





#### Submit by Monday 1 December 2014

#### DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 21: STAGE 2

Please read the Guidance Notes before completing this form. Where no word limits are given, the size of the box is a guide to the amount of information required.

Information to be extracted to the database is highlighted blue.

#### ELIGIBILITY

1. Name and address of organisation (NB: Notification of results will be by email to the Project Leader in Question 7)

Applicant Organisation Name:	Institute of Biodiversity, Animal Health and Comparative Medicine (IBAHCM) University of Glasgow
Address:	Graham Kerr Building, University of Glasgow, University Avenue
City and Postcode:	Glasgow, G12 8QQ
Country:	UK
Email:	
Phone:	

#### 2. Stage 1 reference and Project title

Ref	Title (max 10 words) Sustainable Manu: biodiversity conservation through	
2914	sustainable development and rainforest regeneration	

#### 3. Project dates, and budget summary

Start date: 1/04/2015		End date: 31/03/2018		Duration: 3 years
Darwin request	2015/16	2016/17	2017/18	Total request
	£104,964	£100,437	£84,328	£289,728
Proposed (confirmed and unconfirmed) matched funding as % of total Project cost: 53%				
Are you applying for DFID or Defra		Defra		
funding? (Note you cannot apply for both)				

## 4. Define the outcome of the project. This should be a repetition of Question 24, Outcome Statement.

#### (max 30 words)

Demonstrate to the conservation community how rainforest regeneration can deliver highpriority biodiversity conservation and enhanced livelihoods for communities currently dependent on unsustainable exploitation of rainforest habitat in Manu Biosphere Reserve.

#### 5. Country(ies)

Which eligible host country(ies) will your project be working in. You may copy and paste this table if you need to provide details of more than four countries.

Country 1: Peru	Country 2:
Country 3:	Country 4:

#### 6. Biodiversity Conventions

Which of the conventions supported by the Darwin Initiative will your project be supporting? Note: projects supporting more than one convention will not achieve a higher scoring

Convention On Biological Diversity (CBD)	Yes
Nagoya Protocol on Access and Benefit Sharing (ABS)	Yes
International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)	No
Convention on International Trade in Endangered Species (CITES)	No

#### 6b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the convention(s) your project is targeting. You may wish to refer to Articles or Programmes of Work here. Note: No additional significance will be ascribed for projects that report contributions to more than one convention

#### (Max 200 words)

New evidence on the conservation and biodiversity value of regenerating rainforest in Manu will be collected by the biodiversity monitoring and survey programme. This will be used to increase the understanding and perceived value of biodiversity and regenerating rainforest and it's protection, in the Manu Biosphere Reserve UNESCO World Heritage site, Peru (CBD Articles 1 & 8). We will work collaboratively to provide evidence for the biodiversity conservation and sustainable economic potential of regenerating rainforest to demonstrate an additional route for Amazonian biodiversity protection (CBD Articles 5 & 6). We will empower the community and reduce rainforest and biodiversity destruction through the development and provision of longterm support for sustainable livelihoods (CBD Article 10). The enhancement of relevant educational resources, the creation of entrepreneurial micro-enterprise based on sustainability and the provision of enriched economic opportunities will incentivise conservation by those who rely on it directly (CBD Article 11). One strand of the project will include an assessment of the potential for local communities in Manu to benefit from access and benefit sharing of local genetic resources, such as traditional medicinal plants (Nagoya Protocol). By empowering communities that are currently restricted to destructive practices, we expect to see a shift towards sustainable behaviours that permit regeneration that will create high value biodiversity conservation habitat over the long term (CBD Article 10).

Is any liaison proposed with the CBD/ABS/ITPGRFA/CITES focal point in the host country?

🛛 Yes 🗌 No

if yes, please give details:

The main liaison will be with the CBD national focal point officials in Lima (currently Liliam Ballon Sanchez de Amezaga and Gabriel Quijandría Acosta) and the protected areas national focal point (Pedro Gamboa Moquillaza). The project has been designed to contribute to 6 out of the 8 specific strategy lines identified in Peru's National Biodiversity Strategy and Action Plan and the strategy vision for 2021 and will report on contributions to these to the relevant national focal points.

7. Principals in project. Please identify and provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more personnel or more than one project partner.

Details	Project Leader	Project Partner 1	Project Partners 1 & 2
Surname	MacLeod	Whitworth	Salazar
Forename (s)	Ross	Andrew	Eduardo
Post held	Project Leader	Biodiversity Monitoring Coordinator	Education and Entrepreneurship Officer
<b>Organisation</b> (if different to above)	University of Glasgow	Crees	Crees & Technical Institute
Department	IBAHCM		
Telephone			
Email			

Details	Project Partners 1 & 2	Project Partner 3
Surname	Ochoa	Comberti
Forename (s)	Reynaldo	Claudia
Post held	Agroforestry and Sustainable Livelihoods Specialist	Household Monitoring and Evaluation Analyst
Organisation (if different to above)	Crees & Technical Institute	Oxford University
Department		
Telephone		
Email		

8. Has your organisation been awarded a Darwin Initiative award before (for the purposes of this question, being a partner does not count)? If so, please provide details of the most recent awards (up to 6 examples).

Reference No	Project Leader	Title
162/12/013	Dr Ross MacLeod	Bolivian Key Biodiversity Areas Project

10. Please list all the partners involved (including the Lead Institution) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all

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stages, including project development. This section should illustrate the capacity of partners to be involved in the project. Please provide written evidence of partnerships.

Lead institution and website:	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)
Institute of Biodiversity, Animal Health and Comparative Medicine (IBAHCM), University of Glasgow	The University of Glasgow's Institute of Biodiversity, Animal Health and Comparative Medicine (IBAHCM) is a ground breaking multi- disciplinary research institute in the UK. It was created in 2010 to provide a focus for helping tackle many of the world's most pressing global ecological and environmental challenges. Work focuses on improving understanding of the complex
http://www.gla.ac.uk/res earchinstitutes/bahcm/	focuses on improving understanding of the complex interdependence of biodiversity, human populations and the environment that lie at the heart of many global problems. Staff from the institute have been working closely with the Crees Foundation and other local partners in Manu for 5 years to create the knowledge needed to develop effective, evidence-based solutions that will provide a sustainable future for one of the planets greatest natural assets, the rainforests of the Amazon. IBAHCM is the lead institution in this application and, in partnership with the Crees Foundation, will coordinate the project and provide scientific and research expertise to the project. Other responsibilities include 1) helping design and implement the regenerating rainforest monitoring programme, 2) providing 3 fully funded field biodiversity monitoring teams (each consisting of 8 staff and students from the University of Glasgow Exploration Society for 2 months), 3) assisting development and delivery of environmental education course materials for the Salvacion Technical Institute.

Partner Name and website where available: Crees Foundation <u>http://www.crees-</u> <u>manu.org/crees-</u> <u>foundation/about-us/our-</u> <u>aim/</u>	Details (including roles and responsibilities at engage with the project): (max 200 words) The Crees Foundation was founded a decade Peruvian non-profit conservation and sustainabl organisation working to reduce poverty and protect Amazon rainforest. The Crees Foundation is supp established Amazon ecotourism and environme business, Crees Expeditions who run the Manu Lu a biodiversity and sustainable development rese the Manu Biosphere Reserve. This has allow Foundations to work continuously with local co conservation in Manu for the last 10 years. As financial backing and support facilities in Expeditions provides office space for a foundat development and environmental education coor UK office. Crees and Glasgow University are joir on the Sustainable Manu project and have work	ago and is a e development to biodiversity in orted by a well- ental education earning Centre, earch station in wed the Crees mmunities and well as stable Peru, Crees ion sustainable dinator in their to lead partners
	UK office. Crees and Glasgow University are join	at lead partners ed together on ars. The Crees ery of support, p local people itment of local p-enterprise (we evelopment and he new Natural
Have you included a Letter of Support from this institution? Yes		

e you included a Letter of Support from this institution?

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Partner Name and website where available:	Details (including roles and responsibilities ar engage with the project): (max 200 words)	nd capacity to
Instituto de Educación Superior Tecnológico Publico del Manu (IESTP)	The Instituto de Educación Superior Tecnológic Manu (IESTP) is a Peruvian Ministry of Educa college. Based in Salvación, the IESTP is a wel	ation technical
Salvacion Technical Institute/ Peruvian Ministry of Education	institution as well as the only further education province. This makes it the ideal partner to prov educational engagement with sustainable land The key role of the technical institute will be to bu curriculums for practical modules of a	ide community management. uild and deliver
http://www.minedu.gob.pe/	curriculums for practical modules of a Management course aimed at developing sum management skills in the Manu area. IESTP's will be 1) to work with the Crees Foundation and to build a high quality, practical, and modular Management course that will teach the principals of sustainable land management to the sons and existing smallholders in Manu, 2) to create a enterprise entrepreneurship module that will us and maintenance of sustainable enterprises linke regeneration as a vehicle for delivering practica and business knowledge creation, 3) to suppor enterprise within the wider community by delivering skills content of individual modules to demographic, typically older people, with smallholdings to maintain but with families or which prevent full-time training.	stainable land responsibilities other partners Natural Land and practices d daughters of central micro- ie the building ed to rainforest al skill building ort sustainable ing the practical an additional their own
Have you included a Letter of Support from this institution?		

Have you included a Letter of Support from this institution?

Yes

Partner Name and website where available: School of Geography	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words) The University of Oxford is one of four expert partners for the Sustainable Manu project who will provide advice and support to the three main delivery partners listed above.
and the Environment, University of oxford <u>http://www.geog.ox.ac</u> <u>.uk/</u>	The School of Geography undertakes world-class interdisciplinary research, addresses societal and environmental problems, and advances knowledge within an intellectually vibrant, interdisciplinary research environment that combines natural and social sciences and has geography at its core. As part of the School of Geography the Environmental Change Institute is an interdisciplinary institute for research on the complex processes of global environmental change, the exploration of sustainable solutions, and the promotion of change for the better through partnership and education. Members of the school and institute will support the Sustainable Manu project by providing advice and analytical support for the design and implementation of the household monitoring surveys that form the basis of documenting the impacts of the project on the livelihoods and welfare of local participants in the sustainable micro-enterprise initiatives. Oxford University staff have overseen similar household level socio-economic surveys in many locations around the world, including in Manu in 2009 (Scriven & Malhi 2012).

Have you included a Letter of Support from this institution? Yes		Yes
	22-003 ref App2914	·
Partner Name and website where available:	Details (including roles and responsibilities an engage with the project): (max 200 words)	d capacity to
Manu National Park http://www.sernanp.g ob.pe/sernanp/zonatu	The Manu National Park is one of the expert p Sustainable Manu project who will provide advice and three main delivery partners listed above.	
rismoi.jsp?ID=17	The key support roles Manu National Park will p support and advice for permit applications for biodiver 2) support for environmental education activities d technical institute in Salvacion, 3) support for biodiversity monitoring data from regenerating rainfor rainforest data collected within the core protected a especially on the abundance of the 5 key mamm targets in the Manu NP monitoring plan (Spider M Monkey, Jaguar, Tapir and Peccary). The conservation Manu National Park are also one of the key audience findings of the biodiversity monitoring will be delivered a key partner involved in re-evaluating the potential bio of conservation actions in the 930 km2 of human-use Biosphere Reserve.	rsity monitoring, elivered by the comparison of est with primary rea of the park al conservation Monkey, Woolly on managers of es to whom the d as they will be odiversity value

Have you included a Letter of Support from this institution? Yes	Have you included a Letter of Support from this institution?	Yes
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Partner Name and website where available:	Details (including roles and responsibilities and ca engage with the project): (max 200 words)	pacity to
Universidad Nacional Agraria La Molina	La Molina Agrarian University is one of the expert partne Sustainable Manu project who will provide advice and sup three main delivery partners listed above.	
La Molina National Agrarian University <u>http://www.lamolina.ed</u> <u>u.pe/portada/portal_in</u> <u>gles.htm</u>	La Molina is the leading university in Peru focusing on a and environmental research. They have been working in Biosphere Reserve for more than a decade with a partic on forestry and the development of sustainable agro-fo Molina's key role within the project will be the provision of advice and support for the agro-forestry and other agricult micro-enterprise initiatives. In particular, they will share project the results of research from across Peru (and wit on the most appropriate mix of trees and crops to plant. La will also make the resources of their National Agricultur the leading resource in the country, available to project st with the development of curriculum and training resources	the Manu cular focus prestry. La f technical cure based e with the hin Manu) a Molina al Library, aff to help
Have you included a Letter of Support from this institution? Yes		Yes

22-003 ref App2914		
Partner Name and website where available:	Details (including roles and responsibilities an engage with the project): (max 200 words)	d capacity to
Centro Binacional Peruano Norteamericano (CBPNA)	CBPNA, the Peruvian-North America Binational Centre expert partners for the Sustainable Manu project we advice and support to the three main delivery partners. CBPNA is an NGO specialising in the teaching of lar promotion of cultural interchange and ideas. CBPN with the Crees Foundation for several years a development of the sustainable agro-forestry a initiatives. The main role of CBPNA will be to he ecotourism teaching curriculum at the Technical especially support the development of English langua help local people better access ecotourism guid opportunities.	ho will provide a listed above. Aguage and the IA has worked supporting the nd bio-garden Ip develop the Institute and age teaching to
Have you included a Letter of Support from this institution? Yes		Yes

11. Have you provided CVs for the senior team including the	Yes
Project Leader	

#### 12. Problem the project is trying to address

Please describe the problem your project is trying to address. For example, what biodiversity and challenges will the project address? Why are they relevant, for whom? How did you identify these problems?

#### (Max 200 words)

The world's rainforests are vital for preserving global biodiversity and maintaining essential ecosystem and economic services. Yet a widespread perception exists that there is a fundamental conflict between the desire to conserve biodiversity in healthy rainforest ecosystems and the aspirations and needs of impoverished local peoples living in and around rainforests. The Amazon rainforest and, specifically, the Manu Biosphere Reserve UNESCO World Heritage site exemplify this major global challenge of how to both preserve biodiversity and develop sustainably. Currently, local communities in Manu are forced to financially rely on destructive practices such as logging and unsustainable agriculture. The result is an unsustainable downward spiral of environmental degradation that both reduces rainforest biodiversity and decreases long-term economic returns for local people. Furthermore, areas that have experienced significant human disturbance are perceived (by both local people and conservation managers) as having little economic or conservation value. Due to this undervaluation of their current land, people living within buffer zones around Manu are driven to further exploit and encroach on primary rainforest for economic survival. If deforestation rates are not reversed, we risk losing over 40% of the Amazon rainforest in the next 35 years (Soares-Filho, 2006).

Reference: Soares-Filho et al 2006 Modelling conservation in the Amazon basin, Nature 440, 520-523.

#### 13. Methodology

Describe the methods and approach you will use to achieve your intended outcomes and impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc.).

(Max 500 words – repeated from Stage 1 with main changes highlighted) The section below has been reorganised and rewritten to provide a more detailed picture of how the project will be approached. We have marked in blue text any additions to the goals but have avoided highlighting more minor changes in text or organisational structure, as highlighting these reduced clarity and readability.

The Sustainable Manu project therefore aims to achieve the following key goals:

- 1. Show how much biodiversity conservation can be delivered through rainforest regeneration within and surrounding the 915 km<sup>2</sup> of the Manu Biosphere Reserve buffer zones (known as cultural or human use zones). In pilot work we have shown that almost 90% of Manu's highest conservation priority bird and mammal species (44 Threatened or Near Threatened species on IUCN RedList) live in regenerating rainforest. We will therefore implement the first biodiversity monitoring programme for regenerating rainforest in Manu allowing the value of regenerating rainforest in Manu's cultural zones to be properly documented and assessed. We will use our well-tested line transect and camera trap protocols to document the distribution and relative abundance of the 44 priority species in regenerating rainforest. We will also measure the species richness of 3 key biodiversity indicator groups (amphibians & reptiles using visual encounter surveys, and butterflies using baited traps based on established protocols).
- 2. Demonstrate that rainforest regeneration and other micro-enterprise initiatives can be used to create sustainable livelihood opportunities The development of micro-enterprises will build on our pilot studies in Manu. Work will focus on the development of 6 sustainable micro-enterprises, the first 3 will be initiated in year 1; A) 1 ha agroforestry plots that intersperse both fast and slow growing commercially valuable trees with banana trees providing short (within 2 years) and long-term (from timber) cash crops that can be harvested in rotation while also recreating a forest canopy, B)

biogardens to grow vegetables that can improve family nutrition as well as provide surpluses to be sold and, C) eco-tourism guiding for local eco-tourism lodges. To ensure the project is aligned directly with local peoples priorities a further 3 focal initiatives will be selected by local communities during year 1, in years 2 and 3 with training events and entrepreneurial/micro-enterprise training. We have currently identified 7 further potential micro-enterprise activities that have been trialled in Manu (Scriven and Malhi 2012) and that we have the capacity and experience to support, ranging from aquaculture and apiculture to the production and sale of artisan crafts through Manu's flourishing ecotourism industry.

3. Work with the local technical institute in Manu to create a permanent collaborative training partnership and structure that will bring the local community, micro-enterprise specialists, biodiversity conservation expertise, policy makers and education facilitators together to deliver training and support for micro-enterprise, environmental management and biodiversity conservation. The project will use the support of expert partners (described in section 10) and project staff to help technical institute staff to build and deliver a curriculum for a Natural Land Management training programme. Core to this will be a land management entrepreneur module (aimed at 18 to 30 year olds) focussing on the technical knowledge and practical skills needed to increase benefits gained from micro-enterprises. We will also deliver practical workshops and training activities targeted at people aged 30+ who work on the land but have less opportunity for formal education. In addition we will hold a series of forward planning workshops that will bring together local, national and international experts to identify and assess approaches by which Manu can benefit from implementation of the new Nagova Protocol on access and benefit sharing and from developments in Manu's ecotourism structure.

Footnote: Project management, roles and responsibilities are described in the partner section above and in the monitoring and evaluation section below.

Reference: Scriven, J.N.H. & Malhi, Y. 2012. Smallholder REDD+ strategies at the forest-farm frontier: a comparative analysis of options from the Peruvian Amazon. Carbon Management 3(3), 265-281.

#### 14. Change Expected

Detail what the expected changes this work will deliver. You should identify what will change and who will benefit.

- If you are applying for Defra funding this should specifically focus on the changes expected for biodiversity conservation and its sustainable use.
- If you are applying for DFID funding you should in addition refer to how the project will contribute to reducing poverty. Q19 provides more space for elaboration on this.

Project work will focus on 3 key areas (Tono, the Manu Learning Centre-Salvacion corridor and the Shipitieri community area) within the Manu cultural (or buffer) zones. These were chosen for the benefits they can deliver to biodiversity conservation by reducing pressure for destructive exploitation of primary rainforest in the surrounding zones. In these areas we expect involvement in sustainable micro-enterprises to directly benefit 550 local people through increasing incomes by at least 20% while also reducing time spent on activities associated with unsustainable use of the rainforest by at least 50%. The reduction in reliance on exploitation of primary rainforest will reduce threats to Manu's 44 high conservation priority bird and mammal species and improve conservation prospects for all the biodiversity within the nearby primary rainforest core protected area (Manu National Park). Further we expect to be able to demonstrate the feasibility of applying an integrated sustainable development and conservation model throughout the cultural zones that surround the periphery of the core Manu National Park area and so create a long-term strategy for building a 915 km<sup>2</sup> sustainable development and biodiversity conservation buffer within the wider Manu Biosphere Reserve area. An effective buffer zone would allow protection of one of the world's most important conservation areas and its biodiversity in perpetuity. A key feature of this model is that it would be replicable at focal sites across the Amazon and in impoverished areas with fragile ecosystems more generally.

# 15a. Is this a new initiative or a development of existing work (funded through any source)? Please give details (Max 200 words):

Sustainable Manu is a new stand-alone project that is Stage 2 of a long-term initiative for conservation in the Manu Biosphere Reserve area. Stage 1 ran in Manu between 2010 and 2014 with small-scale pilot studies that demonstrated the potential biodiversity and conservation value of rainforest regeneration in Manu. We showed that across 4 key indicator groups regenerating forest was capable of holding 87% (±3.47%) of comparable primary forest biodiversity and we found 39 out of the 44 key conservation species expected to exist in primary forest of the region. At the same time we researched and worked with local communities to investigate a variety of micro-enterprise models. The most successful micro-enterprise initiatives were; a) agro-forestry plots (time averaged income US\$ 546 per ha, Scriven & Malhi 2012, for which 17 trial 1 ha plots were implemented) and b) biogardens with protective roofing to eliminate soil erosion (leading to a 35% increase in annual income, based on 18 trials). Plus other trials identified ecotourism guide training as a successful avenue for some local people. This Stage 2 project will build on Stage 1 by showing how the results can be scaled up to be delivered across a wider landscape scale. Stage 3 is described under Exit Strategy (Section 20).

Footnote: This short film . <u>https://www.youtube.com/watch?v= EnciuH Lhs</u> featuring the pilot study agro-forestry and bio-garden work achieved international recognition and won the UN Forest Short Film Festival Award, Best Film at the UK Green Film Festival Award and INKAFEST in Peru. It gives a local Peruvian perspective on why the work planned by the Sustainable Manu project is important to Manu and its people.

15b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work?  $\Box$  Yes  $\boxtimes$  No

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

## 15c. Are you applying for funding relating to the proposed project from other sources? $\boxtimes$ Yes $\square$ No

If yes, please give brief details including when you expect to hear the result. Please ensure you include the figures requested in the spreadsheet as Unconfirmed funding.

We have 85% of our planned matched funding confirmed and are applying for the remaining 15% (~£49,000) of matched funding from 3 sources. An application to the Waterloo Foundation for £90,000 is being submitted on the 1<sup>st</sup> December with result expected in 3 months. An application to the TJMF Foundation for £35,000 is being prepared for submission in January, with decision in March. Annual crowd funder campaigns are planned for each year of the project with a target of £15,000 for each campaign. We ran a very successful "GROW a Future" Crowdfunder campaign in 2014 (<u>http://www.crowdfunder.co.uk/growafuture/</u>) for the agro-forestry and bio-garden pilot work and this surpassed the target by £13,000 to reach £28,000 so we expect to be able to repeat our success.

#### 16. 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?

#### (Max 250 words)

This project would deliver substantial matched funding, with a Darwin Initiative grant leveraging more than £280,000 from already confirmed other sources so that every pound from Darwin would effectively be doubled. Beyond the simply financial, the strong and long term nature of the partnership between the University of Glasgow, the Crees Foundation and the Technical Institute mean that work on delivering the project outputs and outcome can start and be efficient immediately, without delays and ineffective use or resources and time caused by the

need to build new partnerships between the core participants. In terms of biodiversity conservation, documenting the conservation potential of regenerating rainforest in Manu will provide good value for money by benefitting many high conservation priority species, especially the 44 key threatened and near-threatened bird and mammal species of the Manu area. Feeding biodiversity data documenting value directly into existing conservation management structures in Manu's core protected areas will also provide good value as it allows the project to influence policy making and conservation action across the buffer areas so improving conservation both within and outwith the core protected areas. Based on the current rate at which families need to clear forest to create new small holdings to sustain even current income levels every hectare of small holders existing land that is developed into an agro-forestry plot will prevent deforestation of 15 times as much land over the next 50 years because agro-forestry doesn't require continued clearance of new land to provide long term economic returns.

#### 17. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the guidance notes.

#### (Max 300 words)

In order to ensure we meet the ethical requirements of Darwin Initiative we will put in place appropriate regulations for all project activities. We will abide by all UK and Peruvian laws including access and benefit sharing legislation (although this project is not directly involved in using or distributing genetic resources). The University of Glasgow and Peruvian partner the Crees Foundation will co-lead the project in Peru with the local technical institute. After 10 years, Crees have formed a close relationship with the local communities and their community leaders and we will ensure this relationship is maintained and strengthened in order to assist with effective and inclusive participation from all local stakeholders. By holding local community meetings before project initiation and throughout the project activities we will ensure that local participants will be well informed and be able to decide on participation from a position of knowledge and understanding. These regular meetings will also facilitate the exchange of ideas and help us develop and implement project activities and topics discussed on courses at the institute between project partners and all those involved. In turn, this will also guarantee that Prior Informed Consent principles are met. To safeguard the rights, wellbeing and health and safety of beneficiaries and staff, written protocols and guidelines will be provided for all project activities. Project managers will be responsible for monitoring the adherence to these protocols and guidelines.

#### 18. Legacy

Please describe what you expect will change as a result of this project with regards to biodiversity conservation/sustainable use and poverty alleviation (for DFID funded projects). For example, what will be the long term benefits (particularly for biodiversity and poor people) of the project in the host country or region and have you identified any potential problems to achieving these benefits?

#### (Max 300 words)

There will be 5 key legacies of this project

- 1) A scientifically robust evidence base, establishing the importance of regenerating rainforest for the conservation of 44 threatened and near-threatened bird and mammal species and 3 further key biodiversity indicator groups (amphibians, reptiles and butterflies).
- 2) Annual inclusion of data from regenerating rainforest on the abundance of 5 key mammal conservation targets in the Manu National Park monitoring programme (Spider Monkey, Woolly Monkey, Jaguar, Tapir and Peccary). As this monitoring plan is the central management tool for determining and implementing conservation in Manu this will allow active conservation measures to be systematically implemented in the regenerating rainforest for the first time, by for example inclusion in the formal park

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guard patrol schedules.

- 3) Development of the 110 micro-enterprise initiatives based on agro-forestry and other sustainable uses of small holders existing land, or new skills, will reduce reliance on destruction of primary rainforest by logging and clearance for unsustainable agriculture. These initiatives will improve income and welfare of the 550 local direct beneficiaries both during the project and long term. They will also reduce pressure on primary forest biodiversity both during the project and long term because the sustainable design of the micro-enterprises means new land doesn't need to be cleared to sustain and increase income levels.
- 4) Working with the Technical Institute, which has secure long term funding from the Peruvian Ministry of Education, means that the creation of curriculum and training resources will have continuing benefit local people long past the end of the project.
- 5) Finally, creation of a strategy for scaling up integrated sustainable development and biodiversity conservation so that it can be applied across Manu will allow the benefits identified above to be multiplied and delivered throughout the 915 km<sup>2</sup> of the Manu Biosphere Reserve buffer zones.

#### 19. Pathway to poverty alleviation

Please describe how your project will benefit poor people living in low-income countries. All projects funded through DFID in Round 21 must be compliant with the OECD Overseas Development Assistance criteria. Projects are therefore required to indicate how they will have a positive impact on poverty alleviation in low-income countries.

#### (Max 300 words)

This project is seeking DEFRA rather than DIFID funding but contributing to poverty alleviation is still a major goal of the project and will be delivered via three avenues:

First, we will contribute to an enhancement of the education system by providing new teaching material, training for the teachers and the introduction of expert teachers to the local technical institute. The aims of the new courses will be to provide the necessary skills and knowledge to undertake sustainable livelihoods and develop sustainable microenterprises, which will increase employment and income in the participating families.

Secondly, we will be providing foundation resources, structure and expertise so that community members can create their agroforestry plots on their own land so gaining a long-term sustainable source of income.

Finally, the biogardens will not only provide income for families and empowerment for local women (by enabling them to undertake an activity that provides a cash income) but they also provide a source of nutritious food that is usually expensive to import into Manu or too difficult to grow.

Through these approaches we will not only provide the finances to initiate reductions in poverty for project participants but also the necessary skills, opportunities and self-sufficiency to create a greater sense of well-being, independence from the need to rely on imported goods and foods from other parts of the country and/or illegal exploitation of primary forest habitats, greater community cohesion through cooperative enterprises and greater access to nutrition.

#### 20. Exit strategy

State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project. Where individuals receive advanced training, for example, what will happen should that individual leave?

#### (Max 200 words)

Successful completion of the project in this application would in itself represent a stable and sustainable end point. We would have 1) demonstrated the value the Manu Biosphere Reserve's buffer zones have for conservation and therefore provided the evidence needed to allow the Manu National Park management to put resources into conservation of these areas, 2) reduced the impact on biodiversity and improved the welfare of the 550 local beneficiaries by helping them create long term sustainable micro-enterprise initiatives, and 3) developed a longterm, local training and support capability for further increasing micro-enterprise, environmental management and biodiversity conservation in Manu. However, one of the most significant aspects of this project is that it is Stage 2 of a larger, longer-term 3-stage initiative. A key project outcome is delivery of a practical, evidence-based strategy for future biodiversity conservation and sustainable development linked through rainforest regeneration. This strategy would enable the project partners to work with Manu National Park and the Peruvian government to apply for large scale follow-on funding. With the goal of implementing integrated sustainable development and biodiversity conservation throughout the Manu buffer zones to provide a secure future for both local people and Manu's globally important biodiversity across the whole 18,811 km<sup>2</sup> region.

#### 21. 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 there 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?

#### (Max 300 words)

We will disseminate the results of our project and raise awareness about the potential worth of biodiversity to four particular audiences.

For local families and communities within the cultural zones of the Manu Biosphere Reserve we will use workshops and activities at the local institute to inform students and their families of the value of biodiversity. In addition we will create environmental education literature and in particular identification guides for biodiversity in the Manu region. These will be provided to the local communities in the local language of Spanish.

To Manu National Park and the conservation management of the Biosphere Reserves core protected areas we will annually present our findings and data about the potential value of regeneration rainforest biodiversity in the region. In addition to literature and guides, we will also work with the management of Manu National Park to layout an evidence based strategy document for delivering future biodiversity conservation through integration with sustainable development in the buffer zones.

We will also raise awareness about the project and its findings to the international conservation and scientific community. To do this we will attend conferences and give talks and presentation regarding the potential for biodiversity conservation in regenerating rainforest and how this can be achieved with sustainable development. Furthermore, we will aim to publish key scientific papers describing the biodiversity that can be protected through rainforest regeneration and documenting the conservation gains that can achieved through the creation of sustainable micro-enterprises in what is often considered degraded land.

Finally, to the international and national audiences, we will discuss and promote our project and its progress using the Crees Foundation's social media pages on Facebook (2047 existing followers) and Twitter (3156 existing followers). We will also be able to enhance sharing knowledge about biodiversity value through the crowdfunding campaigns (see section 15c) we will run during the project.

#### 22. Access to project information

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

(Max 250 words)

Project technical reports will be made freely available on both the University of Glasgow project webpage and the Crees Foundations website. Open access journals will be the first choice for publishing peer reviewed journal articles and we have included £1500 in budget as a contribution to this. The University of Glasgow will also make an in-kind contribution to the open access publishing costs under normal open access block grant agreements; we won't be able to quantify the exact value of this contribution until specific journal articles are accepted for publishing. If for any reason publishing in a direct open access journal is not appropriate then the work will be made open access by the author final version of each article being uploaded to the to the University of Glasgow's institutional repository. This repository, known as Enlighten http://eprints.gla.ac.uk/, allows free access to all publications. Data sets generated by the project will also be shared via the project websites, where possible. However the household surveys data (even if anonymised) would be likely make individual participating families identifiable so will not be placed online but would be made available free on request to organisations or researcher able to deal appropriately with any privacy issues. Site level biodiversity data will be freely available on the project websites, except where site specific information on species locations might make them more vulnerable to hunting.

#### 23. Importance of subject focus for this project

If your project is working on an area of biodiversity or biodiversity-development linkages that has had limited attention (both in the Darwin Initiative portfolio and in conservation in general) please give details.

#### (Max 250 words)

The majority of the world's remaining rainforests are regenerating rainforests. Yet currently the vast majority of efforts and resources of conservation managers and academia are focussed on understanding and working within primary rainforests. As such, the value of regenerating rainforest is often poorly understood and this avenue of biodiversity preservation is potentially undervalued so this project will contribute not only to improved understanding and conservation in Manu but to better understanding of the role that rainforest regeneration may be able to play in biodiversity conservation worldwide. Our pilot research indicates promising results by showing that 80-90% of birds, mammals, amphibians and reptiles that are found in primary forest can also be found in regenerating rainforest in the Manu region. The proposed project will contribute a new landscape-level understanding of the potential value of regenerating rainforest both in terms of a high value biodiversity habitat and in terms of the sustainable development opportunities it can provide for local people around rainforest protected areas. By providing alternative livelihoods that do not rely on the destruction of these habitats but instead promote and value these habitats we can enable regeneration and allow its importance to be fully realised. Furthermore, by demonstrating this value and disseminating our knowledge of this to the populations living within the rainforest and/or relying on it we can aim to shift the way in which both primary and regenerating rainforests are viewed and therefore used.

#### 24. Leverage

#### a) 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.

#### Confirmed:

£XXXX
£XXXX
£XXXX
£XXXX

#### b) Unsecured

Provide details of any matched funding where an application has been submitted, or that you intend applying for during the course of the project. This could include matched funding from the private sector, charitable organisations or other public sector schemes.

Date applied for	Donor organisation	Amount	Comments
1 December 2014	Waterloo Foundation	£90,000	
January 2015	TJMF Foundation	£35,000	
Annually, first campaign in February 2015	Crowd Funder Campaigns	£45,000	One campaign with goal of £15,000 each year

#### PROJECT MONITORING AND EVALUATION

#### **MEASURING IMPACT**

#### 25. LOGICAL FRAMEWORK

Darwin projects will be required to report against their progress towards their expected outputs and outcomes if funded. This section sets out the expected outputs and outcomes of your project, how you expect to measure progress against these and how we can verify this.

The information provided here will be transposed into a logframe should your project be successful in gaining funding from the Darwin Initiative. The use of the logframe is sometimes described in terms of the Logical Framework Approach, which is about applying clear, logical thought when seeking to tackle the complex and ever-changing challenges of poverty and need. In other words, it is about sensible planning.

#### Impact

The Impact is not intended to be achieved solely by the project. This is a higher-level situation that the project will contribute towards achieving. All Darwin projects are expected to contribute to poverty alleviation and sustainable use of biodiversity and its products.

#### (Max 30)

Determine the value of rainforest regeneration for catalysing biodiversity conservation and sustainable development in human-use zones of Manu Biosphere Reserve, so validating a widely applicable, collaborative solution to biodiversity loss.

#### Outcome

There can only be one Outcome for the project. The Outcome should identify what will change, and who will benefit. The Outcome should refer to how the project will contribute to reducing poverty and contribute to the sustainable use/conservation of biodiversity and its products. This should be a summary statement derived from the answer given to guestion 14.

Demonstrate to the conservation community how rainforest regeneration can deliver highpriority biodiversity conservation and enhanced livelihoods for communities currently dependent on unsustainable exploitation of rainforest habitat in Manu Biosphere Reserve.

#### Measuring outcomes - indicators

Provide detail of what you will measure to assess your progress towards achieving this outcome. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure the outcome – if you have more than 3 indicators please just insert a row(s).

Indicator 1	We will measure the number and relative abundance of species of high
	biodiversity conservation priority, and the species richness of other indicator biodiversity, using and relying on regenerating rainforest. Target: 6 months before the end of the project we will be able to show, for the first time, which of Manu's 44 high conservation priority bird and mammal are resident in or use each of our 3 focal areas and which of these key species are sufficiently abundant to be conserved in regenerating rainforest. We will also document the species richness of 3 further indicator taxonomic groups (amphibians, reptiles and butterflies) in regenerating forest. This will provide the evidence to allow conservation managers to re-evaluate the potential biodiversity value of conservation actions in the 930 km <sup>2</sup> of human-use zones of Manu Biosphere Reserve.
Indicator 2	We will annually monitor the type and number of rainforest regeneration and sustainable micro-enterprise initiatives successfully initiated by participants trained during the project. <b>Target:</b> By the end of the project 6 types of micro-enterprise initiative setup that successfully increase income from sustainable activities (by at least 20% from baseline measured before participants receive training) for local people
	from baseline measured before participants receive training) for local people currently dependent on unsustainable rainforest exploitation. We expect to see numbers of micro-enterprises increasing each year to a total of 110 new enterprises created or supported in the Manu area. With targets of 50 agro-forestry enterprises carried (normally carried out by local men), 30 bio-garden enterprises (normally run by local women), 10 people generating income from eco-tourism guiding, and 20 enterprises generating income from the three further micro-enterprise initiatives which the local communities choose to
Indicator 3	receive training in during the year 1 of the project. We will measure the proportion of time participants spend involved in new sustainable micro-enterprise activities, compared to time spent exploiting surrounding primary rainforest habitat. Target: Before each participant receives project training we will record baseline activity profiles. The key target will be to establish the number of 1 ha agro-forestry plots, the size of bio-gardens and the frequency of guiding activity etc that reduces motivation to exploit primary forest by documenting the micro-enterprise involvement that reduces time exploiting primary forest by 20%, 50% and 100%. By year 3, we expect involvement in micro- enterprises will take > 50% of beneficiaries time for half of those involved and >20% of time for the remaining beneficiaries. Since it is time consuming to travel to exploit primary rainforest this will reduce time spent on activities associated with unsustainable use of the rainforest by 50 to 90% (depending on level of involvement).
Indicator 4	We will record the number of people directly benefiting from each micro-enterprise initiative and the amount by which income changes for

#### each participant.

**Target:** 550 people (participants and their families) directly benefiting from micro-enterprise initiatives, including 250 from agroforestry initiatives and a further 300 from people trained in and working on micro-enterprise initiatives by the end of 3 years. We expect beneficiaries to be generating 50% of their income from sustainable livelihood activities within 3 years.

#### Table 1 Verifying outcomes

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Project GIS database containing all biodiversity distribution and abundance data collected during project, annual project reports, published papers on biodiversity.
Indicator 2	Annual household surveys of participants who receive training and support in developing micro-enterprise initiatives. Accounts of local co-operatives selling produce.
Indicator 3	Annual household surveys of participants. Team leader reports (including photographic evidence) on condition and outputs of agro-forestry plots and biogardens etc will provide independent verification of how much time is being spent on these activities (we know from pilot studies approximately how much time is necessary to keep plots etc well maintain and how much effort is required to produce specific outputs from micro-enterprises).
Indicator 4	Annual household questionnaire surveys, project training records and accounts of local co-operatives selling produce.

#### Outcome risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the *outcome and impact* of the project. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	Local community and conservation managers remain receptive to micro- enterprise approaches, to combining conservation and sustainable development goals and to project staff. Project staff and the local partner have been working in the Manu area for many years so are well versed in monitoring the local political temperature and diffusing potential difficulties.
Assumption 2	Peru is a country where earthquakes and landslides occur regularly and these can close roads and cut transport links. An important assumption is therefore that natural disasters don't impede access to the project area for lengthy periods (many weeks). The project can't control natural disasters but can easily monitor events such as road closures and as most project staff will spend most of their time in the project area it should be possible to adapt fairly quickly to such unpredictable events.
Assumption 3	Major national or international political instability doesn't cut transport links. Peru is also a country where road blockades are a normal part of the political landscape and major international events such as 9/11 have in the past reduced transport availability. Again these are situations that can be monitored readily and staff have the experience in adapting to such situations

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#### Outputs

Outputs are the specific, direct deliverables of the project. These will provide the conditions necessary to achieve the Outcome. The logic of the chain from Output to Outcome therefore needs to be clear. If you have more than 3 outputs insert a row(s). It is advised to have less than 6 outputs since this level of detail can be provided at the activity level.

r	
Output 1	Quantification of the potential for micro-enterprise to reduce unsustainable use, or exploitation of primary rainforest forest habitat.
Output 2	Increased knowledge within the community of sustainable practices, natural land management, entrepreneurial skills, eco-tourism and the potential benefits of traditional knowledge linked to local genetic resources.
Output 3	Increased participation in sustainable micro-enterprises and associated increased incomes within the local community.
Output 4	Increased knowledge of biodiversity conserved through rainforest regeneration and how high priority conservation species use regenerating rainforest, communicated to local and international audiences.
Output 5	Delivery of a practical, evidence-based, implementable strategy to the Manu Biosphere Reserve conservation community documenting the potential for rainforest biodiversity conservation through sustainable development initiatives linked to rainforest regeneration.
Table 2	

#### Measuring outputs

Provide detail of what you will measure to assess your progress towards achieving these outputs. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure each output – if you have more than 3 indicators please just insert a row(s).

	Output 1
Indicator 1	The proportion of working time, participants spend on sustainable activities and micro-enterprise initiatives.
	<b>Target:</b> Establish the proportion of time that participants spend on sustainable micro-enterprises in relation to their number of 1 ha agro-forestry plots, the size of their bio-gardens and the frequency of guiding activity etc. By year 3, we expect involvement in micro-enterprises will take > 50% of beneficiaries time for half of those involved and >20% of time for the remaining beneficiaries.
Indicator 2	The proportion of working time participants spend away from their own land for activities linked to unsustainable exploitation of primary rainforest. Target: Show what level of involvement in micro-enterprise is needed to
	reduce motivation and therefore time used to travel and exploit primary forest by 20%, 50% and 100%. By year 3 we expect time spent on activities associated with unsustainable use of the rainforest to reduce by 50 to 90% depending on participants involvement.

Output 2	
Indicator 1	The number of students enrolled on natural land management, eco- tourism, entrepreneurial and environmental awareness courses.
	Target: By year 3, 60 full time students enrolled in local technical institute courses supported by project and participating in entrepreneurial and

	environmental awareness courses.
Indicator 2	The knowledge of local participants of sustainable practices, natural land management, entrepreneurial skills, eco-tourism and local genetic resources.
	<b>Target:</b> Annual retention and use of sustainable practices, entrepreneurial skills etc based on annual house hold knowledge surveys of participants and based on regular assessments of skills and knowledge being utilised by participants in their micro-enterprise initiatives.
Indicator 3	Creation of micro-enterprise initiatives using knowledge and skills delivered by project training initiatives.
	<b>Target</b> : The creation by year 3 of 110 micro-enterprises based on knowledge of sustainable practices, natural land management, entrepreneurial skills, etc.

	Output 3	
Indicator 1	The number of people benefitting from the micro-enterprise initiatives. Target: 550 people (participants and their families) directly benefiting from micro-enterprise initiatives, including 250 from agroforestry initiatives and a further 300 people trained in or working on micro-enterprise initiatives by the end of 3 years.	
Indicator 2	The numbers of agroforestry plots, biogardens and other micro- enterprises. Target: By end of project, 50 agro-forestry enterprises (mostly carried out by local men), 30 bio-garden enterprises (mostly run by local women), 10 eco- tourism guide enterprises, and 20 enterprises generating income from the 3 further micro-enterprise initiatives which the local communities choose to receive training in during year 1 of the project.	
Indicator 3	Income generated through sales of produce etc through the local Manu Cooperative that the project helps set up. Target: By year 3, sales through Manu Cooperative from the project's 6 types of micro-enterprise initiative, to represent at least 20% of baseline income measured before participants receive training.	

Output 4	
Indicator 1	The number of high conservation priority species and amount of biodiversity found in regenerating rainforest.
	<b>Target:</b> By 2.5 years, 80% of Manu's 44 high conservation priority bird and mammal detected using regenerating rainforest and the relative abundance of each in the 3 project focal areas documented. Document the species richness of 3 further indicator taxonomic groups (amphibians, reptiles and butterflies) in regenerating forest.
Indicator 2	The number of participants involved in environmental and biodiversity education courses and activities and the knowledge they display afterwards.
	<b>Target:</b> By end of year 3, 300 participants involved in project biodiversity and environmental workshops and educational activities, with knowledge gains monitored by questionnaires.
Indicator 3	The number of submitted and published papers, reports and other educational resources produced as a result of biodiversity monitoring.
	Target: By end of project 5 papers submitted (and 3 accepted) at peer

reviewed scientific journals. Annual reports to Manu National Park managers
documenting the abundance of the 5 key mammal conservation targets in the
Manu NP monitoring plan (Spider Monkey, Woolly Monkey, Jaguar, Tapir and
Peccary) in regenerating rainforest forest. Three educational resources
covering identification of Manu's key biodiversity.

Completion and submission to conservation decision makers in Manu
and Peru of a written strategy for integrated biodiversity and sustainable development around the Manu Biosphere Reserve
<b>Target:</b> A written technical report (developed with key conservation partners such as Manu National Park) that; 1) Records, captures and assesses the evidence collected by the Sustainable Manu demonstration project on the potential for rainforest biodiversity conservation through sustainable development linked to rainforest regeneration and 2) Presents a costed strategy for catalysing biodiversity conservation through rainforest regeneration and sustainable micro-enterprise across the human-use zones of Manu Biosphere Reserve so that large scale funding can be sought for it's implementation.
Presentation of project results to conservation managers and decision makers
<b>Target:</b> In the final 3 months of the project staff present the project results at workshops with a) Manu National Park staff, b) local communities, c) conservation NGOs working in Manu and d) government departments.

#### Table 3

#### Table 4 Verifying outputs

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Project GIS database containing all biodiversity distribution and abundance data collected during project, annual project reports, published papers on biodiversity.
Indicator 2	Annual household surveys of participants who receive training and support in developing micro-enterprise initiatives. Accounts of local co-operatives selling produce.
Indicator 3	Annual household surveys of participants. Team leader reports (including photographic evidence) on condition and outputs of agro-forestry plots and biogardens etc will provide independent verification of how much time is being spent on these activities (we know from pilot studies approximately how much time is needed to keep plots well maintain and how much effort is required to produce specific outputs from micro-enterprises).
Indicator 4	Annual household questionnaire surveys, project raining records and accounts of local co-operatives selling produce.

#### Output risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the achievement of your outputs. It is important at this stage to ensure that these assumptions can

be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	The majority of local participants involved in micro-enterprise activities remain engaged with activities. Project staff will have regular contact with participants throughout the project so can monitor for any evidence of reducing engagement and so offer support to help participants through difficulties.
Assumption 2	Biodiversity survey sites remain accessible during the project and are not inaccessible because of local political difficulties. Accessibility of sites can be easily monitored and project staff will keep in regular contact with local communities.
Assumption 3	Technical Institute management does not change and remains engaged with development of curriculum. The project is supported by the Peruvian Ministry of Education as well as within the institute so abrupt changes don't currently seem likely.

#### Activities

Define the tasks to be undertaken by the research team to produce the outputs. Activities should be designed in a way that their completion should be sufficient and indicators should not be necessary. Risks and assumptions should also be taken into account during project design.

Output 1	
Activity 1.1	Recruitment of participants for agro-forestry and other micro-enterprise initiatives
Activity 1.2	Measure initial unsustainable use of primary forest by local participants and ongoing levels of sustainable and unsustainable activities using household surveys
Activity 1.3	Measure involvement with and income and welfare benefits of micro-enterprise

	Output 2	
Activity 2.1	Development and delivery of Natural Land Management course	
Activity 2.2	Development of Entrepreneurial Module	
Activity 2.3	Delivery of micro-enterprise training and environmental education workshops supported by expert partners	
Activity 2.4	Organisation of forward planning workshops to assess approaches for delivering benefits to local people of Nagoya Protocol and developments in Manu's ecotourism	

Output 3	
Activity 3.1	Training initiatives and workshops on micro-enterprises
Activity 3.2	Provide technical support and materials for creation of micro-enterprises
Activity 3.3	Setup community co-operative to support agro-forestry and bio-garden businesses

Output 4	
Activity 4.1	Survey and data collection on regenerating rainforest biodiversity
Activity 4.2	Development of environmental education materials on biodiversity and its value in the Manu area

Activity 4.3	Biodiversity value and environmental education awareness workshops for local community and conservation managers in Manu
Activity 4.4	Talks, presentations and scientific communication of biodiversity results to local, national and international audiences
Activity 4.5	Writing of reports and scientific papers on the value of regenerating rainforest biodiversity

Output 5						
Activity 5.1	Collate the evidence on the conservation, sustainable development and educational gains made during the project					
Activity 5.2	Collaborate with the conservation community to write a strategy document for the Manu area outlining how rainforest regeneration and sustainable development could be used to impact biodiversity conservation					
Activity 5.3	Present strategy to the Manu conservation community, Peruvian government and future funders					

22-003 ref App2914 26. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project.

	Activity	No of Year 1				Year 2				Year 3				
		Months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1														
1.1	Recruitment of participants for agro-forestry and other micro- enterprise initiatives	18	x	x	x	x	x	х						
1.2	Measure initial unsustainable use of primary forest by local participants and then annual ongoing levels of sustainable and unsustainable activities using household surveys	12	x	x	x			x	x			x	x	x
1.3	Measure involvement with and income and welfare benefits of micro-enterprise	6						x	x			x	x	x
Output 2														
2.1	Delivery of Natural Land Management course	33		х	х	х	х	х	х	х	х	х	x	х
2.2	Development of Entrepreneurial Module	6	x	x										
2.3	Delivery of micro-enterprise training and environmental education workshops supported by expert partners	26		x	x	x	x	x	x	x	x	x		
2.4	Organisation of forward planning workshops to assess approaches for delivering benefits to local people of Nagoya Protocol and developments in Manu's ecotourism	2						x	x					
Output 3														
3.1	Training initiatives and workshops on micro-enterprises	30	х	х	х	х	х	x	х	х	х	х		
3.2	Provide technical support and materials for creation of micro- enterprises	36	x	x	x	x	x	x	x	x	x	x	x	x
3.3	Setup community co-operative to support agro-forestry and bio- garden businesses	12					x	x	x	x				
Output 4														
4.1	Survey and data collection on regenerating rainforest biodiversity	30	х	х	х	х	х	х	х	x	х	х		
4.2	Development of environmental education materials on biodiversity and its value in the Manu area	9		x	x			x	x		x	x		
4.3	Biodiversity value and environmental education awareness workshops for local community and conservation managers in	6		x			x			x			x	x

#### 22-003 ref App2914 Manu 4.4 Talks, presentations and scientific communication of biodiversity 8 х х х х х Х х х results to local, national and international audiences 4.5 Writing of reports and scientific papers on the value of 9 х х Х х Х х regenerating rainforest biodiversity Output 5 5.1 Collate the evidence on the conservation, sustainable development 14 х х х х х and educational gains made during the project 5.2 Collaborate with the conservation community to write a strategy 12 х Х х Х document for the Manu area outlining how rainforest regeneration and sustainable development could be used to impact biodiversity conservation 5.3 Present strategy to the Manu conservation community, Peruvian 4 Х Х government and future funders

#### 27. Project based 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 projects 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.

#### (Max 500 words)

Monitoring of project progress and indicators is a key part of the role of all project staff but in particular will be the responsibility of the 5 project principals identified in section 7.

The principle means of monitoring the biodiversity outcomes and outputs (Outcome indicator 1) will be through the project GIS database containing all biodiversity distribution and abundance data collected during the project. The results of each individual monitoring survey will be entered into the database immediately after collection. The Field Team Leader, Jaime Villacampa, and the Biodiversity Monitoring Coordinator, Andrew Whitworth then produce monthly reports on the biodiversity recorded in each area with a focus on the presence and abundance of the key conservation species that have been detected. This will allow the Biodiversity Monitoring Coordinator to track which species are being recorded and adapt survey effort to ensure that if species are not detected in regenerating forest it is not likely to be because of survey effort limitations but rather due to a real absence.

The key means of monitoring the micro-enterprise results (Outcome indicators 2, 3, & 4) will be through the use of regular household surveys of the participants being supported by the project. These surveys are being designed with the help of supervisors at Oxford University and will be implemented by Oxford PhD student Claudia Comberti, who is the Household Monitoring and Evaluation Analyst. The project Education and Entrepreneurship Officer, Eduardo Salazar, will also be involved in carrying out the household monitoring. These surveys will be carried out when as participating small-holders are recruited to the project (before training and support starts) and then annually so that each participant will be surveyed a maximum of 3 times. The formal household surveys will be supplemented by visual inspection (documented by photographs) of agro-forestry plots, biogardens, etc. Agro-forestry and Sustainable Livelihoods Specialist, Reynaldo Ochoa, will carry out these visual inspections with each participating family during each support visit to each enterprise. These will occur several times a year, with frequency depending on individual need for support and stage within the project. Assessment of progress towards indicators is therefore designed not just to be by project staff but to be an activity that participants perform to help maximise their income gains and learning and to allow them (and the project) to adapt as lessons are learned or difficulties identified. Environmental Education Coordinator, Louise Rezler, will work with Reynaldo and Eduardo to review progress and indicators. Training outputs and curriculum implementation will be monitored by Eduardo Salazar using survey questionnaires immediately after training. Louise Rezler will be responsible for monitoring how successful training and education activities are in helping participants create and earn increasing incomes (using data from house hold surveys and visual inspections).

All the individual monitoring and evaluation results will pass direct to Project Leader, Ross Macleod, on a bi-monthly basis so that project progress can be assessed against each key indicator and adaptive adjustments made to the project delivery plan and activities.

#### FUNDING AND BUDGET

# Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet.

**NB:** Please state all costs by financial year (1 April to 31 March) and in GBP. **Budgets submitted in other currencies will not be accepted.** Use current prices – and include anticipated inflation, as appropriate, up to 3% per annum. The Darwin Initiative cannot agree any increase in grants once awarded.

#### 28. Cost Effectiveness

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget.

(max 300 words)

The lead project partners have worked together in Manu for 5 years and conducted a number of pilot projects together so we have had precise figures for salary and other costs from which to work out the project budget. The project leader has previously run a Darwin Initiative project in South America and the project was delivered on time and on budget while exceeded planned outcomes and indicators. The project leader therefore has the experience to deliver this Sustainable Manu project cost effectively and efficiently. By building on existing conservation and education infrastructure and providing the resources and evidence needed to make them more efficient the project is likely to be able to cost effectively deliver improvements in educational capacity and conservation management. On a day to day basis both the University of Glasgow and the Crees Foundation have detailed financial tracking systems in place that will allow the project leader and money is being used efficiently. There may be potential for reducing field costs by sharing transport or other costs with NGOs working on other projects in the area and these will be explored and utilized as appropriate to maximise value for money. Budget costs are calculated based on the assumption of an average USD to GBP exchange rate of 1.50 over the course of the project.

#### FCO NOTIFICATIONS

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country.

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)

 $\square$ 

Yes, advice attached

No

#### CERTIFICATION

On behalf of the trustees of

University of Glasgow

I apply for a grant of £289,728 in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

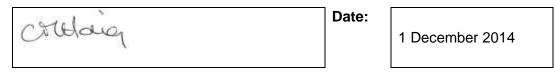
I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

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

- I enclose CVs for project principals and letters of support.
- Our most recent signed audited/independently verified accounts and annual report are also enclosed/can be found at: <u>http://www.gla.ac.uk/about/annualreviews/</u>

Name (block capitals)	KATE HAIG
Position in the organisation	Grants Manager

Signed



#### Stage 2 Application - Checklist for submission

	Check
Have you read the Guidance Notes?	Yes
Have you provided actual start and end dates for your project?	Yes
Have you indicated whether you are applying for DFID or Defra funding. NB: you cannot apply for both	Yes
Have you provided your <b>budget based on UK government financial years</b> i.e. 1 April – 31 March and in GBP?	Yes
Have you checked that your <b>budget is complete</b> , correctly adds up and that you have included the correct final total on the top page of the application?	Yes
Has your application been <b>signed by a suitably authorised individual</b> ? (clear electronic or scanned signatures are acceptable in the email)	Yes
Have you included a <b>1 page CV for all the Principals</b> identified at Question 7?	Yes
Have you included a <b>letter of support from the <u>main</u> partner(s) organisations</b> identified at Question 10?	Yes
Have you <b>been in contact with the FCO</b> in the project country/ies and have you included any evidence of this?	Yes
Have you included a signed <b>copy of the last 2 years annual report and accounts</b> for the lead organisation? An electronic link to a website is acceptable.	Yes
Have you <b>checked the Darwin website</b> immediately prior to submission to ensure there are no late updates?	Yes

Once you have answered the questions above, please submit the application, not later than midnight GMT on Monday 1 December 2014 to <u>Darwin-Applications@ltsi.co.uk</u> using the application number (from your Stage 1 feedback letter) and the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.