
DIR27S2\1062

Managing the pathogens threatening St Helena's biodiversity and food security

St Helena's endemic trees, insects as well as crops are threatened by unidentified introduced pathogens, or changes to endemic pathogens through climate change. This project will survey and identify pathogens associated with tree death (including nursery stock), declining crop yields and insect populations. Methods developed through CABI's Plantwise initiative, will build capacity in diagnostics and management across all sectors, supporting growers, conservationists, and foresters. This will prevent further deterioration of the endemic ecosystem and reduce the necessity to import food.

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title	Dr
Name	Robert
Surname	Reeder
Organisation	CAB International
Website	www.cabi.org
Tel	[REDACTED]
Email	[REDACTED]
Address	[REDACTED]

CONTACT DETAILS

Title	Dr
Name	Rebecca
Surname	Cairns-Wicks
Tel (Work)	[REDACTED]
Email	[REDACTED]
Address	[REDACTED]

GMS ORGANISATION

Type	Organisation
Name	CAB International
Phone (Work)	[REDACTED]
Email	[REDACTED]
Address	[REDACTED]

Section 2 - Title, Dates & Budget Summary

Q3. Project title:

Managing the pathogens threatening St Helena's biodiversity and food security

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

DIR27S1\1804

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	St Helena	Country 2	No Response
Country 3	No Response	Country 4	No Response

Do you require more fields?

No

Q5. Project dates

Start date: 01 July 2021	End date: 30 June 2024	Duration (e.g. 2 years, 3 months): 3 Years
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Q6. Budget summary

Year:	2021/22	2022/23	2023/24	2024/25	Total request
Amount:	£92,179.00	£90,148.00	£69,092.00	£14,021.00	£ 265,440.00

Q6a. Do you have matched funding arrangements?

Yes

What matched funding arrangements are proposed?

ENRP: Use of facilities for meetings/diagnostic work on St Helena. Staff time to support this project will amount to matched funding of £[REDACTED]

CABI: CABI will reduce its overheads on staff time from [REDACTED] down to [REDACTED]. The difference amounts to matched funding of £[REDACTED]. CABI offers 20 free molecular identifications per year; this will amount to matched funding of ca.£[REDACTED] throughout the project.

Birmingham Institute of Forest Research: Matched funding will be provided for a PhD focusing on the cloud forest tree dieback totalling £[REDACTED] which will cover stipend (£[REDACTED] fees (£[REDACTED] £[REDACTED] for consumables and £[REDACTED] for travel.

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).

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.

St Helena's endemic trees, insects as well as crops are threatened by unidentified introduced pathogens, or changes to endemic pathogens through climate change. This project will survey and identify pathogens associated with tree death (including nursery stock), declining crop yields and insect populations. Methods developed through CABI's Plantwise initiative, will build capacity in diagnostics and management across all sectors, supporting growers, conservationists, and foresters. This will prevent further deterioration of the endemic ecosystem and reduce the necessity to import food.

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 tackle impacts of agriculture practices on biodiversity, livelihoods and climate
- 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)

- United Nations Framework Convention on Climate Change (UNFCCC)
- 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 will assist the Government of St Helena to conserve the species-rich cloud forest through the identification and management of plant pathogens threatening keystone species. The project supports the Government's implementation of several Articles of the CBD, notably 8 (In-situ Conservation), and 12 (Research & Training) also 6 (General Measures for Conservation & Sustainable Use) and 7 (Identification & Monitoring). The project is in support of the CBD themes "Economics, Trade and Incentives", "Protected Areas", and "Sustainable Use and Biodiversity". It aligns with the goals of CBD's 'Strategic Plan 2011-2020', supporting in particular, the Aichi Biodiversity Targets relating to Strategic Goals B, C & E (reduce direct pressures on biodiversity and promote sustainable use; improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity; enhance implementation through participatory planning, knowledge management & capacity building). Although the CBD's 'Strategic Plan 2011-2020' is now technically outdated it will only be replaced later this year with a new framework towards the 2050 Vision of "Living in harmony with nature".

The project supports also – albeit on a small scale - the UNFCCC by contributing to Article 5 (research and systematic observation) through assessing whether any of the emerging pathogen problems on St Helena are related to climate change.

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 Chief Environmental Officer, Isabel Peters, is the focal point for CBD, CITES, CMS and Ramsar on St Helena. Isabel Peters is aware of and supports this project and has kindly offered to provide further input as necessary. St Helena isn't signatory to ABS and ITPGRFA.

Q9d. Global Goals for Sustainable Development (SDGs)

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

With a GDP per capita of £ [REDACTED] (2018/19) income levels on St Helena are low and the limited job market forces many St Helenians to take up jobs in Ascension Island, the Falklands and the UK. There are reports that poverty in Saint Helena has been increasing at an alarming rate and that a reliance on imports makes the cost of living volatile (<https://www.borgenmagazine.com/poverty-in-saint-helena/>). This is particularly true of imported fresh food products where the costs are extremely high, leading to an island consumption of fruit and vegetables equivalent to the lowest levels in Europe.

Improved plant protection will lead to both increased income for growers and higher affordability of fresh produce for buyers, supporting SDG goal 1 (no poverty) and here in particular targets 1.2 (reduce poverty by at least 50%) and 1.5 (build resilience to environmental, economic and social disasters). By increasing food security, it will also address SDG goal 2 (zero hunger), by directly addressing target 2.4. (sustainable food production and resilient agricultural practice).

Long-term our project will lead to increased sustainable income for growers supporting SDG 8 (economic growth), in particular target 8.1 (sustainable economic growth) but through engagement with students on the island also target 8.6 (promote youth employment, education and training).

Addressing the dieback of endemic keystone tree species addresses SDG 15 (life on land), in particular the targets 15.1 (conserve and restore terrestrial and freshwater ecosystems), 15.2 (end deforestation and restore degraded forests), and 15.5 (protect biodiversity and natural habitats).

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
DPLUS074	Norbert Maczey	Improving biosecurity in the SAUKOTs through Pest Risk Assessments (2018-2020)
DPLUS033	Norbert Maczey	Enhancing biosecurity and biological control capacity in the Falkland Islands
22/001	Steve Edgington	Rescuing and restoring the native flora of Robinson Crusoe Island
16/008	David Minter	Microfungi: a voice for unprotected and vulnerable organisms (2007-2010)
15/004	Dave Moore	Conserving and Using Entomopathogenic Fungi and Nematodes within Chile (2006-2009)
14/030	Paul Cannon	Going for Gold – Cordyceps Conservation in Bhutan (2005-2008)


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.


 [Provide detail of 3 contracts](#)


 09/02/2021

 15:48:18


 pdf 70.88 KB


 [CABI-Annual report and accounts 2019 - signed](#)


 08/02/2021

 10:43:09

 pdf 2.21 MB

 [CABI-Annual report and accounts 2018 - signed](#)

 08/02/2021

 10:43:08

 pdf 895.82 KB

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: CAB International

Website address: <https://www.cabi.org/>

Details (including roles and responsibilities and capacity to engage with the project):

(Max 200 words)

CABI has led the design and development of this project and will provide overall co-ordination. CABI will also be responsible for conducting field surveys, collecting and identification of pathogens and vectors, and based on this develop recommendations for improved crop management.

CABI will also conduct all training activities. For this, we will provide the necessary training materials including online tools.

CABI scientists have considerable experience in conducting research linked to plant pathology and biodiversity conservation covering taxonomic, ecological and other aspects such as biological control and improvement of biosecurity. CABI scientists have collaborated on, and managed many DFID and DEFRA funded projects. Our organisation has also a long history of capacity building through participatory approaches.

Rob Reeder is plant pathologist with a great deal of experience in project coordination. He will be supported by Phil Taylor, Norbert Maczey and Jayne Crozier, all highly experienced in plant protection and or biodiversity conservation.

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:

St Helena Research Institute (SHRI)

Website address:

<https://sthelenaresearch.edu.sh/>

Details (including roles and responsibilities and capacity to engage with the project):

SHRI (coordinator Dr Rebecca Cairns-Wicks) has been instrumental in bringing the project partners together to address plant pathogens. SHRI will manage the on-Island delivery of the project, ensuring activities are timeous, well-planned and coordinated, securing, good communication, strong collaboration and participation of partners and lead farmers, growers and wider stakeholders. The Coordinator will provide oversight and supervision of research activity.

Have you included a Letter of Support from this organisation?

Yes

2. Partner Name: Environment, Natural Resources and Planning Directorate (ENRP)

Website address: <https://www.sainthelena.gov.sh/directorates/environment-natural-resources-planning/>

Details (including roles and responsibilities and capacity to engage with the project):

ENRP were consulted at stage 1 and 2 and have contributed to the Stage 2 application.

The Director, Darren Duncan, will provide leadership to Heads of Sections (Terrestrial Conservation, Agriculture: Agricultural Extension and Pest Control; Forestry and Biosecurity), who will be directly involved in the delivery of project activities, including identification of threatening pathogens, pathogen impact assessment, development of action plans, capacity building and implementation of pathogen treatment measures, and will make their resources (such as the lab for diagnostic uses) available to the project.

ENRP will also provide membership on the Project Management (Steering Group) to support oversight of the project, including meeting regularly to review progress, consider problems and developing solutions, and monitoring and evaluation of project outputs and outcome.

Have you included a Letter of Support from this organisation? Yes

3. Partner Name: Birmingham Institute of Forest Research (BIFoR) at the University of Birmingham

Website address: <https://www.birmingham.ac.uk/research/bifor/index.aspx>

Details (including roles and responsibilities and capacity to engage with the project):

BIFoR (director Professor Robert Jackson) will provide expertise on molecular analyses of gene sequences and fully fund and supervise a PhD student to work in parallel with the project. The student will be involved in surveying and sampling cloud forest trees and other forest plants, isolating and identifying microbes, and characterising potential pathogens, including antagonistic microbes that might suppress pathogen growth.

Have you included a Letter of Support from this organisation? Yes

4. 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

5. 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

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.

HE Governor Rushbrook has offered his support to this project and is drafting a letter of support

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

 [Cover letter Darwin pathogens on St Helena stage 2](#)
 09/02/2021
 10:06:04
 pdf 227.49 KB

 [Combined letter of support](#)
 08/02/2021
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Section 7 - Project Staff

Q12. Project staff

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

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

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

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Rob Reeder	Project Leader	10	Checked
Phil Taylor	Pathologist (CABI)	15	Checked
Norbert Maczey	Ecologist/entomologist (CABI)	12	Checked
Harry Evans	External consultant; Mycologist, EPF expert	10	Checked

Do you require more fields?


Yes


Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Jayne Crozier	Pathologist (CABI)	10	Checked
Rebecca Cairns-Wicks	Coordinator/project co-leader (SHRI)	18	Checked
TBC	Project delivery support	40	Unchecked
Ted Whitton	Agronomist (ENRP)	10	Checked
Andy Timm	Agricultural Development Officer (ENRP)	10	Checked
Myra Young	Forestry Officer (ENRP)	10	Checked
Julie Balchin	Biosecurity Officer (ENRP)	10	Checked


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

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

 [Combined CVs](#)

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Have you attached all project staff CVs?

No

If you cannot provide a CV or job description, please explain why not.

At the time of submitting the PhD candidate and the SHRI support staff are still in the process of being selected. The PhD student from BIFoR will spend 50% of time on the project

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).

St Helena's native cloud forest supports > 250 endemic species making it the most biologically diverse location across the UK and its OTs. Four endemic trees, black cabbage, he-cabbage, dogwood, whitewood and the endemic tree fern are the keystones of the forest. In recent years significant numbers of mature trees have died, due to an unknown cause, impacting tree populations and associated flora and fauna. The dieback is predominantly from the black cabbage tree populations, but has been observed across all four key tree species, removing many prime, mature specimens and impacting recovery work as nursery grown stock have also been infected. The peak areas supply 40% of the islands water, with an estimated 60% occurring as mist capture within the cloud forests. The loss of these keystone species therefore has an impact on the water balance of the island and water availability for the growth of subsistence crops, a situation likely to worsen due to climate change.

Fragile habitats like the cloud forests are susceptible to disruption, particularly from invasive species. The National Trust observed in 2020 that populations of some endemic insects were declining alarmingly fast due to infection by entomopathogenic fungi. This could be caused by one of several recently arrived invasive fungal species, climate change or an, as yet, unidentified cause. A newly arrived forestry pest (*Sirex notilio*) is a vector for fungal dieback in local pine afforestations, important for the island's self-sufficiency in

fuelwood.

Additionally, growers have reported new problems in a variety of agricultural crops. Traditional farming practices may not be appropriate for managing these emerging problems and growers need better information and improved practices. These problems may be linked to newly introduced species, or perhaps a change in virulence of endemic pathogens. Although the formal agricultural sector on St Helena is small the informal sector, supports many families with 76% of households routinely supplementing their diets with home grown vegetables and 2% being completely reliant on home production (State of the Island report 2015)

The recent COVID crisis has shown the susceptibility of St Helena to disruption of food chains and the need for improved food security. A reliance on imports makes the cost of living volatile and the island has already experienced some food shortages and consequent significant price increases. Whilst data is scarce, there are indications of poverty at the margins of society and relative poverty exists amongst low income families.

Using a coordinated approach this project aims to identify the pathogens causing the emerging threats to livelihoods and biodiversity on St Helena and to develop sustainable management strategies. This involves capacity building in diagnostics and management across all sectors, addressing knowledge gaps for growers (commercial and home), conservationists, agriculture and forestry staff. The project aims to tackle aspects of food security, habitat destruction and biosecurity through improved diagnostic capacity and demonstrating best practices for preventing and managing emerging problems. Improving agriculture is one route to providing for a healthy population, and could potentially supply produce to the tourism sector.

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.).

We will address the problems detailed in Q13 in a staged approach:

Step 1:

Create a current database of pests/plant pathogens (and vectors) on St Helena through a review of literature and through surveys. This will target pests/pathogens of cloud forest trees, forestry trees and of crop production; cataloguing pathogen and vector status (native/non-native, date and mode of introduction).

Step 2:

Identification of previously unknown pests/pathogens (and their vectors) identified in step 1. The PhD student from the University of Birmingham is expected to have a significant input into the identification of putative pathogens isolated from the forestry trees. This will be largely through molecular biology methods. Survey of entomopathogenic fungi on native invertebrates to separate indigenous from introduced pathogens to estimate threat of invasive pathogens on native fauna and to consider their potential as bio-control agents of pests/vectors in major crops.

Step 3:

Assessment of the impact of pests/pathogens on endemic tree populations (incl. associated species possibly sharing pathogens/vectors). When establishing the causal agent(s) of an unknown tree health problem it is necessary to undertake pathogenicity studies to identify the organisms responsible. This

research will be undertaken by the PhD student as part of the thesis, using pot grown plants. Assessment of agricultural and forestry crops and invasive species and the potential interactions between them will take place using survey methods and morphological and molecular techniques. An assessment will be made of the status and degree of threats posed by pests/diseases. Additionally, interviews with all commercial farmers and forester on site will be undertaken to learn of their, pest and disease problems and management techniques, with the aim of improving phytosanitation and IPM practices. Where possible, consultation will take place with part time farmers on the island. This will primarily be achieved through, meetings with growers and cooperatives, but also by setting up a 'plant clinic'. Home production of food is recognised as an important means for inhabitants to supplement their diets. Prediction of disease response to stress factors (CC) and potential for changes to risk status will be assessed along with a social and economic evaluation of the impact of pests/pathogens.

Step 4:

Development of an action plan to mitigate threats with diagnostic tools and management techniques for newly discovered pathogens and their vectors and best practice guides for extension workers and conservationists. These will be based on approaches widely used in Plantwise. Delivery of important messages will be provided through numerous routes including radio announcements providing advice at crucial times of the year for specific crops.

Assess indigenous entomopathogenic fungi discovered in step 2 as safe biocontrol agents for insect pests/vectors in agriculture and forestry on St Helena. Horizon scanning for future threats and update of biosecurity measures to reduce risks from pathogens.

Step 5:

Capacity building/training stakeholders across conservation, agriculture, biosecurity and forestry sectors in diagnosing pathogens and vectors, disease control and management techniques and laboratory diagnostic procedures. The level of training will be tailored according to level of experience and need. This will include the relatively simple Plantwise in-field diagnostic approach for use in agricultural scenarios on the more common problems, but also a much more in-depth diagnosis based on microscopic methods. Training will involve both an on-line learning and tutoring component and hands on training whereby the associated fungi are isolated from host into pure culture and the contaminants identified and the pathogen diagnosed. Training covering pest and disease problems will be given to teachers and students at the Prince Andrews School as well as the establishment of demonstration plots

This would involve an upgrading of the local laboratory facilities at the ENPRD laboratories and the procurement of laboratory equipment.

Step 6:

Rollout of best practice methods on farms, forest nurseries and cloud forest restoration in the final year followed by early impact assessment in Y3Q3 using a range of indicators including yield.

In parts, this project feeds into a larger initiative including the Peaks National Park Management Plan (2019-2024) and the Peaks Implementation Plan (2021-2026). The St Helena Government with support from the RSPB has undertaken a highly collaborative process to develop both the island's collective vision for the cloud forest and how to deliver it. Assessment of ecological impact of pathogens associated with cloud forest trees is an identified priority action within the plan and it was intended that this would be achieved through research and sourcing external funds.

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?

Knowledge sharing will be conducted on several levels:

1) Stakeholders in conservation, agriculture, forestry and biosecurity on St Helena across the public, private and NGO sectors are the primary audience - new knowledge will be shared through diagnostic training sessions, introduction to CABI's online identification services (Plantwise), plant clinics and through field trials to demonstrate best practise. Resulting in an increase in local ability to diagnose plant diseases, improved capacity to manage the priority diseases identified, reduce risks of infection and better management of future disease outbreaks.

2) Education Directorate – pupils studying Agriculture and their teacher at Prince Andrews Secondary School – engaging in relevant parts of their curriculum to produce teaching and training material and toolkits.

3) General public - Project information will be shared with the general public through local newspapers, radio interviews and the farmer's support news bulletin. This will increase general awareness amongst island residents of plant diseases that have a significant impact on St Helena's endemic biodiversity, forestry and agricultural. Moreover, it will also inform them of work underway to address these impacts and how they as individuals can also access information about plant diseases to reduce risks at home.

4) Senior Government officials and elected members of Council - sharing project progress and action plans will increase understanding of the issues faced by conservation, agriculture and forestry sectors, the actions to address them and their impact on sustainable economic development.

5) Regional professionals – as the first comprehensive modern pathological study of plant diseases in the South Atlantic, we will share knowledge and experiences gained through the project with colleagues in the SA Region, enabling them to access project reports and outputs (including online resources).

6) International research community – publications in peer-reviewed journals of the findings and results of the project.

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 is a cornerstone of this proposal. The St Helena Agriculture Sector Development and Training Needs document of 2018 highlighted areas where capacity building was required. The report states that "growers (with the necessary training and support) must take far more ownership of their pest and disease problems" this is exactly what the Plantwise training will offer. It will enable many lead farmers and part-time growers to create support networks and make basic diagnoses and take steps to prevent and overcome problems themselves. Often, growers view pest or disease attack as out of their control and simply bad luck whereas with correct planning they can be eliminated or at least reduced without necessarily engaging with the pesticide treadmill. All growers will be encouraged to attend the basic training whilst greater training (and an ability to train others) will be provided to those in an advisory capacity. The plant clinic will become a forum for discussion on pest and disease diagnosis and management; radio announcements will advise on timely intervention. For conservationists rearing endemic trees, additional training will be provided featuring arboricultural phytosantiation, diagnostic and treatment advice. On soils, the 2018 report says "there is a general lack of soils management understanding among producers". The diagnosis of nutrient deficiencies in a variety of crops is part of the Plantwise training and will fill this lack of understanding on the part of the islanders.

To secure gained capacity beyond the lifetime of the project, methods for improved management will

become part of the ongoing advisory service and both growers and advisory staff will be trained to make use of any future developments in the CABI diagnostic and advisory online services. Through these tools we will continue to provide assistance remotely on newly-arrived or outbreaks of rarely seen pests or disease.

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.

The agricultural work force on St Helena is ageing and predominantly male, although there is a good gender balance at the management and advisory level. Whilst, it is difficult to make broad generalisations about gender in agriculture, due to the variation in gender roles, farming systems, and geographic and cultural contexts, some generalisations hold true, including that young people are often reluctant to move into agriculture. There are many factors associated with this decision, but poor financial returns are one of the perceived limitations. The project will contribute to improved diagnosis and treatment of agricultural problems helping to make crop production more profitable and thus more attractive to all, including young people, encouraging them into the sector. The project will focus on promoting gender equality whenever possible, through focused practical measures to ensure that gender considerations are integrated throughout the programme and that interventions are gender responsive. To this end, gender analysis will be integrated into the project activities. Gender disaggregated data is essential to gender sensitive monitoring and therefore data collection linked to project impacts will be disaggregated according to gender. Traditional approaches to extension, such as visits from extension officers and training workshops, tend to reach men more easily than women. Ensuring that different groups of women and men can access services requires an understanding of the roles and responsibilities, barriers and constraints to different groups' accessing information. The training provided will be open to all farmers and those involved in advising farmers, increasing their knowledge and impact. Consideration will be given to the location and timing of events to make sure that they are accessible to all. The graduated training will allow those previously side-lined to become better trained by working their way through the training material.

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.

Immediate benefits:

Growers and farming advisors of the island who have received training will feel empowered to make diagnoses independently, they will better understand sources of infection and conditions likely to exacerbate the problem, this will lead to better management of the diseases. The technical skills of scientists of the island will also increase enabling them to confirm diagnoses and to identify newly arrived fungi that may pose a threat to endemic plants or crops alike. Better equipped lab-facilities will significantly support on-island diagnostics and thereby reduce reliance on external support.

Those raising nursery stock used to replenish and expand the forest remnant will learn how to manage the diseases and will feel confident that they are providing healthy material to the forest replacing tree species

lost to diseases in the cloud forest rather than adding to it.

As the survey of entomopathogenic fungi will also cover invasive species this will allow to set in motion short-term mitigation efforts in case any of these pose a threat to endemic invertebrates.

Food production will increase and there will be less reliance on imports.

Longer term benefits:

Incidence level of dieback will decrease over time due to improved habitat management allowing a recovery of the keystone species and the whole forest system. Preventing the decline of the mature cloud forest trees will lead to a more sustainable protection of the immense biodiversity of St Helena. Local people will benefit from tourism due to the cloud forest remaining intact and the retention of the unique ecosystem of St Helena.

Farmers, and the whole island population will benefit from increased and more sustainable food security due to better disease control on the island with both yields and quality being improved. This in turn will improve livelihoods both of farmers and consumers alike.

One important legacy will be that the training offered by CABI is simple and can be passed onto further generations locally and via online courses. Similarly, once the knowledge is on the island the increase in mycological scientific capacity will enable them to spot new diseases going forward.

The survey of entomopathogenic fungi lays the groundwork for future sustainable usage of biological resources whether this will be directly on the island to develop environmentally friendly biopesticides for pest control or even a future exploration of the potentially high pharmaceutical value of any newly discovered endemics.

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.

Work to save the unique cloud forest habitat, primarily directed at controlling non-native invasives and planting nursery grown stock, has been on-going since 1994. The increasing incidence of wild and planted tree death and decline in endemic insects, indicates the cloud forest is under a new kind of threat that could increase species extinction risks. This multifaceted project will be the first step in understanding the nature of the pathology of these threats to endemic trees and insects, where the pathogens have come from and why they are so virulent. Training of conservation staff will ensure nursery trees, raised in an effort to replace mature specimens will be healthy. Building on these gains it may be possible to create a strategy for preventing the spread within the forest. Reducing extinction threats will protect the social and economic investments in biodiversity conservation and the ecological services it provides, protecting existing livelihoods in conservation and tourism.

Through the training of local people, in field identification of problems and laboratory isolation and identification, agricultural and forestry production on the island will become more productive and more profitable, supporting livelihoods and leading to a decrease in the reliance from food imports.

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 fundamental design of this project, with its focus on training and capacity building across multiple sectors and has been chosen with long-term sustainability in mind.

Ongoing technical support from ENRP to growers based on the provided training after the termination of the project.

To secure gained capacity beyond the lifetime of the project, methods for improved management will become part of the ongoing advisory service and both farmers and advisory staff will be trained to make use of any future developments in the CABI diagnostic and advisory online services. Through these tools we will continue to provide assistance remotely on newly arrived pathogens or outbreaks of pests or diseases.

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

No Response

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.

 [Budget over 100K May 2020 rev Feb21-pathogens on St Helena CABI](#)

 08/02/2021

 16:39:42

 xlsx 68.93 KB

Q22. Funding

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

New Initiative

Please provide details:

The design and development of the project has been informed by The Peaks National Park Management Plan (2019-2014) and the Peaks Implementation Plan (2021-2026) developed to implement and deliver the ambitions outlined in the management plan. The St Helena Government with support from the RSPB has undertaken a highly collaborative process to develop both the island's collective vision for the cloud forest

and how to deliver it. Assessment of the ecology and ecological impact of pathogens associated with all cloud forest trees is an identified priority action within the plan and it was intended that this would be achieved through research and sourcing external funds. A large project bid is being developed to enact the Peaks Implementation Plan and this project will be carried out in full support and in collaboration with that project.

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
CABI	██████	GBP	CABI will reduce its overheads on staff time from its standard ██████. The difference is listed as matched funding of £██████. For a member country such as St Helena CABI can offer up to 20 molecular identifications per year; this will amount to additional matched funding of £██████ over the course of the project.
ENRP	██████	GBP	Use of facilities for meetings/ diagnostic work etc. on St Helena. Staff time of ENRP staff to support this project will amount to matched funding of £██████

Birmingham Institute of Forest Research (BIFoR) at the University of Birmingham



GBP

Matched funding will be provided to for a PhD focusing on the tree dieback in the cloud forest totalling around £[redacted] which will cover stipend [redacted] for consumables and £[redacted] for travel.

No Response

0

No Response

No Response

Q23b. Unsecured

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

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

Do you require more fields?

No

Section 11 - Open Access and Financial Risk Management

Q24. Outputs of the project and Open Access

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

Open access to data and the products of research is a general policy of CABI. All data, reports, leaflets, training materials, photographs, films and other outputs from the project will be freely accessible, and

available in digital form where possible and appropriate on the Darwin, CABI, SHRI and ENRP websites. All data gathered and analysed during the project will be made available in digitised format. The data will be included as an annex to the final project report, subsequently becoming accessible through the Darwin Initiative website. Should this not be possible due to the volume of material, CABI has offered to make the data available on its own website. Annual and half-year reports to Darwin will also list project progress and the products available from them.

Social media accounts from CABI and St Helena Government will be used to promote photographs and stories arising. The lessons learnt from this comprehensive project will be applicable to all the UKOTs as disease problems impacting on the environment and agriculture are common throughout. The results will be presented at any relevant conference that occurs in the second half of the project and the aim is also to publish results on disease identification or – if applicable – the description of new species in peer reviewed scientific journals.

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.

CABI has a Code of Business Conduct, which sets out fundamental standards of conduct that CABI expects to maintain the integrity and reputation of the organisation; to help ensure compliance with legal requirements; and to meet the highest standards of good governance. Lawful and ethical behaviour from all CABI staff members is required at all times. All employees agree to the terms of the Code of Business Conduct through countersignature.

CABI is independent and externally audited by PricewaterhouseCoopers (PwC), who sign-off the annual report and financial statements. CABI's Finance Policy has been recognized by the EU Pillar Assessment, which found that CABI complies with the requirements of the Internal Control, Accounting, External Audit and Procurement Pillars.

CABI's Anti-Fraud and Response Plan sets out the responsibilities regarding fraud prevention, what to do if fraud is suspected and the action that will be taken subsequently. Included in this policy is a Bribery Policy, as bribery is one aspect of fraud. CABI also has a Money Laundering Policy to alert staff to the possibility of a case arising; however, due to the nature of CABI's products and services, it is unlikely that attempts would be made to launder funds through CABI.

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 laboratory facilities on St Helena are basic, but provide reasonable accommodation for the proposed work. The capital purchases are necessary to enable diagnosis and processing of pathogen samples as well as field diagnosis and management. These will be retained by ENRP to maintain services post project. An autoclave, media, glass petri dishes and UV lighting will permit the isolation/culture and of microorganisms. UV-induced sporulation will assist in fungal identification.

Microscopes (low and high power) and an external light source are essential tools, a bracket to allow photomicrographs to be taken through a mobile phone represents a significant saving over a dedicated camera mount. Tablets are to be taken into the field to show farmers on-line resources.

Containers for the air freight of cultures will allow unidentified pathogens to be sent to CABI.

The APS compendia provide a great crop-specific information resource providing clear images of symptoms

and diagnostic information.

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.

Although cost implications caused by pathogens to the ecosystem, forestry and agriculture on St Helena are difficult to estimate, these are significant in relation to the population of this territory, and this project addresses an urgent high-profile conservation issue. By preserving key-stone species we aim to prevent the extinction of many endemic taxa associated with these, thereby achieving significant impact. Although agriculture mostly supports domestic demand, effective production is vital to sustain livelihoods and maintain general health on the island. The fragility of the food security of St Helena has been exposed during the Covid crisis where disruptions to food supply chains have resulted in shortages and contributed to high food prices.

Travel costs to St Helena are high and a number of visits are required for this project. However, we can provide high value for money by addressing a wide range of issues related to pathogens, which under other circumstances would require several separate projects. During individual visits we will work simultaneously on several strands (diseases of endemics, forest trees and crops; diagnostics and implementation of solutions).

Value for money is also provided through significant contributions of all project partners and the matched PhD funding as described in Q6 and Q22.

CABI, as a not for profit organisation owned by member states can provide the highest levels of expertise at competitive cost rates. Adopting cost-effective procedures to stay viable as an organisation has allowed CABI to keep overheads to a minimal level whilst maintaining efficient overseas work practices.

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?

CABI employees are required to adhere to a high ethical conduct detailed in our code of conduct document. This Code requires that we will:

- conduct our business with honesty and integrity and that this will be demonstrated by our professional and personal conduct;
- treat all colleagues, partners, and beneficiaries with dignity and respect and by adopting a zero-tolerance approach challenge any form of harassment, discrimination, exploitation or abuse;
- seek to protect the health, safety, security and well-being of all colleagues, partners, and beneficiaries;
- seek to promote human rights, protect the environment and oppose unethical activities, including modern slavery and human trafficking;
- conduct our business with openness and transparency and restrict information only where the wider business interest or commercial considerations clearly demands it;
- respect the legitimate interests of all those with whom we have relationships

Further details relating to ethical conduct are provided in our Code-of-Business-Conduct document (<https://www.cabi.org/wp-content/uploads/CABI-Code-of-Business-Conduct-2019.pdf>). In addition CABI has a policy on access and benefit sharing of genetic resources (see uploaded document).

There are no human rights and/or international humanitarian law risks in relation to your project.
More details about CABI's policies can be found here: <https://www.cabi.org/about-cabi/our-policies/>

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.

CABI has a Procurement Policy ensuring transparency, non-discrimination and equal treatment. In addition, tendering procedures are clearly defined in the policy and in the supporting Procurement Guidelines. Controls and risk mitigation (including contractual arrangements) regarding implementing organisations (= 'collaborators') are specified in the CABI Collaborator Policy. Collaborators are selected on their ability to be able to ethically deliver the objectives of the programme / project. As part of that selection process and planning for the transfer of programme funds to a local partner, a Collaborator Risk Assessment will be completed and updated annually thereafter. Avoidance of bribery, corruption etc. also forms part of the contractual terms with collaborators. CABI and its employees will disclose any actual or potential areas of conflict, to avoid any appearance of professional misconduct.

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.

CABI has a Code of Business Conduct, which sets out fundamental standards of conduct that CABI always expects from all CABI staff members. All CABI employees agree to the terms of the Code of Business Conduct through countersignature.


CABI will share its policies with downstream partners and seek agreement on the standards contained therein.

Application of Procurement policy to ensure value for money from suppliers


Integrated financial ledgers and finance organisation ensures transparency and clarity on programme expenditure


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

 [Cabi Abs Policy](#)


 08/02/2021

 15:18:00


 pdf 88.24 KB


 [CABI Policy and Guidelines for Proper Scientific Conduct in Research](#)


 06/02/2021

 10:51:09


 pdf 474.22 KB


 [CABI-Code-of-Business-Conduct-2019](#)


 06/02/2021

 10:50:50

 pdf 378.55 KB

 [Safeguarding+Policy+2020](#)

 06/02/2021

 10:50:18

 pdf 712.75 KB

Section 13 - Logical Framework


Q31. Logical Framework


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

- [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.

 [R27 Darwin St2 Logical Framework FINAL](#)

 08/02/2021

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Impact:

Biodiversity on St Helena will not be threatened due to invasive non-native plant pathogens and livelihoods based on production and use of the Island's natural resources will be improved.

Outcome:

St Helena will have an increased local capacity to manage plant and insect pathogens reducing the risk of biodiversity loss and increasing economic prosperity.

Project Outputs

Output 1:

Pathogens at the heart of emerging threats identified for the agricultural, forestry and environmental sectors.

Output 2:

Current and future impact of plant pathogens on the peaks cloud forest species and economically important crops assessed

Output 3:

Action plan to mitigate identified threats developed with and made available to all stakeholders (this will include different chapters addressing the identified threats for each sector and a strategy for future management)

Output 4:

Capacity for St Helena to address threats caused by pathogens independently increased

Output 5:

Pathogen treatments implemented

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.

0.1 First audio/video conference with all project partners present; project introduction; discussion of work plan and amendments if necessary; establishment of communication channels/procedures/frequency of video calls, Y1 Q2.

1.1 Collation of existing information on pathogens previously recorded on St Helena, presumed pathways of introduction and any observed or recorded impact. Preliminary listing of priority needs and gaps. Literature review conducted supported through on island research of hard copy reports and papers, Y1 Q2&3.

1.2 Cataloguing of pathogens and associated vectors including the ones recorded during the project. This activity will be based on excel and is an ongoing process starting right at the beginning of the project, Y1 Q2. The main work on the catalogue will conclude Y3 Q4 but it will remain open for further additions afterwards and beyond the termination of the project.

2.1.1 Assessment of tree dieback of cloud forest trees including survey for causal agents during first survey visit in Y1 Q3 by CABI/BIFoR team and PhD student; species finalised by Y2 Q4.

2.1.2 Second on site survey for tree pathogens by CABI/BIFoR/PhD student, Y2 Q1.

- 2.1.3 Processing of samples and development of assessment report, Y2 Q4.
- 2.2.1 First onsite survey of crop and forestry pathogens as well as EPFs including farmer interviews, first plant clinic, Y1 Q3.
- 2.2.2 Second onsite survey of crop and forestry pathogens as well as EPFs and plant clinic, Y2 Q1.
- 2.2.3 Processing of samples and development of assessment report, Y2 Q4.
- 3.1 Action plan to mitigate identified threats in all assessed sectors developed jointly with and made available to all stakeholders, Y2 Q4.
 - 4.1.1 Development of training material based on action plan, Y2 Q4.
 - 4.1.2 Three workshops held on St Helena to train relevant stakeholders in diagnosis of diseases and best practice for efficient control, Y2 Q4 to Y3 Q3.
 - 4.1.3 Student and community engagement through trial plot at Prince Andrews School; ongoing supervision onsite by SHRI and ENRP, Y2 Q2 to Y3 Q4.
- 4.2 Improvement of laboratory facilities for diagnostic of pathogens and/or preparation of samples for shipment for external identification. Final review of material and equipment list in Y1 Q3 after joined site inspection; order of new equipment in Y1 Q3; shipment and instalment until Y2 Q1.
- 4.3 First onsite training of at least 6 staff in using improved diagnostic facilities & CABI online tools; established Plantwise test applied before and after training to measure the increase in knowledge by an increase in the score on the two tests in Y2 Q1; further onsite supervision of trained staff during follow on CABI team visits Y2 Q3, Y3 Q1 and Y3 Q3.
- 5.1 Implementation of treatment and/or mitigatory measures starting during Y3 Q1
- 5.3 Efficacy of treatment surveyed in crops and with nursery stocks in Y3 Q3/Q4.
- 6.1 Final project report, Y4 Q1.
- 6.2 Handover project activities for continuation after the project to SHRI/ENRP, Y4 Q1





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 pathogens on St Helensa CABI](#)
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 -  17:41:06
 -  xlsx 26.82 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](#)).

At the start of the project a detailed work plan, co-ordinated by the project manager, will set out responsibility for activities according to the project implementation timetable and performance indicators, mechanisms for financial control, and the M&E plan.

Regular project monitoring will be held through bi-monthly meetings between the four partner organisations via audio/video links that will use the work plan and M&E plan to monitor and evaluate progress against project outputs. This will be co-ordinated by CABI and SHRI. More extensive M&E meetings will take place every six months, in line with the Darwin reporting schedule, so as to evaluate progress. Any changes in assumptions or risks, or new issues arising, will be noted and used to modify the workplan proactively, and in consultation with the Darwin Secretariat. Annual and final reports, as well as all published outputs, will be generated as collaborative activities, with responsibility shared equally between the four partner organisations.

A steering group, featuring all four partner organisations, will be established to provide further oversight and guidance. It will meet every 6 months.

Activities conducted within individual work packages impact to a considerable degree on the conduct of subsequent work packages both with regards to the anticipated time frame and methodology. As the work packages on diagnostics, development of treatment methods and training need to be conducted in sequential order, towards the end of each package a limited evaluation with regards to any necessary adjustments will be undertaken. At these points in the project consultation with involved stakeholders will evaluate ongoing activities and correct procedures whenever required.

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs)

£ [REDACTED]

Number of days planned for M&E

25

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.

Yes (no written advice)

Please attach details of any advice you have received.

No Response

Section 17 - Certification

Q35. Certification

On behalf of the

Company

of

CAB International

I apply for a grant of

£265,440.00

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


Robert Reeder

Position in the organisation


Knowledge for development Team Leader


Signature (please upload e-signature)

 [CABI-Annual report and accounts 2019 - signed](#)


 09/02/2021

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 [CABI-Annual report and accounts 2018 - signed](#)


 09/02/2021


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 pdf 895.82 KB

 [CABI-Annual-Review-2018](#)

 06/02/2021

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 [CABI-Annual-Review-2019-1](#)

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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, outlining 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).