

Darwin Initiative Annual Report

Darwin Project Information

Project Ref Number	15/039
Project Title	Participatory Implantation of a Management Plan, Maderas Volcano Natural Reserve, Nicaragua
Country(ies)	Nicaragua
UK Contract Holder Institution	Fauna & Flora International
UK Partner Institution(s)	n/a
Host country Partner Institution(s)	Nicaragua Ministry of Environment and Natural Resources (MARENA) Fundacion entre Volcanes (FEV) Amigos de la Tierra (España) Carlos Diaz Cooperative Alcaldía de Altagracia
Darwin Grant Value	£98,450 over 3 years
Start/End dates of Project	April 2006 – April 2009
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	24 April 2006- 31 March 2007 Annual report No 1.
Project Leader Name	Alison Gunn
Project website	http://www.fauna-flora.org/ometepe.php
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1. Project Background

The Island of Ometepe in Lake Nicaragua is formed by two volcanoes linked by a wetland isthmus, to create one of the world's largest freshwater islands. The range of altitudes on the island, combined with its position between Nicaragua's dry Pacific and humid Atlantic coasts, subject it to a dramatic range of micro-climates. For this reason the island is potentially the most biodiverse of any area its size in Nicaragua and has been identified as a national biodiversity conservation priority. In the past, a lack of active management of the Maderas Volcano Natural Reserve (MVNR) left its wildlife and tropical forests (dry, montane and elfin) vulnerable to agricultural encroachment, wildlife trafficking and the impacts of increasing and unregulated tourism.

The goal of this project, with support from the Darwin Initiative is to protect the biodiversity of the Island of Ometepe by bringing the Maderas Volcano Natural Reserve under effective conservation management through the implementation of a revised and validated management plan. This project also aims to build the capacity of the stakeholders involved - including the Ministry of Environment and Natural Resources (MARENA) - to manage the Reserve effectively, whilst developing the tools necessary for this to become sustainable.

2. Project Partnerships

Ministry of Environment and Natural Resources: Fauna & Flora International's institutional partnership with MARENA - the official authority responsible for protected area management, biodiversity conservation and compliance with Nicaragua's environmental law – is guided by a 5-year Memorandum of Understanding, signed in 2002. FFI support MARENA through capacity building and training, as well as technical guidance in the development and implementation of national policy and protocols. Through our work, currently focussed in 4 protected areas in Nicaragua, FFI aims to increase MARENA's capacity to meet Nicaragua's commitments to the CBD. The Darwin project has enabled our engagement with MARENA to extend to another priority protected area – Maderas Volcano Natural Reserve.

However, the run up to the national elections, which took place in November 2006, and the subsequent change of government has slowed momentum within MARENA (as it has within all Nicaragua's Ministries). Recent government directives have taken authority for decision making away from MARENA technical personnel, all the way up to the Directorate General of Protected Areas. The resulting backlog is negatively impacting upon project deliverables where MARENA involvement or approval is key to project activities or outputs. For this reason there have been delays in the final revisions and official approval of the Management Plan, the recruitment of Park personnel, and the approval of the new Co-management entity for the Reserve.

Nevertheless we are working to strengthen our relationships with the new Minister and within the MARENA hierarchy. We are beginning the process of updating our MoU with MARENA and hope that this will serve to increase the impetus to move our joint agenda forwards for the coming term.

Fundación entre Volcanes (FEV): This is a local NGO based on Ometepe, whose work is focussed upon biodiversity conservation and natural resource management. FFI signed a Memorandum of Understanding with FEV in 2006, outlining the objectives of our partnership to work together in the conservation and management of biodiversity and natural resources on the island of Ometepe. FEV have been involved in the development of the management plan for Maderas Volcano and have a seat on the co-management committee; alongside FFI, MARENA, the Alcaldia (local governor), and community representatives.

Amigos de la Tierra (España): FFI and AdIT worked together to obtain stakeholder validation of the management plan for the Reserve. We have a cooperation agreement (MoU)

with AdIT outlining our commitment to work together in the validation, publication and dissemination of the Plan. As described above the publication and launch of the plan is overdue as a result of the delays in obtaining official approval from MARENA.

Cooperativa Carlos Díaz Cajina: This agricultural cooperative operates on the flanks of the Maderas NR running local tourism services and has participated in the management planning process. Key areas of land on the flanks of the volcano are owned by the Co-operative and they have signed a long-term lease of land on one plot where the park ranger station is being constructed.

Alcaldía de Altagracia: The Alcaldia, or municipal government office, is a key actor in the co-management of the reserve and is part of the co-management committee.

3. Project progress

All planned project activities are underway, despite some delays in the initial part of the project and the institutional delays inherent within MARENA. In order to secure full execution in year 1 some activities have been passed to Year 2, offset against expenditure originally budgeted for Year 2 (as per email correspondence with the Darwin Secretariat dated 1st March 2007). This has not affected the overall project logframe.

3.1 Progress in carrying out project activities

Initial workshop: The project started by supporting a series of 3 workshops, attended by representatives from 10 local communities and local organisations (economic, social and environmental NGO's). These workshops focussed on the preparation and validation of the Management Plan of the Natural Reserve Volcan Maderas and introduced this project which would focus on its implementation. One of the workshops discussed the new limits of the Reserve, change of the management categories and new management rules.

Project steering group: An informal steering committee for the project meets on a monthly basis, composed of the following: MARENA (Ministry of Environment), the Municipality of Altagracia (one of two municipalities on the island), the local NGO Fundacion entre Volcanes, and the Carlos Diaz Cooperative. The project logical framework was presented at the first steering committee meeting in June 2006, when a collective planning process for the year was conducted to finalise the workplan for 2006-2007. Key project activities are coordinated through this committee, such as the selection of the personnel for the protected area, as well as agreeing and defining the best **mechanism and structure for the co-management of the reserve.**

Park staff recruited: Five Park Rangers and one Park Manager have been recruited for the reserve, with the participation of the steering committee and local indigenous groups. It is worth noting that, although these personnel were selected in July 2006, there was a considerable delay in their starting work on-the-ground; in order for the park personnel to be MARENA staff they then had to go through all the administrative and human resource procedures of the Ministry, and this took far longer than expected. It is envisaged that, once the co-management agreement is signed by MARENA and the new co-management entity, the park personnel will become staff of that entity.

Field equipment purchased: Equipment for the park rangers, including standard issue uniform and basic field equipment (knapsacks, books, torches) has been procured.

Ranger training; theory & practice: The park rangers are being trained through a series of training sessions, which are being executed in collaboration with the local NGO Fundación entre

Volcanes. A total of 6 workshops have been held so far, which have focused upon providing basic knowledge of protected areas, management (including **co-management**) and enforcement (including provision of standard ranger manuals), natural resources, as well as an overview of the Nicaraguan legal environmental framework. The training sessions are employing national expertise as well as our own FFI staff.

Training in biological survey techniques, monitoring and natural resource use: The curriculum for more extensive training in biological diversity (covering all vertebrate taxa, with a special focus on avian fauna), survey techniques and monitoring, has been designed and is scheduled for May-June 2007. This will be provided not only to park rangers, but also to local tourism guides (about 30 participants in all).

Legal analysis of land rights and regulations: An Environmental Lawyer has been contracted and is working to compile the registries of all the properties in the Reserve and the buffer zone in order to analyze land rights and tenure. It is envisaged that this will be completed by June 2007.

Biodiversity monitoring protocols produced and priorities identified based upon baseline biodiversity inventories: The protocol for biodiversity monitoring has been designed, and is due to be finalised and printed next month. Due to the importance of the island for migratory birds and their importance as indicator species we have prioritized the development and implementation of the protocol for resident and migratory birds. MARENA has granted permission for research and data collection within the reserve and, following their training, the park rangers are now acting as research assistants collecting field data.

GIS habitat and land-use maps produced: A set of thematic maps for the reserve have been produced in collaboration with Fundacion Amigos de la Tierra (España) as part of, and contributing to, the management planning process. The printing of these maps and related materials are therefore awaiting MARENA's official approval of the Management Plan.

Management Plan approved and published: The management plan for Maderas Volcano Natural Reserve (Annex 3) has been submitted to MARENA and official approval (& publication) is expected in May 2007.

Construction of PA management/ranger office: Construction is underway. The ranger station is being built on land owned by the Cooperativa Carlos Diaz Cajina with whom we have signed an initial 10-year agreement relating to its use.

Management Entity legally formed: Under Nicaraguan law, MARENA has to offer the Reserve for co-management and endorse a new co-management entity, following an open and transparent selection procedure. In the conception of this project it was initially envisaged that a new management entity for the reserve would need to be legally created. However, following discussions with the project steering committee and local actors, two existing entities have offered themselves as co-managers; the Municipality of Altagracia, and a local NGO, Fundacion Ometepe. While the Alcaldia are expected to win the seat and have the endorsement of the steering committee, no decision has yet been announced. We have held a number of meetings with MARENA and lawyers in order to assist this process, which should have been finalised in January 2007.

Ecotourism strategy plan: The formulation of a Tourism Plan for the Reserve is underway. Outputs of this process include a situation analysis, the design of new and alternative products and routes for tourism in Maderas, as well as an evaluation of an entrance fee system for Maderas. As part of this process we are participating in a wider tourism initiative for the whole island of Ometepe, in collaboration with CITOMETEPE (Inter-municipal Commission for Tourism), DED (German Agency for Technical and Social Cooperation) and PEMCE (DfID Micro-enterprise Programme).

Other: This Darwin funded project has enabled us to strengthen the overall project on Ometepe and leverage a further USD \$165,305 for complementary project activities.

3.2 Progress towards Project Outputs

Overall execution of the project, and achievement of outputs and general indicators, are on track at the end of Year 1. The changes in Nicaragua's political framework (outlined above) are the main reason for delays in delivery of certain outputs (including the management plan and co-management entity for the Reserve) and FFI is putting pressure where possible within the government to expedite these processes. Meanwhile the project is proceeding with implementing management activities even though the plan and the co-management structure is not yet official.

3.3 Standard Output Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year Total	1	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
6A	6 training workshops for park rangers and other stakeholders in protected areas management, biodiversity and the legal environmental framework.	27 participants					27
6B	As above	3 weeks					3
7	Ranger Training Manual is in preparation.	0					0
8	UK project staff time	4 weeks					4
9	Management/action plan published	0 (delay to 2007/08)					0
New Project specific measures	- Land use and zonification maps	4					4
15B	Local press release	1					1

Table 2 Publications

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	(if applicable)
Management Plan & Maps	Completed but not yet published			
News article	t.b.c	t.b.c	t.b.c.	
Birdlist	Completed but not yet published			

3.4 Progress towards the project purpose and outcomes

Project is progressing well towards achieving its general purpose and outcomes, assisted by additional project co-financing leveraged.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

We believe we are making a highly significant positive impact on conservation of biodiversity in the island of Ometepe. Nevertheless, for long term sustainability continuation funding needs to be secured. Although the Maderas Natural Reserve contains the most important biodiversity and the best conserved habitats on the island, it is of great importance for the sustainability and long term vision of work to have a broader scope of work in Ometepe, to include the whole island as a more integrated ecosystem approach. Outcomes and activities need to further be geared towards sustainable use of natural resources and organic agriculture in the island, in order to have more integrated and greater long-term impacts on biodiversity conservation. Sustainable tourism is a major focus for the next phase for Ometepe and this project is providing us with the opportunity to ensure that tourism is introduced in the most economically and environmentally sustainable way possible.

4. Monitoring, evaluation and lessons

The project is under continuous supervision and follow up by FFI's Nicaragua Programme Coordinator, as well as by FFI Americas Project Manager in Cambridge, to ensure that activities and outputs are contributing to the achievement of the project goal.

5. Actions taken in response to previous reviews (if applicable)

Not applicable.

6. Other comments on progress not covered elsewhere

The main risk to the project is securing active engagement within all sectors of MARENA. Without their official endorsement of key project outputs and products, the project would suffer.

7. Sustainability

Project sustainability is being sought through the preparation of new project proposals, where we plan to engage local partners in the direct execution of the new projects.

The sustainability of the management of the protected area is key, and this is why we will concentrate this following year on the development of the financial mechanisms to secure on-going funds for the management of the reserve.

8. Dissemination

Dissemination activities have not been a target this year, but will be during the second year, once the impacts and changes brought by the project become more evident. By August 2007, the Maderas Volcano will have improved infrastructure, improved trails, increased visitation rates and improved management conducted by local stakeholders. We believe our outcomes and successes will be important to share with other protected areas in the country and with other local communities and NGO's working in the same field.

9. Project Expenditure

Table 3 Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

Item	Budget	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries: Evan Bowen-Jones – FFI Regional Director (& Livelihoods specialist in place of E Caddy whilst on sabattical) Alison Gunn – FFI Project Leader Emma Caddy - FFI Sustainable Livelihoods Coordinator Berry Mulligan – FFI Finance Officer Teresa Zuniga – FFI Nicaragua Coordinator			

Salvadora Morales – Biodiversity Coordinator & PA Specialist PA Finance Specialist Bosco Castillo – Reserve Manager Park Rangers & Community Coordinators (N Zambrana, A Morales, O Otero, L Hernandez) Ranger Training Consultancy (Guillermo Rodríguez, Amigos de la Tierra) Aracelly Umana – Project Admin Officer Environmental Lawyer (Marianela Rocha) Tourism Consultant (Ana Evelyn Orozco) Civil Engineer (Silvio Humberto Chavez)			
TOTAL			

** These figures are relative to original budget and grant agreement, whereas expenditure reflects agreed reallocations (ref. emails of 1st March 2007)*

10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

We expect to be able to report more outstanding achievements next year!

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2006/07

Project summary	Measurable Indicators	Progress and Achievements April 2006 - March 2007	Actions required/planned for next period
<p><i>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>			<p><i>(do not fill not applicable)</i></p>
<p>Purpose</p> <p>Natural resources and biodiversity of Ometepe protected, through strengthened local management capacity for the implementation of the Maderas Volcano Natural Reserve management plan</p>	<p>Approved management plan implemented by co-managers and supported by stakeholders.</p> <p>Effective co-management of the reserve is being implemented.</p> <p>High priority areas of biodiversity are protected.</p> <p>Environmental degradation in and around Maderas NR is reduced.</p>	<p>Management plan is not yet officialized. However management activities are taking place through the staff hired, and in coordination with local stakeholders.</p> <p>Co-management legal process has started, and although the Ministry of environment has not signed the agreement yet, a co-management entity is being formed informally.</p>	<p>To get the management plan legally officialized, and to get official support from MARENA.</p> <p>To get the co-management agreement signed and going.</p> <p>To get more effective protection in effect, and to see reduction in forest and resources degradation.</p>
<p>Output 1.</p>	<p>Species and habitat conservation</p>	<p>This output is delayed as the monitoring programme only began in</p>	

Priority areas / species identified from baseline biodiversity and sociological data	and action plans published by end Yr 1 and applied in field Yr 2	earnest in December 2006. The species action plans will be produced in June/July 2007, following a series of mini scientific expeditions to more inaccessible areas of the volcano.
Output 2. Legal analysis of land rights and regulations for Maderas NR and buffer zone.	Current land ownership rights, and applicable laws/regulations, clarified to stakeholders.	This process is underway and will be completed in June 2007. The main product will be an inventory of properties within the Maderas Volcano and its buffer zone, all the way to the Istian Isthmus. This is a priority to establish incentive mechanisms to private landowners, whether they are inside the area's boundaries or in the buffer zone.
Output 3. Implementation of officially approved management plan.	Approved management plan being implemented by co-management entity	This has been delayed as an official process, due to changes in government authorities after elections last November. The new government authorities are taking some time to settle, but we are hoping to have the plan being implemented by the selected co-management entity by the end of the year 2007.
Output 4. Ecotourism strategy plan, with criteria for services, agreed upon	Ecotourism plans approved and enacted by INTUR	This is being carried out at present time, via a consultancy, in coordination with other agencies, the Ministry of Tourism and the Ministry of Environment. The output will be a tourism plan for the protected area, rather than an "ecotourism strategy" - we are participating in a wider initiative to develop a tourism strategy for the whole island of Ometepe. This is a more expensive process and will take more time, nevertheless the tourism plan for Maderas will be an important component of this.
Output 5. Improved infrastructure for Maderas NR	Guard posts, management office and field station built. Tourists have basic facilities. Rangers have better means of patrolling	The principal park ranger station will be finished in May 2007. The station consists of an office, a park rangers boarding room and kitchen, and a reception hut for visitors. This is being built at the place where most visitors have access to the reserve and the most often used trail to go up the volcano begins.

Output 6. Effective awareness materials produced for key target groups	Interpretational trails in place. Tourists, managers, locals able to acquire materials from key points	Two major trails are being improved (one is 6km long, the other 2km long), which will be equipped with appropriate interpretative signs and access facilities whilst climbing the volcano. They are going to be finished by July 2007.
Output 7. Sustainable finance mechanisms identified and implemented.	Entrance tariff system in place and generating income	This is going to be carried out in the second year of the project, approx in August 2007.

Annex 2 Project's full current logframe

The project's logframe has not changed.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of benefits arising out of the utilisation of genetic resources 			
<p>Purpose</p>			
<p>Natural resources and biodiversity of Ometepe protected, through strengthened local management capacity for the implementation of the Maderas Volcano Natural Reserve management plan.</p>	<p>Approved management plan implemented by co-managers and supported by stakeholders.</p> <p>Effective co-management of the reserve is being implemented.</p> <p>High priority areas of biodiversity are protected.</p> <p>Environmental degradation in and around Maderas NR is reduced.</p>	<p>Co-management structure in place.</p> <p>Progress reports by managers and guards.</p> <p>Biodiversity/sociological assessments.</p> <p>Improved infrastructure.</p>	<p>MARENA is supportive of the initiative.</p> <p>Local stakeholders support and attend workshops and training and remain committed to the project.</p>
<p>Outputs</p>			
<p>Priority areas / species identified from baseline</p>	<p>Species and habitat conservation and action plans published by end Yr 1 and</p>	<p>Baseline data and GIS maps published.</p>	<p>Partner organisations willing to cooperate and share information</p>

biodiversity and sociological data.	applied in field Yr 2	Species and habitat plans at MARENA and in use by co-management entity.	
Legal analysis of land rights and regulations for Maderas NR and buffer zone.	Current land ownership rights, and applicable laws/regulations, clarified to stakeholders.	Legal agreements; signed MoUs; Analysis report.	Stakeholders can reach consensus on potentially contentious issues.
Implementation of officially approved management plan.	Approved management plan being implemented by co-management entity.	Approved plan published. Progress reports from co-managers.	Co-managers and stakeholders able to co-operate effectively.
Ecotourism strategy plan, with criteria for services, agreed upon.	Ecotourism plans approved and enacted by INTUR (Nic. Tourism Institute). Set of criteria written into tourism plans.	Web-site (MARENA/ INTUR). Promotional materials at tourist offices, hotels, airports, schools & cooperatives.	INTUR accepts ecotourism as positive option on Ometepe
Improved infrastructure for Maderas NR	Guard posts, management office and field station built. Tourists have basic facilities. Rangers have better means of patrolling the NR.	Photos of outposts, office, field station, and tourist facilities. Reports from ranger patrols.	Recommendations of Environmental Impact Assessments for infrastructure construction.
Effective awareness materials produced for key target groups.	Interpretational trails in place. Tourists, managers, locals able to acquire materials from key points.	Copies of all awareness materials and photos sent to Darwin.	Awareness materials are appropriately targeted towards target audiences.
Sustainable finance mechanisms identified and implemented.	Entrance tariff system in place and generating income.	Tariff system covers portion of park costs and salaries; Co-management reports outline other sustainable fundraising strategies.	Tourists willing to pay fee system. Additional mechanisms can be agreed by all stakeholders

