Applicant: **Ranum, Elin Cecilie**
Organisation: **The Development Fund**
Funding Sought: **£600,000.00**

DIR29S2\1013

Community-based agro-biodiversity systems for improved livelihoods and climate resilience

Climate change affects agricultural production in Central America, threatening food security. This project will improve rural
households' livelihoods and resilience to climate change by increasing smallholder farmers' access to locally adapted
seeds. By involving farmers and indigenous people in the development of new varieties of maize and beans and the
conservation of the rich and native diversity in the region, and facilitate access to seeds through community seed banks,
the project will contribute to improved food security in Central America.

PRIMARY APPLICANT DETAILS

Title	Ms
Name	Elin Cecilie
Surname	Ranum
Organisation	The Development Fund

[redacted]

DIR29S2\1013

Community-based agro-biodiversity systems for improved livelihoods and climate resilience

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title	Ms
Name	Elin Cecilie
Surname	Ranum
Organisation	The Development Fund
Website (Work)	utviklingsfondet.no
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Address	

GMS ORGANISATION

Type	**Organisation**
Name	The Development Fund
Phone (Fax)	[redacted]
Email (Work)	
Website	
Address	

Section 2 - Title, Ecosystems, Approaches & Summary

Q3. Title:

Community-based agro-biodiversity systems for improved livelihoods and climate resilience

What was your Stage 1 reference number? e.g. DIR28S1\1123

DIR29S1\1095

Q4. Key Ecosystems, Approaches and Threats

Select up to 3 biomes that are of focus, up to 3 conservation actions that characterise your approach,

and up to 3 threats to biodiversity you intend to address, from dropdown lists.

Biome 1

Tropical-subtropical forests

Biome 2

Intensive land-use systems (agric., plantations and urban)

Biome 3

No Response

Conservation Action 1

Species management (harvest, recovery, re-introduction, ex-situ)

Conservation Action 2

Livelihood, economic & other incentives (incl. conservation payments)

Conservation Action 3

No Response

Threat 1

Climate change & severe weather

Threat 2

Human intrusions & disturbance (recreation, war)

Threat 3

No Response

Q5. Summary of project

Please provide a brief summary of your project: the problem/need it is trying to address, 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 the website.

Please write this summary for a non-technical audience.

Climate change affects agricultural production in Central America, threatening food security. This project will improve rural
households' livelihoods and resilience to climate change by increasing smallholder farmers' access to locally adapted
seeds. By involving farmers and indigenous people in the development of new varieties of maize and beans and the
conservation of the rich and native diversity in the region, and facilitate access to seeds through community seed banks,
the project will contribute to improved food security in Central America.

Section 3 - Title, Dates & Budget Summary

Q6. 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	Guatemala	**Country 2**	Honduras
Country 3	Nicaragua	**Country 4**	Costa Rica

Do you require more fields?

⊙ No

Q7. Project dates

Start date:	**End date:**	**Duration (e.g. 2 years, 3 months):**
01 July 2023	31 December 2025	2 years, 6 months

Q8. Budget summary

Year:	2023/24	2024/25	2025/26	2026/27	Total request
Amount:	£216,527.00	£220,333.00	£163,140.00	£0.00	**£** 600,000.00

Q9. Proportion of Darwin Initiative budget expected to be expended in eligible countries: % [redacted]

Q10a. Do you have matched funding arrangements?

⊙ Yes

What matched funding arrangements are proposed?

The Development Fund will provide matched funds through its collaboration agreement with the Norwegian Agency for
Development (Norad) (2021-2025). All four direct partnerorganizations (Asocuch, UCR/Experimental Station, Fipah and Fecodesa) will contribute to matched funding, as showed in the budget template "Sources of Additional Funding". Other local actors has also proposed matched funding: National Institute of Innovation and Transfer of Agricultural Technology (INTA), Costa Rica, and the Ministry of Agriculture and Livestock (MAG), Costa Rica, and the University ZAMORANO, Honduras.

Q10b. Total confirmed & unconfirmed matched funding (£) [redacted]

Q10c. If you have a significant amount of unconfirmed matched funding, please clarify how will you fund the project if you don't manage to secure this?

No Response

Section 4 - Problem statement

Q11. 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. What is the need, challenge or opportunity?

For example, what are the drivers of biodiversity loss that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems? Please cite any evidence you are using to support your assessment of the problem (references can be listed in a separate attached PDF document).

Mesoamerica is one of the regions with richest agro-biodiversity in the world. It is the origin of beans (Phaseolus vulgaris) and maize (Zea mays) and holds a rich diversity of crop varieties and wild relatives. Smallholder farmers in the region depend on these native varieties and are also guardians of agrobiodiversity.
Maize and beans are the main staple crops in the region, with smallholder farmers as the main producers. Smallholder farmers face several constraints which are, among others, caused by scarce land resources with poor soil quality and their plots are often in steep areas which are prone to soil erosion and landslides.

The region is highly vulnerable to the effects climate change expressed through droughts, high temperatures and uncontrolled rains in short periods, most recently experienced with the hurricanes ETA and IOTA in 2020. Climate change causes crop failure and losses and weakens the means of agriculture production. It has therefore a huge impact on food security. At the same time, there is a loss of agrobiodiversity caused by change in land use, deforestation, growing human activity, and consequences of climate change which alters species natural habitat. This affects the region's capacity to adapt to climate change in the future, and hence food security.

"By 2025, climate change coupled with soil degradation and widespread poverty could produce annual maize and bean production losses of 350,000 tons, with a gross production value close to US$120 million (Tortillas on the Roaster, 2011)." This means that greater efforts are need to halt the loss of agrobiodiversity. This will be crucial for the possibility to reduce climate vulnerability and increase resilience in the agriculture production systems to the future scenario of climate shocks as developed by the IPCC (2022). The effects of climate change do not respect borders, in the same way, the adaptation of agricultural production systems based on the richness of plant genetic resources, must cross borders and promote joint initiatives among the countries of the region, to achieve rapid, effective and efficient adaptation (PAEM, 2013)[1].

Increased access to locally adapted varieties and the development of new varieties are crucial to ensure food and nutrition security in the future. In-situ and on-farm conservation are crucial in a region with weak national gene banks. Existing community seed banks play an important role for this purpose, however

many community seed banks lack adequate storage facilities and technologies to conserve the genetic resources and the risk of genetic erosion is high. Breeding depends on a wide pool of genetic resources, which can be obtained through collaboration across the region.

To counter the risk of continued loss of biodiversity, it is crucial to rescue and conserve wild relatives as well as to safeguard already identified plant genetic resources. Ex-situ, in-situ and on-farm conservation approaches are complementary for ensuring that valuable resources are not lost, at the same time as they can be continuously used and further developed to withstand and adapt to the changing climate conditions.

Section 5 - Darwin Objectives and Conventions

Q12. Biodiversity Conventions, Treaties and Agreements

Q12a. 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)

Q12b. National and International Policy Alignment

Using evidence where available, please detail how your project will contribute to national policy (including NBSAPs, NDCs, NAP etc.) and in turn international biodiversity and development conventions, treaties and agreements that the country is a signatory of.

CBD: The project will promote actions linked to Article 1, particularly through its efforts to conserve and safeguard biodiversity and sustainable use, building on and recognising traditional knowledge.

ITPGRFA: The project will contribute to the overall objective of the ITPGRFA and the implementation of its articles 5,6 and 9.
Its contribution to art. 5 is foremost, but not limited to, linked to art. 5.2.c, where the project will promote and document good practices for on-farm conservation and management of PGRFA. These practices can be scaled up and included in national governments action plans. Through collections of new varieties and wild relatives, the project also contributes to item a and b under art. 5.2

It will contribute to art. 6.2 through the establishment and maintenance of diverse farming systems that favour the sustainable use of plant genetic resources; strengthening research that promotes and conserves biodiversity; promotion of plant breeding initiatives with the involvement of farmers to strengthen the capacity to obtain varieties adapted to social, economic and ecological conditions, particularly in marginalised areas; and expanding the genetic base of crops and increasing the range of genetic diversity available for farmers.
It will contribute to the implementation of article 9 by applying farmers and indigenous people's knowledge in breeding and conservation of plant genetic resources; ensuring equitable benefit sharing by enabling free access and use of new and existing varieties; ensuring the right to save, use, exchange and sell farm-saved seeds; and the participation of farmers' in decision making.

SDGs: The project will contribute to SDG 1, 2, 13 and 15.

The project will contribute to the implementation of several national policies in the respective countries, particularly policies linked to seeds, biodiversity, food security, agriculture, and climate. The main policies for each countries are listed below. Given the space limit, it is not possible to demonstrate how the project contributes to the different laws in each country. Its main contribution will be by a) implementation of actions provided in the policies/laws; b) achievement of goals established by the policies/laws; c) development and documentation of good practices and advocate for the inclusion of these practices during revisions of policies/laws; and d) support the implementation of the countries' commitments in the above mentioned international agreements/treaties.

Guatemala: National policy on food and nutrition security (SESAN); Policy and law on climate change; National policy on biodiversity; National strategy for biodiversity and action plan.

Honduras: General law on environment; Law on climate change; Law for the modernisation and development of the agriculture sector; National plan for climate change adaptation; National action plan for food security, nutrition and eradication of hunger.

Nicaragua: Law for the production and commercialisation of seeds; Law for the conservation and sustainable use of biodiversity; Law for food and nutrition sovereignty; Law for the promotion of agro-ecological and organic agriculture production.

Costa Rica: National seed law, National biodiversity law.

Section 6 - Method, Change Expected, Gender & Exit Strategy

Q13. Methodology

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

- **how you have reflected on and incorporated evidence and lessons learnt from past and present similar activities and projects in the design of this project.**
- **the specific approach you are using, supported by evidence that it will be effective, and justifying why you expect it will be successful in this context.**
- **how you will undertake the work (activities, materials and methods)**
- **what will be the main activities and where will these take place.**
- **how you will manage the work (governance, roles and responsibilities, project management tools, risks etc.).**

The project builds on the Participatory Plant Breeding in Meso-America programme (http://www.programafpma.com/), a joint programme of the involved local partners and the Development Fund, which was implemented in the period of 2001 and 2016. As a result of this project, more than 70 varieties of maize and beans were developed through participatory plant breeding. Moreover, more than 40 community seed banks were established and more than 40 seed fairs were celebrated. The programme resulted in the documentation of collections of wild relatives of maize and beans in Central America and the submission of more than 650 accessions of important food crops were submitted to national genebanks. Moreover, the programme was successful in training 60 youth in agrobiodiversity

management; while more than 500 leaders (men and women) and technical staff were trained in seed production, participatory plant breeding, agro-ecology, and farm diversification.

The project will apply and scale up tested methodologies from this and other projects, of which the most important are:

Development of varieties that respond to the challenges of climate change: The project will develop maize and bean varieties through participatory plant breeding (PPB). PPB combines the scientific knowledge of plant breeders within of the collaborating organizations with the local knowledge of the farmers to obtain varieties and materials with ideotypes desired by the farmers. The evaluation processes of the different lines will be carried out directly in the farmers' fields. This is crucial for ensuring that the new varieties are in line with local conditions and farmers' preferences, which in turn will increase the probability of farmers' using the new varieties.

Strengthening of Community seed banks (CSB): A rapid assessment of the existing CSBs will be conducted to identify gaps. Based on this, CSBs will be strengthened to ensure the production and protection of quality seed and capacity to deliver its main functions: protection of seeds of important varieties for farmers; access to seeds in the case of emergency situations; conservation of local germplasm which can be used for the development of new varieties with better climate adaptation; and production of quality seeds. With the support from the project, the CSBs and farmers' organsations will seek agreements with National Gene Banks for the delivery of accessions of farmer varieties.

Collection of native varieties of P. vulgaris, P acutifolius and Zea Mays: The local partner organisations will use passport data to identify: 1) relevant information on their management, consumption and general characteristics, 2) the native genetic diversity, 3) determine their conservation in the medium and long term of native varieties, 4) which type of genetic improvement it requires;, and 5) its potential use in genetic improvement.
Seed fairs: Local seed fairs will be organized within different indigenous cultures that establish relations of conservation, exchange, and use of various seeds. Seed fairs are important platforms for the promotion of farmers rights, the promotion of native varieties and their specific characteristics, and promotion of local culinary culture linked to the native varieties.

Collection of wild relatives of Phaseolus: The places of origin of each of the wild populations found will be identified and georeferenced. From each site, when the abundance of material in the field allows it and without putting the population at risk, two or more herbarium and seed specimens will be collected for conservation in herbariums and gene banks, both national and international. This methodology involves three visits: the first to identify and locate populations, a second to collect herbariums and the third to harvest seeds. Specimens will be transferred to herbariums, where they will be dried and refrigerated.

These methodologies are recognised by the Governing Body of the ITPGFRA in its 7th session as means to promote Farmers Rights (IT/GB-7/17/Res7) https://www.fao.org/3/mv102e/mv102e.pdf and are also encouraged in the document on "Options for encouraging, guiding and promoting the realization of Farmers' Rights as set out in Article 9 of the International Treaty" developed by the Ad Hoc Tecnhical Expert Group on Farmers' Rights (AHTEG) within the framework of the ITPGRFA and taken note of by the Governing Body of the ITPGFRA in its 9th session. https://www.fao.org/3/cb6843en/cb6843en.pdf
All activities will be implemented in collaboration with farmers' organisations in Guatemala, Honduras, Nicaragua and Costa Rica (see section on partners for more details).

The project will address lessons learnt from the referred programme and other DF programmes. This includes the need for strengthening CSBs, sustainability strategies for CSBs, and improved collaboration between CSBs and national gene banks.

Q14. Capability and Capacity

How will you support the strengthening of capability and capacity in the project countries at organisational or individual levels, please provide details of what form this will take, who will benefit, and the post-project value to the country.

The project will strengthen the capacity and capability of national governments and relevant institutions, partners, and smallholder farmers in the following way.

The project will strengthen national governments' implementation of their commitments under the relevant international agreements to which they are bound by:

- Providing good practices for the implementation of above-mentioned articles of these agreements.

National gene banks will be strengthened through:

- increased technical capacity in order to improve processes for documentation and collection of wild relatives of beans
- stronger linkages with community seed banks, research institutes, NGOs and farmers' organisations
- new collections of accessions of maize and beans varieties, and collections of wild relatives

Project partners will be strengthen their capacity to continue to implement actions that increase seed security and improved agricultural production through
- stronger linkages and collaboration with other organisations, research networks and national gene banks
- increased technical capacity in order to document collections of wild relatives
- increased capacity to undertake processes for access to and deposit of genetic materials
- increased access to new varieties

The project will strengthen the capacity and capability of Smallholder farmers and their organisations (including CSB) so they can continue to function and further develop their skills after the life-time of the project through:
- increased capacity to participate in plant breeding activities
- increased capacity for storage of seeds and plant genetic materials in community seed banks
- improved infrastructure of community seed banks
- access to new, locally adapted and improved varieties
- increased and better access to agro-biodiversity
- increased access to seeds
- increased capacity to conserve and sustainable manage plant genetic resources

Q15. Gender equality

All applicants must consider whether and how their project will contribute to reducing inequality between persons of different gender. Explain how your understanding of gender equality within the context your project, and how is it reflected in your plans. Please summarise how your project will contribute to reducing gender inequality. Applicants should, at a minimum, ensure proposals will not increase inequality and are encouraged to design interventions that proactively contribute to increased gender equality.

The project will promote the participation of women in all activities related to participatory plant breeding processes, the management and registration of seed banks and the collection of wild relatives. This will

contribute to the strengthening and improvement of agricultural production of women farmers, as women's preferences will be taken into account. It will also strengthen women's representation and influence in decision-making, which in turn will contribute to women's economic, social, political and cultural empowerment.

To measure the impact of the project on women's participation and influence, one indicator has been included at outcome level: Women have increased influence with access and use of varieties which respond to their preferences. At output level, the SMART indicators will be disaggregated by gender where relevant (e.g. 1.3 # of farmers trained in participatory plant breeding and seed production). In addition, qualitative methods, such as focus group discussions and theory of change, will be used to provide in-depth information that will complement the quantitative indicators.

DF and partners will build on existing policies and lessons learned from previous projects to ensure the participation of women. The main local partner, ASOCUCH, has developed a gender policy which includes different actions that should be implemented in order to benefit women, as well as to achieve the equal distribution of benefits and access to resources to promote sustainable production processes. Moreover, the grassroots organisations (cooperatives, farmers associations) that comprise ASOCUCH have developed internal gender policies and gender units within their structures.

The other partners responsible for implementing gender affirmative actions (FIPAH-Honduras, and FECODESA-Nicaragua), have long experience in promoting women's participation and influence. Both organisations have gender policies in place.

Q16. Awareness and understanding

How will you raise awareness and understanding of biodiversity-poverty issues in your stakeholders, including who your stakeholders are, what approaches/formats/products will you use, how you will ensure open and free access to all data, and how will you know that the messages are understood?

The diversity of PGRFA is a crucial factor for the ability of smallholder farmers to adapt food production to the effects of climate change, like increasing temperatures, droughts, new pests and diseases, and unpredictable rainfall. PPB and PVS have proven to be pathways to developing locally adapted crop varieties, while CSBs are important for ensuring access to adapted varieties, and the conservation and sustainable use of plant genetic resources, and hence maximising the benefits for food security and income. DF and partners will raise awareness and understanding of the biodiversity-poverty issues and their linkages through:

- Awareness raising and capacity building of smallholder farmers in PPB, PVS and CSB management
- Awareness raising and capacity building of smallholder farmers in farmers' rights to PGRFA
- Strengthening farmers' seed systems and documenting the importance of farmers' seed systems in climate adaptive agriculture, food production and poverty reduction
- Promoting local crop diversity through seed fairs, and promotion of local crops in local markets. These activities will involve farmers, community members, local authorities, and local markets customers
- Policy and advocacy at local, national, and international level. Partners will continue to engage actively in policy work at local and national level, while DF and partners will use documented good practices from the project in their international policy work.
- Documenting good practices and stories which can be published in webpages, social media, and policy briefs
- Indicators of the messages being spread successfully and understood are, among others, farmers engaging in PPB, PVS and CSB management after training; farmers advocating for their rights to PGRFA and referring to their rights in e.g. seed fairs and CSB meetings; farmers exchanging seeds at seed fairs;

local crops are sold at local markets; feedback from authorities and general public.

Q17. Change expected

Detail the expected changes to both biodiversity and poverty reduction, and links between them, 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) and the potential to scale the approach.

When talking about how people will benefit, please remember to give details of who will benefit, differences in benefits by gender or other layers of diversity within stakeholders, and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used.

(Max 500 words) currently 492 -

The project will benefit more than 3,000 smallholder (1500 Guatemala, 500 Honduras, 500 Nicaragua and 500 Costa Rica) and their families, including indigenous people. The farmers are linked with 58 local farmers' organisations from communities that are dependent on small scale and subsistence agriculture, with limited access to agricultural inputs and formal credit systems. At least 30% of the direct beneficiaries will be women.

The project will also benefit an aditional more than 2,500 families through improved access to quality seeds and new varieties.

The main expected changes are:

Smallholder farmers, including indigenous people, will increase their adaptive capacity to climate change through improved access to locally adapted and high-quality seeds. Farmers are directly involved in the process of developing new varieties. During the life of the project, farmers will increase their capacity to manage local seed systems, integrating new varieties and more genetic diversity in their agricultural production. In the long-term, farmers will benefit from improved agriculture production in terms of increased food security and income. Improved agriculture production is important for increasing smallholder farmers' income. The project will benefit from synergies between other projects or local partners ongoing activities related to income generation. A large number of the beneficiaries are organised in farmers' cooperatives or other types of farmers' organisations, through which they can commercialise their products. A direct benefit from the project will be increased yields for maize and beans due to improved and locally adapted varieties, which will enable farmers to sell the surplus production. Maize and beans are mostly sold on local markets, to which farmers can access through cooperatives or as individuals.

By the end of the project, farmers' organisations and community seed banks will have better capacity to store seeds and conserve native varieties and genetic resources. This will increase farmers' seed security in the long-term.

The collaboration between community seed banks and national gene banks will be improved. In long-term, this will strengthen national gene banks and increase their germ plasm collection. Materials from wild relatives will be ready for pre-breeding, which in long-term will result in new varieties and increased biodiversity.

Collaboration between farmers and research institutions will be continued and strengthened through the

Participatory Plant Breeding in Meso-America network. New varieties and materials will be exchanged across the region, which in short-term will increase biodiversity and strengthen the basis for continued breeding and conservation of agro-biodiversity.

The project's approach can be scaled-up to include new communities and more farmers. Scaling-up will be based on the adoption of good practices that promote improvements to local seed systems that sustain rural and indigenous populations in the region. Scaling-up should also be undertaken in collaboration with extension agencies of the Ministries of Agriculture where these agencies exist.

Q18. Pathway to change

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

(Max 200 words) - 188 words

Improved and more diversified agricultural production is an important pathway for improving rural households' livelihoods and adaptive capacity to climate change. Access to locally adapted high-quality seeds is crucial for improving and diversifying agricultural production.

Participatory plant breeding has proven to be an efficient way of developing new climate resilient varieties that are likely to be adopted by farmers (Output 1). Through capacity building of farmers and linking them with breeders, farmers will gain the skills to develop new varieties and produce seeds.

Community seed banks are important for improving seed security and the conservation of local agro-biodiversity. By strengthening community seed banks, (output 2) they will increase their capacity to protect, produce and store seeds. Improved collaboration between community seed banks and national gene banks will increase the availability of materials as well as safeguard the rich genetic diversity. Seed fairs are important for the dissemination of local varieties.

Rescue and conservation of wild relatives is crucial for halting the loss of diversity. Collection and characterisation of wild relatives (output 3) will strengthen the conservation of important genetic resources, which in long-term is fundamental for future breeding.

Q19. Exit Strategy

How will the project reach a sustainable point and continue to deliver benefits post-funding?

How could post-project scaling of the approach (if proven) be delivered: through new finance or through uptake by stakeholders or other mechanisms? Are there any barriers to scaling and how will these be addressed?

How will the required knowledge and skills remain available to sustain the benefits?

Through the strengthening of the network of partners of the Collaborative Program for Participatory Plant Breeding in Mesoamerica (FPMA), the continuity of the processes and benefits is ensured at the end of the project, since many of the related organizations have their own personnel and with a base solid social network in the territory, which allows advocacy actions so that the Agricultural Research Institutes (INIAs)

can give priority to issues related to the management and conservation of agrobiodiversity.

The FPMA has extensive experience in the subject, which has given results over time, making a conjunction of actors (Government, University, NGOs and Producer Organizations) that can give continuity to the processes through the budget allocation by the National Governments and with the search for new financing. In the case of Guatemala and Honduras, the link to the initiative promoted by the CGIAR (the Consultative Group for International Agricultural Research) be sought through the Resilient AgriLac Project, through the formation of Technological Innovation Hubs

How will the knowledge and skills needed to maintain benefits remain available? Combining the technical knowledge of professional staff with the technical knowledge of farmers, who for many years have maintained agrobiodiversity and have made constant innovations in landscapes.

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

- DI Main Round 29 References The Development Fund
- 12/12/2022
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- pdf 523.08 KB

Section 7 - Risk Management

Q20. Risk Management

Please outline the 6 key risks to achievement of your Project Outcome and how these risks will be managed and mitigated, referring to the Risk Guidance. This should include at least one Fiduciary, one Safeguarding, and one Delivery Chain Risk.

Projects should also draft their initial risk register using the Risk Assessment template provided, and be prepared to submit this when requested if they are recommended for funding. Do not attach this to your application.

Risk Description	Impact	Prob.	Gross Risk	Mitigation Header	Residual Risk
Fiduciary Misuse of funds in the programme may widen scope for corruption, undermine implementation and results achievement, lead to suspension of funding, and damage DF's institutional reputation.	Major	Unlikely	Mayor	• Triggering of relevant clauses of the DF anti-corruption policy, including initiate formal investigation. • Strengthen DF financial management and auditing routines as appropriate. Assess and strengthen FM systems and routines of relevant partners, as appropriate.	Moderate

Safeguarding Exposing staff to risky workplace and or environment will affect both the reputation of the organization and the deliverables expected of DF and implementing partners.	Moderate	Unlikely	Moderate	• Ensure Continuous awareness raising on PSEA (Prevention of Sexual Exploitation and Abuse), Child safeguarding, reporting, and learning for DF and Partner Staff members • Conduct regular internal inspection and monitoring on the utilization of internal code of conducts and accountability systems for DF and Partners.	Minor
Delivery Chain Deficient capacity and systems for results-based programme design and implementation. Involves the adverse effects of weak capacity, culture, systems and tools for good practice results-based programme design, planning, management, and implementation. This risk factor will undermine overall programme implementation and results achievement, with serious implications for DF's reputation.	Major	Rare	Moderate	•Ensure adherence to and application of DF's Monitoring, Evaluation, Adaptation and Learning framework at all levels, including mainstreaming of Results-based Management approach. •Continue organization-wide awareness and capacity-building efforts in good practice programme planning and implementation. •Ensure realism in implementing MEAL activities in country programmes (simplified approach, delimit indicators, right tools).	Minor

Risk 4 Recurrent climate change related shocks. Natural disasters and extreme weather events like droughts, landslides, floods, strong wind, and frosts may have an adverse impact on the execution of the program. This can lead to pest and disease outbreak related to crops, low food production, malnutrition, and the loss of livelihoods.	Major	Likely	Severe	• Promotion and adoption of climate adapted agriculture practices such as conservation agriculture. • Sustain ongoing soil and water conservation programmes. • Monitor relevant Early Warning systems and encourage partner access and dissemination of climate/weather information. • Promotion of drought tolerant crops and crop diversification.	Major
Risk 5 Political or civil or ethnic unrest (crisis event) can expose program staff to potential harm, and slow down or prevent program execution, thus undermining the achievement of results. It may be accentuated as a result of upcoming regional and national elections.	Moderate	Possible	Major	• Conduct a comprehensive context analysis and risk assessment prior to program and project planning. • The procedures and functions for crisis management are valid and updated in each country. • Realize precautionary measures including avoiding travel to high-risk areas. • Organizing security courses for partners own operational staff.	Moderate
Risk 6 Limited participation of women in programme activities. Central America is still characterized by a macho culture where expectations for women are linked to house and family.	Moderate	Possible	Major	•Assess scope for programme design improvements and implement changes to rectify imbalance (incl. targets and indicators). •Review and strengthen gender policies that deliberately promote equal distribution of roles among all groups, including through quotas for female representation. •Strengthen involvement of local and traditional leaders.	Moderate

Section 8 - Implementation Timetable

Q21. 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 Word 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.

Activity timetable
11/12/2022
20:15:17
docx 32.2 KB

Section 9 - Monitoring and Evaluation

Q22. Monitoring and evaluation (M&E)

Describe 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).

During the 2021-2030 strategy period, DF has dedicated its efforts to help rural communities to strengthen their resilience and to be an active part of sustainable food systems. Key to achieving this goal is a robust system for monitoring progress and quality of DF activity implementation, monitoring and evaluating the impact of our programmes, assessing the effectiveness and relevance of our programme and organizational strategies and supporting learning and accountability.

As part of project design, DF and partners will develop a detailed MEAL plan to provide a clear roadmap for implementation of this project's MEAL related activities focusing on activity, outputs and outcomes. The framework will describe how the outputs and outcomes will be tracked, measured and improved.

The lead local partner will assign a project coordinator which will be responsible for the monitoring of the project with support from a local MEAL advisor within the organisation. The project coordinator will work closely with DF to ensure that the MEAL plan is developed, implemented and adjusted as necessary.

DF Programme, MEAL and Finance will play critical roles in monitoring project interventions throughout the project cycle and continuously provide technical support to partners and, if relevant, engage with government and other stakeholders to ensure that project is within State plans and priorities and meets

the needs of the stakeholders. Joint field monitoring with partners at field level will be upheld to ensure that both DF staff and partners maximise on learning points during these visits. DF MEAL advisor will support the lead partner's project coordinator and other relevant staff in the MEAL work. This will mainly be done virtually, and if possible, a physical meeting combined with MEAL training for all DF supported projects.

The MEAL system will use a combination of quantitative and qualitative methods in order to assess progress towards the indicators in the Logical Framework. These include:

• Seed bank registers as a database doe established Community seedbanks and seed varieties stored in the banks.

• Project registers to compile key information, track implementation of activities and measure output indicators.

• Photo time series

• Review of reports and meeting minutes from training workshops, policy dialogues, and policy meetings.

• Field monitoring, interviews with key informants, feedback and learning sessions with community members and other collaborators, and regular observation and reflection.

• Participant Register to track project participants receiving different kinds of support or training. The tool will be used to measure output indicators on # of people trained or supported in different activities, as well as to monitor project reach.

• Under the Qualitative monitoring of outcomes and/or Theory of Change, DF will use participatory rural appraisal

• Most Significant Change

Focus group discussions.

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs)	[redacted]
Percentage of total project budget set aside for M&E (%)	
Number of days planned for M&E	60

Section 10 - Logical Framework

Q23. Logical Framework (logframe)

Darwin Initiative projects will be required to monitor and report against their progress towards their 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

The **logframe template** (N.B. there is a different template for Stage 1 and Stage 2) needs to be downloaded from Flexi-Grant, completed and uploaded as a PDF within your Flexi-Grant application – **please do not edit the logframe template structure (other than adding additional Outputs if needed) as this may make your application ineligible.**

Please upload your logframe as a PDF document.

Logframe DI 12.12.22
12/12/2022
20:13:08
pdf 263.36 KB

Impact:

To improve the living conditions and climate adaptation of indigenous and peasant families in Central America through the sustainable use of native agro-biodiversity.

Outcome:

Local agricultural production systems strengthened through participatory plant breeding, community seed bank networks and collection of wild relatives.

Project Outputs

Output 1:

Developed varieties through Participatory Plant Breeding approaches adapted to the effects of climate change

Output 2:

Strengthen collaboration between local seed banks and national genebanks in the region.

Output 3:

Collection and regeneration of accessions of wild relatives of Phaseolus, to make them available to pre-breeding programs at the regional level.

Output 4:

No Response

Output 5:

No Response

Do you require more Output fields?

It is advised to have fewer 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. Participatory selection of bean varieties for the development of new germplasm tolerant to terminal drought and high temperature
1.2. Introgression in bean materials in collaboration with the Bean Research Program (PIF) of Zamorano, for the development of new varieties with drought tolerance and low fertility, using local germplasm.
1.3. Introgression in maize germplasm, for the development of new varieties with tolerance against drought, and the diseases ear rot and "Asphalt Patch Complex", focused on tropical and high sub-tropical areas, using local materials.
1.4. Local production and distribution of good quality seed of locally adapted maize and bean varieties.
1.5. Training on participatory plant breeding, seed production and insitu conservation of wild relatives for leading farmers and technicians of organizations.
1.6. Field days and dissemination of results with farmers for the dissemination of technologies and practices of adaptation to climate change in maize and bean production systems.
1.7. Regional exchanges to learn about experiences in the development and dissemination of maize and bean varieties.
1.8. Elaboration of catalogs of varieties product of participatory and / or native plant breeding of beans
2.1. Strengthening of the network of existing seed banks at the regional level.
2.2. Organization and development of Agrobiodiversity Fairs.
2.3. Training on farmers' rights within the framework of the ITPGRFA.
2.4. Collections, characterization and increase of native accessions of corn and beans.
2.5. Delivery of copies of accessions collected from corn and beans to national germplasm banks.
3.1. Training for personnel involved in the collection processes of wild relatives of common beans in 3 countries (Costa Rica, Honduras, Nicaragua)
3.2. Collection and regeneration of wild relatives of common bean in 3 countries (Costa Rica, Honduras, Nicaragua)
3.3. Increase of seed of wild relatives of common beans and shipment to national gene banks.
3.4. Delivery of herbarium specimens from wild bean relatives to national and international museums
3.5. Identify wild bean areas for designation as ecologically important areas and with recognition by local governments

Section 11 - Budget and Funding

Q24. 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 all Darwin Main should be using the over £100,000 template. Please refer to the Finance Guidance for more information.

- Budget form for projects over £100k

Please ensure you include any co-financing figures in the Budget spreadsheet to clarify the full budget required to deliver this project.

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 the Lead Partner's accounts at the certification page at the end of the application form.

BCF Budget DF 12.12.22
12/12/2022
12:49:38
xlsx 93.88 KB

Q25. Funding

Q25a. Is this a new initiative or does it build on existing work (delivered by anyone and funded through any source)?

⊙ Development of existing work

Please provide details:

The proposed project builds on the DF supported Participatory Plant Breeding in Meso-America programme (PPB-MA). The programme was faced out in 2016. However, DF has through its Norad-funded programmes (2017-2020, and 2021-2025) continued to support initiatives that focus on seed security (including PPB, PSV, and CBS) as means to increase climate resilience and reduce poverty among smallholder farmers in Guatemala. The lead local partner, ASOCUCH, has also implemented similar initiatives with support from the Benefit Sharing Fund of the ITPGRFA. Local partners in other countries have also continued to implement similar activities as those included in this project with funding from other donors.

Building on the PPB-MA, the project will develop new crop varieties that are important for food security and nutrition. New varieties will be developed based on existing collections established by the PPB-MA as well as regional variety testing of beans that is managed by Zamorano University. The project will also continue to strengthen linkages between CSB and national genebanks as to ensure a mutual flow of materials between the two types of institutions. With regard to wild relatives, the project proposes to establish new collections for the second time in 20 years.

Q25b. Are you aware of any current or future plans for similar work to the proposed project?

⊙ Yes

Please give details explaining similarities and differences, and explaining how your work will be additional and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits.

ASOCUCH has presented a new proposal to the Benefit Sharing Fund of the ITPGRFA, which is a second phase of the above-mentioned BSF project. If approved, the BSF project will be complementary and increase the impact of this project.

The ongoing Norad funded programme (Cimate resilient rural livelihoods 2021-2025) has a holistic approach and seeks to improve nutrition and food security, increase economic empowerment for rural households, and improve government services and legal frameworks in line with rural communities' needs and priorities. The proposed project will benefit from the above-mentioned programme, in particular through income generating activities, natural resource management and climate adaptation, and strengthening of farmers' organisations. It will also contribute to the overall outcomes of that programme

as it will increase biodiversity and crop varieties of maize and beans available in the area and strengthen the CSBs.

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.

Only 2.8 percent of the budget is capital costs. Capital costs are related to the strengthening of community seed banks through equipment for seed storage, testing, and improved infrastructure. All investments will benefit CSBs directly and remain within the CSBs after the end of the project.

Q27. Value for Money

Please demonstrate why your project is good value for money in terms of impact and cost-effectiveness of each pound spend (economy, efficiency, effectiveness and equity). Please make sure you read the guidance documents, before answering this question.

Key measures for ensuring value for money:

1. Building on existing networks and previous collaborations will ensure effective coordination and collaboration among DF and partners. These are long-term partnership characterised by trust and mutual respect. This will reduce the need for travels across the region for meetings, as coordination meetings can be held by virtual means. Moreover, this will facilitate the exchange of genetic materials and information at a very low level cost.

2. Scaling-up: this project builds on documented achievements and lessons learned from the PPB-MA programme (see ref.). As such, DF and partners will have relatively few "start-up" investments and can focus on proven cost effective and efficient implementation modalities.

3. Building on existing infrastructure: by involving existing CSBs, the need for investments and time for developing infrastructure is minimal. With low-cost investments, the project will contribute to increased sustainability of CSBs, which will be important guardians for seed security, and the conservation and sustainable use of PGRFA in the future.

4. Capacity and capability: by investing in farmers organisations and CSB committees, and building their capacity over time, DF ensures sustainable cost-effective solutions for the benefit of local communities.

5. Low administration costs: as set forth in our programme and financial management policies and routines, DF has relatively low support and administrative costs which contributes towards value for money. To reduce the administrative burden, DF will sign a contract with the lead partner, ASOCUCH, which in turn will sign contracts with the other project partners.

Section 12 - Safeguarding and Ethics

Q28. 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 Partner has the following policies in place and that these can be available on request:

Please upload the lead partner's Safeguarding Policy as a PDF on the certification page.

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 on certification page)	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 all 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 and strengthen your safeguarding policies in practice and ensure that all partners apply the same standards as the Lead Partner. If any of the responses are "no", please indicate how it is being addressed.

DF's ethical guidelines include procedures for reporting of sexual harassment and improper behaviour. During periodical internal staff meetings, all staff are familiarised with these documents and discuss how they can be operationalised. DF staff have attended PSEA trainings, and selected staff (such as programme coordinators) have received a course in training of trainers for PSEA, which has already been rolled out to the lead partner in Guatemala. This will be rolled out to all project partners. All DF staff attend anti-corruption trainings. DF conduct anti-corruption training for partners and their staff, including technical staff, finance staff, management and board members.

Q29. Ethics

Outline your approach to meeting the key principles of good ethical practice, as outlined in the guidance.

The project will be implemented in line with national and regional laws and legislations and in close consultation and with the involvement of relevant local government agencies. All countries are parties to

the ITPGRFA, and transfer of material will follow standard procedures (SMTAs). ABS will be ensure through access to varieties and a no-royalty policy on improved varieties.

Local ownership and involvement of the communities in the planning, implementation and monitoring are key principles for the Development Fund and our local partners. The communities covered by the project and local governments are consulted and involved prior to the start-up. The project will use several participatory approaches and will in this way meet ethical standards on PIC, strong leadership and ownership of communities and local governments, and traditional knowledge. Moreover, through its focus on local or native varieties, the project builds heavily on agro-pastoralists' traditional knowledge. The Development Fund adheres to GDPR norms and standards. The Development Fund's code of conduct applies for all staff. We have established security procedures and crisis management teams to protect health and security and follow the regional authorities' security recommendations and norms during travels.

Section 13 - FCDO Notifications

Q30. 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 Initiative in any country.

No

Please indicate whether you have contacted FCDO Embassy or High Commission to discuss the project and attach details of any advice you have received from them.

⊙ Yes (no written advice)

Section 14 - Project Staff

Q31. Project staff

Please identify the core staff (identified in the budget), their role and what % of their time they will be working on the project.

Please provide 1-page CVs or job description, further information on who is considered core staff can be found in the Finance Guidance**.**

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Elin Cecilie Ranum	**Project Leader**	5	Checked
Audun Husby	Program Coordinator, The Development Fund	25	Checked

Bård Scheie Karlsaune	Finance Advisor, The Development Fund	5	Checked
Sergio Romeo Alonzo Recinos	Regional Programme Coordinator, ASOCUCH	50	Checked

Do you require more fields?

⊙ Yes

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Jorge Augusto Granados Cano	Field implementation, ASOCUCH Guatemala	100	Checked
Veronica del Carmen Zelaya Portillo	Field implementation, FIPAH Honduras	100	Checked
Blanca Iris Castro Briones	Field implementation, FECODESA Nicaragua	100	Checked
Alejandro Betancourt Flores	Field implementation, UCR Costa Rica	100	Checked
Gilmar Arnoldo Torrez	Administrative support, ASOCUCH Guatemala	100	Checked
No Response	*No Response*	0	Unchecked
No Response	*No Response*	0	Unchecked
No Response	*No Response*	0	Unchecked

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.

CV nine persons
11/12/2022
20:42:49
pdf 1 MB

Have you attached all project staff CVs?

⊙ Yes

Section 15 - Project Partners

Q32. Project Partners

Please list all the Project Partners (including the Lead Partner - i.e. the partner who will administer the grant and coordinate the delivery of the project), clearly setting out their roles and responsibilities in the project including the extent of their engagement so far and planned.

This section should demonstrate the capability and capacity of the Project Partners to successfully deliver the project. Please provide Letters of Support for all project partners or explain why this has not been included.

The partners listed here should correspond to the Delivery Chain Risk Map (within the Risk Register template) which you will be asked to submit if your project is recommended for funding.

Lead partner name:	The Development Fund
Website address:	utviklingsfondet.no
Details (including roles and responsibilities and capacity to engage with the project):	DF has over 40 years' experience integrating development work with climate adaptation and natural resource management in rural communities. We have built a strong competence in planning and managing development assistance, while also having staff with sufficient technical skill to ensure programme quality and develop innovative and integrated approaches to local challenges. DF has solid experience and technical in agro-biodiversity on the ground and policy-wise. DF strongly believes in a bottom-up approach, where locally adapted solutions and participatory processes are key to ensure beneficiaries' ownership and the sustainability of interventions. Empowerment of small-scale farmers and local communities, such that they can mobilise their assets and be recognized as drivers of their own development process is central to our work. DF will provide quality control of activities and regular MEAL activities with the partner organisations. DF will use its networks and facilitate learning between partners, involving other partners and alliances as relevant. DF will also provide capacity building to partners in financial and programme management, anticorruption and PSEA among other areas. Through its communication and marketing department, DF will spread information on the achievements of the project. As lead partner, DF will compile reports and other submissions to Darwin
Allocated budget (proportion or value):	[redacted]
Represented on the Project Board	⊙ Yes
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:	Asociación de Organizaciones de los Cuchumatanes (ASOCUCH)
Website address:	www.asocuch.com
Details (including roles and responsibilities and capacity to engage with the project):	ASOCUCH is a producer organization located in the Sierra de los Cuchumatanes, Guatemala, which brings together 20 small producer organizations (associations and cooperatives) with a total membership of 13,000 families. The purpose of the federation is a strong network of local organizations that are capable of strengthening the conditions for small producers. Asocuch aims to promote a territorial management model that includes both rural entrepreneurship and good environmental practices. During the last 20 years, ASOCUCH has been dedicated to the management, conservation and development of agrobiodiversity with indigenous populations, managing to generate maize varieties under the FP approach in collaboration with plant breeders, building a network of community seed banks, seed dissemination of quality basic grains, characterization of collections of basic grains and identification of areas with wild relatives of corn, beans and potatoes. Within the consortium, ASOCUCH will be the organization responsible for coordinating actions at the regional level (Central-America), and in Guatemala it will coordinate closely with the Institute of Agricultural Sciences and Technologies (ICTA). Within the framework of the project, ASOCUCH will contribute to the three results of the project, with emphasis on the first two.
Allocated budget:	[redacted]
Represented on the Project Board	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes

2. Partner Name:	Fundación para la Investigación Participativa con Agricultores de Honduras (FIPAH)

Website address:	www.fipah-hn.org
Details (including roles and responsibilities and capacity to engage with the project):	FIPAH is a leading organization in plant breeding and participatory research with more than 25 years of experience promoted to the Local Agricultural Research Committees (CIAL). Through these initiatives, in close coordination with the Zamorano Panamerican Agricultural School, FIPAH has managed to release bean varieties at a regional and national level. In the case of corn, FIPAH has achieved to release corn varieties at the regional and national level. In the execution of the project, FIPAH will be the instance that collaborates directly with the producer organizations to achieve the proposed results and the direct execution of technical activities for participatory improvement in Maize and Beans, in close coordination with the Zamorano Panamerican Agricultural School. Some of their responsibilities will be: Participatory Selection of Bean and Maize Varieties, local production and distribution of seeds of locally adapted maize and bean varieties, training on FP methods for leading farmers and technicians from organizations, events for the dissemination of technologies and climate change adaptation practices for production systems, field days and dissemination of results with farmers, preparation of catalogues of FP and/or native bean product varieties, collections, characterization and increase of native maize and bean accessions; linking to the 3 results.
Allocated budget:	[redacted]
Represented on the Project Board	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes

3. Partner Name:	Federación de Cooperativas para el Desarrollo (FECODESA)
Website address:	www.fecodesa.org.ni

Details (including roles and responsibilities and capacity to engage with the project):	FECODESA is a cooperative organization that promotes the integration of farmers and youth in cooperative organizations at different levels: the community level, unions and centres at the municipal or departmental level and the federation at the national level, which in turn is integrated into the National Council of Cooperatives (CONACOOP). All this with the purpose of strengthening participation in advocacy spaces, decision-making, project management and execution, access to technologies, development of capacities to improve productivity and promote access to new market opportunities and value aggregation of products. FECODESA has played a leading role in the generation and release of varieties of basic grains, the conservation of local varieties in community seed banks, identification and collection of wild relatives, the defence of native seeds and the rights of farmers, to the conservation and use of local biodiversity and the integration of ancestral knowledge. Within the framework of the project, they will coordinate directly with INTA (the National Institute for Innovation and Transfer of Agricultural Technology) and implement actions in the three results.
Allocated budget:	£98,473.00
Represented on the Project Board	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes

4. Partner Name:	University of Costa Rica (UCR), Experimental Station Agrícola Fabio Baudrit Moreno
Website address:	https://www.ucr.ac.cr https://eeafbm.ucr.ac.cr
Details (including roles and responsibilities and capacity to engage with the project):	UCR is the instance that will coordinate the actions of the project at the level of Costa Rica. During the last 36 years, UCR has been dedicated to plant improvement processes linked to food security and, in association with the National Institute for Innovation and Transfer of Agricultural Technology (INTA), has developed the bean varieties that are used in the country. UCR is also dedicated to the production of Foundation bean and Certified corn seed, to the rescue and conservation of wild and native biodiversity of the genus Phaseolus, training in genetic improvement, local seed production, establishment of community seed banks and agronomic research of the bean crop. Within the framework of the project, UCR will be the body in charge of coordinating the achievement of the results proposed in the 3 results and the administrative management of the funds through its foundation (UCR Foundation).
Allocated budget:	£121,483.00

Represented on the Project Board	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes

5. Partner Name:	Panamerican/Zamorano Agricultural School. The Crop Research and Development Unit.
Website address:	https://www.zamorano.edu
Details (including roles and responsibilities and capacity to engage with the project):	Zamorano participates through its improvement programs in beans, maize and sorghum, contributing to the characterization of germplasm accessions and development of improved varieties with adaptation to stresses caused by drought, high temperatures and low soil fertility, with resistance to diseases and pests, and good culinary quality and acceptance by consumers. Zamorano has coordinated the Bean Network of Central America and the Caribbean since 2002, distributing trials and nurseries to the national agricultural research institutes, and to the member farmers' programs and organizations of the Collaborative Program for Participatory Plant Breeding of Mesoamerica for more than 20 years resulting in the release and adoption of a significant number of bean and corn varieties in the region. In Honduras, Zamorano collaborates with FIPAH, the Rural Reconstruction Program and the Local Agricultural Research Committees (CIAL), facilitating trials for participatory research activities at the farm and community level; in the rescue, conservation and characterization of germplasm, management of community seed banks; and the training of technicians and farmers in genetic improvement, agroecological management of crops, seed production and other aspects.
Allocated budget:	£0.00
Represented on the Project Board	○ Yes ○ No
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*
Allocated budget:	£0.00
Represented on the Project Board	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ No
If no, please provide details	The agricultural school Zamorano will actively contribute to the program, but will not be funded by the Darwin Initiative (only additional funding).

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.

DIR29S1 1095 Cover letter
12/12/2022
21:00:52
pdf 233.49 KB

Letter of Support DF-combined
12/12/2022
13:53:59
pdf 3.38 MB

Section 16 - Lead Partner Capability and Capacity

Q33. Lead Partner Capability and Capacity

Has your organisation been awarded Darwin Initiative, Darwin Plus or Illegal Wildlife Trade Challenge Fund funding 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
25-025	Elin Cecilie Ranum	Improved seed, food and livelihood security for agropastoralists in Somalia
DAREX003	Elin Cecilie Ranum	Climate resilience, food and livelihood security for agropastoralists in Somalia
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 yes, please upload these on the certification page. Note that this is not required from Government Agencies.

⊙ Yes

Section 17 - Certification

Certification

On behalf of the

Trustees

of

The Development Fund

I apply for a grant of

£600,000.00

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 project key project personnel, cover letter, letters of support, a budget, logframe, Safeguarding Policy 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	Elin Cecilie Ranum
Position in the organisation	Head of Programme
Signature (please upload e-signature)	elin 12/12/2022 20:19:15 jpg 4.45 KB
Date	12 December 2022

Please attach the requested signed audited/independently examined accounts.

Development fund audit report 2020
12/12/2022
15:53:49
pdf 186.52 KB

Development fund audit report 2021 signed
12/12/2022
15:53:10
pdf 155.73 KB

DF's annual accounts and the board's report - signed 24.06.2022
12/12/2022
14:37:36
pdf 4.05 MB

The development fund's annual accounts, balance sheet and notes 2020 (signed 11.06.2021)
12/12/2022
14:37:21
pdf 3.75 MB

Please upload the Lead Partner's Safeguarding Policy as a PDF

Ethical Guidelines with annexes
12/12/2022
20:32:29
pdf 139.98 KB

Section 18 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance, including the "Darwin Initiative Guidance", "Monitoring Evaluation and Learning Guidance", "Risk Guidance" **and** "Financial 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 attached the below documents to my application • my completed logframe as a PDF using the template provided	Checked
• my budget (which meets the requirements above)	Checked
• my completed implementation timetable as a PDF using the template provided	Checked
I have included a 1 page CV or job description for all the Project Staff identified at Question 31, including the Project Leader, or provided an explanation of why not.	Checked
I have included a letter of support from the Lead Partner and partner(s) identified at Question 32, or an explanation of why not.	Checked
I have included a cover letter from the Lead Partner, outlining how any feedback received at Stage 1 has been addressed where relevant.	Checked
I have included a copy of the Lead Partner's safeguarding policy, which covers the criteria listed in Question 28.	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 Partner, or provided an explanation if not.	Checked
I have checked the Darwin Initiative website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on the Darwin Initiative website.	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 the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the Forms and Guidance Portal.

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising the Darwin Initiative including project details (usually title, lead partner, project leader, location, and total grant value).

Project title: **Community-based agro-biodiversity systems for improved livelihoods and climate resilience**

	Activity	No. of Months	Year 1 (23/24)				Year 2 (24/25)				Year 3 (25/26)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	**1. Developed varieties through Participatory Plant Breeding approaches adapted to the effects of climate change**													
1.1	Participatory selection of bean varieties for the development of new germplasm tolerant to terminal drought and high temperature	30												
1.2	Introgression in bean materials in collaboration with the Bean Research Program (PIF) of Zamorano, for the development of new varieties with tolerance for drought and low fertility, using local germplasm.	30												
1.3	Introgression in maize germplasm, for the development of new varieties with tolerance against drought, and the diseases ear rot and "Asphalt Patch Complex", focused on tropical and high sub-tropical areas, using local materials.	30												
1.4	Local production and distribution of good quality seed of locally adapted maize and bean varieties.	27												
1.5	Training on participatory plant breeding, seed production and insitu conservation of wild relatives for leading farmers and technicians of organizations.	8												
1.6	Field days and dissemination of results with farmers for the dissemination of technologies and practices of adaptation to climate change in maize and bean production systems.	3												

Project title: **Community-based agro-biodiversity systems for improved livelihoods and climate resilience**

	Activity	No. of Months	Year 1 (23/24)				Year 2 (24/25)				Year 3 (25/26)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.7	Regional exchanges to learn about experiences of development and dissemination of maize and bean varieties.	2												
1.8	Elaboration of catalogs of varieties product of participatory and / or native plant breeding of beans	6												
Output 2	**2. Strengthen collaboration between local seed banks and national genebanks in the region.**													
2.1	Strengthening of the network of existing seed banks at the regional level.	6												
2.2	Organization and development of Agrobiodiversity Fairs.	3												
2.3	Training on farmers' rights within the framework of the **ITPGRFA.**	2												
2.4	Collections, characterization and increase of native accessions of corn and beans.	24												
2.5	Delivery of copies of collected maize and bean accessions to national genebanks.	2												
Output 3	**3. Collection and regeneration of accessions of wild relatives of *Phaseolus*, to make them available to pre-breeding programs at the regional level.**													
3.1	3.1. Training for personnel involved in the collection processes of wild relatives of common beans in 3 countries (Costa Rica, Honduras, Nicaragua)	1												

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	Activity	No. of Months	Year 1 (23/24)				Year 2 (24/25)				Year 3 (25/26)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3.2	3.2. Collection and regeneration of wild relatives of common bean in 3 countries (Costa Rica, Honduras, Nicaragua)	24												
3.3	3.3. Increase of seed of wild relatives of common beans and shipment to national genebanks.	24												
3.4	3.4. Delivery of herbarium specimens from wild bean relatives to national and international museums	2												
3.5	3.5. Identify wild bean areas for designation as ecologically important areas and with recognition by local governments	24												

Project Title: **Community-based agro-biodiversity systems for improved livelihoods and climate resilience**

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: To improve the living conditions and climate adaptation of indigenous and peasant families in Central America through the sustainable use of native agro-biodiversity.			
Outcome: (Max 30 words) Local agricultural production systems strengthened through participatory plant breeding, community seed bank networks and collection of wild relatives.	At the end of the project: 0.1 At least 3000 rural families (500 led by women) have accessed new improved varieties with adaptation to agroecological niches, generated under the participatory plant breeding approach in 100 communities 0.2 At least 5000 families benefit through 36 community seed banks (CSB), which conserve 2500 accessions of food crops and under-utilized species. 0.3 There are at least bioprospections of wild bean relatives supported by herbarium and seed specimens in gene banks. 0.4 At least 20 communities contribute to the rescue of wild relatives from crops important to Food and Nutrition Security. 0.5 Women have increased influence with access and use of	0.1 Technical sheets of generated varieties. 0.2 Registration of producers benefiting from quality seed. 0.3 Variety characterization documents. 0.4 Updated register of agrobiodiversity of community seed banks. 0.5 Collections of wild bean relatives characterized and conserved in gene banks. 0.6 Focus Group Discussions on women's preferences and decision-making power on PGRFA.	Suitable climatic conditions for the process of generating varieties. Interest exists among farmers in validating and adopting new varieties of maize and beans. Adequate conditions exist in countries for the delivery and conservation of germplasm from wild relatives to genebanks.

	varieties which respond to their preferences.		
Outputs: **1**. Developed varieties through Participatory Plant Breeding approaches adapted to the effects of climate change	At the end of the project: 1.1 At least 6 varieties of beans and corn with tolerance to abiotic stresses have been generated, under the participatory plant breeding approach. 1.2 Quality seed has been distributed as a result of Participatory Plant Breeding processes in at least 2,000 households. 1.3 At least 500 farmers (200 women) have been trained in Participatory Plant Breeding and quality seed production. 1.4 At least 20 field days have been conducted with the participation of farmers. 1.5. Regional exchange activities have been conducted to learn about experiences in the development and dissemination of participatory plant breeding varieties	1.1 Technical sheets with the descriptors of generated varieties. 1.2 Registration of producers benefiting from quality seed. 1.3 Registration of trained producers. 1.4. Registration of producers participating in field days.	Suitable climatic conditions for the process of generating improved varieties. There is interest from farmers in validating and adopting new varieties of maize and beans. There is interest on the part of small producers to participate actively in training processes.
2. Strengthen collaboration between local seed banks and national genebanks in the region.	At the end of the project:	2.1 Characterization and generation of local diversity catalogs.	Suitable climatic conditions for the characterization process of native varieties.

	2.1 36 Community Seed Banks have been strengthened in the region. 2.2 At least 8 agrobiodiversity fairs have been organized and developed. 2.3 At least 8 trainings on farmers' rights have been developed within the framework of the **ITPGRFA.** 2.4 At least 4 deliveries of new accessions have been made for conservation in national genebanks.	2.2 Updated register of agrobiodiversity of community seed banks. 2.3. Report of investments made in community seed banks (CSB). 2.4 Reports of agrobiodiversity fairs held. 2.5 Reports of training events conducted. 2.6 Register of agrobiodiversity entered into national gene banks.	
3. Collection and regeneration of accessions of wild relatives of *Phaseolus*, to make them available to pre-breeding programs at the regional level.	At the end of the project: 3.1 At least 3 new collections of wild bean relatives have been made in Costa Rica, Honduras, and Nicaragua. 3.2. At least 3 deliveries of wild relative accessions to gene banks have been made. 3.3. Herbarium specimens have been delivered to national and international museums. 3.4 The regeneration of at least 50% of the wild accessions of Phaseolus currently conserved in genebanks has begun.	3.1 Collections of wild bean relatives backed by gene banks. 3.2 Number of populations found. 3.3 Number of bio-surveys carried out. 3.4 Number of herbarium specimens delivered. 3.3 Register of agrobiodiversity entered into national germplasm banks. 3.4 Relationship of the regeneration of wild accessions of gene banks.	Suitable conditions exist in countries for the delivery of germplasm from wild relatives to banks. Appropriate political and regulatory conditions for the collection of wild relatives. Techniques for the regeneration of wild accessions are effective.

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Activities (each activity is numbered according to the output that it will contribute towards, for examples 1.1, 1.2 and 1.3 are contributing to Output 1. Each activity should start on a new line and be no more than approximately 25 words.)

1.1. Participatory selection of bean varieties for the development of new germplasm tolerant to terminal drought and high temperature
1.2. Introgression in bean materials in collaboration with the Bean Research Program (PIF) of Zamorano, for the development of new varieties with drought tolerance and low fertility, using local germplasm.
1.3. Introgression in maize germplasm, for the development of new varieties with tolerance against drought, and the diseases ear rot and "Asphalt Patch Complex", focused on tropical and high sub-tropical areas, using local materials.
1.4. Local production and distribution of good quality seed of locally adapted maize and bean varieties.
1.5. Training on participatory plant breeding, seed production and insitu conservation of wild relatives for leading farmers and technicians of organizations.
1.6. Field days and dissemination of results with farmers for the dissemination of technologies and practices of adaptation to climate change in maize and bean production systems.
1.7. Regional exchanges to learn about experiences in the development and dissemination of maize and bean varieties.
1.8. Elaboration of catalogs of varieties product of participatory and / or native plant breeding of beans

2.1. Strengthening of the network of existing seed banks at the regional level.
2.2. Organization and development of Agrobiodiversity Fairs.
2.3. Training on farmers' rights within the framework of the **ITPGRFA.**
2.4. Collections, characterization and increase of native accessions of corn and beans.
2.5. Delivery of copies of accessions collected from corn and beans to national germplasm banks.

3.1. Training for personnel involved in the collection processes of wild relatives of common beans in 3 countries (Costa Rica, Honduras, Nicaragua)
3.2. Collection and regeneration of wild relatives of common bean in 3 countries (Costa Rica, Honduras, Nicaragua)
3.3. Increase of seed of wild relatives of common beans and shipment to national gene banks.
3.4. Delivery of herbarium specimens from wild bean relatives to national and international museums
3.5. Identify wild bean areas for designation as ecologically important areas and with recognition by local governments