Applicant: **EKUE, Marius Rodrigue Mensah**
Organisation: **Bioversity International**
Funding Sought: **£375,000.00**

DIR27S2\1001

Building smart seed systems for biodiversity, livelihoods and resilient restoration

Tree-based restoration is critical for biodiversity, rural livelihoods and nutrition. In Cameroon, lack of conservation and use of native forest genetic resources has contributed to the country's failure to meet its AFR100 restoration pledge of 12 million hectares. Stakeholders will identify 30+ priority native tree species and use technology to monitor seeds from collection to planting, aimed at making genetically-diverse, climate-resilient, and locally-adapted tree species available for landscape restoration efforts, delivering livelihood and environment benefits for rural populations

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title	Dr
Name	Marius Rodrigue Mensah
Surname	EKUE
Website (Work)	www.bioversityinternational.org
Tel (Mobile)	[redacted]
Email (Work)	[redacted]
Address	[redacted]

GMS ORGANISATION

Type	**Organisation**
Name	Bioversity International
Phone (Work)	+[redacted]
Email (Work)	[redacted]
Website	[redacted]
Address	[redacted]

Section 2 - Title, Dates & Budget Summary

Q3. Project title:

Building smart seed systems for biodiversity, livelihoods and resilient restoration

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

DIR27S1\1419

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	Cameroon	**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 months):
01 July 2021	30 June 2023	3 years

Q6. Budget summary

Year:	2021/22	2022/23	2023/24	2024/25	Total request
Amount:	£130,375.00	£117,048.00	£99,781	£27,796.00	**£** 375,000.00

Q6a. Do you have matched funding arrangements?

⦿ Yes

What matched funding arrangements are proposed?

£[redacted] in matched funding from the Burundi Landscape Restoration and Resilience Project to restore degraded collines using native species and build capacities to manage community nurseries.
£[redacted] in matched funding from the Copernicus Climate Change Service: to gather data on tree species distributions in Central Africa and the impact of climate change
£[redacted] in matched funding via FAO and host country in-kind financing of personnel assigned to project.
£[redacted] via the CGIAR Forest Trees and Agroforestry programme contribution to valuing genetic diversity, improving seed systems and decision support tools for restoration in African countries.

Q6b. Proposed (confirmed and unconfirmed) matched funding as % of total project cost (total cost is the Darwin request plus other funding required to run the project). [redacted]

Section 3 - Project Summary

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 GOV.UK.

Please write this summary for a non-technical audience.

Tree-based restoration is critical for biodiversity, rural livelihoods and nutrition. In Cameroon, lack of

conservation and use of native forest genetic resources has contributed to the country's failure to meet its AFR100 restoration pledge of 12 million hectares. Stakeholders will identify 30+ priority native tree species and use technology to monitor seeds from collection to planting, aimed at making genetically-diverse, climate-resilient, and locally-adapted tree species available for landscape restoration efforts, delivering livelihood and environment benefits for rural populations

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.

- ☑ To understand and support action to address linkages between biodiversity and human health
- ☑ 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)
- ☑ Nagoya Protocol on Access and Benefit Sharing (ABS)
- ☑ Convention on International Trade in Endangered Species (CITES)
- ☑ 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.

The project contributes to:
• CBD Strategic Goal (SG) A: Address the causes of biodiversity loss by mainstreaming biodiversity across government and society. (Aichi Targets 1 and 2), CBD SG B: Reduce the direct pressures on biodiversity and promote sustainable use (Aichi Targets 5, 7 and 13), CBD SG C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity (target 13), CBD SG D: Enhance the benefits to all from biodiversity and ecosystem services (target 15); and to ABS Articles 7 and 9.
The project identifies important native tree species and priority populations critical as sources of seed and germplasm, thus adding value to locally threatened tree populations. It will address weaknesses in the tree seed supply system that lead to restoration failures including non-delivery of expected socio-economic and environment benefits. This will be accomplished through scaling up the diversity (number of species) available, and volume of genetically diverse native tree seeds and seedlings to meet growing restoration demands. It will engage with a wide range of stakeholders involved in forest landscape restoration (FLR) activities, from seed collectors to nurseries, restoration practitioners and farmers, to identify locally valued native tree species, and co-design and promote good practices for their conservation, adequate selection and seed sourcing, and sustainable use for resilient restoration.

• CBD SG E: Enhance implementation through participatory planning, knowledge management and capacity building (target 19); and to ABS Article 17 (Monitoring the Utilization of Genetic Resources), Article 22 (Capacity)
The project will build capacity of stakeholders to independently evaluate the available quality and quantity of seeds from native tree biodiversity for the tree seed supply system (from participatory identification of valuable species to seed collection, through nursery, dissemination, plantation and performance). The monitoring of genetic resources of priority tree species, coupled with better knowledge about their nutritional benefits, livelihood values and threat status, will increase capacity to better match seed supply systems to restoration objectives and development impact.

• CITES: Bioversity's proposed project is aligned with the goals of the CITES Tree Species Programme(CTP), which seeks to foster economically, socially and environmentally sustainable development under Goal 15 of the UN Sustainable Development Goals, notably Goal 15 as it relates to sustainably managing forests and halting biodiversity loss. The proposal's focus, to support Cameroon in the adoption and use of good forest governance to ensure long-term species conservation that benefits people and environment, will contribute directly to the CTP's objectives of securing rural development in often remote areas, sustainable economic growth at country level and long-term poverty alleviation. This Darwin project includes six species on Appendix II of CITES, namely: Prunus africana, Pericopsis elata, Pterocarpus erinaceus, Guibourtia demeusei, Guibourtia pellegriniana, and Guibourtia tessmannii.
In addition, a further 15 species which are listed as either threatened or vulnerable by the IUCN red list (www.iucnredlist.org) will be targeted (Afzelia Africana, Entandrophragma candollei, Entandrophragma cylindricum, Entandrophragma utile, Garcinia kola, Garcinia lucida, Irvingia gabonensis, Khaya senegalensis, Milicia excelsa, Nauclea latifolia, Pericopsis elata, Prunus africana, Pterocarpus erinaceus, Ricinodendron heudelotii, Vitellaria paradoxa).

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.

The CITES focal point is hosted at MINFOF, partner in this project. The CBD and ABS focal points are hosted by the Ministry of Environment. Both ministries are part of the Coordination Unit set up by the Government of Cameroon to plan landscape restoration activities within AFR 100.
Anicet Ngomin (Director of Forest and Wildlife) represents MINFOF in the Coordination Committee and Bioversity's staff in Cameroon interacts regularly with the Focal Point from the Ministry of Environment as well as the Coordination Unit. Through MINFOF and the Ministry of Environment, we will have policy access to CITES, CBD and ABS.

Q9d. Global Goals for Sustainable Development (SDGs)

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

The project goal is to deliver livelihood and environment benefits for rural populations through making genetically diverse, climate-resilient, and locally-adapted germplasm of native tree biodiversity available for landscape restoration. This directly contributes to SDG 15 Life on Land – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and biodiversity loss. The project will promote food tree species important for nutrition and food security prioritized by rural populations in Cameroon, such as Irvingia gabonensis, Tetrapleura tetraptera, etc. (preliminary list of priority species in Annex 1), contributing to SDG 2 – Zero

hunger and food security. By helping the forestry department and seed collectors to document, trace, and create a database of tree genetic biodiversity and designing plans to conserve and use that diversity for restoration, it contributes to SDG2 sub-target 2.5 of “By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species”. In documenting, monitoring the performance of, and promoting the natural regeneration and planting of 30+ priority native tree species resilient to local pests and diseases, we will reinforce the adaptive capacity of landscapes and communities to climate change. Appropriate management and use of native species will be a means for fostering Climate Smart Agriculture practices among practitioners and raising awareness among policy makers and government about ways to mitigate CC at country policy level, thus contributing to SDG 13 – Fight Climate Change and its Effects.

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
22017	Dr Michael Halewood	Mutually supportive implementation of the Nagoya Protocol and Plant Treaty
23008	Alexia Prades	Upgrading and broadening the new South-Pacific International Coconut Genebank
26023	Dr Mohammad Eshan Dulloo	Bridging agriculture and environment: Southern African crop-wild-relative regional network
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.

Financial Statement 2019
09/02/2021
20:21:38
pdf 1.52 MB

Financial Statement 2018
09/02/2021
20:17:33
pdf 3.07 MB

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:	Bioversity International
Website address:	www.bioversityinternational.org
Details (including roles and responsibilities and capacity to engage with the project):	The project will be coordinated by Dr. Marius Ekue, Africa lead FGR and coordinator of the Sub-Saharan African Forest Genetic Resource Programme (SAFORGEN). Dr. Chris Kettle (Global Team leader FGR) will lead on digital tech for restoration, genetic aspects of seed collection, and project oversight, and PhD student supervision. Dr. Marlene Elias (gender specialist) will ensure equity across stakeholders from a gender and youth perspective. Mr. Enrico Mazzoli (economist) will lead on evaluating new opportunities and measuring the livelihood benefits created by FGR value chains.
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 the Project?

⦿ Yes

1. Partner Name:	Ministry of Forest and Wildlife of Cameroon (MINFOF)
Website address:	www.minfof.cm
Details (including roles and responsibilities and capacity to engage with the project):	MINFOF is in charge of setting and implementing policies of the Government of Cameroon related to forests (including forest landscape restoration) and wildlife.
Have you included a Letter of Support from this organisation?	⦿ Yes

2. Partner Name:	Asaah Fonyam and Angwi Foundation (AFAF)
Website address:	http://asaahfafoundation.org/forest-environment-health/
Details (including roles and responsibilities and capacity to engage with the project):	AFAF: is committed to being a premier grassroots non-governmental organization in Cameroon; focusing on environment, agriculture and sustainable socio-economic as well as capacity development. The Foundation works in partnership with local communities and organizations to maintain environmental health while building a sustainable, healthy, food-secured and productive economy with technical, moral, financial support and experience from its national and international partners. Dr. Ebenezer Asaah of AFAF, will provide expertise in agroforestry in project sites. He is an Agroforester, with a distinguished career in research integrating diverse trees/vines (indigenous & exotic) on-farm as a valuable resource for food, markets and environment in both agriculture and forest landscapes in West and Central Africa for more than two decades using the World Future Council & Technology in Agroecology in the global South; 2019 award winning Outstanding Practice in Agroecology: Participatory Tree Domestication of Indigenous Trees for the delivery of Multifunctional Agriculture by Agroforestry.
Have you included a Letter of Support from this organisation?	⦿ Yes

3. Partner Name:	Actions for Biodiversity and Land Management (in French: Actions pour la Biodiversité et Gestion des Terroirs) (ABIOGeT)
Website address:	http://www.abioget.org/

Details (including roles and responsibilities and capacity to engage with the project):	ABIOGeT : Mr. Clément Sofalne coordinates field activities and interactions with local communities in Northern Cameroon. Created since 2004 in the north of Cameroon, the goal of ABIOGeT is to combat desertification and climate change, through the implementation of projects concerning reforestation, environmental education and the protection of forest ecosystems, water conservation and management for the purpose of improvement of the living conditions of populations. ABIOGeT has developed proven skills in: 1) development of nurseries and reintroduction of local species; 2) development and community mobilization; 3) capacity building of beneficiaries; 4) proximity with local authorities; 5) agroforestry; 6) prevention and management of conflicts ; 7) negotiation and advocacy ; etc.
Have you included a Letter of Support from this organisation?	⦿ Yes

4. Partner Name:	Promotion de l'Ecotourisme, Encadrement des Couches Vulnérables et autres Minorités (PEM)
Website address:	None
Details (including roles and responsibilities and capacity to engage with the project):	PEM: Jean Paul Nguianba coordinates field activities and interactions with local communities in Southern Cameroon. Created since 2018, PEM's goal is to support public, para-public, private entities and local communities in the implementation of their community development activities and projects. Key activities include: • Forest governance and protection of forest ecosystems. • Supporting communities and municipalities in the development, implementation and independent monitoring of forest and mining development plans, environmental and social management plans (environmental education, sustainable management of ecosystems) and landscape restoration using native species. • Supporting and monitoring Decentralized Territorial Collectivities (CTD) in the decentralization process to better manage natural resources. • Promoting ecotourism with the inclusion of vulnerable groups.
Have you included a Letter of Support from this organisation?	⦿ Yes

5. Partner Name:	University of Yaounde 1
Website address:	http://www.uy1.uninet.cm/

Details (including roles and responsibilities and capacity to engage with the project):	Prof Bonaventure Sonké (Director of the Laboratory of Plant Systematic and Ecology) will provide expertise on forest ecology and management and supervise the students (1 PhD and 2 MSc) to be recruited
Have you included a Letter of Support from this organisation?	◯ Yes ◯ No

6. Partner Name:	*No Response*
Website address:	*No Response*
Details (including roles and responsibilities and capacity to engage with the project):	*No Response*
Have you included a Letter of Support from this organisation?	◯ Yes ◯ No

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

No Response

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

Letters partners
09/02/2021
23:17:47
pdf 1.5 MB

DG Cover Letter
09/02/2021
20:52:08
pdf 530.51 KB

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?
Marius, Ekue	**Project Leader**	24	Checked
Christopher, Kettle	Lead on digital tech for restoration, genetic aspects of seed collection, and PhD supervision	5	Checked
Bonaventure, Sonké	Providing expertise on forest ecology and management and supervising the students	9	Checked
David, Burslem	Advisor in tropical seed science and forest genetic resources and co-supervising the PhD student	10	Checked

Do you require more fields?

◉ Yes

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Evariste Hermann, Taedoumg	Botanist	26	Checked
Ebenezer, Asaah	Coordinator of field activities and interactions with local communities on agroforestry practices	15	Checked
Clément, Solfane	Coordinator of field activities and interactions with local communities in Northen Cameroon	15	Checked
Herbert Gatien, Ekodeck	Assistant Coordinator of field activities and interactions with local communities in Northen Cameroon.	18	Checked
Jean Paul, Nguianba	Coordinator of field activities and interactions with local communities in Southern Cameroon.	15	Checked
Enrico, Mazzoli	Lead on creating FGR value chains to generate income	5	Checked
Marlène, Elias	Gender specialist	3	Checked
Hannes, Gaisberger	GIS Specialist	6	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.

CVs
09/02/2021
23:25:56
pdf 674.83 KB

Have you attached all project staff CVs?

Yes

Section 8 - Problem statement

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).

Tree-based restoration, is widely recognised as one of the most powerful tools to simultaneously sequester atmospheric carbon, tackle climate change, and yield benefits for biodiversity, rural livelihoods, nutrition, contributing to multiple SDGs.
Restoration targets are ambitious: 113 million hectares pledged under the African Forest Landscape Restoration Initiative (AFR100), 12 million hectares in Cameroon alone. These are mostly government-led, requiring significant investment. Assuming that 50% of restoration is tree planting, this will require 6 million ha to be planted with approximately one thousand (1,000) trees per ha. A conservative estimate is that demand exists for 10's of billions of seeds and seedlings. The limited capacity of most community nursery (max 500,000 seedings per year), necessitates thousands of community nurseries will need to start producing seedlings of high quality, biodiverse, native tree species. This initiative is aimed at kickstarting this process for Cameroon, to accelerate the country's progress towards these ambitious (and fast-approaching) targets.
However, critical gaps in the capacity and tools to conserve and use native FGR - Forest Genetic Resources – has resulted in a dearth of quality, locally-adapted material available for restoration. The failure to consider the genetic and species diversity of seed sources undermines the forests' ability to adapt to environmental change and deliver ecosystem benefits to local people. In Cameroon, desertification, and population displacement due to conflict sees increased degradation as trees are cut to satisfy short-term needs. The pressure on Cameroon to meet its AFR100 target, coupled with lack of access to information about local tree diversity, has translated to reforestation that favours easily-available but poorly-suited exotic species (eucalyptus, pines) over native biodiversity. Native species, if carefully selected and managed, could provide greater benefits for livelihoods, long-term conservation, and climate change adaptation.
Poor consideration of diversity is a major constraint to successful and efficient restoration. In Cameroon lack of attention to species selection and origin contributes to failure of restoration . Current nursery production and seed systems are often ad-hoc, artisanal and unregulated. National restoration commitments indicate the demand for native tree seedlings in Cameroon is likely in the order of billions of

seedlings. This will require a substantial shift in production, with tens of thousands of farmers and communities engaged in tree seedling production.
This project will help Cameroon shift from the status quo of using exotic, maladapted, or unfit for purpose planting material towards restoration that harnesses the multiple benefits of native FGR. The project is fully aligned with Cameroon's most recent national restoration strategic framework (October 2020) , which highlighted the need for an integrated and multisectoral approach to FLR with effective monitoring, reporting and communication systems at scale, for strengthening the role of research to support upscaling of FLR, and for building capacities of local communities to use the full range of native tree species.
This project will empower community-based nurseries to collect seeds, propagate seedlings and market these products to meet growing national-level demand for billions of seedlings. At the same time documenting, and verifying activities from seed collection to planting.

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.).**

Historical Basis:
Bioversity previously conducted a multidisciplinary (ecology, genetics, nutrition, socio-economic, gender…) study producing scientific outputs and policy recommendations (adopted by the Central African Forestry Commission – COMIFAC) on management models and interventions to minimize the negative impacts of timber extraction on tree biodiversity important for rural population, and safeguarding genetic resources for future uses (e.g. maintaining viable population and seed trees) in restoration.
A Bioversity assessment of restoration in Cameroon revealed that lack of attention to species selection is partly responsible for failures in landscape restoration, including over-dependence on exotic species, poor species-site matching and no consideration of genetic diversity. Poor diversity was also confirmed as a major constraint to successful restoration by a Bioversity global survey (2017). Bioversity has identified 420 native tree species used in restoration in Cameroon. We compiled an initial list of 64 native tree species of interest for this project based on their uses & services, habitat, conservation status, importance for women, and livelihood potential (Figure 1, Annex 1). Bioversity has also piloted smartphone apps as part of seed tracking of CITES species in Asia. The mobile phone penetration rate in Cameroon, which rose from 12% in 2005 to 83% in 2016, is a critical enabling factor for uptake of smartphone based applications and piloting of the SeedIT app.

Rationale:
Cameroon's commitment to the Bonn Challenge to restore 12 million Ha, creates demand for billions of native tree seeds. Failure to effectively integrate native tree biodiversity into FLR planning will have negative economic and environmental consequences including: (i) Public money spent on procurement of exotic FGR does not trickle down to stimulate the local market or benefit local nurseries, (ii) Decline in native FGR available for sustaining local livelihoods and especially those of women. Products from native trees frequently come under women's purview and contribute to household diets or to women's incomes, whereas exotics such as pine or cacao are controlled by men for sales from which men retain the revenues, (iii) The cultivation of exotic trees focuses on monoculture production, decreasing both biodiversity and

local population access to biodiversity based solutions.

Methodology:
1. Baseline study to identify tree species currently used for restoration, reasons for their selection, and critical gaps in seed supply systems. (MINFOF, AFAF, ABIOGeT, PEM, Yaounde 1, Bioversity).
2. This will inform the design of a series of interactive participatory workshops and pilot program using smartphone apps (SeedIT) to document seed performance from collection to planting over 16 months (Figure 2). (MINFOF, AFAF, ABIOGeT, PEM, Yaounde 1, Bioversity).
3. Stakeholders will receive training in how to use the SeedIT app to record passport ID information of individual tree species and track their performance. The app records species, geographic location, individual tree status, ecological context (isolated on a road verge, in a forest) and the size of the seed source, using a photographic record for each seed tree and drop-down menu to record the number of conspecific trees in the area. (ABIOGeT, PEM, Bioversity) linked to the latest google earth satellite data.
4. Information will be centrally Cloud stored when the phone has data connection. The field-based data will be linked directly to remotely-sensed tree cover data (e.g. OPENFORIS). MINFOF will host the national seed database using cloud-based technology and will test the platform with seed collection agencies across each region. (AFAF, ABIOGeT, PEM, Yaounde 1, Aberdeen, Bioversity)

Target study zones will be in the North (drylands), Centre (humid savannas) and the South (rainforest), prioritized by MINFOF under AFR100 as degraded landscapes in severe need of restoration. (Figure 3)

The target zones are dominated by different land use types (State Forests, Community Forests, Forest Concessions, Agricultural landscapes) with sometimes competing interest from the different users (rural population, forest administration, forest concessionaires, local authorities) over the tree species of interest.

Cameroonian women own the least amount of land in the world. Women and men are differently and unequally affected by land degradation. Loss of access to fuelwood or tree products disproportionately affects women who are heavily dependent on these products for food and subsistence. This project will empower local communities with a focus on women and youth. These are typically excluded from restoration efforts, as initiatives are either conducted in a top-down manner or interact with elite men in the communities.
We will also engage with NGOs, local researchers and Vocational Forestry School where field Foresters and Protected areas managers are trained in the country, to train them to use the SeedIT app. (MINFOF, AFAF, ABIOGeT, PEM, Yaounde 1, Bioversity, Aberdeen).

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?

The project will build the capacity of 1,000 stakeholders (smallholders, seed collectors, nurseries, seed centers, farmers' cooperatives, NGOs, foresters and some Government's staff) involved in the national tree supply system at different levels. Workshops will be organized at the local, communal, and national levels with MINFOF (involved in this project) on the issue of appropriate seeds sourcing.
We will train trainers and students (1 PhD and 3 MSc), results published in scientific journals. We will craft practical, illustrated manuals and guidelines for (i) future management of planting for native species, (ii) use of the SeedIT technology, and (iii) scaling out to other contexts. All materials will demonstrate the benefits

of recognizing, conserving, and using native tree biodiversity locally, and will be adapted to the needs of populations and for restoration practitioners working in the field.
We will use the experience generated in the field to develop a community of practice on FGR for restoration by setting up a platform for knowledge sharing but also a repository of knowledge and capacity building. The platform, as well as the database developed via the SeedIT app, will be hosted by MINFOF, who is partner in the project and charged with making policy decisions related to FLR in Cameroon, and linked to regional wide databased for south-south exchange through the SAFORGEN (Sub-Saharan African Forest Genetic Resources Programme) network.
Two key components of the Forest and Landscape Restoration (FLR) Strategic Framework of Cameroon (MINFOF-MINEPDED-GIZ-WRI, 2020) are (1) enhancing monitoring, reporting and communication systems for FLR at scale and (2) strengthening the role of research in the implementation and evaluation of FLR efforts, thus the project aligns with national priorities and is positioned to influence the policy decisions related to seeds systems.

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.

- Capacity building of 1000 local seed collectors, community-based nursery workers, and restoration practitioners in selecting and propagating high quality native tree seed and managing nursery and restoration sites
- Capacity building of 3 MSc and 1 PhD students in morphological/genetic characterization in support of restoration initiatives, and tree seeds value chain development.
- Capacity and knowledge building of at least 50 policymakers on sustainable forest management and governance, ABS case studies, integration of scientific indicators in the CITES framework relevant for biodiversity conservation and sustainable management, particularly on genetic diversity aspects.
- Capacity building of all local researchers involved in the project given the multi-disciplinary framework proposed.
- Capacity building of the community forests and the department of forestry through the establishment of smart seed supply systems, and virtual seed database.
- This methodology will be built into a scalable model that can be replicated at a broader scale and can therefore be relevant also to other countries in the Congo Basin.

One of the outputs relates to building the capacity of key stakeholders to manage future planting (“The capacity of key stakeholders to manage increased planting and survival of priority species in the future is enhanced”). Envisaged under this output are the following deliverables: a training manual for the seed collectors, provenancing strategies for each target community, and protocols for sustainable management and propagation of selected native FGR.

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.

Cameroonian women own the least amount of land in the world . Women and men are differently and unequally affected by land degradation. Loss of access to fuelwood or tree products disproportionately affects women who are heavily dependent on these products for food and subsistence. However, they are often excluded from efforts to restore degraded lands, as initiatives are either conducted in a top-down manner or interact with elite men in the communities where they are implemented (Basnett et al. 2017). This project will engage with women and men from different social groups to identify priority tree species

for restoration, as well as preferred project engagement strategies. All activities will be conducted in gender sensitive ways (e.g. in terms of timing, location, planning, and design). Participatory work will be conducted with both women and men separately to allow women to voice their priorities and ideas freely. The selection of focus trees for this project will be driven by their value to both women and men, including socio-economically marginalized groups.
Bioversity's Gender Specialist will develop a Gender Action Plan to mainstream and monitor gender integration in the project. She will work with staff on the ground to ensure that interventions are inclusive and that benefits equitably shared among women and men and that they reach poorer community members. A baseline gender analysis will inform the project's engagement strategy, and all data (including for M&E) will be disaggregated by gender and other social variables (socio-economic status, age) to ensure that women and men profit equitably from the benefits of the programme.

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.

Short Term:
By engaging 200 local nurseries and 1,000 (50% women) local people in documenting and verifying native tree biodiversity for restoration, at least 10,000 individuals in the target areas will directly participate in the livelihood and nutrition benefits derived from increasing native FGR supply in response to largescale State landscape restoration efforts. The target group will benefit from (1) quality verification data on native FGR (2) improved genetic diversity in nurseries. Driven by better data on specific tree varieties, tree-based livelihoods will be stimulated, reducing threats to native species and boosting sustainable trade.
Next-Users: (i) 1,000 smallholders learn to value the seeds they collect, leading to better prices paid by nurseries and improved livelihoods around seed collecting, (ii) 200 seed centres, national collections, and nurseries gain access to FGR whose quality and performance are correctly documented, creating tree seed collections that are high quality, adapted to local growing conditions, and valuable to the local economy, and (iii) the national forestry department and MINFOF use the data to select superior varieties of FGR to restore degraded landscapes in Cameroon.

Long Term:
At national level, a coordinated seed system that effectively integrates genetic diversity will be more efficient, ultimately optimizing restoration success rates. Forest cover will increase, boosting climate change resilience (SDG 13). Data-driven seed supply systems will provide empirical evidence of the social, economic, and environmental value of including native FGR in restoration efforts, leading to improvement of the nutritional resource base of rural communities (SDG2). Over the longer term, a percentage of land degradation may be reversed, halting or slowing biodiversity loss (SDG15). National and international stakeholders will use project data to guide policies for improving tree seed systems and restoration planning. Project outcomes will guide public and private investment planning. SeedIT may be adopted more broadly as a powerful tool to balance trade-offs between different SDGs ensuring long term benefits to biodiversity, sustainable food systems, healthy diets and climate mitigation. Given Cameroon's geographical position, knowledge and tools can be easily scaled out to neighbours with many of the same tree species (Nigeria, Chad, CAR, Congo).
End-Users: (i) Population around target sites, who benefit from access to information about 30+ priority

tree species documented as being high value sources of food, fodder, medicine, spice, timber, fuelwood, or conservation benefits to enhance livelihood potential and value chain activities around those products, (ii) Nurseries, private forestry agri-businesses, and seed centres improve level of income earned from selling or supplying documented FGR for use in landscape restoration, (iii) Conservation scientists benefit from the positive spillover effects from improved tree seed diversity monitoring, such as increased awareness in LICs of the importance of conserving, valuing, and using tree biodiversity, (iv) the local economy around target site areas whose products and income derive partially or wholly from access to, sale, and exchange of high quality timber and non-timber forest products , and (v) the general population and government benefitting long-term from a greater use of climate-adapted tree genetic material in future largescale landscape restoration.

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.

Four (4) outputs lead to the outcome: Knowledge and capacity for delivery of genetically-diverse, climate-resilient, native tree species lays foundations for landscape restoration in Northern, Central and Southern Cameroon to be more equitable, resilient, climate-smart, and livelihood focused for the people of Cameroon:
1. Stakeholders evaluate trade-offs and synergies between different land uses and species to identify 30+ priority native tree species proven to yield significant livelihood, productivity, and environmental benefits compared to exotic species.
2. Seed collectors, nurseries, seed centers, and government stakeholders gain the capacity to document, verify, and track the performance and quality of valuable tree species native to Cameroon.
3. The capacity of key stakeholders to manage increased production and planting and survival of priority tree species is enhanced.
4. Increase in livelihoods for smallholder tree farmers, local seed businesses, seed cooperatives, and community nurseries driven by increasing Government demand for, and largescale procurement of, bulk quantities of high quality, native tree species seed to fulfil urgent national restoration commitments.
These outputs will lead to the outcome, and finally the impact: Genetically-diverse, climate-resilient, and locally-adapted native tree species germplasm available for, and integrated into, landscape restoration efforts, delivering multiple livelihood and environment benefits for rural populations.

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?

The risks of plant disease and biosecurity will be managed via (i) reducing the demand for imported exotic planting material, thus also the risk of imported (foreign) pests and pathogens, (ii) promoting the use of a diversity of native species and genetic diversity, thus mitigating the risks of disease and pest outbreaks, and (iii) working with ecological seed zones based on the natural expected ranges of tree species under climate change will reduce the vulnerability of landscape restoration projects to disease.
Capacity development relating to the use of smartphone applications and other topics will be enshrined in a training manual that can be used to pass on skills, methodologies, etc. to other stakeholders. We will also produce a scaling out guideline for stakeholders to scale out tools and knowledge to neighbouring

countries with similar challenges. Communities will also benefit from a new, mutually-agreed provenancing strategy for use of native FGR in their region. In order to ensure the sustainability of future planting, we will develop a protocol for the management of native FGR, targeting MINFOF and development cooperation agencies (e.g. GIZ). The database will be maintained by MINFOF past the end of the project.

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

Figure 3
09/02/2021
23:39:08
pdf 3.36 MB

Figure 2
09/02/2021
23:36:26
pdf 363.15 KB

Figure 1
09/02/2021
23:36:16
pdf 918.89 KB

Annex 1 Preliminary list of tree species
09/02/2021
23:36:00
pdf 574.21 KB

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.

Darwin-DR-2021-proposal budget-M.Ekue-FINAL
09/02/2021
21:44:30
xlsx 72.9 KB

Q22. Funding

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

⦿ New Initiative

Please provide details:

This project is a new initiative, and nothing like it has been funded yet. But it builds on our involvements in 1) the Initiative 20x20 in Latin America and the Caribbean, and 2) the ongoing Darwin Initiative project "Conserving rosewood genetic diversity for resilient livelihoods in the Mekong"
In Initiative 20x20, Bioversity analysed the national seed systems in Mexico, Guatemala, Costa Rica, Colombia, Peru, Chile and Argentina. The existing seed production and supply systems were assessed through five groups of indicators (seed selection and innovation; seed harvesting and production; market access, supply and demand; quality control and enabling environment) to identify their strengths and weaknesses. This led to the formulation of appropriate guidelines and recommendations ensuring that appropriate material of a diverse range of suitable species, adapted both to local conditions, and capable of persisting over generations under a changing climate, is available for each restoration project being carried out.
In the Darwin Initiative project, we are working with forest authorities and communities in the Mekong region to safeguard the genetic resources of three rosewood species of high conservation concern in situ and ex situ; and also building the capacity of rural households to generate livelihoods benefits from sustainable uses.

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

Q23a. Secured

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

Burundi Landscape Restoration and Resilience Project - WOrld Bank	[redacted]	£	£[redacted] in matched funding from the Burundi Landscape Restoration and Resilience Project to cover salaries of personal involved in restoration activities in two provinces (Bujumbura rural and Muyinga) using native species and building capacities of beneficiaries to manage 22 community nurseries.
Copernicus Climate Change Service	[redacted]	£	£[redacted] in matched funding from the Copernicus Climate Change Service: Sectoral Information System to Support the Biodiversity Sector grant to gather data on tree species distributions in Central Africa and the impact of climate change, specifically using the climate data generated for this project.
FAO	[redacted]	£	£[redacted] in matched funding via FAO and host country in-kind financing of personnel assigned to project.
CGIAR Research Program on Forests, Trees and Agroforestry (FTA)	[redacted]	£	£[redacted] in matched funding via FTA in-kind financing of personnel assigned to project

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?

- ◯ Yes
- ◯ 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.

The project will adopt an open access approach to its project results to benefit the wider community. The project will generate data on 30+ priority tree species, including ecogeographic data such as location, altitude, latitude, micro-climate, distribution, organoleptic data such as size and form of seeds, and data on performance (germination, adaptation, etc.). Such data would be available on open access platforms such as GBIF. The project will help MINFOF manage a database of data on tree species and provide advice on how to keep the data open source where possible. The project will also design two add-ins to the SeedIT app: (i) a Marketplace tab, for access by private businesses and nursery managers to a small section of the entire database, where they can buy the material, identify contacts, locations of genetic material, etc., and (ii) a link to the PlantNet Plant Identification app which will allow non-expert users to identify the tree species by sending a photo to the other linked app. These add-ons will be kept open source and free for users. Articles and public education materials will be published on the Bioversity website, as well as disseminated via our social media channels. A data management strategy will be developed for the project at the outset of the project to define how each of these project products will be made accessible and shared. Bioversity will use Dataverse (coordinated by Harvard University and MIT), a free open-source application for sharing, citing, reusing and archiving research data.

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.

Given that Bioversity International is already present in Cameroon, has implemented multiple projects there, our partners are well known to us, and our proposed Project Coordinator is in situ, we do not foresee any major problems with financial risk. In any case, Bioversity has strong financial risk monitoring policies and procedures in place. Bioversity International's Institutional Code of Conduct and Whistle-Blower policies include reference to mechanisms for reporting fraud, misuse or resources, and in general any unethical behaviour. Policies for fraud reporting by sub-recipients and beneficiaries are currently under revision and will be shared as soon as finalized. The expenditures incurred by sub-recipients are recorded in the Bioversity's accounting system through financial reports submitted by sub-recipients approved by the appropriate grant manager and budget officer. Accounting evidence for expenditures is retained based on the grant's terms and conditions. In general, the documentation rests with the sub-recipients but the sub-recipients are informed through the letter of agreement that these should be available upon request for audit purposes.

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 motorbikes will be used during field works by the NGOs staff and the students. With the bad state of roads in rural areas in Cameroon, we are expecting them to be depreciated after 3 years. At the completion of the project, Bioversity will donate the motorbikes to the two NGOs (PEM and ABIOGET) provided they are still in good condition 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.

The total budget is £[redacted] of which [redacted] ([redacted] is requested from Darwin funds. The core budget for lead organisation consists of staff cost, travel and subsistence cost, two laptops, GPS and some mobile phones to run the SeedIT app. Overhead cost includes overheads, facilities, utilities, and audit cost. Research support services cost cover communication and data management cost and enhancing farmers benefit activities.

The travel cost covers the participation of Bioversity staff to meetings and fieldworks, scholarships for 3 students (1 PhD and 3 MSc), and also cover travel cost for members of the steering committee (M&E). Partner organisations' budgets include national-level travel for their own participation at project annual meetings and workshops, and to bring together key stakeholders to national network meetings. Field operation costs are essential for engaging with farmers and restoration practitioners in the field. The capital item will be the purchase of 2 motorbikes to allow partners and students to travel between villages and forests where roads are degraded and difficult to reach by cars.

Bioversity International has a country office in Yaounde, where the project coordinator is based. We are therefore prepared to start the project right away without any huge start-up costs. Bioversity is also bringing co-financing of £[redacted] that is already secure.

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?

The project enshrines Darwin Initiative's principles for research ethics by promoting equitable benefits-sharing within the target country and providing strong leadership via a multi-stakeholder project steering committee that ensures adherence to existing ethical standards. The project complies with CGIAR Guiding Principles for Management of Intellectual Assets, Article 3 (farmers' rights). In striving to protect indigenous knowledge and locally-sourced germplasm, Bioversity has pioneered mutual recognition of traditional and scientific knowledge, respecting knowledge-stewards' rights and the ownership of local populations and landraces. The project will promote awareness of local communities' rights regarding free prior and informed consent (FPIC) for engaging in research and providing germplasm and related information subject to the CBD, Nagoya Protocol and ITPGRFA. Project stakeholders will be informed about project goals, roles, rights to participate (or not), and how project outputs will be shared with external audiences.
The project will ensure participation is equitably balanced (gender, public/private sector participation, civil society), and manage any conflict of interests arising among participants. During field work, it will work closely with national authorities and local communities to secure FPIC.
Ownership of data on tree locations and seed sources will be carefully monitored throughout the project. The MINFOF in Cameroon is the primary responsible custodian of the data. We will develop a stakeholder dialogue on how data is collected and stored, and how information on seed availability and nursery stocks is shared among different stakeholders.

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.

We do not foresee any risks of corruption related to this project. Bioversity International has been operating in Cameroon since 2005 and has successfully implemented multiple projects there with the involvement of national partners that are well known to us.

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.

Bioversity International adheres strictly to its Research Ethics Policy and code of conduct enshrined in its (2016) Personnel Policies Manual. Relevant sections for preventing project-level corruption and bribery include Section 103.0: Staff Code of conduct and responsibilities p. 15; Section 113.0: Disciplinary Code p. 58; and Section 115.0 Communication by employees of concerns about Bioversity compliance ("Whistle-blower" Policy) p. 68.
Bioversity International core values (integrity, respect, collaboration and teamwork, and excellence) are deeply held beliefs, that define how it conducts its business. The core value of integrity demands that:
a. Staff display the highest level of honesty and ethics in dealings with colleagues, partners, donors and all stakeholders. Staff must not engage in or tolerate unethical behaviour or fraudulent practices;
b. Staff hold themselves, collectively and individually, accountable to do what is right, and to report unethical behavior and address any breach appropriately;
c. Staff must make fair and transparent decisions and explain them clearly;
d. Staff must manage Bioversity's resources transparently and in ways that deliver the best value for money.
These standards are replicated in the subcontracts and subagreements we sign with partners to fulfil a portion of the work, thus holding them to the same standards.

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

No Response

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.

- Stage 2 Logframe Template

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.

Logical Framework
09/02/2021
22:14:52
pdf 222.93 KB

Impact:

Genetically-diverse, climate-resilient, and locally-adapted priority tree species germplasm is available for, and integrated into, landscape restoration efforts, delivering multiple livelihood and environment benefits for rural populations

Outcome:

High-quality data on genetically-diverse, climate-resilient, native tree species makes landscape restoration efforts in Northern Central and Southern Cameroon more effective, sustainable, climate-smart, and economically fruitful for the people of Cameroon.

Project Outputs

Output 1:

Stakeholders (smallholders, seed collectors, nurseries, seed centers, farmers' cooperatives, NGOs, government) evaluate trade-offs and synergies between different land uses and species to identify 30+ priority native tree species proven to yield significant livelihood, productivity, and environmental benefits compared to exotic tree species.

Output 2:

Seed collectors, nurseries, seed centers, and the government stakeholders gain the capacity to document, verify, and track the performance and quality of valuable tree species native to Cameroon

Output 3:

The capacity of key stakeholders to manage increased planting and survival of priority species in the future is enhanced

Output 4:

Increase in livelihoods for smallholder tree farmers, local seed businesses, seed cooperatives, and community nurseries driven by increasing Government demand for, and largescale procurement of, bulk quantities of high quality, native tree species seed to fulfil urgent national restoration commitments.

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.

Output 1.
1.1 Inaugural Project Workshop held with all partners and key stakeholders (including NGOS, development Cooperations agencies, Ministry of Forest and Wildlife, Ministry of Environment, Ministry of Agriculture). Workplan communicated and refined
1.2 Project Steering Committee Meeting established
1.3 Baseline survey of the state of tree seed supply systems
1.4 Species prioritization with local communities and other stakeholders in projects sites and final selection of the 30+ priority native tree species for restoration
1.5 Validation workshop of findings of the baseline survey
1.6 Compilation of the detailed knowledge on the use (e.g.: food, fodder, medicine, spice, timber, fuelwood, conservation, etc.), value (nutritional, economic, cultural etc.) of the 30+ priority tree species
1.7 Elaboration of the provenancing strategy and sources of propagules for each priority tree species

Output 2
2.1 Refine, test and adapt the SeedIT mobile app for field trial in Cameroon
2.2. Elaboration of training manuals adapted to local contexts
2.3 Seed collectors, nursery workers, and forestry department managers have started using the SeedIT app to record data about tree seeds collected in project sites
2.4 Build capacities of 1000 new stakeholders to use the SeedIT mobile app to record and track seed quality
2.5 Elaboration of guidelines for future scaling out

Output 3
3.1 Stakeholders (forestry department, seed collectors, community nurseries, small FGR agri-businesses) use recommendations from the provenancing strategy to restore new sites
3.2 Nursery managers, managers of seed collections, seed centers, and forestry department personnel have improved their capacity to manage increased planting and survival of priority species via (i) technical assistance and mentoring from the project and (ii) a written protocol for management of native FGR.

Output 4
4.1 Mapping of the native tree seed suppliers and their capacities
4.2 Stakeholders (forestry department, seed collectors, nursery managers, small FGR agri-businesses, community nurseries) use the SeedIT app's verification of quality function to negotiate better prices for FGR along existing value chains.
4.3 New livelihood options for community-based nurseries involving native FGR have been explored, tested, or begun.
4.4 Baseline socio-economic study carried out in Year 1 and repeated in Year 3 to understand the impact of production and of good quality seedlings of native species on different stakeholders, including an analysis of the forward and backward economic multipliers within the specific value chain. The study will include an assessment of the economic returns for the various actors within specific value chains.

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.

R27 Darwin St2 Implementation Timetable Template FINAL
09/02/2021
23:05:43
xlsx 16.71 KB

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 Finance Guidance for Darwin/IWT**).**

Rigorous M&E mechanisms will be established to allow project leadership to manage adaptively, mitigate risks, monitor internal compliance with Bioversity's safeguarding measures, and fulfill all funder obligations. Bioversity will use its logframe as the basis for the M&E plan. The logframe has been developed in a participatory manner with partners, thus there is advanced awareness about the project outcome, outputs, and key deliverables. Upon award, Bioversity will finalize the M&E plan, whose core elements will be:

1. Baseline Assessment: By M4, Bioversity will complete a qualitative and quantitative baseline assessment to measure indicators for key outcome indicators and outputs, Bioversity will lead the BA, with input on tools and analysis planning from our partners and provide oversight for data collection and analysis.
2. Gender: Bioversity's Gender Specialist will conduct a Gender Analysis (GA) to inform the final design of the M&E plan for the project, with a focus on ensuring female participation targets are met and that the design considers the burdens placed on women's time and labour. She will also review the baseline and end line assessment plans to ensure that the voices of women are adequately solicited and captured.
3. Adaptive Management: Progress towards the M&E framework and workplan will be measured and reported annually (all partners, led by Bioversity). The project will be led by the Bioversity Project Coordinator and a Management Team (MT) composed of our UK-based and Cameroonian partners. The M&E plan will be reviewed on a rolling basis to ensure that progress towards outcome and individual outputs is on track, in addition to being formally reviewed annually to scan for issues that require a change in approach, adaptation, or mitigation measure (Bioversity Project Coordinator, MT).
4. Results-Based Management: Bioversity uses a comprehensive RMT (Results-Based Management Tool)

linking the monitoring systems of the budget office, the grants administration unit, and the proposal development team with the deliverables for which the organization is responsible under its SRF (Strategic Results Framework), as well as for individual grant awards with funders and partners. The financial data and budget information is linked to payroll, procurement, human resources, proposal and grant management. The RMT offers a suite of management options to the MT. To facilitate decision making, the data in OCS is linked through Power BI, a business analytics solution, allowing the Project Coordinator and budget officer to review (in real time) information on a specific output, or groups of deliverables arranged by outcome or partner. RMT guarantees a high level of compliance with Darwin reporting and management obligations and will enable the MT to manage the project adaptively based on real-time feedback and data on results, deliverables, budget spend, and partner commitments. (Bioversity)
5. End Line Impact Assessment: A project audit and end-line impact assessment at project end will form the final evaluation of project impact. Compilation of the reports will be managed by the MT, with the final report transferred into Darwin reporting systems by Bioversity. (MT, Project Coordinator, Bioversity Grants Administration Unit)

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs)	£[redacted]
Number of days planned for M&E	33
Percentage of total project budget set aside for M&E (%)	[redacted]

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 Guidance Notes) and attach details of any advice you have received from them.

⦿ No

If no, why not?

Bioversity International has office and staff based in Yaounde since 2005. The project is not going to be implemented in areas in Cameroon where there are security issues. The project leader is the actual Country Representative in Cameroon.

Please attach details of any advice you have received.

No Response

Section 17 - Certification

Q35. Certification

On behalf of the

Company

of

Bioversity International

I apply for a grant of

£375,000.00

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	Marius R.M. Ekue
Position in the organisation	Scientist/African lead Tree Biodiversity for Resilient Landscapes and Cameroon Country Representative
Signature (please upload e-signature)	My Signature 09/02/2021 22:31:59 jpg 107.71 KB
Date	09 February 2021

Section 18 - Submission Checklist

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 here. 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).