



17-027



DARWIN200

Submit by Monday 1 December 2008

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 16: 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.

1. Name and address of organisation (NB: Notification of results will be by post)

Name: University of York	Address: Environment Department Heslington York, YO10 5DD, UK
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2. Project title (not exceeding 10 words)

Market Based Scheme for Conservation in La Primavera Forest Mexico

3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start date: 1 st Apr 2009		Duration of project: 3 years		End date: 31 st March 2012	
Darwin funding requested	2009/10 £37,411	2010/11 £31,726	2011/2012 £31,344	2012/13 £	Total £100,481

4. Define the purpose of the project (extracted from logframe)

Identification of the potential of a local payment scheme for environmental values independent from public budget in La Primavera to provide resources for rural development, enhancing ecosystem's services, protecting biological corridors and halting land-use change in the oak-pine forest.

5. Principals in project. Please 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 than one overseas project partner.

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner and co-ordinator in host country/ies
Surname	Lovett		Balderas Torres
Forename (s)	Jon		Arturo
Post held	Senior Lecturer		Lecturer
Institution (if different to above)			ITESO, Mexico and University of Twente, Netherlands
Department	Environment Department		Department of Industrial and Technological Processes and Centre for Clean Technology and Environmental Policy
Telephone			
Email			

6. Has your organisation received funding under the Darwin Initiative before? If so, give details.

Reference No	Project Leader	Title
9005	Prof.Callum Roberts	Conservation of whale sharks & fish spawning aggregations in Belize.
5164	Prof.Callum Roberts	Do Marine Reserves Promote Biodiversity Conservation and Fishery Sustainability?
4186	Prof.Charles Perrings	Implementation of the Biodiversity Convention in Sub-saharan Africa
3018	Dr. Rupert Ormond	Conservation of Coral Reef Fish Biodiversity

7. IF YOU ANSWERED 'NO' TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

Aims (50 words)
Activities (50 words)
Achievements (50 words)

8. Please list the UK/collaborative (where there are partners in addition to the applicant organisation) and host country partners that will be involved, 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 host country partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

Partner Name: La Primavera Natural Protected Area Managerial Office	Details (including roles and responsibilities and capacity to engage with the project): The Biosphere Reserve managerial office is the official governmental body that operates and monitors La Primavera. The managerial office was involved from the early stages of development of the project and has agreed to provide support for gathering information, sharing GIS files, forest statistics and other primary data. It will also help coordinate access to the protected area for fieldwork and arrange meetings with landowners. The research team will present progress reports to the managerial office so findings can be integrated directly into the project. Dissemination activities will be discussed with the office before being released. The managerial office has the resources, capacity and authority to engage effectively with the project and is one of the major stakeholders. Contact: Jose Luis Gamez, Director; Ramon Gerardo Cabrera, Research & Monitoring Coordinator
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Partner Name: ITESO	Details (including roles and responsibilities and capacity to engage with the project): <p>The participation of ITESO will be coordinated through the Department of Industrial and Technological Processes of the University, where the Bachelor in Environmental Engineering is located. The ITESO was the first University in Jalisco to create the undergraduate programme in Environmental Engineering in the 1990s and so became one of the leading universities on environmental issues in the region. It has a physical chemical laboratory where basic measurements to obtain dry weight can be carried out, and a GIS laboratory and expertise that can be used to analyze and process the project data. Its participation in the project will be to provide access to the laboratories and coordinate enrolment of undergraduate Environmental Engineering students as volunteers for field work. Dissemination activities will be planned and carried out in coordination with the personnel of ITESO. ITESO has the expertise and the human and material resources to engage with the project.</p> <p>Contact: Alvaro Ochoa, Head of the Department. Lydia Hernandez, Coordinator of the Environmental Engineering Programme. Arturo Balderas Torres, Lecturer, and Coordinator of the Project, Mexico.</p>
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Partner Name: CIGA, UNAM Campus Morelia	Details (including roles and responsibilities and capacity to engage with the project): <p>The UNAM is the leading university in Latin America. The campus at Morelia hosts the specialized centres CIGA (Research Centre for Environmental Geography) and CIEco (Ecosystems Research Centre). Participation of UNAM will be coordinated by Dr. Margaret Skutsch, a senior researcher seconded from the University of Twente in the Netherlands, who will provide insights regarding community based forestry projects and payments for carbon sequestration. Dr. Margaret Skutsch will co-supervise the research in Mexico together with Arturo Balderas. CIGA will provide support in GIS analysis and will contribute to the theoretical framework of the research and elaboration of the reports.</p> <p>Contact: Dr. Margaret Skutsch. CIGA UNAM, University of Twente. Dr. Gerardo Bocco. Director CIGA UNAM.</p>
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Partner Name: ALICEA AC	Details (including roles and responsibilities and capacity to engage with the project): ALICEA AC (Latin American Association for Research, Training and Environmental Education) is a local NGO working on social and environmental affairs in Jalisco. Their key members are well known local social and environmental scientists. ALICEA will provide support for the preparation and execution of fieldwork, training, surveying and focus group workshops. ALICEA has recently conducted research on land management regulations in the Guadalajara Metropolitan Area, and has the capacity, human and material resources to engage with the project. Contact: Dr. Ofelia Perez, Director
Partner Name: CORAZON DE LA TIERRA AC	Details (including roles and responsibilities and capacity to engage with the project): Corazon de la Tierra AC is a local environmental NGO that has developed projects related to rural sustainable development and climate change mitigation in Jalisco. The organization has worked in the south-western part of the study area close to the Natural Protected Area of Sierra de Quila in the watershed of Villa Corona lagoon. The key personnel from this NGO have expressed willingness to collaborate with the project through recruitment of volunteers to participate in fieldwork and surveying. They can also provide networking support to prepare invitations to the workshops, and are interested in future participation for coordination of the implementation of conservation and carbon management projects in the areas where they have been working. Contact: MSc. Alejandro Juarez Aguilar, Director
Partner Name: FOMENTO Y PROTECCION BOSQUE PRIMAVERA	Details (including roles and responsibilities and capacity to engage with the project): Fomento y Proteccion Bosque La Primavera (Protection and Promotion of La Primavera Forest) is a local environmental NGO working closely with the La Primavera managerial office. The NGO will help to coordinate fieldwork and the networking required to organize workshops in Guadalajara's Metropolitan Area, thereby helping access the policymakers. The NGO is also identified as one of the potential actors that could participate actively in the future implementation of the financing scheme and is a major stakeholder for the project. Contact: Ismael Sanchez Anguiano, President. Marco Antonio Martinez Colin, Scientific Advisor

Partner Name: CONACYT	<p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>CONACYT (Mexican National Council for Science and Technology) has granted a scholarship to Arturo Balderas Torres to pursue a Ph.D. degree in Valuation of Environmental Services and Rural Development at the Centre for Clean Energy and Environmental Policy of the University of Twente; the scholarship consists of living expenses and medical insurance and does not include funds for fieldwork or research materials.</p>
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<p>9a. Have you consulted stakeholders not already mentioned above? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please give details:</p> <p>Arturo Balderas collaborated with ALICEA AC and the Department of Ecology of the municipality of Zapopan which is one of the municipalities covering La Primavera forest, in the dissemination of the proposal for a local land-use regulation decree that includes ecological features. Representatives of agricultural, industrial and citizens groups were consulted, the Darwin research proposal was mentioned and the actors supported the approach that valuing environmental services is a relevant strategy for local sustainable land use planning and conservation.</p>
<p>9b. Do you intend to consult other stakeholders? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please give details:</p> <p>As part of the research there will be consultation with many stakeholders in the local and regional spheres; however there are a few critical stakeholders who will play relevant roles in a future design, dissemination and implementation of the scheme, these are the Jalisco's Secretary for Environment and Sustainable Development (SEMADES); the Directors of Ecology of the Municipalities of Zapopan, Tala and Tlajomulco where La Primavera is located and representatives of Jalisco's Legislative Congress (there will be new representatives after the local and federal elections in 2009); The National Commission for the Study and Use of Biodiversity (CONABIO) and the Central Office of National Commission of Natural Protected Areas (CONANP) that coordinates all the protected areas in Mexico, among them La Primavera.</p>
<p>9c. Have you had any (other) contact with the government not already stated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please give details:</p> <p>Dr. Margaret Skutsch and Arturo Balderas have been participating in the Carbon Technical Consulting Group of the National Project "Forests' Environmental Services" lead by CONAFOR (Mexican National Forestry Commission); this group is designing the strategy for implementation in Mexico of the Reduced Emissions from Deforestation and Degradation (REDD) policy of the United Nations Framework Convention for Climate Change. The proposed research has been discussed with members of the group, receiving positive comments and they have expressed their interest in the implications of the findings for the design of national projects.</p>
<p>9d. Is any liaison proposed with the CBD/CMS/CITES focal point in the host country? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please give details:</p> <p>Mexico signed the CBD in 1992 and ratified it in 1993. As part of implementation of the CBD in 2000 the Mexican Government established the Mexican Biodiversity's National Strategy stating that "Protection and Conservation" of biodiversity is the first strategic line; this project contributes directly to the first two policies of this strategic line: Conservation <i>in situ</i>, and Rescue of Elements of Biological Diversity. The La Primavera project contributes to these focal points defined by Mexico through the identification of additional financial sources to support conservation activities inside natural protected areas specifically targeted to landowners, and through evaluation of the best schemes by which private institutions or citizens could finance activities to recover habitat lost outside protected areas through creation of voluntary agreements.</p>

PROJECT DETAILS**10. Please provide a Concept note (Max 1,000 words) (repeat from Stage 1, with changes highlighted)**

This research will explore the potential for capturing environmental values in a market-based scheme based on above-ground carbon accounting in order to develop habitat conservation and restoration activities in and around the La Primavera forest, Mexico. This proposal is in line with Mexican government's priorities outlined in the National Development Plan, Axis 4, Strategy 3.3 with the aim to develop local markets for the valuation of ecosystems' services specifically forests, independent from public funds (Presidencia, 2007) and follows Mexican policy on the CBD stated by CONABIO in the section "Protection and Conservation" of the Mexican Biodiversity's National Strategy (Presidencia, 2000). The work is based on the principles of the ecosystem approach outlined in CBD decisions V/6 and VII/11 to achieve a balance between conservation, sustainable use and equitable sharing of benefits.

La Primavera's Natural Protected Area was created in 1981, and was categorized as a Biosphere Reserve in 2006. It consists of 30500 ha of pine-oak forest located in western Mexico next to the second biggest city in the country, Guadalajara Metropolitan Area (CONANP, 2000). 200 vertebrates are listed, 19 of which are protected under Mexican regulation NOM-089-SEMARNAT-2001. 961 vascular plants have been identified, four of which are under protection and two are endemic. Cougars (*Puma concolor*) are the top predator in the forest; however biological corridors are needed to maintain a long term viable population. Urban pressure and land use change are isolating La Primavera and closing natural biological corridors for wildlife. These trends are driven by lack of sustainable forestry practices and low economic attractiveness of conservation in comparison to agriculture and industrial and housing development. Territory in the eastern and south-eastern surroundings of La Primavera has been modified dramatically, practically closing the biological corridor to the Santiago River Canyon through Tesistan's Valley. Land use change inside La Primavera is more controlled due to legal protection, however some landowners are trying to promote change due to lack of alternatives for local development in line with conservation. Human pressure is less intense on the northern, western and south-western boundaries; hence there is an opportunity to enhance and maintain biological corridors to La Sierra de Tesistán, Volcán de Colima in the north. Another protected area, Sierra de Quila, in the southwest is still viable but fragile due to the development of roads.

The project will investigate the potential for implementing a local voluntary payment based on carbon-sequestration values of the La Primavera and surrounding forests in order to enhance conservation and restoration activities to halt habitat loss of the oak-pine forests. The aim is to maintain ecological integrity and biological corridors through recognition of the importance of ecosystem services. The research will consist of four components. The intention is not to obtain precise figures, which would require detailed work, but rather estimates are needed to assess viability of the payment policy. Firstly the potential for carbon production will be estimated for 30500 ha of La Primavera and 30000 ha of adjacent land. This will be achieved through ground surveys and analysis of satellite images. Carbon production will be assessed through the potential for reforestation and afforestation and reduced emissions from land use change and forest fires compared with the business as usual scenario in the region. Secondly, the implementation, transaction and opportunity costs and the landowner's willingness to supply ecosystem services will be estimated through questionnaire surveys and interviews. Thirdly, the potential for payments for ecosystem services from citizens and organizations in Guadalajara will be estimated through surveys. Finally an assessment of the viability of a voluntary scheme will be assessed and a proposal for implementation put forward.

Project outputs will be disseminated through a range of publications. The most important output will be a report to the La Primavera management office on the viability of establishing a payments scheme. Secondly, information on carbon markets and ecosystem services in an easily accessible form will be distributed to both land owners and potential payees in Guadalajara. Thirdly, academic publications on the research will be submitted to international journals.

The project was developed through ongoing collaboration between Arturo Balderas Torres and Jon Lovett (Balderas Torres et al, submitted). Arturo gained a distinction in the Environmental Economics and Environmental Management Masters programme at the University of York and on returning to Mexico developed the Primavera research project, in conjunction with the Primavera managerial office, for which he has received a scholarship grant from CONACYT. The project will collaborate with Dr Margaret Skutsch, an expert in carbon payment policy through the REDD mechanism, who is on secondment from the University of Twente to the UNAM Campus Morelia in Mexico for two years. GIS support for the project will be provided by CIGA and ITESO. Jon Lovett has previously researched Mexican forest management with Vanessa Pérez-Cirera (Pérez-Cirera & Lovett 2006) and is currently coordinating the carbon-component of the 'Valuing the Arc' project which is investigating payments for ecosystem services in the Eastern Arc biodiversity hotspot. He is also working with Natural England on the economics of ecosystem service payment policy with support from the ESRC.

-Presidencia 2000, Estrategia Nacional sobre Biodiversidad de México. Presidencia de la República, Estados Unidos Mexicanos. Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT). México.

-Presidencia, 2007. Plan Nacional de Desarrollo 2007-2012. Presidencia de la República de los Estados Unidos Mexicanos. <http://pnd.calderon.presidencia.gob.mx/index.php?page=bosques-y-selvas>. México.

-CONANP 2000. Natural Protected Area Management Plan for La Primavera. SEMARNAT. Mexico.

-NOM-059-SEMARNAT-2001. Norma Oficial Mexicana- Especies Nativas de Mexico de Flora y Fauna Silvestre- Categorías de Riesgo y Especificaciones para su Inclusión, Exclusión o Cambio-Lista de Especies en Riesgo.

-Balderas Torres, A., Marchant, R., Lovett, J.C., Smart, J.C.R., Tipper, R. Community carbon projects: landowner's decision making and sequestration costs in marginal rural areas. Submitted to Ecological Economics.

-Pérez-Cirera, V., Lovett, J.C. 2006. Power distribution, the external environment and common property forest governance: A local user groups model. Ecological Economics 59: 341-352.

11a. Is this a new initiative or a development of existing work (funded through any source)?

Please give details:

This is a new initiative developed by Arturo Balderas Torres in conjunction with the La Primavera management office.

11b. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work?

Yes 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:

There is an ongoing research project registered with the La Primavera managerial office and coordinated by the University of Guadalajara aiming to evaluate environmental services of the micro watershed "Rio el Salado" within La Primavera; however the project focuses on hydrological services in an area with current public use for leisure and ecotourism. We have communicated with Dr. Agustin Gallegos and Dr. Raymundo Villavicencio who are the coordinators. They state that they do not include accounting for carbon services as is our intention. They have also offered access to valuable information on inventories at the Forestry Department at the University of Guadalajara and look forward to the results of the project.

12. Please indicate which of the following biodiversity conventions your project will contribute to: -

At least one must be selected.

- Only indicate the conventions that your project is directly contributing to.

- No additional significance will be ascribed for projects that report contributions to more than one convention

Convention on Biological Diversity (CBD) Yes No

CITES Yes No

Convention on Migratory Species (CMS) Yes No

What problem is this project addressing and how was it identified? (150 words)

The project addresses the difficulty of conserving natural habitats given the tension between development and conservation. This is reflected in land use change trends causing biodiversity loss, greenhouse gas emissions from deforestation, climate change and ultimately unsustainable development. The problem was identified after analyzing La Primavera's food web and comparing the area required for a viable *Puma concolor* population and land use dynamics with the current protected forested area (30500 ha). It was noted that local long-term viability of the cougar population is at risk. Valuation for environmental services is a possible way of reconciling the conservation-development dilemma. Valuation of carbon services by forests is rapidly gaining interest and may provide a strategy that delivers multiple benefits in terms of biodiversity conservation, climate change mitigation and rural sustainable development.

What will change as a result of this project? (150 words)

The project will identify the requirements to enhance habitat conservation and reforestation in the study region and the potential for local financing following an ecosystem approach and using the cougars' area requirements as indicator for habitat management. It is expected that the suggested incentives for the voluntary financing scheme can be established and practices will be developed both in La Primavera and areas corresponding to the biological corridors in the mid term. This will represent more resources for the La Primavera managerial office to prevent forest fires and monitor land use compliance; a higher income for landowners who decide to join the project; the maintenance of biological corridors; and partial offsetting of local greenhouse gas emissions. The proposed scheme could be adapted to other regions nationally including other protected areas.

Why is the project important for the conservation of biodiversity? (150 words)

This project will make an assessment of the potential for conservation funded through voluntary market based mechanisms based on valuation of an ecosystem's services. The project results will demonstrate the potential to reduce dependence on public funds for conservation and introduce payments for environmental services based on local valuation in Mexico's context. The project will look at carbon, and payment of carbon services as a surrogate for a variety of other ecosystems services, most notably biodiversity, thus building biodiversity into climate change mitigation strategies. Creation of a new development alternative for habitat conservation and restoration in rural areas through valuation of ecosystem's services may help halt land use change and biodiversity loss. Including biodiversity criteria in habitat architecture and top predators range-sizes areas can provide a comprehensive long-term strategy to maintain healthy habitats.

How does this relate to one or more of the biodiversity conventions? (150 words)

The work follows the principles of ecosystem approach outlined in CBD decisions V/6 and VII/11 to achieve a balance between conservation, sustainable use and equitable sharing of benefits. It follows the approach to the CBD stated by the Mexican government in the National Strategy and will contribute to halt biodiversity loss by promoting in situ conservation as stated in Article 8. The project will contribute to the strategy to protect endangered species and wildlife in oak pine forests in Mexico. This habitat covers ~20% of Mexico hosting 25% of vertebrates present nationally⁽¹⁾. In La Primavera, the project will help to conserve 23 species currently under protection and 2 endemic, and the top predator (*Puma concolor*) which may become locally extinct and is currently classified Appendix II in CITES.

⁽¹⁾Flores, O. y Gerez, P. (1994). Biodiversidad y Conservación en México: Vertebrados, Vegetación y Uso del Suelo. CONABIO/UNAM, México.

13. How will the results of the project be disseminated; how will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used? (max 200 words)

Results of the project will be presented in a report on the research findings that will contain guidelines for the proposed voluntary market based mechanism for the provision of ecosystem services. Results will be presented to: the managerial team of La Primavera Natural Protected Area; the team of the national payment for environmental services program of the National Forestry Commission; and local stakeholders involved in policymaking. Results will be presented to local radio stations and newspapers in a form appropriate for dissemination to a popular audience. Potential exposure of the project will be around 6,000,000 persons in Jalisco state alone. Some of the radio stations and newspapers are also available on line. Academic articles will be submitted to peer-reviewed journals and findings will be presented in national and international

forums. All surveys, formats and training material used during the project will show the Darwin name and logo; which will be also included in reports, presentations and posters. Support from the Darwin Initiative will be acknowledged in academic papers and newspaper articles. The results and abstracts will be electronically available in both English and Spanish.

14. What will be the long term benefits of the project in the host country or region and have you identified any potential problems to achieving these benefits? (max 200 words)

The project aims to give long-term benefits by creation of a local mechanism that provides incentives for equitable habitat and biodiversity conservation through valuing ecosystem service provision. Results will give indicative estimates based on local socioeconomic perspectives and can be adapted for management of forested areas locally and regionally in Mexico. A voluntary scheme will be easier to implement than a taxation system and it could be implemented in the mid term.

A potential problem is that costs might be too high for implementation in the region. In this case the role of ecosystem service valuation will be contrasted against that of implementation of land use regulations. If potential financing is closely linked to the creation of incentives by policymakers and those are not developed, or if financing depends on performance of the national economy and an economic crisis appears, then project implementation might be limited. However, this will not imply the scheme would not work, but will allow the identification of the necessary conditions for it. Participation of capable third party actors for monitoring activities and system transparency might be also critical at the development stage.

15. 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)

The project is conceived as a discrete research project in line with local and global conservation policies. It will be the first step for development of a local strategy to bring together efforts for habitat conservation, rural development and climate change mitigation in the western part of Mexico. The project will be a valuable input for local policymaking by demonstrating a multidisciplinary approach to provision of ecosystem services and it could be readily adapted to different contexts outside the study area. It is expected that local actors consulted during fieldwork and in the dissemination activities (landowners, local citizens and organizations, environmental NGOs, media, and policymakers) will become sensitised to the issue of ecosystem services valuation enabling promotion and participation in a voluntary market based scheme to be taken to the next stage. The relevant local partners have been chosen because they are able to take up project results for a further operational stage. Project team members will collaborate with local partners to ensure that skills and knowledge developed during the research can be maintained and offered locally as part of their training programs.

16. If your project includes training and development, please indicate how you will assess the training needs in relation to the overall purpose of the project. Who are the target groups? How will the training be delivered? What skills and knowledge do you expect the beneficiaries to obtain. How will you measure training effectiveness. (max 300 words)

You should address each of these points.

The project includes three general activities for which training is required. The first is training for local partners and volunteers collaborating in fieldwork. For this target group training will be based on the rationale of the research and market based mechanisms, fieldwork techniques (tree measurement, GPS use, use of formats and reporting, and first aid) and statistical techniques to analyze the data in order to attain the overall purpose of the project. Training will be delivered through workshops and practical fieldwork. Training effectiveness will be measured using pilot tests and monitoring of fieldwork tasks.

The second group of training activities includes contextualisation for the landowners, citizens and representatives organizations that will participate in the study. Presentations and focus group workshops involving groups of up to eight or ten persons will be used. The objective is to familiarize participants with technical issues of sustainable development, ecosystems services, biodiversity conservation, carbon emissions and climate change mitigation, before they are asked survey questions. Pilot sessions will be carried out to test adequacy of the methodology and surveys will be revised to verify all questions are answered on a sound way.

The third group of training consists of a final workshop involving representatives of the groups consulted. Training will pay attention to the criteria, procedures and activities that should be carried out during the operational stage. Emphasis will be placed on the roles and responsibilities of the different actors and on critical factors for success of the scheme (effective monitoring, transparency, expected observable results); a short questionnaire and a role-play will be used to assess training effectiveness.

LOGICAL FRAMEWORK

17. Please enter the details of your project onto the matrix using the note at Annex 3 of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes. (Use no smaller than Arial 10 pt)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.			
Sub-Goal: La Primavera's Oak-Pine forest is well conserved and landowners are receiving incentives from a local environmental valuation market; new areas have been reforested inside and outside the Natural Protected Area creating biological corridors, halting habitat loss and increasing the probability of maintaining a viable habitat for cougars (<i>Puma concolor</i>).	-Proposal for a Voluntary Market Scheme based on the results of this project, including the following: -Satellite surveys and maps indicating potential areas for reforestation/forestation. -Landowners' willingness to provide the environmental services. -Guadalajara's society willingness to pay for these services.	-Surveys hard copies and analysis. -Satellite images and data from the forest inventory of the National Forestry Commission (CONAFOR) and technical information from La Primavera Management Office. -Voluntary Market Scheme Proposal. -DI Closed Project Evaluation.	
Purpose Identification of the potential of a local payment scheme for environmental values independent from public budget in La Primavera to provide resources for rural development, enhancing ecosystem services, protecting biological corridors and halting land-use change in the oak-pine forest.	Project findings show the recommended implementation stages to develop the local market, the potential areas to work in, the estimated carbon content and expected project's costs, the willingness to supply by landowners and willingness to pay by population/organizations.	Voluntary Market Scheme Proposal obtained as a result of this research project and surveys results.	-The environmental valuation expressed by the participants in the surveys reflect their true intentions and are enough to cover the implementation, transaction and opportunity costs of the scheme. -Local, regional and national policymakers positively receive this kind of policy instrument.
Outputs 1. Carbon content in vegetation within La Primavera and its immediate surroundings, and carbon sequestration potential for areas that can be restored by reforestation estimated.	Maps and Satellite images showing estimated carbon content and potential sequestration for the 30,500 ha of La Primavera and the biological corridors in 30,000 ha of the surrounding area.	The body of the report and a map scale 1:50,000.	Atypical massive forest fires do not occur changing the estimated carbon estimations.

2. Implementation, transaction and opportunity costs, and landowners' willingness to conserve/supply ecosystem services in La Primavera and surrounding area assessed.	Costs curves for the 30,500 ha of La Primavera and in 30,000 ha of the surrounding area, showing project's viability. 90 surveys from landowners in the 13 ejidos comprising La Primavera.	The body of the report and a map scale 1:50,000. Landowners' surveys.	Truthful participation of landowners in the surveying process.
3. Local financing potential for ecosystem conservation and restoration in the Guadalajara Metropolitan Area, expressed on a per ton-CO ₂ basis estimated.	Financing potential from survey results and estimation for Guadalajara's Metropolitan Area following the socioeconomic and demographic profiles. 300 surveys from citizens, institutions and organizations from Guadalajara Metropolitan Area.	Body of the report and surveys	Truthful participation of citizens, institutions and organizations in the surveying process.
4. Voluntary market-based for environmental services valuation and rural development in La Primavera and its immediate surroundings proposed.	Critical route for the development of the proposed scheme. Technical documents proposed for the operation and follow up of the scheme.	Voluntary market-based scheme proposal.	Local, regional and national policymakers remain open to the approval of this kind of instruments.
<p>Activities (details in workplan)</p> <ul style="list-style-type: none"> 1.1 Set carbon measuring points and field work logistics 1.2 Provide training to work team 1.2 Perform field work 1.3 Data analysis to determine carbon content and sequestration potential 2.1 Identify the technical, transaction and opportunity costs 2.2 Provide training to the work team 2.3 Apply the surveys to verify opportunity costs and determine willingness to supply 2.4. Data analysis to shape the supply side of the scheme. 3.1 Identify the general profile of citizens, institutions and organization in the Metropolitan Area of Guadalajara 3.2 Provide training to work team 3.3 Apply the surveys to assess carbon footprint, financing potential and preferred scheme 3.4 Data analysis to shape the demand side of the scheme 4.1 Define the characteristics of the proposed market-based scheme 4.2 Consult the relevant actors involved in policymaking about feasibility of the proposed scheme 4.3 Identify the critical route for development of the proposed scheme 4.4 Data analysis and writing of the final report 4.5 Dissemination of results 			
<p>Monitoring activities: Quarterly, yearly and final reports including measurement of project's progress providing quantifiable follow-up and description of tasks realized, specifically progress in measuring points in the study area, surveying process (landowners, citizens, organizations and institutions), and main results obtained.</p>			

18. 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	Months	Year 1				Year 2				Year 3			
		1	2	3	4	1	2	3	4	1	2	3	4
1.1 Identify the biological corridors and delimit study area	1	X											
1.2 Classify the study area according to land-use and tree crown	1	X											
1.3 Set carbon measuring points and field work logistics	1	X											
1.4 Provide training to work team	1	X											
1.5 Perform field work	7	X	X	X									
1.6 Data analysis to determine carbon content and sequestration potential	3			X	X								
1.7 Writing and dissemination of the first part of the report	5					X					X	X	
2.1 Identify the strategies to conserve and enhance carbon services	5		X	X	X								
2.2 Identify the technical requirements and local costs (transport, plant production, biodiversity issues labour and materials)	2		X										
2.3 Identify transaction costs of the UNFCCC REDD and Voluntary Market Schemes	1		X										
2.4 Identify the local opportunity costs in the study area (land use and productivities)	2			X									
2.5 Design the surveying instrument to verify local opportunity costs and willingness to supply the environmental services	2		X	X									
2.6 Define the logistics to apply the surveys/workshops	1			X									
2.7 Provide training to the work team	1			X									
2.8 Apply the surveys to verify opportunity costs and determine willingness to supply	6			X	X	X							
2.9 Data analysis to determine the costs and willingness to supply	4						X	X					
2.10 Writing and dissemination of the second part of the report	4							X			X	X	
3.1 Identify the general profile of citizens, institutions and organization in GMA from official statistics	1			X									
3.2 Define the subsample for each representative group	1			X									
3.3 Design the surveying instrument to assess carbon footprint, financing potential and preferred scheme	3				X								
3.4 Define the strategy to apply the surveys/workshops	1				X								
3.5 Provide training to work team	2				X								
3.6 Apply the surveys to assess carbon footprint, financing potential and preferred scheme	7				X	X	X						
3.7 Data analysis to determine local financing potential on a per ton-CO2 basis	5						X	X	X				
3.8 Writing and dissemination of the third part of the report	4								X		X	X	
4.1 Define the characteristics of the proposed market-based scheme	1						X	X	X	X			
4.2 Identify and contact the relevant, local, regional and national actors involved in environmental incentives policymaking	2		X						X				
4.3 Consult the relevant actors involved in policymaking about feasibility of the proposed scheme	5								X	X	X		

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4.4	Identify the critical route for development of the proposed scheme	3								X	X			
4.5	Elaborate the final technical documents and training material proposed for the operation and follow up of the scheme	3										X	X	
4.6	Dissemination of the proposed scheme among relevant local stakeholders	3											X	X
5.1	Quarterly Report	3	X	X	X	X	X	X	X	X	X	X	X	X
5.2	Yearly Reports	3			X				X				X	
5.3	Final Report	1												X

19. Please indicate which of the following Standard Measures you are likely to report against. You will not necessarily plan to cover all these Standard Measures in your project.

Standard Measure No	Description	Tick if Relevant
1A	Number of people to submit thesis for PhD qualification (in host country)	
1B	Number of people to attain PhD qualification (in host country)	
2	Number of people to attain Masters qualification (MSc, MPhil etc)	
3	Number of people to attain other qualifications (ie. Not outputs 1 or 2 above)	
4A	Number of undergraduate students to receive training	X
4B	Number of training weeks to be provided	X
4C	Number of postgraduate students to receive training	
4D	Number of training weeks to be provided	
5	Number of people to receive at least one year of training (which does not fall into categories 1-4 above)	
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	X
6B	Number of training weeks to be provided	X
7	Number of (ie different types - not volume - of material produced) training materials to be produced for use by host country	X
8	Number of weeks to be spent by UK project staff on project work in the host country	X
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	X
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	X
11A	Number of papers to be published in peer reviewed journals	
11B	Number of papers to be submitted to peer reviewed journals	X
12A	Number of computer based databases to be established and handed over to host country	X
12B	Number of computer based databases to be enhanced and handed over to host country	X
13A	Number of species reference collections to be established and handed over to host country(ies)	
13B	Number of species reference collections to be enhanced and handed over to host country(ies)	
14A	Number of conferences/seminars/ workshops to be organised to present/disseminate findings	X
14B	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	X
15A	Number of national press releases in host country(ies)	
15B	Number of local press releases in host country(ies)	X
15C	Number of national press releases in UK	
15D	Number of local press releases in UK	X
16A	Number of newsletters to be produced	
16B	Estimated circulation of each newsletter in the host country(ies)	
16C	Estimated circulation of each newsletter in the UK	
17A	Number of dissemination networks to be established	
17B	Number of dissemination networks to be enhanced/ extended	
18A	Number of national TV programmes/features in host country(ies)	
18B	Number of national TV programmes/features in UK	
18C	Number of local TV programmes/features in host country(ies)	
18D	Number of local TV programmes/features in UK	
19A	Number of national radio interviews/features in host county(ies)	
19B	Number of national radio interviews/features in UK	
19C	Number of local radio interviews/features in host country(ies)	X
19D	Number of local radio interviews/features in UK	
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	
21	Number of permanent educational/training/research facilities or organisations to be established and then continued after Darwin funding has ceased	
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	X

PROJECT BASED MONITORING AND EVALUATION

20. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.

Initially there will be an introductory workshop involving the major partners and stakeholders to prepare the final timetable for the initial work. The project will then be continuously monitored by the coordinator with activities and outputs reported quarterly and yearly. At the end of the project a Final Report will be prepared including the technical and administrative activities. Reports will be prepared by the project coordinator in Mexico and will describe the activities achieved, the level of fulfilment, compliance with the general plan and quality of the results obtained during each period.

Activities will be monitored to determine if they have been carried out on time in accordance with the general plan and if they have the quality needed to achieve the outputs. Once the final logistics and dates have been set for the activities of the program, achievement of activities will be measured as a percentage completed at a given moment. Indicators will be monitored to follow up practical items as the number of measuring points established in the area of study; number of fieldwork surveys processed; number of surveys/workshops applied/organised; number of surveys analysed; number of dissemination activities realised; budget planned and executed.

The technical findings of the reports will also be presented to the partners participating in Mexico, so any comment or inquiry can be integrated to the project and programmed for the next immediate period. By the end of the first year it is expected that all the information related to quantification of the carbon services for the study area will be processed; at the end of the second year the activities to determine the costs, landowners' willingness to supply and the financing potential will have been carried out. At the end of the third year all dissemination activities will have been completed, and the proposed scheme and reports submitted to the relevant stakeholders.

FUNDING AND BUDGET

Please complete the separate Excel spreadsheet which will provide the Budget information for this application. Some of the questions below refer to the information in this spreadsheet.

NB: Please state all costs by financial year (April to March). Use current prices – and include anticipated inflation, as appropriate up to 3% per annum. The Darwin Initiative will not be able to agree increases in grants to cover inflation on UK costs once grants are awarded.

21. How is your organisation currently funded? (max 100 words)

The University of York is supported by a direct government grant, student fee income and research grants from a wide range of sources. The organisation accounts are available on the website:

<http://www.york.ac.uk/admin/finance/findept/final.pdf>

22. Provide details of all confirmed funding sources identified in the Budget that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional unconfirmed funding the project will attract to carry out addition work during or beyond the project lifetime. Indicate those funding sources which are confirmed.

Confirmed:

CONACYT granted a scholarship to Arturo Balderas Torres, to pursue a Ph.D. degree in Valuation of Environmental Services and Rural Development at the University of Twente; the scholarship consists of living expenses and medical insurance, the value is about £29580 depending on US dollar exchange rate.

Unconfirmed:

We have applied to the Dutch WOTRO Integrated Project call of September 2008 for additional funds for PhD students to work on project related activities and to link the project to other carbon-market schemes elsewhere in the world. Our proposal is through to the second round of the call. If successful then the PhD projects will compliment the Darwin project activities and will not start until 2010.

23. Please give details of any further funding resources (confirmed or unconfirmed) sought from the host country partner (s) or others for this project that are not already detailed in the Budget or Question 22. This will include donations in kind or un-costed support eg accommodation. (max 50 words per box)

Financial resources:

N/A

Funding in kind:

Access to GIS and physical chemical laboratories at ITESO.

Volunteers for fieldworks in La Primavera, workshops, surveying and data capturing.

Logistic access to La Primavera and networking for workshops organization.

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 the local UK embassy or High Commission directly to discuss security issues (see Guidance Notes) and attach any advice you have received from them.

Yes (no written advice)

Yes, advice attached

No

CERTIFICATION 2009/10

On behalf of the trustees/company* of University of York

(*delete as appropriate)

I apply for a grant of £37411 in respect of expenditure to be incurred in the financial year ending 31 March 2010 on the activities 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 lead UK institution to submit applications and sign contracts on their behalf.)

I enclose a copy of the organisation's most recent audited accounts and annual report, CVs for project principals and letters of support.

Name (block capitals)	
Position in the organisation	

Signed

Date:

Stage 2 Application - Checklist for submission

	Check
Have you provided actual start and end dates for your project?	
Have you provided your budget based on UK government financial years ie 1 April – 31 March?	
Have you checked that your budget is complete, correctly adds up and that you have included the correct final total on the top page of the application?	
Is the concept note within 1,000 words?	
Is the logframe no longer than 2 pages and have you highlighted any changes since Stage 1?	
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable)	
Have you included a 1 page CV for the Project Leader, any other UK staff working 50%+ on this project, and for a main individual in each overseas partner organisation?	
Have you included a letter of support from the main overseas partner organisations?	
Have you checked with the FCO in the project country/ies and have you included any evidence of this?	
Have you included a copy of your most recent annual report and accounts? An electronic link to a website is acceptable.	
Have you read the Guidance Notes ?	

Once you have answered Yes to the questions above, please submit the application, not later than midnight GMT on **Monday 1 December 2008** to Darwin-Applications@itsi.co.uk 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**. However, 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). **In addition**, a hard copy of the application and any supporting documents not available electronically should be submitted to the Darwin Applications Management Unit, c/o ECTF, Pentlands Science Park, Bush Loan, Penicuik EH26 0PL **postmarked** not later than **Tuesday 2 December 2008**.

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.