DIR27S2 1039
- <u>1039</u>
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Q22. Funding

Q22a. Is this a new initiative or a development of existing work (funded through any source)?

• Development of existing work

Please provide details:

Although building on existing small-scale initiatives at each of the three main target areas, where MFG, MBG and LOVASOA have been leading native-species forest restoration efforts in conjunction with the distribution of smaller numbers of commercial trees as an incentive, this project would allow the opportunity to expand these efforts to the next level and facilitate access to expert in-country and international practitioners, who can lend their experience, knowledge, developed techniques and source plant material to allow a much faster establishment of agroforestry parcels and improve the chances of success of individual household agroforestry initiatives. Financial support has been limited in the past, which has severely impeded development of agroforestry promotion on a larger-scale within our respective projects. With a much-needed jump-start from a Darwin Initiative grant we feel we can set up the necessary long-term sustainable infrastructure, expertly-trained local personnel and practitioners/advocates required to facilitate the long-term establishment of agroforestry in each of the target areas.

Q22b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work?

No

Q23. Co-financing

Are you proposing co-financing?

• Yes

Provide details of all funding successfully levered (and identified in the Budget) towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity, as well as any your own organisation(s) will be committing.

Donor Organisation	Amount	Currency code	Comments
MFG		No Response	Salaries, flights, newsletters
den Biggelaar		No Response	Salary
MBG		No Response	Salary, project support post end
CRS		No Response	Salaries

Q23b. Unsecured

Provide details of any co-financing where an application has been submitted, or that you intend applying for during the course of the project. This could include co-financing from the private sector, charitable organisations or other public sector schemes. This should also include any additional funds required where a donor has not yet been identified.

Date applied for	Donor Organisation	Amount	Currency Code	Comments
No Response	No Response	0	No Response	No Response
No Response	No Response	0	No Response	No Response
No Response	No Response	0	No Response	No Response
No Response	No Response	0	No Response	No Response

Do you require more fields?

• No

Section 11 - Open Access and Financial Risk Management

Q24. Outputs of the project and Open Access

Please describe the project's open access plan and detail any specific funds you are seeking from Darwin to fund this.

Updates from the project will be posted on MFG's website, Facebook and Twitter social medial platforms. Articles will be included in MFG's two newsletters: a local-language Malagasy quarterly newsletter destined for schools, colleges and circulation with our local partners; and an international quarterly newsletter for MFG members and supporters. The latter are posted on the MFG website, with free and open access to all. Updates from the project will also be included in MFG's regular radio emission programmes, which air around the Toamasina area, Eastern Madagascar. Summaries of project activities and results will feature in MFG's annual reports, which will be posted on MFG's website. At the project end the final report including all results will be posted on MFG's annual budget and are included in the budget as counterpart funding.

Q25. Financial Risk Management

This question considers the financial risks to the project. Explain how you have considered the risks and threats that may be relevant to the successful financial delivery of this project. This includes risks such as fraud or bribery, but may also include the risk of fluctuating foreign exchange and internal financial processes such as storage of financial data.

By using the average exchange rate for 2020 in our budget preparation we hope to avoid exchange rate fluctuation issues. In practice, with local inflation usually high in Madagascar the exchange rate tends to increase rather than decrease (ie more Malagasy Ariary to the pound Sterling as time progresses) and as the majority of our budget has been calculated using local costs in Ariary, if anything our project costs should decrease rather than increase as a result of exchange rate fluctuations. Similarly as the budget is set finally in GBP per year, this should protect to some extent against in-country inflation-related price changes. MFG has strict policies set out in our Manual of Procedures and Internal Rules handbooks with zero-tolerance for corruption/theft, which have been enforced in the past resulting in contract terminations. We contract an independent accounting firm to carry out monthly petty-cash/accounting checks. Our accounts are housed online with the accountancy firm, which are backed up on a daily basis to the Cloud limiting risk of loss of accounting information. From 2019 onwards we are carrying out independent general audits of all our accounts (rather than grant-specific as in the past) with another organisation, working to international standards.

Q26. Capital items

If you plan to purchase capital items with Darwin funding, please indicate what you anticipate will happen to the items following project end. If you are requesting more than 10% capital costs, please provide your justification here.

The only capital costs for this project will be:

• Start-up specialist agroforestry equipment for participating households, which will remain with the project participants after the end of the project

• Laptops, camera, GPS units for each project site. These will remain the property of MFG, MBG and LOVASOA respectively and will be entered in organisational equipment inventories. These will remain with the respective organisations after the end of the project and repurposed either for follow-up activities or other conservation work carried out by these organisations

• Headtorches, sleeping bags and mats (for 3 members of MFG's staff who will need to travel extensively for the project) will be issued to staff members but will remain the property of MFG/MBG/VOVASOA and be

appropriately entered in equipment inventories. The equipment, if still functioning, will be reallocated for other conservation activities by the respective organisations at project end.

Q27. Value for Money

Please describe why you consider your application to be good value for money including justification of why the measures you will adopt will secure value for money.

By partnering with specialist partners already running successful operations in Madagascar we can profit from the established infrastructure of those organisations to ensure excellent value for money for this project. In the counterpart funding calculations we have mainly only shown in-kind salary contributions from partner organisations but as these partners will be using their own vehicles and equipment in most instances, the in-kind contribution is underestimated. Not only can we profit from their existing infrastructure but by accessing the knowledge and experience of these highly-trained agroforestry and extension specialists, many of whom have worked in similar conditions in Madagascar for many years, we can forego the years of trials and experimentation that they have likely invested in the development of their proven methods, thus saving a great deal of time and waste on unsuccessful techniques. Obviously there is no "one size fits all" answer for agroforestry and local adaptations will likely be needed for species choice and methods to optimise for local growing conditions but the specialists are already adept at such adaptations and can guide the participants during this process.

All the partner organisations have a long practical experience of working in Madagascar and hence know how to access the best value goods and products.

Section 12 - Ethics and Safeguarding

Q28. Ethics

Outline your approach to meeting Darwin's key principles for ethics as outlined in the guidance note. Additionally, are there any human rights and/or international humanitarian law risks in relation to your project? If there are, have you carried out an assessment of the impact of those risks, and of measures that may be taken in order to mitigate them?

MFG, MBG and LOVASOA are all community-based in their approach. By employing local staff who originate from the villages we work in, we ensure that there is always a strong understanding and respect for local and cultural issues at play. Our project methods specify community consultation as the first step in the setting-up process. Even before the project has started we have already completed consultations at each target site to ensure that the project responds to local needs and aspirations. This project, although with its own identity and autonomy, will build on decades of work and relationship-building at Betampona and Vohibe by MFG and MBG respectively. We have worked hard to build trusting and productive relationships with these communities and will ensure that this project too respects local cultural and political sensibilities. The contract that will be agreed with each participant outlining both parties' responsibilities will be developed in a collaborative and participative fashion through community meetings led by the village association representatives, the village leader (President Fokontany) and village elders (Tangalamena). Local resource use agreement development will similarly be villager-led and done through open-access village meetings to allow all viewpoints to be heard and considered. Enforcement of the agreements will be assured by the villagers themselves in collaboration with local authorities. Malagasy national and regional law will be respected for all aspects of the project. All project staff and partners on this project will be required to follow MFG's safeguarding policy.

Q29. Corruption

This question specifically considers corruption. Explain how you have considered any risk of corruption that may affect the success of this project, and how you plan to manage this. This may include financial corruption, but may also deal with gifts or inducements, or other types of dishonesty or deceit.

MFG has a zero-tolerance policy on corruption and works hard to reduce occurrences through strict financial management following formal procedures detailed in a Manual of Procedures. MFG has a policy to seek written quotes from 3 different organisations for any expenses over \$65 but this may not be practical in this project as suppliers of specialist agroforestry equipment/plant stock will be limited. However, with our long operational history in Madagascar both MFG and MBG accounting staff/ managers have a good idea of local prices and should be able to detect any unusually high expenditures. There is no competitive evaluation element to this project for cash or in-kind incentives so the risks of corruption are low. As we will be targeting the vast majority of the inhabitants in our target villages the risks of favouritism/corruption are low. The target villages have been chosen by MFG and MBG project leaders as sites next to forest fragments of particular biodiversity value and the existence of village associations so, again, risks of corruption in application of project funds is low. Contracts will be agreed with each project participant specifying that any materials or trees donated through the project are not permitted to be sold.

Q30. Safeguarding

Projects funded through the Darwin Initiative must fully protect vulnerable people all of the time, wherever they work. In order to provide assurance of this, projects are required to have appropriate safeguarding policies in place. Please confirm the lead organisation has the following policies in place and that these can be available on request:

We have a safeguarding policy, which includes a statement of our commitment to safeguarding and a zero tolerance statement on bullying, harassment and sexual exploitation and abuse	Checked
We have attached a copy of our safeguarding policy to this application (file upload below)	Checked
We keep a detailed register of safeguarding issues raised and how they were dealt with	Checked
We have clear investigation and disciplinary procedures to use when allegations and complaints are made, and have clear processes in place for when a disclosure is made	Checked
We share our safeguarding policy with downstream partners	Checked
We have a whistle-blowing policy which protects whistle blowers from reprisals and includes clear processes for dealing with concerns raised	Checked
We have a Code of Conduct for staff and volunteers that sets out clear expectations of behaviours - inside and outside the work place - and make clear what will happen in the event of non-compliance or breach of these standards	Checked

Please outline how you will implement your policies in practice and ensure that downstream partners apply the same standards as the lead organisation.

We are planning staff training sessions to explain the policy and will ask all staff and volunteers to sign that they have read , understood and will adhere to the policy.

We will ensure that all partners read and sign their agreement to the policy as a pre-requisite for working on this project.

Please upload the lead organisation's Safeguarding Policy as a PDF

- ☆ MFG Safeguarding policy DIR27S2 1039
- ₿ 09/02/2021
- ③ 23:55:06
- pdf 509.9 KB

Section 13 - Logical Framework

Q31. Logical Framework

Darwin Initiative projects will be required to monitor (and report against) their progress towards their expected Outputs and Outcome. This section sets out the expected Outputs and Outcome of your project, how you expect to measure progress against these and how we can verify this.

<u>Stage 2 Logframe Template</u>

Please complete your full logframe in the separate Word template and upload as a PDF using the file upload below. Copy your Impact, Outcome and Output statements and your activities below - these should be the same as in your uploaded logframe.

Please upload your logframe as a PDF document.

- A R27 Darwin st2 Logical framework FINAL-DIR2
- <u>7S2 1039 MFG</u>
- 📋 10/02/2021
- ③ 08:38:52
- 🛽 pdf 157.6 KB

Impact:

Natural capital in the landscape surrounding the Betampona and Vohibe protected areas restored thereby reducing pressure on the natural goods within these reserves.

Outcome:

A critical mass of farmers living in landscapes surrounding the two protected areas are committed to nurturing natural capital through sustainable use of remaining forest and agroforestry.

Project Outputs

Output 1:

A diversity of plant species attractive to local farmers are easily available for use in agroforestry trials.

Output 2:

Farmers living in the landscape surrounding the two protected areas are aware of the opportunities presented by agroforestry to meet their tree product and food production needs and some are skilled, effective and convinced practitioners.

Output 3:

Community in host landscapes agree to conserve certain unprotected forest fragments.

Output 4:

. Community engages in participatory baseline and annual surveys of destructive forest harvesting and natural capital (including biodiversity) in target forest fragments surrounding the main protected areas

Output 5:

No Response

Do you require more Output fields?

It is advised to have less than 6 Outputs since this level of detail can be provided at the Activity level.

No

Activities

Each activity is numbered according to the Output that it will contribute towards, for example, 1.1, 1.2, 1.3 are contributing to Output 1.

1.1.1 3-day Fruit Tree Cultivation training by FVEE team at each of the 4 target villages (Antaranarina, Ambodirafia and Ampasina at Betampona and Ampitabe by Vohibe) to introduce fruit-tree cultivation/care and nursery techniques, distribute initial fruit trees to participants, identify potential sites for fruit tree permanent orchards and nurseries and select two proactive participants for further intensive training at a later stage. To be carried out by June 2022.

1.1.2 Production of Fruit Tree Cultivation training workshop report for each site including pre and post workshop quiz results produced within 2 months of the training workshop end.

1.2.1 Identification and establishment of nursery staff by end December 2021.

1.2.2 Construction of new nurseries or renovations/improvements to existing nurseries and establishment of fruit tree orchard to provide

scions for grafting long-term at each of the 4 target sites by end of YR1.

1.2.3 Provision of nurseries with supplies, commercial seeds and materials needed to begin tree production (mixtures of fruit, spice, timber,

fuelwood and N-fixing species) by end of YR1.

1.2.4 Securing seed collection permits for the target forest fragments from the Ministry of the Environment and Sustainable Development by

end of YR1

1.2.5 Collection of seeds from forest fragments throughout YR2 (seasonally-dependent)

1.2.6 Production of at least12,000 trees (in total between the 4 nurseries) and associated record-keeping by July 2023

1.2.5 Quarterly visits to each nursery Project Coordinators to follow progress, offer ongoing technical support and collect nursery

records (e.g. numbers of plants, % germination rates, % survival rates etc.)

1.3.1 Distribution of at least 12,000 produced trees to project participants by November 2023 with records kept of specific trees

supplied to each participant.

2.1.1 Extension workers and animators identified for each site by MFG and MBG Project Coordinators by December 2021.

2.1.2 Extension workers and animators trained by MFG and MBG Project Coordinators and Dr den Biggelaar by end of YR1.

2.1.3 Reports written of each training session including list of participants, trainer, duration and subjects covered within 2 months of the end of

the training session.

2.2.1 Initial community meetings held in each of the 4 target villages by Project Coordinators, Extension Agents and local animators by end

December 2021 to explain the benefits of agroforestry, project goals and methods, commitments required of participants to pro-actively protect the target forest fragments. Terms of project participation contract collaboratively developed.

2.2.2 Participating households identified and contracts signed by end of YR1.

2.2.3 Introductory training workshop held in each of the target villages for all participants to train participants to assess land availability, quality

of existing agroforestry trees, techniques for rejuvenation and maintenance of trees, plot planting planning and the value of forming co-operatives and distribution of annual crop seeds by Project Coordinators, Extension Agents, local animators and Dr den Biggelaar by end of 2022.

2.2.4 Reports of each introductory training session produced including pre and post workshop quiz evaluation results to gauge efficacy of the

Training produced within 2 months of the training workshop end.

2.2.5 Collection of preliminary questionnaire (baseline) data for each participating household on specific species planting choices, land availability for

agroforestry, existing agroforestry trees, and household income by Extension Agents and local animators by end of 2022.

2.3.1 Quarterly follow-up visits of each participating household by Extension Agents and/or local animators from end of initial training

workshop throughout the duration of the project (unless participants decide to withdraw from the programme)

2.3.2 Yam cultivation training workshops by Dr Mamy-Tiana Rajaonah, Kew to collective participants at each of the target villages and

distribution of 30kg of start-up yam bulbuls by end of 2022. Training session reports for each site submitted within 2 months of the end of the session.

2.3.3 Value-chain, financial management, crop preservation and storage, and co-operative farming benefits training by CRS at all 4 target

villages and MC Ingredients at the 3 Betampona sites by end 2022. Training session reports for each site submitted within 2 months of the end of the session.

2.3.4 Completion of mid-term survey for all original participants attending the introductory workshop to gauge activities undertaken as a result

of the programme, trees and crops planted, crops harvested, household income changes, reasons for programme abandonment (where relevant), feedback on programme and ways to improve it by Extension Agents and local animators by end April 2024.

2.4.1 Completion of final survey at end of YR3 for all ongoing programme participants to gauge activities undertaken as a result

of the programme, trees and crops planted, crops harvested, household income changes, reasons for programme abandonment (where relevant), feedback on programme and ways to improve it by Extension Agents and local animators.

2.5.1 As part of final survey, ask specific questions about membership in farmer co-operatives and subsequent impacts on income from

produce sales.

3.1.1 Record proceedings of initial community meetings at the 4 target villages (Activity 2.2.1) by end Dec

2021.

3.2.1 During the initial community meetings review current village association (VOI) agreements for protection of remnant forest fragments

outside of the official protected areas, facilitate discussion of acceptable use/activities in the fragments, and document VOI decisions and commitments.

3.3.1 Quarterly follow up of community-based patrols of the forest fragments by Project Coordinator, Extension Agents and local animators

from March 2022, including collection of patrol data and provision of support as needed to approach local/regional authorities.

4.1.1 Project Coordinators, Extension Agents and local animators will complete oral quizzes and record the results at the end of the initial

community consultation

Meetings (by end December 2021) to gauge understanding of the need for participative and communal protection of the target forest fragments and understanding of the ecosystem services they provide

4.2.1 Training workshops at each site on biodiversity and forest use monitoring (Aug/Sep 2021)

4.2.2 Project Coordinators, Extension Agents, local animators and a selection of nominated programme participants from each target village

will set up permanent transects for surveys of forest use and biodiversity in each target fragment forests by February 2022.

4.2.3.1 Extension agents, local animators and alternating programme participants (organised on a rota-basis by the Extension Agents and local

animators) will complete baseline transect surveys by end March 2022 to assess forest use (destructive and non-destructive) and quarterly thereafter (Activity 3.3.1).

4.2.3.2 Extension agents, local animators and alternating programme participants (organised on a rota-basis by the Extension Agents and local

animators) will complete baseline transect surveys by end March 2022 to assess and vertebrate biodiversity and annual surveys thereafter for the duration of the project.

4.2.4 Project Coordinators, Extension Agents, local animators and a selection of nominated programme participants from each target village

will map the present forest fragment perimeter by GPS (using the tracking function) and survey the whole fragment for clearings/signs of cultivation. The survey will be repeated annually thereafter for the duration of the project noting any news areas cleared for logging or cultivation.

Section 14 - Implementation Timetable

Q32. Provide a project implementation timetable that shows the key milestones in project activities

Provide a project implementation timetable that shows the key milestones in project activities. Complete the Excel spreadsheet template as appropriate to describe the intended workplan for your project.

Implementation Timetable Template

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and fill/shade only the quarters in which an activity will be carried out. The workplan can span multiple pages if necessary.

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Section 15 - Monitoring and Evaluation

Q33. Monitoring and evaluation (M&E)

Describe, referring to the Indicators above, how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E.

Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact. Additionally, please indicate an approximate budget and level of effort (person days) to be spent on M&E (see <u>Finance Guidance for Darwin/IWT</u>).

The project will be continually monitored by the Dynamic Agroforestry Animators, Extension Agents and Project Coordinators. Each training will be closed by a feedback session/ oral quiz for each participant to gauge how the training has been received, that key messages have been absorbed and to ask for their feedback oh strengths and weaknesses of the training and what can be improved for the following training session. All nursery data with be collected each quarter to ensure continual assessment of activities and progress towards targets. Similarly, all monthly patrol and participative monitoring data will be collected and analysed on a quarterly basis so that problem areas can be identified and addressed.

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs)	£
Number of days planned for M&E	252
Percentage of total project budget set aside for M&E (%)	

Section 16 - FCDO Notifications

Q34. FCDO Notifications

Please state whether there are sensitivities that the Foreign Commonwealth and Development Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country.

No

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see <u>Guidance Notes</u>) and attach details of any advice you have received from them.

• No

If no, why not?

We have a team of Malagasy Nationals permanently based in Madagascar who will carry out the vast majority of the work so we did not feel it was necessary to seek embassy advice on security. However, we will be sure to inform the Ambassador if we succeed in securing funding.

Please attach details of any advice you have received.

No Response

Section 17 - Certification

Q35. Certification

On behalf of the

Trustees

of

Madagascar Fauna and Flora Group

I apply for a grant of

£314,522.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

- I have enclosed CVs for key project personnel, letters of support, budget and project implementation timetable (uploaded at appropriate points in application).
- Our last two sets of signed audited/independently verified accounts and annual report are also enclosed.

Checked

Name	Karen Freeman (married name Kett)
Position in the organisation	Executive Director
Signature (please upload e-signature)	 ☆ karen freeman signature 茴 10/02/2021 ③ 00:34:54 ☑ jpg 26.08 KB
Date	09 February 2021

Checklist for submission

	Check
I have read the Guidance, including "Guidance Notes for Applicants" and "Finance Guidance".	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
I have provided actual start and end dates for the project.	Checked
I have provided my budget based on UK government financial years i.e. 1 April – 31 March and in GBP.	Checked
I have checked that our budget is complete, correctly adds up and I have included the correct final total at the start of the application.	Checked
The application been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have included a 1 page CV or job description for all the key project personnel identified at Question 12, including the Project Leader, or provided an explanation of why not.	Checked
I have included a letter of support from the the Lead Organisation and main partner organisation(s) identified at Question 11, or an explanation of why not.	Checked
I have included a cover letter from the Lead Organisation, outling how any feedback received at Stage 1 has been addressed where relevant.	Checked
I have included a copy of the lead organisation's safeguarding policy, which covers the criteria listed in Question 30.	Checked
I have been in contact with the FCDO in the project country/ies and have included any evidence of this. If not, I have provided an explanation of why not.	Checked
I have included a signed copy of the last 2 annual report and accounts for the Lead Organisation, or provided an explanation if not.	Checked
I have checked the Darwin website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on GOV.UK.	Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to

biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in this application form, including personal data, will be used by Defra as set out in the latest copy of the Privacy Notice for Darwin, Darwin Plus and the Illegal Wildlife Trade Challenge Fund available <u>here</u>. This Privacy Notice must be provided to all individuals whose personal data is supplied in the application form. Some information, but not personal data, may be used when publicising the Darwin Initiative including project details (usually title, lead organisation, location, and total grant value) on the GOV.UK and other websites.

Information relating to the project or its results may also be released on request, including under the 2004 Environmental Information Regulations and the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the General Data Protection Regulation (Regulation (EU) 2016/679).