Darwin Initiative for the Survival of Species

Final Report on

Community Conservation and Sustainable Development in the Awacachi Corridor, NW Ecuador

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FFI and Fundación Sirua

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DARWIN INITIATIVE – FINAL REPORT

1. Darwin Project Information

Project Reference No.	162/13/005
Project title	Community Conservation and Sustainable Development in the Awacachi Corridor, NW Ecuador
Country	Ecuador
UK Contractor	Fauna & Flora International (FFI)
Partner Organisation (s)	Fundación Sirua (FS)
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Project website	www.sirua.org
Author(s), date	Julio Bernal (FFI) and Fernando Echeverria (FS), 3 July, 2007

2. Project Background/Rationale

- Describe the location and circumstances of the project

The Awacachi Corridor (AC) is located in Northwestern Ecuador, Esmeraldas Province and is part of the Chocó bioregion. The Northwest Ecuador Chocó bioregion runs north from Esmeraldas into southern Colombia. It encompasses primary western Ecuador moist (tropical) forest, listed as a critically threatened ecoregion by WWF, and as one of the highest conservation priorities both globally and within Latin America by Conservation International (the Tumbes-Chocó-Magdalena hotspot) due to its high species diversity and bird and plant endemism. The AC itself has been singled out in the European Union's Ecuador Country Strategy as a site of importance due to the high number of unique plants it contains, and is classified as an Important Bird Area by Birdlife International. However, since the 1970's commercial interests and unsustainable development have -- and still continue-- to threaten the area. Fuelled by a chain of oil, agricultural, construction and logging booms, the Chocó forest now provides more than 60% of Ecuador's timber and plywood. Indeed, as a result over 90% of Chocó forest in Ecuador has been lost to agriculture alone. Within the last five years and in the project area, the vast majority of forest outside the existing protected areas and within 60km of the coast has been lost as improved infrastructure opened the region up to a relentless onslaught of oil palm companies working hand-in-hand with loggers to overcome legislation protecting primary forest. This resulted in land disputes, aggressive colonization, and the rapid, often illegal, deforestation of over 300,000 hectares of primary forest.

Since 1999, the Americas Programme of Fauna & Flora International (FFI) has been working in collaboration with NGOs and government institutions to protect the last remnant of the Chocó region in the Northwestern Ecuador. Specifically, FFI and Ecuadorian partner Fundación Sirua (FS)—previously known as Fundacion Awacachi, have been working to establish a functional biological corridor linking two key protected areas in the region.

- What was the problem that the project aimed to address?

Between 1999 and 2004, FS, with the support of FFI and other international partners, purchased roughly 12,000 hectares of forested land, which permitted the creation of a biological corridor (known as the Awacachi Corridor) between the Awa Indigenous Reserve and the Cotacachi-Cayapas Ecological Reserve. Combined, this total area represents a conservation unit of over 250,000 hectares. However, despite this advance, the region as a whole and the AC itself continued to suffer from deforestation as the principal threat to its biodiversity. High deforestation,

hence poor forest management, was caused by aggressive and sporadic colonization as the agricultural frontier expanded, in turn driven by large extractive industries, poverty, land scarcity, and population growth. The Ecuadorian portion of the Chocó was most acutely threatened, with only 2% of the original lowland forest remaining. By the beginning of the Darwin project, the NW portion of Ecuador had one of the highest deforestation rates in the world.

In addition, before and at the onset of the Darwin project, the largest monoculture in Esmeraldas Province was the unsustainable production of oil palm, which was negatively affecting habitats and species. Oil palm and other unsustainable industries became a threat in the late 1990's when a road was opened up in a previously relatively remote area. The industries attracted outside capital (foreign and domestic) and displaced Afro Ecuadorian and indigenous populations from their traditional areas, forcing them to move to towns and cities or occupy protected areas. This was the case in and around our Darwin project area where new settlements were established in the Awá Ethnic Reserve and in and around the area that became the AC. The effects included overexploitation of land from inappropriate land tenure and illegal logging, ecosystem fragmentation, and displacement causing serious conflict over land issues.

Therefore, this Darwin project was designed to help FS:

- develop and implement environmentally friendly income generation activities with the communities located in the buffer zone of the AC aiming to offer income options different than logging and oil palm, preventing the current degrading activities,
- design a participatory management plan with the communities, and
- formulate a consensus over an action plan between the management bodies for the Cotacachi Cayapas Ecological Reserve, Awa Indigenous Reserve and AC to protect the total conservation unit.

- <u>Who identified the need for this project and what evidence is there for a demand for this work and a commitment from the local partner?</u>

The need for the protection of this area was flagged up by a local Ecuadorian grassroots NGO (this NGO no longer exists) that in 1999 requested FFI's support in combating increasing deforestation in northwest Esmeraldas province. After a scoping mission to confirm the area's conservation importance and the level of threats, FFI and its local partners worked to physically establish a strategic biological corridor connecting the region's two largest reserves.

In 2003 FFI supported the creation of the Ecuadorian NGO Fundación Awacachi (name changed in 2004 to Fundación Sirua) to manage and be the legal custodian of the AC, having as a mission "…*the establishment of the Awacachi Corridor as a model of conservation and sustainable management, with inter-institutional cooperation and coordination and the direct participation of local communities through their training, strengthening and sustainable development*." Since then FFI has been technically and financially supporting FS in the implementation of activities in and around the AC to conserve this key area's biodiversity. Indeed, the conservation of the Awacachi Corridor is one of the FFI Americas Region's largest and most ambitious programmes. There is a Memorandum of Understanding over the long-term relationship between FFI and FS.

Demand and commitment for the Darwin project from the local national partner was developed more robustly once the constitution of Fundación Sirua was drawn up. A subsequent needs analysis highlighted alternative community income generation and the development of a managmenet plan as key milestones. A Memorandum of Understanding was drawn up between FFI and FS specifically for the Darwin project stipulating roles and responsibilities for the management and implementation of the project.

As part of FFI's modus operandi, the UK Ecuador Projects Manager has been assigned the specific task of supporting staff in FS and therefore this individual has had daily communication with FS and made trips to Ecuador for project(s) review, needs analysis, and training. Lastly, FFI sits on FS's Board of Directors, and therefore was able to confirm that commitment to the Darwin

project was secured from the beginning and was run as one discrete project within the wider Awacachi Programme of activities.

3. Project Summary

- What were the purpose and objectives (or outputs) of the project? Please include the project logical framework as an appendix if this formed part of the original project proposal/schedule and report against it. If the log frame has been changed in the meantime, please indicate against which version you are reporting and include it with your report.

See appendix IV for the full Logical framework

The project purpose was to secure the biodiversity of the Awacachi Corridor through enhanced local conservation capacity and completion of a participatory management plan for focusing on innovative community income generation projects using non-timber forest products (NTFPs)

Project objectives/ outputs:

1. Professional operational arm of Fundación Sirua functioning effectively through capacity building and institutional strengthening
2. Management plan developed and being implemented in key areas within the corridor
3. Biological monitoring system for the Awacachi Corridor established and functioning
4. Butterfly farming/ranching facility established and generating income
5. Alternative income generation projects established and yielding income in 2 communities

- Were the original objectives or operational plan modified during the project period? If significant changes were made, for what reason, and when were they approved by the Darwin Secretariat?

The original objectives were not modified as such during the Darwin project, however the more detailed operational plan was adaptively managed, hence, on several occasions mechanisms by which to deliver outputs were amended in order to meet unforeseen challenges to the project. These amendments were deemed as insignificant and therefore were not sought for approval by the Darwin Secretariat.

- Which of the Articles under the Convention on Biological Diversity (CBD) best describe the project? Summaries of the most relevant Articles to Darwin Projects are presented in Appendix I.

The project has directly assisted Ecuador in implementing the following articles of the CBD: **Article 6:** General Measures for Conservation & Sustainable use; **Article 7:** Identification and Monitoring; **Article 8** *In-situ* Conservation; **Article 10**. Sustainable Use of Components of Biological Diversity; **Article 12** Research and Training; and **Article 18**: Technical & Scientific Cooperation.

In addition to the articles that the Darwin project intended to address, two more can be added: **Article 13** Public Education and Awareness; and **Article 17** Exchange of Information.

- Briefly discuss how successful the project was in terms of meeting its objectives. What objectives were not or only partly achieved, and have there been significant additional accomplishments?

The project largely met its objectives, however some components of them need further time or refinement due to delays or circumstances out of the project's control. In all cases, there are plans in place to fully achieve the 'largely' or 'partially' met objectives, however they will be achieved beyond the life the Darwin project itself, which closed end of March 2007.

Objectives fully met:

1. Professional operational arm of Fundación Sirua functioning effectively through capacity building and institutional strengthening

This objective has not only been achieved to the level desired by the project, but surpassed it. Briefly, FS has evolved from being a small, largely non-functional NGO to a recognised major player the NW of Ecuador with skilled staffing, proven fundraising skills, and proven networking capabilities. More details are presented in Project Impacts and Outputs sections.

Objectives largely met:

2. Management plan developed and being implemented in key areas within the corridor.

A management plan has been developed and is fully implemented in the key areas in the corridor, but not in its buffer zone. The development of the *participatory* management plan was delayed due to external conflicts affecting the AC and its communities that are located in the AC buffer zone. The most significant were; (1) Plan Colombia, which resulted in an influx of immigrants from Colombia to the Esmeraldas Province, creating land conflict issues and further exploitation of forests and resources; (2) as forests were becoming more protected, legal and illegal loggers were using communities as intermediaries to cut down forest for timber promising them lucrative, fast financial returns; and (3) land traffickers promoting land invasions and squatting to exploit and sell the resources on the land.

These occurrences represented a challenge to the project in that they destabilised previous community commitment (agreements) for a management plan for the AC. FS mitigated the conflicts by increasing its informal meetings and formal consultations with the communities surrounding the AC reinforcing friendly ties and trust and the need for alternative income generation as a viable solution to destructive forest practices. The more intense meetings and consultations took place end of 2004/ beginning of 2005 and continued throughout the year. As a result, communities had to recommit themselves to participating in the development of the management plan. Whilst the meetings and consultations were taking place, a contingency strategy emerged focussing on three main courses of action:

- In order to not lose more time, during the consultation process, a management plan was drafted by FS for the *core* AC, which was then presented to interested communities and discussed with some amendments made.
- The management plan for the core AC was implemented dealing largely with ranger patrolling / surveillance and monitoring of biodiversity
- Work with alternative income generation was increased with the intent to demonstrate to communities that not only does the alternative land use protect the land but it also generates income. As communities started to see the benefits of the alternative income generation, they were 'gently' re-engaged over the development and implementation of a management plan for the buffer areas.

Effectively, this means that an adaptive management plan has been produced with an action plan for the consolidation of the AC. However, at this stage it is not as participatory as originally intended, nor has it been fully implemented as it can only be applied to the core AC and not the surrounding buffer zones. It is important to note though that as communities, through continued informal meetings and formal consultations, renew their commitment to a management plan, the management and action plan for the buffer zones will ensue. Both FFI and FS view the setback as non-ideal, but are in keeping with an adaptive management style approach that works realistically with current changes in context whilst keeping the overall goal of the conservation of the AC.

3. Biological monitoring system for the Awacachi Corridor established and functioning

All the outputs of this objective have been carried out including ranger training, the development of a biological monitoring plan, and various keys and manuals produced. Rangers have been carrying out monitoring in the AC but after extra training and reinforcement and the evaluation of their performance, it was concluded that their capabilities are only enough for basic monitoring and are not enough to carry out some of the more detailed monitoring required in the programme. Indeed, the illiteracy amongst the rangers was worse than anticipated and therefore several of them had problems recording field data, hence formats had to be experimented with quite a bit.

To compliment the basic monitoring of the rangers, a plan was developed which will use biologists from the local universities who need to do theses and are looking to fill research needs with local groups. This will enable studies on specific species of plants and animals to be carried out that will compliment the information that the rangers gather. Preliminary discussions have already taken place with Catolica University in Quito. We expect that this initiative can start by the end of 2007.

Objectives partially met:

4. Butterfly farming/ranching facility established and generating income

The butterfly farm (plant nursery and breeding facility) was established and all training for staff was completed. However, it has only been operational for 6 months and hence, an accurate assessment of its income generating value has not yet been possible. Delays were encountered throughout the life of the project such as in the construction of the infrastructure, the need to submit more documents and permits including the development of a management plan for the breeding facility and the fact that the Morpho butterfly is not is not present in the Ecuadorian Chocó all year round (in contrast to the Central American variety). After further bureaucratic delays with the Ministry of Environment, permits were finally issued September 2006 and up until the close of the Darwin project, the remaining time was spent on collecting and breeding butterfly varieties for later sales but also for continued training.

5. Alternative income generation projects established and yielding income in two communities

Native cacao and native bamboo income generating projects were established encompassing two communities, Durango and San Francisco. Training, feasibility studies and marketing studies were completed as planned. In San Francisco, the first yield for cacao was at the end of 2006 but as expected from first year yields, the production was low and was mainly used for self-consumption. The next yield is due mid 2007 and is expected to be higher with some commercialisation possible. The cacao plantation in Durango was established last and as such has not yet produced its first yield. It is developing according to schedule.

The native bamboo plantations in Durango and San Francisco are still in a process of implementation and the first yield is expected by the beginning of 2008 with some commercialisation possible. Some delays were encountered when the seedlings were not growing according to technical recommendations and literature, However the situation has now been remedied by use of different growing methods.

In both cases and communities, extra time and effort was needed to complete income generation activities due to security and confidence issues arising from increased colonization, illegal logging and land trafficking. As previously stated, FS had to focus on clarifying misconceptions in the communities about logging and resource exploitation. This was largely resolved with San Francisco, however Durango took more time to negotiate with.

Chicken and swine production were also established at the specific request of the communities for rapid food and, to a degree, for some income. Although these are not considered alternative income generation schemes, they are addressed here. However, these schemes proved futile as in all cases the recommendations for rearing chickens and swine were not adhered to, despite expert advice and visits every week. They did, however, give the participating families food. Community members decided not to pursue further the farming of chickens and swine much to the dismay of FS.

4. Scientific, Training, and Technical Assessment

- Please provide a full account of the project's research, training, and/or technical work.
- **Research** - this should include details of staff, methodology, findings and the extent to which research findings have been subject to peer review.

Research studies carried out:

- Rapid Biological Assessment,
- Feasibility studies on the following alternative income generating activities: butterfly farming, native cacao and native bamboo, and
- Market study on native cacao.

RAPID BIOLOGICAL ASSESSMENT

The biological work at the AC was carried out by five biologists employed by the Ecuadorian Museum of Natural History (MECN) with specialities in botany, avifauna, mammals, herpetofauna and macrobenthos. FS's staff supported the implementation of this work logistically. During the fieldwork rangers from FS collaborated as field assistants receiving on the job training in biological sampling, data recoding, and species identification. Sampling methods were proposed by the MECN team and discussed with the FFI Americas Projects Manager and FS's staff. Due to budget limitations, it was decided to limit the work to three strategic areas within the corridor. Those studies provided important information regarding censuses, important species for conservation, a general overview of the natural resources of the corridor and identified important areas to concentrate monitoring efforts. Since the beginning of the work, it was clear that the information gathered was going to provide valuable information to base future studies on. In short, methodology was as follows:

- *Botany:* 10 linear transects of 100m each, randomly collecting samples along and around the transect;
- *Mammals*: linear transects of 1.5 km long, direct and indirect observations of megamammals, mist nests for flying mammals and live traps (Sherman and Tomahawk);
- *Avifauna:* linear transects of 1.2 km surveyed by direct observation and sign recognition using the MTW methodology;
- *Herpetofauna:* Direct observations and captures along linear transects of 100m x 4m. Additional random surveys (sightings and captures) carried out in specific habitats such as ponds, wetlands, epiphytic plants etc.

- *Macrobenthos:* Sampling of aquatic organisms using appropriate methods according to the characteristics of the water body.

FEASIBILITY STUDIES ON ALTERNATIVE INCOME GENERATING ACTIVITIES

Specialists carried out feasibility and market studies for native cacao, butterfly farming and native bamboo in the area.

In the case of native bamboo, a consultant was contracted from the regional office of the International Network for Bamboo and Ratan (INBAR). Methodology included collation of secondary information, gathering social and economic information in the field and researching existing markets. Methodologies were given for the establishment of bamboo plantations, propagation, management and harvesting. Economic analyses of the exploitation of this resource were presented. Finally, conclusions and recommendations were made regarding both markets for commercialization, as well as for the establishment of new plantations and sustainable use of native bamboo in the project area.

Regarding butterfly farming, a UK expert in butterfly farming was contracted to carry out the feasibility and cost benefits analysis for establishing a butterfly farm operation in the AC. Information provided consisted of analysis of the area, initial consideration on setting up a butterfly farm, constraints, detailed information of the butterfly operation and infrastructure construction, species to breed, importance of botanical collections for operations and an analysis of costs and returns.

In the case of native cacao, two feasibility studies were undertaken. The first study was carried out by an Ecuadorian agronomist with experience in cacao plantations in the region. Information provided in the study included among other topics cacao varieties, propagation, cultivars associated to cacao, diseases and pest control, organic fertilization, profit in one hectare of cacao national variety, and cacao production costs. The second study encompassed a detailed market study in the Northern part of the Esmeraldas Province carried out by an economist with much experience in exports. Information provided consisted of characterisation of the Esmeraldas Province (population, main economic activities, promising economic activities), current situation of cacao cultivation, cacao varieties and reasons to chose one over another, factors affecting production, current cacao offer, distribution and commercialization channels, exports, future trends, demand from US and European markets, cost analyses, recommendations about cultivation, types of end products, and derivate alternatives. Finally, a complete set of annexes was provided including technical quality norms for cacao, documentation necessary to export cacao, the requirements to access American and European markets and comprehensive lists on Ecuadorian cacao exporters and commercial contacts in the US and Europe.

- **Training and capacity building activities** – this should include information on selection criteria, content, assessment and accreditation.

Professionals carried out a number of training elements described below but not in association with an educational institution; therefore, none of the training activities except one were accredited.

Awacachi Foundation staff received training in NGO management (fundraising, strategy development, communications, administration) and technical subjects

Training was on-going throughout the Darwin project and was delivered through different means such as workshops, attendance at conservation-related conferences, specialist training in specific topics, and FFI day to day support in the activities.

The FFI Americas Projects Manager and Americas Regional Director ran two workshops on how to develop institutional strategies. FFI used its internal approach to develop strategies

and contents included: basic concepts and rational of the process, methodology, importance of SWOT analysis and methodology; action plan etc. The results were two draft strategies for fundraising and communications. The latter one is currently being finalised.

The FFI Americas Projects Manager constantly provided training and day to day support on institutional analysis, fundraising and donor relationships, proposal writing (audiences, kind of donors, messages, language, indicators, Log Frames, project cycle), donor reporting, accounting systems (cashbooks, bankbooks, donor reporting, financial tracking), administration procedures (templates, reporting, team roles); people management and communication dynamics. Additional to these activities, FFI's Projects Manager delivered training sessions to all field staff in biological monitoring.

FS's team has attended specialised courses on Ecuadorian Taxation Law (accountant and administrative staff); Ecuadorian Social Security Rules (accountant, administrative assistants, and coordinator); and GIS. (all FS staff except accountant and administrative assistants);

FS's field team attended various training sessions run by experts in topics such as conflict management, income production alternatives, biological monitoring, tourist guidance and health and safety in the field.

The field biologist attended a workshop related with butterfly production in the Ecuadorian Amazon. This workshop was organized by the Gaia Foundation.

FS's coordinator attended to a refresher course related with Administrative and Constitution **accredited by Católica University in Quito**. This course offered legal resources to counteract treats from illegal mining and deleterious consequences of indiscriminate monocultures and their negative impacts in the environment.

Community members trained in butterfly farming/ranching operations and business planning

Training was provided through workshops, exchange visits and on the job training. The main beneficiaries of this training were FS staff (Operations Director, Field Coordinator, 7 rangers, 4 community promoters and programme assistant) and 14 community members. Community participants were chosen based on their interest on this activity and demonstrated ability to take on board and apply technical recommendations.

Training was given to FS field staff by a UK consultant (highly experienced in butterfly breeding) in butterfly farming procedures and management of the breeding facility. This consultant also responsible for the construction of the butterfly farm infrastructure, which provided practical training to FS's staff and to 14 community members. Special emphasis was on the rationale of enclosure shape, materials, location and distribution.

Two exchange visits were carried out to a fully functioning butterfly farm in Belize by FS's Director of Operations and the biologist in charge of the breeding facility. The visits served as further training from the UK consultant and to learn from the facility in Belize. A key feature of the butterfly farm in Belize is that the operations in the facility are run in conjunction with community members.

Three workshops were delivered to community members and FS's staff. Community members were chosen on the basis that they would be directly working with the farm and/or promoting it.

- The first workshop was delivered by an Ecuadorian biologist with experience in invertebrates and butterfly farming. His main purpose was to sensitise the community to the importance of conservation of biodiversity and the establishment of a butterfly

farm. This workshop was attended by a total of 25 community members, 2 teachers from San Lorenzo, and two members of the Environmental Department of the San Lorenzo municipality.

- The second workshop was run by the biologist in charge of the breeding facility and his workshop covered biological cycle of the butterflies, feeding in captivity, reproduction and handling of pupae. This workshop was attended by 10 community members , two teachers form san Lorenzo Municipality and FS's field team.

- The third workshop was delivered by a botanist experienced in the selection of host plants for butterfly farming. His workshop covered the identification of host plants, propagation, and field collection of seedlings. His workshop also included the actual establishment of the seedling nursery, to provide host plants for the butterfly farm and establishment of host plants within the enclosures. FS's field team and five community members currently involved with the breeding facility attended this workshop.

  In addition to lectures during the workshop, the botanist had practical training exercises in the identification of host plants particularly of the *Inga* genus, collection of seedlings from the field, accustomisation of seedlings to nursery conditions, establishment of nursery, and pest control.

Evaluations after each workshop and training were carried out with extremely positive results for all of them. The majority of participants for each workshop/training found that their understanding of issues and confidence in discussing them was significantly increased.

Community members trained for alternative livelihood projects

Community members received training in native cacao and native bamboo, as well as chicken farming, and swine production. These members were chosen on the basis that they had sold land to FS for incorporation into the biological corridor and that they were interested in piloting alternative livelihoods projects.

Native Cacao: As part of the institutional strengthening of FS and following a recommendation of collaboration made in the feasibility study, a cooperation agreement was signed by FS with APROCANE (Community Growers of Cacao in the Noth of Esmeraldas). Training was delivered by them through five workshops and covered the following topics: implementation of nurseries, pruning techniques, organic control of pest and diseases, organic agriculture, fertilization and use of bio fertilizers. 70 community members, FS's filed team benefited form these activities.

One of FS's community promoters received an intensive training in all the phases of the cacao culture during one week in the community of Maldonado. This community possesses successful low scale community cacao production. After the training, this promoter was in charge of offering quick support to community members engaged in the cacao programme, increasing the technical support offered by FS.

Two exchange visits were carried out between Belize and Ecuador (one in each way) taking advantage of the cacao production activities of a local Mayan NGO supported by FFI in Belize. The project in Belize is an example of a successful community run organic cacao production with community members benefiting from increased income. However, the plantations were currently starting to suffer from disease. Conversely, the cacao project in Ecuador was at early stages of implementation but it had good experience of organic pest and disease control. Therefore, in the first exchange visit the Operational Director of FS (agronomist by profession) offered training in Belize about pest and disease control whist gaining understanding of community production. In the second one the community leader in charge of

cacao activities in Belize offered training in organic production and community management in Ecuador whilst receiving field experience in pest and disease control.

Finally, FS staff and community members visited other community run cacao plantations in Maldonado in the Esmeraldas Province to gain experience in community management of cacao plantations.

Native bamboo: Following the feasibility and market study carried out by INBAR an agreement was set between FS and INBAR where INBAR committed themselves to provide training and support to the implementation of any activity related with Bamboo in the Canton San Lorenzo. Two workshops were delivered by INBAR: "Guadua: plantations and uses" and "Guadua cultivation techniques" (guadua is the native bamboo). The workshops were attended by 40 community members and FS staff. Four local exchange visits from communities located in the buffer zone to other experiences in Esmeraldas Province was made.

Moreover, a regional workshop on incentives for the cultivation of native bamboo was carried out in San Lorenzo with the support of INBAR with the attendance of general public, community representatives and government staff (53 attendees).

Chicken farming and swine production: Training was delivered by an Ecuadorian zoo technician with extensive experience in these two activities. Sixteen community members were trained for chicken farming; 30 were trained for swine production. Additionally, FS's field team benefited from both training groups. Participants were selected from families that sold land for the establishment of the corridor. Training was delivered during 2004. Topics covered included infrastructure construction, feeding requirements, and diseases control. The initial training was reinforced during the life span of the activities by frequent visits to the families by Manuel Valencia, programme assistant and technician of FS, with experience in poultry and swine production. He monitored progress and offered technical support and advice as necessary. Even though Mr Valencia had the experience to deliver the training, it was decided to contract the zoo-technician because communities at that time valued more external training than in-house training.

5. Project Impacts

- What evidence is there that project achievements have led to the accomplishment of the project purpose? Has achievement of objectives/outputs resulted in other, unexpected impacts?

The project purpose can be divided into 3 distinct parts. Below is an account of the achievements that support the purpose, as well as the evidence for it.

1. Enhanced local conservation capacity

Achievements include FS undergoing signficant capacity building and institutional strengthening throughout the Darwin Project as exemplified by its improved institional structure, increased technical and administrative capabiltities, improved fundraising ability, increased networking, and its positive reputation both locally and nationally. These are described in more detail:

IMPROVED INSTITUTIONAL STRUCTURE

Prior to the Darwin project, FS's staff consisted of the Operations Director, one secretary, a Programme Assistant, 4 rangers, 1 ranger coordinator, and 3 community promoters. The Darwin project contributed towards salaries for FS Operations Director, Finance Manager, Programme Assistant, Secretary in Quito, all of whom directly benefited from administrative and technical training. The Darwin funds also helped leverage funds for the other positions presented in the organogram below. By the close of the Darwin project, enough funds had been secured to retain all the positions for atleast another year.

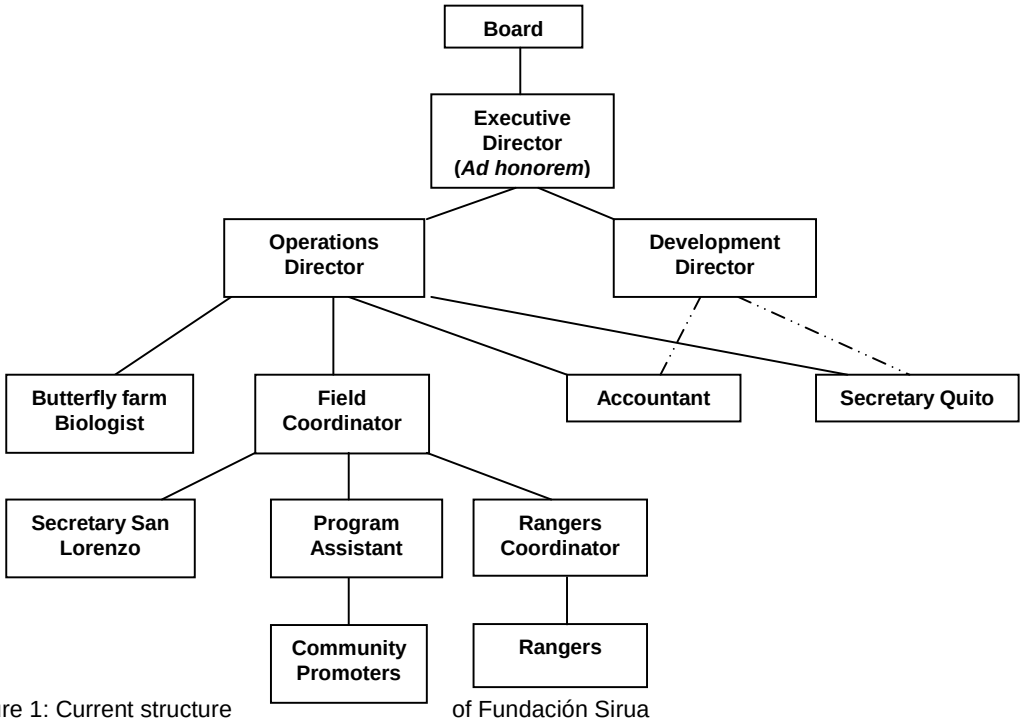

Figure 1: Current structure of Fundación Sirua

IMPROVED TECHNICAL AND ADMINISTRATIVE ABILITIES

Training workshops and capacity building for local NGO management was completed in full.

FS's administrative staff received training in taxation and NGO management including accounting systems, administrative procedures, and the more technical positions were trained in proposal writing and fundraising. The Field Coordinator received training in GIS and conflict management and has benefited from specific bamboo training. Rangers received training through workshops especially in: biological monitoring, patrolling, conflict management, production alternatives (butterfly farming, cacao and bamboo production), tourist guiding, and health and safety in the field. Biologists from the butterfly farm and Operations Director have benefited from inter institutional exchanges with FFI's partners and staff in Belize mainly regarding community relationships, organic cacao production/commercialization and community butterfly farming (for more details refer to section 4). All of these new skills directly benefit the protection of the AC it gives rangers and FS a biological baseline knowledge by which to take management decisions and actions, and it permits FS and field staff to know how to mitigate and negotiate conflicts with communities over land use, as well how to encourage and implement alternative income generation activities that do not destroy or degrade the AC.

Additionally, during FFI visits, technical staffs of FS have been receiving in-situ training through institutional reviews, donor visits, accounting training, strategy development and internal workshops. Also with the economic support of FFI it was possible to support the recruitment of a part time FS Development Director.

IMPROVED PROPOSAL WRITING

The relationship between FFI and FS to date has been excellent. FFI UK keeps constant contact with FS supporting them on a daily basis in order to improve their administrative capabilities and improve their NGO management. FFI Americas Projects Manager and FS Operations Director are in permanent communication in order to follow the activities of the entire Awacachi Program. This constant support encompasses general activities advice, accounts support, reporting, donor relationship, proposals writing amongst other activities. Due to this constant mentoring, FS has

been more and more able to carrying out fundraising by their own. Prove of this has been the approval of two significant grants: one submitted by FS to the Flemish Fund for Tropical Forest (approved 2006 for € 66,924) and other submitted by FS in conjunction with the Municipality and other NGOs to PRODERNA –EU funds- (approved 2006, €420,000 from which €130,000 will be executed by FS). In both of these proposals, FFI's input was kept to a minimum. The Flemish Fund supports ranger training and further training in conflict resolution, and the EU funds support reforestation of degraded lands and increased livelihood activities.

REPUTATION

During the course of the Darwin project, FS has evolved from being a small, new organization to being recongnised locally and nationally as one of the more serious ecuadorian NGOs working in the NW Ecuadorian area. This does not imply that FS does not require further support, rather, it means that during four years of existence FS has as a result of its hard work, been demostrating their seriousness and commitment to the conservation of the Awacachi Corridor and the surronding area, with the participation of local communities and institutions. In particular, it is noteable that the San Lorenzo municipality has been inviting FS to more of its meetings and recognising them as an ally for improving their environment. Moreover, other institutions in Ecuador have approached FS for collaboration and support:

- The Municipality of San Lorenzo has been frequently inviting FS to participate in meetings related with environmental issues in the area. Exists signed MoU between the Municipality and FS to support environmental conservation in the Canton as well as support for the activities of the Awacachi Corridor.
- Conservation International recommended FS to manage some RARE funds due to its commitment and work in the area of the corridor.
- The inclusion of FS in the Environment Campaign activities in San Lorenzo.
- The signature of an agreement between FS and APROCANE for native cacao training and for technical and marketing support.
- INBAR considers FS a strategic partner to develop activities related to native bamboo in the Province.
- GTZ has been in contact with FS to explore possible sources of collaboration.
- FS participated in a public tender in consortium with other NGO in order to develop the Management Plan of the Cotacachi Cayapas Ecological Reserve. FS's consortium got the highest score in the technical qualifications but unfortunately there was another consortium that could develop the Plan to a lower price, being the grantee of the contract,
- The invitation of WWF to be part of this working group to determine Critical Conservation Areas, offers the possibility of interacting with some of the private companies (palm and logging) in an impartial atmosphere, situation that normally would not be possible. This opportunity can be canalised towards agreements with these companies to respect and support conservation activities in the Corridor area.

Moreover, through its networking in the Canton- San Lorenzo Development Committee, FS has been able to become involved in the management planning process at the Cotacachi Cayapas Ecological Reserve (CCER), and has been able to raise and discuss thematic and common issues that need addressing at a more regional level. Through regional networking, FS has amassed more learning from others and gained insights into good practices and lessons learnt that can be applied to the protection of the AC. Moreover, by becoming involved in the management planning at the CCER, FS is able to contribute towards the protection of the total conservation unit, not just that of the AC.

2. Completion of a participatory management plan

The completion of the management plan for the core AC area has not been implemented for enough time to substantiate any direct impact on the protection of the AC.

3. Innovative community income generation projects using Non Timber Forest Products

The butterfly farm, native bamboo, and native cacao have been implemented in the two communities but none of the activities have been operational long enough to determine any impacts on the local biodiversity and for income generation.

However, the exchange visits by Durango and San Francisco communities proved very useful and motivational and resulted in other members of the communities voluntarily starting their own nurseries. These individuals only asked FS for help with supplying seedlings and giving some technical support.

- To what extent has the project achieved its purpose, i.e. how has it helped the host country to meet its obligations under the Biodiversity Convention (CBD), or what indication is there that it is likely to do so in the future? Information should be provided on plans, actions or policies by the host institution and government resulting directly from the project that building on new skills and research findings.

No plan, actions and policies directly involving *both* FS and the Ecuadorian government have been made to date, however it is very likely that this will happen in the future for the Chocó bioregion in NW Ecuador as government backing in terms of consistent law and enforcement is necessary for the protection of the AC, the greater conservation unit, and the wider Chocó area.

It is even plausible to believe that in the future there will be bilateral cooperation between Ecuador and Colombia to protect the Chocó bioregion as they share not only the natural resources and the priority status afforded to the biodiversity hotspot and ecoregion, but also similar threats. The countries would, therefore, need to cooperate in order to address the deforestation and root causes. Already there is much cooperation between the two as for example, there are institutions such as the EC, country embassies and several conservation agencies that have bilateral offices.

- Please complete the table in Appendix I to show the contribution made by different components of the project to the measures for biodiversity conservation defined in the CBD Articles.

See Appendix 1.

- If there were training or capacity building elements to the project, to what extent has this improved local capacity to further biodiversity work in the host country and what is the evidence for this? Where possible, please provide information on what each student / trainee is now doing (or what they expect to be doing in the longer term).

Please see our response to Section 5's first question where the local conservation capacity in terms of increased administrative and technical capability is described.

In terms of trainees, all staff in FS are still employed there, including rangers and are expected to want to stay in those positions for the foreseeable future. Community members are also still residing in their respective communities and the ones who received training in native cacao have also helped other community members grow native cacao. FS and FFI have not been involved in this training element.

- Discuss the impact of the project in terms of collaboration to date between UK and local

partner. What impact has the project made on local collaboration such as improved links between Governmental and civil society groups?

As described previously in other sections, FFI and FS have always had an extremely close and interlinked working relationship. The Darwin has served to forge this more closely in terms of what the combined efforts of UK and Ecuadorian expertise can achieve together. However, it has also demonstrated to FFI that FS is able to carry out more activities on their own and as such, the extent of the technical and financial requirements that they require from FFI are changing. Already FFI and FS have developed the next stage of action for their partnership and in order for FFI to further strengthen the work FS is doing in the Awacachi Corridor FFI is relocating the UK Darwin Project Manager to Ecuador and assigning him as the FFI Ecuador Country Programme Manager.

Indeed, the degree to which FS has been able to grow institutionally and technically reinforces FFI's philosophy of having long-term relationships with its local partners, ensuring that they are able to deliver and maintain conservation activities by their own. In order to ensure the latter FFI will continue supporting and strengthening FS beyond this Darwin funded project.

The project has had some direct impact on local collaboration between local government and FS. For example, the municipality of San Lorenzo have drawn up agreement with FS for collaboration on management planning, alternative income generation projects, and other environmental issues.

- In terms of social impact, who has benefited from the project? Has the project had (or is likely to result in) an unexpected positive or negative impact on individuals or local communities? What are the indicators for this and how were they measured?

The project was designed to have FS and local community members are direct beneficiaries for increased capacity and income generation, respectively. The expectation is that within one year the native cacao, native bamboo and butterfly farming will generate income for individuals.

Unfortunately, the chicken and swine farming proved to be futile ventures based on the production reports and feedback from participating members of communities, and therefore may have put off some individuals from trying other environmentally friendly alternative income generating schemes. However, it is hoped that with the income soon coming in from the other activities, community members would be motivated rather than dissuaded. The feasibility studies predict profitable ventures for native cacao, native bamboo and butterfly farming but the actual production reports will indicate the degree of benefit it has had on the community members.

6. Project Outputs

- Quantify all project outputs in the table in Appendix II using the coding and format of the Darwin Initiative Standard Output Measures.

See Appendix II.

- Explain differences in actual outputs against those in the agreed schedule, i.e. what outputs were not achieved or only partly achieved? Were additional outputs achieved? Give details in the table in Appendix II.

The majority of outputs listed in Appendix II were achieved. Ones that were partially achieved are listed below together with a brief explanation of their status.

- 12 people were meant to receive training in biological monitoring techniques, however only 9 were trained. Less number of rangers needed training as the AC rangers had been awarded as official park rangers under the Ministry of Environment and therefore the project did not need the services of other official rangers.
- Originally there was meant to be 4 workshops on NGO management but only two were given. The additional training was delivered in the way of small working sessions and one to one discussions.
- A participatory management plan was meant to be produced but in reality a management plan for AC itself was produced. The buffer zone around the AC (where all the communities are located) was not included, hence communities were not consulted to the extent intended, due to security issues, land trafficking and illegal logging. See Section 3 for a full explanation on this.
- 6 local press releases were meant to be produced. None on the press releases were produced. FS decided not go ahead with press releases until income generating activities are generating income therefore this will be achieved at the end of 2007 beginning of 2008, unfortunately after the completion of the Darwin project.

Outputs that were not achieved at all were:

- 2 UK press releases and 2 UK radio interviews were meant to be produced about the project / AC. This was not achieved as there was no interest from UK based radio or newspapers.
- A workshop to disseminate project findings was meant to be carried out but it was decided to do a review later on in 2007 once more results are obtainable for the alternative income generation and the management plan. It is expected that a dissemination workshop will take place in the first quarter of 2008. Despite this happening after the close of the Darwin project, it is still considered valuable since the project offers some lessons learnt that can be applied to other reserves or corridors in the NW of Ecuador facing similar issues.
- 2 community development strategies were meant to be produced. None were. This could not be done due to conflicts created by external interest and pressures. Communities were not interested in strategies, they wanted to start implementation of activities. FS decided to put more effort to establish income generating activities and to secure markets for their products. The issue of the development of the strategies will be revitalised after those alternatives start to produce some income.

A few of the outputs surpassed their expected results:

- 12 weeks of training were originally planned for alternative livelihoods plus 5 of biological monitoring, however a total of 76 weeks were delivered. Extra training modules were given for alternative income generation and for follow-up to ranger training in biological monitoring techniques. Both subjects needed more in-depth training as trainees found the concepts difficult to grasp and therefore needed reinforcement. The overall outcome of the project appears to be the same however.
- USD 30,000 in capital items was expected to be leveraged as a result of the Darwin project. This amount was surpassed significantly; in excess of 50,000 was raised from different donors. Even more important is the amount of funds raised to complement deliverables of the Darwin project and additional activities in the Awacachi Corridor. In excess of US$ 500,000 has been raised (see leverage

section for further details).

One output was additional:

- A Rapid Ecological Assessment of the AC was carried out by the Ecuadorian Museum of Natural History. The major taxonomical groups were surveyed and used as a baseline by which to develop a monitoring programme. This output was included as part of the development of a Biological Monitoring Programme but was not specified as an output in the original Darwin proposal.

- Provide full details in Appendix III of all publications and material that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website database.

See Appendix III

- How has information relating to project outputs and outcomes been disseminated, and who was/is the target audience? Will this continue or develop after project completion and, if so , who will be responsible and bear the cost of further information dissemination?

The project did not conduct a dissemination workshop, as explained beforehand, this is intended to be carried out in early 2008 once the alternative livelihoods and biological monitoring show more tangible results. A workshop of this nature would be immensely valuable given that the problems with income generating activities are useful for other projects in the region who deal with similar kinds of threats and social issues. The presence of other agencies, such as those represented by the Canton San Lorenzo Development Group, would be essential since they may stand to benefit the most from the experiences of the Darwin project (aside from FFI and FS).

Up until then, achievements so far will be displayed on the FFI and FS websites. The newsletter started under the Darwin project would continue to be produced twice a year as it has now become institutionalised with FS.

The communication strategy developed under the Darwin project also raises the possibility of renting air time to have consistent weekly radio programmes about the AC and its surrounding area. News of the biodiversity and income being generated from the alternative livelihoods would be useful topics as would future educational programmes for children. Radio programmes would also be suitable for communities who still have very high rates of illiteracy amongst the adult populations. Other plans are for videos to be produced, again, showing useful topics such as the state of biodiversity within and around the AC as well as progress of the income generating schemes and how to implement them. Local TV stations could air them. Posters have also proved to be very useful. A children's educational programme will also be starting soon, where biodiversity of the AC and the wider conservation unit will be featured in creative ways. This initiative also intends to directly involve children in the show through creative means, such as story telling/ writing, songs, awarding prizes for 'environmental pieces of work' etc.

7. Project Expenditure

- Tabulate grant expenditure using the categories in the original application /schedule.
- Highlight agreed changes to the budget.
- Explain any variation in expenditure where this is +/- 10% of the budget.

Expenditure Details	**Total Project Expenditure (£)**				**Notes**
	Allocated	***Actual***	***Diff***	**% Diff**	
					This amount corresponds to funds not spent under the allocated Darwin year and carry forward not approved by the Darwin Secretariat
					This amount corresponds to funds not spent under the allocated Darwin year and carry forward not approved by the Darwin Secretariat
					The difference in overall project expenditure is due to the Darwin Secretariat's decision to disallow a late carry forward request of £8.267

8. Project Operation and Partnerships

- How many local partners worked on project activities and how does this differ from initial plans for partnerships? Who were the main partners and the most active partners, and what is their role in biodiversity issues? How were partners involved in project planning and implementation? Were plans modified significantly in response to local consultation?

  FS has been FFI's main in-country partner and the only one in keeping with the original Darwin project. FS is a young but well cemented Ecuadorian NGO, founded with the purpose of establishing the corridor, being the legal custody of the corridor (the land is owned by the Foundation) and to develop activities to consolidate and manage it (protection, biological and livelihoods).

  FS have been extensively involved in the design of the Darwin project, as well in the execution of it. The project is consistently reviewed with FS input; indeed FS is in effect implementing the project. They are also the ones who receive the feedback and therefore formulate the local perception of the project. FS also gave contingency plans when the illegal logging and land trafficking increased.

- During the project lifetime, what collaboration existed with similar projects (Darwin or other) elsewhere in the host country? Was there consultation with the host country Biodiversity Strategy (BS) Office?

FS collaborated with another Darwin Initiative Project in Ecuador developed by Gaia Foundation (GF). The collaboration between FS to GF has been mainly based on the exchange of biological information in the Corridor area, and support in logistics in a field visit. GF offered support in the publication of an article about the corridor in the Terra Incognita Magazine. The article was sent to them and it is waiting for the right issue to be published. Additionally, last year GF organized a workshop about butterfly farming in the Ecuadorian Amazon, and FS's biologist was invited and participated in this training session. During 2006, due to the increased work and good reputation of FS, Conservation International asked for the direct support to a RARE project developed by them. This support consisted in the management of funds, logistical collaboration and transfer of community and conservation knowledge of the area to support the the Environmental Education Campaign in San Lorenzo.

- The relationship with the British Embassy in excellent. The Embassy has been supporting the activities in the Corridor through institutional awareness and networking.
- As a result of the establishment of income generating alternatives such as native bamboo, INBAR is considering FS as a strategic partner to develop different activities related with guadua (native bamboo) in the Province of Esmeraldas.
- WWF Colombia has invited FS to participate in a working group to commence the territorial design for the north zone of Ecuador and the South of Colombia in order to define Critical Areas for Conservation. This group includes other local NGO's, government institutions and oil palm and logging companies.

- How many international partners participated in project activities? Provide names of main international partners.

  No other international partners were associated with the project as such. However, as part of the Awacachi Programme, FS has been able to count with the support of some additional donors. All those funds permitted to complement activities related with physical control,

land purchases and legalization of lands, conflict resolution, training, biological monitoring, productive alternatives, administrative and staff support etc. The following international donors have contributed to the implementation of activities in the Awacachi Corridor: CEPF (The Critical Ecosystem Partnership Fund) and GCF (Global Conservation Fund) from Conservation International, BDF (Barbara Delano Foundation) from UK, Ruffords Maurice Laing Foundation, Fota Wildlife Park and DGIS (the Directorate General for International Cooperation, Dutch Government)

- To your knowledge, have the local partnerships been active after the end of the Darwin Project and what is the level of their participation with the local biodiversity strategy process and other local Government activities? Is more community participation needed and is there a role for the private sector?

FS's mission ensures that activities continue beyond the Darwin Funding.

The relationship between FS and San Lorenzo Municipality has improved immensely. Currently a signed MoU exists between them stating mutual collaboration in pro of the conservation of the natural resources of Canton San Lorenzo. It important to highlight the fact that the Municipality often asks FS for advise in the majority of the issues relating with environment in Canton san Lorenzo.

FS recently updated and signed the MoU with *the Ministry of the Environment,* after almost 2 and a half years of negotiation with different governments. The delay was due to political instability.

9. Monitoring and Evaluation, Lesson learning

- Please explain your strategy for monitoring and evaluation (M&E) and give an outline of results. How does this **demonstrate** the value of the project? E.g. what baseline information was collected (e.g. scientific, social, economic), milestones in the project design, and indicators to identify your achievements (at purpose and goal level).

Monitoring and Evaluation was carried out by monitoring on a monthly basis the project expenditure against the milestones. Close communication by email and Skype enabled the questions to be asked about progress. Darwin project leader visits took place once a year and reviews with FS were carried out simultaneously. In addition, FFI internal project cycles ensured that the Darwin project was reviewed on a bi-annual basis and that any slippage or funding issues were raised.

The outcomes of the project are outlined below together with baseline information against key indicators

- Output/Outcome: *Population of key species recovering and illegal resource extraction reduced:*

  Indicators*: reduction in logging infractions and increase in fauna sightings*
  During the last year daily data collections were carried out by the Community Rangers. These reports show an increase in sightings of animals in some areas of the corridor. In addition, the number of logging infractions has been diminishing. In order to improve this info a new matrix for collecting data was designed in order to obtain better and more specific information. Additional training have been deliver to improve the data collection.

- Output/Outcome: *Increased capacity for the local NGO to manage the Corridor.*

  Indicators: *quality of FS products, effective responses to emergencies, fundraising effort and success, increased networking capabilities, increased willingness of working together with FS , increase in the involvement of regional conservation activities etc.*

  The quality of reports submitted to FFI has been monitored for the increase in networking capacity shown by the Foundation staff, by the agility in responding to emergencies in the corridor and by fundraising effort (contacts and submission of proposals).
  Also the increase in institutional capacity can be demonstrated by the number of proposals submitted to donors. During the second half of 2005 two proposals were written by FS staff and submitted to donors (Toyota Fund and Flemish Fund), with one approved (Flemish Fund for Tropical Forest). In 2006, 6 proposals were submitted; 4 as part of consortiums. Only one was successful (PRODERNA) but in general terms all the proposals had positive feedbacks.

- Output/Outcome: *Communities involved in successful alternative income generation:*

  Indicators: *Number of communities involved in income generating activities, number of hectares of cacao and native bamboo planted, number of families/people benefiting from income generating activities, number of alternatives, increased interest on benefiting from the alternatives, change in people's perceptions*

  Currently two communities are effectively working with alternative income generating projects. The San Francisco Community is actively working with native bamboo and cacao plantations. Durango community and San Francisco are involved in the Butterfly activity and native cacao. There are plans to expand native bamboo activities to Durango.

- Output/Outcome: *Training:*

  Indicators: *Number of training sessions and duration of them to staff and communities. Variety and appropriateness of the training delivered. Number of people trained.*

  Effective community and staff training has been provided. Communities have been increasing their involvement in the Corridor activities and requesting additional training and support.

- Output/Outcome: *Production of manuals, studies, reports, article etc.*

  Indicators: *Number of manual, feasibility studies, reports, strategies produced. Coverage of the activities by the documents.*

- <u>What were the main problems and what steps were taken to overcome them?</u>

There were several major challenges that were impacting the project. They are described below in detail.

THE AWA FEDERATION's decision for more restricted collaboration
The FCAE (Ecuadorian Federation of Awa Centres) has a strong political influence over the Awa communities, affecting positively or negatively the relationships between an Awa community and any institution. During the last meetings with the new Directors the Awa Federation had explained to FS that they were open to mutual collaboration but that they think it is necessary to have a process of approach before signing any agreement. This process could include mutual invitations to workshops, activities and if possible economical support to some specific Awa productive initiatives. FS researched about their activities needing support and evaluation, which can then be covered by existing funding (if any) and which ones can be included in future proposals. Unfortunately, due to general mistrust in anything that it is not

indigenous, the FCAE is currently holding the position of not engaging with ANY NGO, and not signing any kind of agreement, decision that has affected immediate collaboration with them. Even more, institutions that have been implementing actions with them have been affected such in the case of Altropico and Conservation International. Networking continues with them and hopefully this situation came be overcome in the near future.

Delays in biological training due to illiteracy and poor knowledge retention by rangers.
The process of training in Biological Monitoring techniques has been successful in terms of number of workshops and topics covered. However, it is a fact that the level of literacy of some rangers imposed a challenge when they collect data. FS had analyzed the convenience of continued data collection in the way that has been done because some conclusions and observations of some rangers did not reflect reality, due to the fact that they had their own interpretation of the information. In order to improve the data collection the rangers that have better understanding of the biological Monitoring received the support of young people from the communities conforming teams of students supporting data collection activities.

Gathering of biological data improved through increasing training activities with the rangers. Although it improved, it still needed significant revamping in order to find a better way for the rangers to complete them. Changes to the matrix involved a system of ticking off rather than writing. .

High levels of insecurity in the area due to migration form Colombia as a result of plan Colombia + sporadic presence of insurgent groups
Levels of insecurity arose in the area as a result of Plan Colombia in Colombia. This was affecting the implementation of productive alternatives whereby some communities were reluctant to collaborate with the project because they were receiving financial promises from miners, timber companies and palm companies that if they invaded areas of the Corridor.

Attempts were also made to mine the AC in its last year of the Darwin project. These attempts were prevented through direct negotiation with the miners and in some cases supported by the authorities. Although until now there have been only attempts, this is an increasing problem due to the fact that under Ecuadorian Law subterranean mineral resources are property of the state. As a result it is possible for a mining company to get legal permission from the government to exploit a protected area and extract gold, minerals, petroleum or others subterranean natural resources. FS was researching concessions for mineral extraction in the area of the corridor (within and around) and will seek governmental support to stop them. In any case, it is a serious problem that required immediate attention and requires economic resources to cover the legal fees.

- During the project period, has there been an internal or external evaluation of the work or are there any plans for this?

Internal evaluation was carried out when FFI visited FS in March 2007. A further evaluation of the project is due in late 2007 when the FFI office is opened in Quito. The progress with the alternative livelihoods will be monitored beyond this as other project funds will support the work started by the Darwin project.

- What are the key lessons to be drawn from the experience of this project? We would welcome your comments on any broader lessons for Darwin Initiative as a programme or practical lessons that could be valuable to other projects, as we would like to present this information on a website page.

1. Additional to the support from FFI, the collaboration between the different organizations has been a positive factor to develop initiatives related with fundraising, consultancy and mutual training.

2. The identification of community leaders (even if there are not any legal ones) is important to obtain the support of the communities. This is especially important in areas where it is very difficult to change the idea of some people who see the NGO only as money or as an 'activities provider 'and not as a partner/associate.

3. It is important to differentiate the real expectations of the communities and the personal interest of pseudo leaders that are trying to obtain economic benefit from these kinds of projects the community interest.

4. The collaboration of the British Embassy to this project has been very important in order to obtain political support to the initiatives.

5. Although in the majority of the cases it is avoided, the intervention of enforcement bodies such as police, navy and army is important in cases of emergency. They have the proper training and authority to deal with difficult and dangerous situations. Specifically in the case of the Awacachi Corridor, by having the links with the enforcement bodies has, in some cases, reduced attempts of major illegal activities such as miming and illegal commercial logging.

6. Even if the local authorities are institutionally weak and sometimes do not show too much real interest in the environment, engagement with them and constant “nagging” starts creating this interest for the environment. In the case of the Awacachi Corridor, the Municipality of San Lorenzo has evolved from being a strong critic of FS, to an ally made official by an MoU between them and FS.

7. Perseverance is necessary in conservation. After two and a half years trying to update a MoU with the Ministry of the Environment and needing to restart the process after every presidential and ministerial change, it has finally been signed.

10. Actions taken in response to annual report reviews (if applicable)

- Have you responded to issues raised in the reviews of your annual reports? Have you discussed the reviews with your collaborators? Briefly summarise what actions have been taken over the lifetime of the project as a result of recommendations from previous reviews (if applicable).

In the past half year report, clarifications about various issues were requested by the reviewer and these were sent. Recommendations by the reviewer included more structure for assessing the training value over the lifetime of the project. This was discussed with FS and it was agreed that an evaluation would be carried out each semester.

11. Darwin Identity

- What effort has the project made to publicise the Darwin Initiative, e.g. where did the project use the Darwin Initiative logo, promote Darwin funding opportunities or projects? Was there evidence that Darwin Fellows or Darwin Scholars/Students used these titles?

The Darwin Initiative was publicised in all outputs of the project by displaying the logo. Verbal introductions to workshops and training included a brief summary over the nature of the project and the donor.

- What is the understanding of Darwin Identity in the host country? Who, within the host country, is likely to be familiar with the Darwin Initiative and what evidence is there to show that people are aware of this project and the aims of the Darwin Initiative?

The Darwin is poorly understood in Ecuador. The British Embassy was familiar with the Darwin Initiative as was the Ministry of the Environment. Other Darwin Initiatives have been carried out in Ecuador.

- Considering the project in the context of biodiversity conservation in the host country, did it form part of a larger programme or was it recognised as a distinct project with a clear identity?

This project was distinct in identity as it totally centred around the AC and its buffer zones. It was implemented in a relatively remote area of Ecuador where local awareness about donors are of limited interest.

12. Leverage

- During the lifetime of the project, what additional funds were attracted to biodiversity work associated with the project, including additional investment by partners?

  The following funds for biodiversity work during or after the life of the Darwin project were secured by FFI and FS:

  1. Fota Wildlife: a total of £15,000 (flexible funds)
  2. Flemish Fund: Project ending in September 2007. Main activities are ranger training. Total amount € 66,924
  3. PRODERNA –EU funds- Two years project starting activities in July 2007. Main activities to be implemented by FS include reforestation and land recovery through the implementation of agroforestry plantations, protection of catchments areas and headwaters, and physical security in protected areas in the Canton San Lorenzo. Total approved, €420,000 from which €130,000 will be executed by FS
  4. Global Conservation Fund: A new one-year grant was approved. Main activities will support ranger physical protection and training, consolidation of biological monitoring and establishment of internship program, design and establishment of a Trust Fund for the management of the Awacachi Corridor. Total amount: USD 159,373.
  5. DGIS: Project ending in December 2007. Main purpose of this support is the improvement of local livelihoods to support conservation. Total amount: USD 42,000.
  6. Rufford Maurice Laing: Funds granted to support initial recruitment of the field coordinator. Total Amount: £7,500

- What efforts were made by UK project staff to strengthen the capacity of partners to secure further funds for similar work in the host country and were attempts made to capture funds from international donors?

As previously described, FFI's modus operandi is to work long-term with in-country partners and to help them being self sufficient in terms of writing proposals and identifying donors. During the Darwin project, a handful of international donors were identified and FFI actively encouraged FS to approach them, as they did with results shown above. Moreover, FS themselves identified several in-country donors and applied to them for funding without the aid of FFI.

13. Sustainability and Legacy

- What project achievements are most likely to endure? What will happen to project staff and resources after the project ends? Are partners likely to keep in touch?

A handful of the project achievements are very likely to endure beyond the Darwin project. They are listed and described below in terms of how they will form a basis for further work thereby strengthening sustainability and legacy.

Institutional strengthening of FS
During 2007 extra efforts have been made to increase the profile of the Foundation and its work. For this purpose a communications strategy was developed targeting different audiences with different activities, meetings and products. Also, regular meetings are held with government institutions and NGOs in order to establish alliances and to present FS's work. As a result, FS has been positioned as a serious NGO that works for the conservation of the Chocó bioregion and is committed to take into consideration and to support local communities. The skills that have been built up within FS will be retained. FFI will continue its close partnership with FS well beyond the life the Darwin project.

Biological Monitoring:
Currently there is enough capacity to build on the current monitoring system to make it more robust. Additionally to these monitoring activities, a volunteer/internships programme funded by GCF (Global Conservation Fund) and collaboration with local universities will be developed by FFI/FS during the second semester of 2007.

Butterfly farm:
Capture effort will be increased by the contraction of field assistants so number of breeding individuals can be maximised during appropriate weather conditions. Breeding of other low profit species (and easy to handle) will continue in parallel to the breeding of *M. cypris* so the breeding facility starts to produce some income even if in low quantities.

Cacao production:

At the end of 2006, PRODERENA approved a proposal to Fundación Sirua (EU funds) submitted in conjunction with the San Lorenzo Municipality and two other local NGOs. This proposal amongst other activities will establish around 50 additional hectares of native cacao under agroforestry and around 30 hectares of native bamboo with local communities. Also around 20 hectares along the rivers and headwaters will be reforested with a variety of native vegetation and native bamboo.

A community eco-enterprise will be implemented to manufacture and commercailise cacao derivates. It will cooperate with the “Colegio Agropecuarion San Lorenzo” which posseses a newly installed plant in San Lorenzo for processing of food but can be used for cacao production as well. The terms of engagement and derivates to produce are still under dicussion.

Bamboo production:

Additional training in bamboo uses will be delivered as well as practical training at a bamboo plant located in Guayas Province. This plant produces furniture, as well as parts of bamboo for construction and handicrafts. The idea is to establish something similar in a community in San Lorenzo to add value to the bamboo produced by the communities of the Awacachi Corridor

- Have the project’s conclusions and outputs been widely applied? How could legacy have been improved?

Conclusions and outputs have been applied where possible so far. As previously described, the outputs will not be in vain; they will continue to be built upon in the future by use of other funds. Moreover, a workshop in 2008 will further disseminate findings of the Darwin project.

It would have been ideal to have had the workshop by the close of the workshop but as not all deliverables were showing results, this was not the preferred option. This was simply not possible given some of the difficulties faced during the project that were outside of FFI’s and FS’s control.

- Are additional funds being sought to continue aspects of the project (funds from where and for which aspects)?

Yes, this is already covered in the sections above.

14. Value for money

- Considering the costs and benefits of the project, how do you rate the project in terms of value for money and what evidence do you have to support these conclusions?

Weighing the costs against the benefits of the project so far, FFI and FS rate this project as a 7/8 on a scale from 1 – 10. The fact that the project encountered substantial challenges beyond our control did delay the project and hence, the impacts for some of the objectives could not be assessed. However, it is clear that the protection of the AC's biodiversity is attainable and that the deliverables of the Darwin project will be built upon and that lessons learnt will be taken on board and shared with others in the region. Moreover, perhaps the greatest achievement has been the strengthening of FS as a local player in the Chocó bioregion of Ecuador and the fact that local communities are realizing through informal and formal meetings and trials of sustainable and environmentally friendly income generating projects that FS wants to work with them to improve their welfare and that of the environment.

15. Appendix I: Project Contribution to Articles under the Convention on Biological Diversity (CBD)

Please complete the table below to show the extent of project contribution to the different measures for biodiversity conservation defined in the CBD Articles. This will enable us to tie Darwin projects more directly into CBD areas and to see if the underlying objective of the Darwin Initiative has been met. We have focused on CBD Articles that are most relevant to biodiversity conservation initiatives by small projects in developing countries. However, certain Articles have been omitted where they apply across the board. Where there is overlap between measures described by two different Articles, allocate the % to the most appropriate one.

Project Contribution to Articles under the Convention on Biological Diversity		
Article No./Title	**Project %**	**Article Description**
6. General Measures for Conservation & Sustainable Use	10	Develop national strategies that integrate conservation and sustainable use.
7. Identification and Monitoring	5	Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.
8. In-situ Conservation	15	Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
9. Ex-situ Conservation		Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
10. Sustainable Use of Components of Biological Diversity	25	Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.
11. Incentive Measures		Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.
12. Research and	25	Establish programmes for scientific and technical

Training		education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).
13. Public Education and Awareness	5	Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
14. Impact Assessment and Minimizing Adverse Impacts		Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
15. Access to Genetic Resources		Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair and equitable way of results and benefits.
16. Access to and Transfer of Technology		Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
17. Exchange of Information	5	Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
18. Technical and Scientific Cooperation	10	*Countries* shall promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity, where necessary, through the appropriate *international and national institutions.*
Total %	**100%**	**Check % = total 100**

16. Appendix II: Outputs

Please quantify and briefly describe all project outputs using the coding and format of the Darwin Initiative Standard Output Measures.

Code	Total to date (reduce box)	Detail (←expand box)
Training Outputs		
1a	Number of people to submit PhD thesis	n/a
1b	Number of PhD qualifications obtained	n/a
2	Number of Masters qualifications obtained	n/a
3	Number of other qualifications obtained	n/a
4a	Number of undergraduate students receiving training	n/a
4b	Number of training weeks provided to undergraduate students	n/a
4c	Number of postgraduate students receiving training (not 1-3 above)	n/a
4d	Number of training weeks for postgraduate students	n/a
5	Number of people receiving other forms of **long-term** (>1yr) training not leading to formal qualification(i.e. not categories 1-4 above)	n/a
6a	Number of people receiving other forms of **short-term** education/training (i.e. not categories 1-5 above)	**Total = 195 cumulative individuals; about 85 different individuals trained** - 6 FS's staff trained in NGO management (fundraising, strategy development, communications, administration) and technical subjects such as GIS and PRA - 9 community rangers trained in biological monitoring techniques - 5 FS's attended to update courses - *5* community members trained in butterfly farming/ranching operations - 14 community members, 4 coomunity promoters, 7 FS's rangers and 2 FS's staff trained in construction of butterfly farming infrastructure - 70 community members trained for organic cacao production - 40 trained in native bamboo production - 16 trained in chicken farming **-** 30 trained in swine production
6b	Number of training weeks not leading to formal	**Total= 76 weeks**

Code	Total to date (reduce box)	Detail (←expand box)
	qualification	- 8 training weeks in biological monitoring - 2 weeks training in NGO management, GIS and PRA. - 12 training weeks in butterfly farming operations - 2 training week in n construction of butterfly farming infrastructure - 20 training weeks in organic cacao production - 8 training weeks in native bamboo production - 20 training weeks in chicken farming - 4 training weeks in swine production
7	Number of types of training materials produced for use by host country(s)	**Total = 3 types** 2 community manuals (nursery and pigs); 1 manual for butterfly farming; 1 management plan for the butterfly facility; 1 NGO procedures manual;
Research Outputs		
8	Number of weeks spent by UK project staff on project work in host country(s)	**Total = 41 weeks** Project Leader(s) (29 weeks); Proposals Preparation (2 weeks) ; Admin and Mngmt (3 week); Butterfly consultant (3 weeks) Biodiversity Specialist (4 weeks)
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s)	**Total=1** Management Plan for the Awacachi Corridor
10	Number of formal documents produced to assist work related to species identification, classification and recording.	**Total= 1** 1 document with the important species to monitor in the AC plus the accompanying quick reference guides
11a	Number of papers published or accepted for publication in peer reviewed journals	n/a
11b	Number of papers published or accepted for publication elsewhere	n/a
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	**Total =1** 1 basic database produced
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	
13a	Number of species reference collections established and handed over to host country(s)	
13b	Number of species reference collections enhanced	

Code	Total to date (reduce box)	Detail (←expand box)
	and handed over to host country(s)	

Dissemination Outputs		
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	
14b	Number of conferences/seminars/ workshops **attended** at which findings from Darwin project work will be presented/ disseminated.	
15a	Number of national press releases or publicity articles in host country(s)	1 local magazine article sent for publication, 2 posters, 1 institutional triptych.
15b	Number of local press releases or publicity articles in host country(s)	
15c	Number of national press releases or publicity articles in UK	
15d	Number of local press releases or publicity articles in UK	
16a	Number of issues of newsletters produced in the host country(s)	3 issues of newsletter
16b	Estimated circulation of each newsletter in the host country(s)	500 copies
16c	Estimated circulation of each newsletter in the UK	50 copies
17a	Number of dissemination networks established	1
17b	Number of dissemination networks enhanced or extended	
18a	Number of national TV programmes/features in host country(s)	2 interviews in TV news channel (Canal uno) 1 video (10 min) running in the coaches travelling Quito and San Lorenzo
18b	Number of national TV programme/features in the UK	
18c	Number of local TV programme/features in host country	1 local TV programme (San Lorenzo TV)
18d	Number of local TV programme features in the UK	
19a	Number of national radio interviews/features in host country(s)	
19b	Number of national radio interviews/features in the UK	
19c	Number of local radio interviews/features in host country (s)	8 local radio interviews
19d	Number of local radio interviews/features in the UK	
Physical Outputs		
20	Estimated value (£s) of physical assets handed over to host country(s)	£ 6,437 by Darwin Approx US$ 50,000 by other donors
21	Number of permanent educational/training/research facilities or organisation established	
22	Number of permanent field plots established	5
23	Value of additional resources raised for project	Flemish Fund (€66,929) GCF second phase (USD 159,373), DGIS (USD 42,000), Ruffords Foundation (£7,500), Fota Wildlife park (£15,000),

		PRODERENA (€130,000)
OTHER	Other products	Awacachi Corridor maps 3 feasibility studies (cacao, butterfly farming and native bamboo). 1 communication strategy 1 marketing plan for cacao 1 native bamboo cultivation manual + 2 DVD (produced in conjunction with INBAR) called MINGAS. 1 Biological monitoring document plus preliminary results analyses. 1 set of rapid biological assessments by the MECN

17. Appendix III: Publications

Provide full details of all publications and material that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website Publications Database that is currently being compiled.

Mark (*) all publications and other material that you have included with this report

Type * (e.g. journals, manual, CDs)	**Detail** ***(title, author, year)***	**Publishers** ***(name, city)***	**Available from** (e.g. contact address, website)	**Cost USD**
Manual	*Manejo de Guaduales Naturales, INBAR, 2005*	Soboc Grafic, Quito	*Fundación Sirua. Alemania 616 y Mariana de Jesús, dpto 3B. Quito –Ecuador.*	50
DVD	*Caña Guadua, cultivo, aprovechamiento y Usos (2 DVD), INBAR-SIRUA, 2005*		*Fundación Sirua. Alemania 616 y Mariana de Jesús, dpto 3B. Quito –Ecuador.*	25
Report	*Plan de Manejo para el Corredor Awacachi*		*Fundación Sirua. Alemania 616 y Mariana de Jesús, dpto 3B. Quito –Ecuador.*	0
Report	*Cacao en Esmerladas. Analisis de la zona norte (mainly funded by DGIS, with support from Darwin)*		*Fundación Sirua. Alemania 616 y Mariana de Jesús, dpto 3B. Quito –Ecuador.*	0
Report	*Estudio de factibilidad granja de mariposas*		*Fundación Sirua. Alemania 616 y Mariana de Jesús, dpto 3B. Quito –Ecuador.*	0
Report	*El cultivo de la Caña Guadua en el Corredor Biológico Awacachi*		*Fundación Sirua. Alemania 616 y Mariana de Jesús, dpto 3B. Quito –Ecuador.*	0

18. Appendix IV: Darwin Contacts

To assist us with future evaluation work and feedback on your report, please provide contact details below.

Project Title	Community Conservation and Sustainable Development in the Awacachi Corridor, NW Ecuador
Ref. No.	162/13/005
UK Leader Details	
Name	Julio Bernal
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Address	Alemania 616 y Mariana de Jesús, dept 301. Quito - ECUADOR
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Partner 2 (if relevant)	
Name	
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Role within Darwin Project	
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19. Appendix V: Log frame

Project summary	*Measurable indicators*	*Means of verification*	*Important assumptions*
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 • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources			
Purpose To secure the biodiversity of the Awacachi Corridor through enhanced local conservation capacity and completion of a participatory management plan for focusing on innovative community income generation projects using non-timber forest products (NTFPs)	Populations of key species recovering and illegal resource extraction reduced Increased capacity for local NGO, communities and authorities to manage the Awacachi Corridor. At least two communities involved in successful alternative income generation projects by yr 3	Biological monitoring data, ranger reports Management Plan document, agreements & MoUs, Community agreements and project reports, cooperatives established (where appropriate), feasibility studies	Data consistent and accurate Ecuadorian authorities remain supportive of the project Communities display commitment to the projects
Outputs Professional operational arm of Awacachi Foundation functioning effectively through capacity building and institutional strengthening	Strategic review of Awacachi Foundation and key staff trained in NGO management and PRA techniques, CSC established. Organisation generating own income	Strategy documents Workshop results Organisational strategy and planning documents. Committee documents Successful funding bids	Staff available and motivated to training and application of new skills That the capacity building process is successful
Management plan developed and being implemented in key areas within the corridor	Participatory management planning process completed and key Awacachi staff trained in PRA	Management Plan Maps Community management agreements Workshop results	Willingness of communities and other stakeholders to participate and reach consensus on difficult issues
Biological monitoring system for Awacachi Corridor established and functioning	5 rangers trained in species identification, classification and other biological monitoring techniques, ranger field guide produced	Field guide	Socio-political situation in northern Ecuador allows regular fieldwork.
Butterfly farming/ranching facility established and generating income	Community members trained in operating butterfly farming/ranching business, production of manual	Business and marketing plans. Consultancy and project reports	That the assessments are pragmatic and based upon the actual situation

Alternative income generation projects established and yielding income in 2 communities	Feasibility studies completed for alternative income-generation projects Community manuals for alternative income generation projects produced Long-term strategy for community development produced	Consultancy reports, feasibility studies Manuals Project reports and community feedback Strategy document and community agreements	Population movement/immigration does not disrupt/diffuse project impact Communities see value of process and participate fully
Activities	**Activity Milestones (Summary of Project Implementation Timetable)**		
Training / workshops	**Yr 1**: In first 6 months: workshop to establish priorities, methodologies and procedures for participatory management planning; training workshops in biological monitoring techniques (e.g. species and habitat survey skills) and participatory assessment techniques (e.g. PRA); technical management planning workshops and technical training for butterfly farming/ranching; **Yr 2&3**: training for further income-generation projects;		
Technical and scientific research	**Yr1**: In first 6 months stakeholder analysis completed; social & biological data collected; mapping work completed; draft management plan completed; further marketing and technical research for butterfly farming/ranching and feasibility analysis by sustainable livelihood consultants completed for further income generation projects**; Yr 2**: Management plan approved and planning document disseminated. Biological monitoring system established and implemented; **Yr 3:** Revision and evaluation of management plan;		
Production of materials	**Yr 1:** production of maps in first 6 months; **Yr 2**: production of ranger field guide by end of year; **Yr 3** by the end of the year production of community manuals for butterfly farming/ranching and other selected income-generation projects;		