

1. Darwin Project Information

<i>Project Ref. Number</i>	162/12/016
<i>Project Title</i>	Indigenous Methods to Sustainably Manage Riverine Plantations, Amazon Region
<i>Country(ies)</i>	Colombia, Brazil, Peru
<i>UK Contractor</i>	University of Strathclyde
<i>Partner Organisation(s)</i>	Blanca de Corredor, Universidad Nacional, AICSE ¹
<i>Darwin Grant Value</i>	£179,100
<i>Start/End dates</i>	September 2003/August 2006
<i>Reporting period</i>	1 Apr 2005 to Mar 2006, Annual Report No. 3
<i>Project website</i>	
<i>Author(s), date</i>	Blanca de Corredor, Ann M. Mitchell, Alexander I. Gray, April 2006

2. Project Background

The region of Amazonia (along with Orinoquia) comprises more than half of the country of Colombia and both of these river systems feed into the larger Amazon floodplain and its wealth of biodiversity. These flooded forest regions are the birthplace for many species that distribute themselves in the greater Amazon delta. The Colombian Government has been concerned for many years about the management of this area and in 1979 commissioned the project 'Proyecto Radagrametrico del Amazonas'. This project (La Amazonia colombiana y sus Recursos, 1979) evaluated the resources of the Colombian Amazonia and its appropriate management but very obviously from a 'western' point of view. It did not take cognisance of indigenous methods of land management and policy (e.g. Arts. 8, 10 & 11, CBD).

Our project seeks to open up a dialogue (Arts. 17 & 18, CBD) between local indigenous communities and the institutions with a more western stance involved in agriculture/biodiversity conservation to look at methods for preservation of habitats, particularly those of river banks that form platforms for reproduction of fauna in general (mammals, birds, river animals – reptiles, fish, amphibians) and ultimately for sustainable human agriculture.

The need for solutions to problems of inappropriate management of the rainforest has been identified by members of the communities near Leticia, Amazonas, who have participated in a previous Darwin-funded project (No. 162/9/008). The present project is studying sustainable methods of farming and maintenance of riparian forest areas used by indigenous and other communities seeking to determine the methods that allow preservation of the area while providing sustenance for communities without degrading and sterilising the land for future crops.

3. Project Purpose and Outputs

The main purpose of this project is to work together with indigenous specialists, institutions and communities to investigate and promote methods of sustainable management of riverine plantations on the periodically flooded riverbanks in the Amazon region which forms

¹ Asociación para la Investigación Científica Sociocultural y Ecológica

the frontier between Colombia, Peru and Brazil. The study seeks to compare traditional indigenous methods for management of low, mid and high riverine *chagras*² (*chagras de vega*³) with forest *chagras*. The team (from Colombian and British institutions) is collaborating with the indigenous communities of Colombia and contiguous Amazonian countries (Peru and Brazil), to study land use for cultivation of edible, medicinal, and ritual plants⁴. A series of workshops has brought bring key personnel (indigenous communities, institutions, government, private sector together to identify and address problems affecting riverine *chagras* and look at ways of implementing sustainable management. This has the long term objective of conserving biodiversity, improving standard of living for riverine communities as well as maintaining viable habitats for indigenous fauna. The *sabedores(as)* regard the forest as a botanical garden of all plants and the *várzea*⁵ is the basic producer of food sustenance. Good nutrition is necessary to maintain health and this is considered by the elders to be addressing not only local needs but global ones. Their knowledge of traditional preventative medicine is profound and the interconnection between their mythology and conservation and management of *várzea* and rainforest is being studied by the team.

On a practical level in the Community of Santa Sofia, The workshops and field research form the basis for the production of educational packages in a medium and format useful to indigenous communities for local communities planned for the third year of this project. Outputs, such as video and written transcriptions of the workshops, have been deposited in the Library of the Banco de la República, Área Cultural, Leticia.

The operational plan and outputs were modified as a result of the MTR in Nov 2004 which were agreed by the Darwin Initiative Secretariat. The main changes were to concentrate funding and energy on more workshops in Leticia due to this successful methodology and to cut visit of mycorrhiza specialist. The outputs and plan followed these modifications, achievements and progress are laid out in the logical framework in Appendix 1 of this report.

4. Progress

History

By means of a series of workshops and fieldwork together with elders and leaders of indigenous communities local and governmental organizations, this project has set up a working dialogue between institutions (UK and local country) to look at sustainable methods to conserve the biodiversity of the a section of *várzea* area of the Amazon Basin. UK expertise has been brought in to build up awareness and confidence and respect to

² **Chagra** – Traditional Indigenous Mixed-Species gardens cultivated by the indigenous people. They are normally of one or two hectares in size, to produce edible, ritual and medicinal plants for the family

³ **Chagra de Vega** – plantations or “*chagras*” on the banks of white water rivers – areas, also known as *várzea*, which are flooded during the rainy winter season and planted in summer when the water level falls leaving a rich sediment on the river bank. The crops/species planted depend on whether the *chagras* are high, medium or low in relation to the river water level.

⁴ **Ritual plants** - Plants used for rituals by indigenous ethnic communities. These plants are sacred and in many cases private/secret. Different ethnic communities use different plants ritually. Examples of such plants are coca (*Erythroxylum coca*), tobacco(*Nicotinum tabacum*), yage (*Banisteriopsis spp*).

⁵ **Varzea** - The river Amazonas floods its river banks 50 Kilómetros inland into the jungle. When the river level goes down the water leaves a rich top soil – these large beaches are what we know as *varzeas*. As the water level goes down and exposes the beaches, the indígenas plant many products: yuca, corn, rice (14 varieties), beans, peanuts, fruits such as water melon, and other products such as the *chiclayo* beans from Peru – many varieties of beans. Once the water starts to rise the indígenas quickly harvest the products. The *varzea* zone is not burned or treated with chemicals (“artificial”/synthetic fertilizers). The only chemicals are the natural nutrients left by the river and forest when the water goes down.

indigenous traditional knowledge. Educational material has been produced by the project but aiding the local people to join generations and respect traditional knowledge. This is to promote conservation/recuperation of identity which is vital to conservation of environment (a conclusion from our workshops and which coincide with, for example the conclusions of the working party of the CBD on article 8(j)). Two large training and awareness workshops had been held and a series of locally organised workshops to disseminate work done in large workshops and put into action plans according to the priorities of communities. Three medicinal plant gardens had been initiated and one in area of deforested land near Santa Sofia *resguardo* work had been commenced by the elder, Mario Gutierrez to rehabilitate it with várzea trees, in particular which had medicinal or other practical uses for the community.

Politics of this project

- The politics of this project are based in the comprehension of the pueblos and the union or exchange of knowledge/expertise of sustainable management of the ecosystem.
- In order to achieve these objectives (reestablishment of the ecosystem) it is necessary to make bridges in order to enable comprehension and tolerance between cultures.
- In the continent of South America we have the problems generated on a world level as well as those from pueblos and governments from this continent.
- Within this, we include the project: Sabedores – sabedoras which has the general philosophy of working towards the defence of the environment, patrimony of pueblos, Nations in a worldwide context.

Methodology used in this project

The project uses a methodology of participative observation together with written and audio-visual means to document traditional methods of management of floodplain forest. More specifically methodology involves:

Exchange of knowledge:

- A weaving of knowledge and relations – traditional and academic in search of solutions to preserve and recuperate the biodiversity of the tropical forest and várzea
- Knowledge is understood as the science which is dedicated to the two methodologies – academic and practical (traditional). The union of these two different types of expertise can achieve the result of preventing the degradation of the biodiversity.
- This methodology is totally participative and crosses both cultural and international boundaries.

Workshops:

Project Methodology uses the form of workshops held in the Banco de la República, Leticia (two of these held this year – May and Nov 2005 – see Appendix 3 and Exhibits 1a & b and 2a & b) for exchange of expertise and knowledge between UK specialists, sabedores, leaders and institutions. An important output of these workshops is cohesion of communities and formation of action plans for conservation of biodiversity. Practical workshops are also held in field locations such as the *resguardo* Santa Sofia to work on projects such as formation of medicinal plant gardens and preparation of education material (See Appendices 4 & 5b, and Exhibit s 3,4 & 5). Two one week workshops were held

Formation of Medicinal Plant Gardens – recuperation of biodiversity and knowledge of biodiversity:

In the community of Sta. Sofia (5 resguardos), a communal plant garden was made in 2004. This was initiated in the search or a better quality of life for the community who had to go long distances to search for the medicinal plants and were losing their knowledge of

management of their environment and of the medicinal plants. An initial workshop was run by the local school teachers, elders, children together with Dr. German Benitez – Professor Universidad Nacional de Colombia and specialist in alternative/complimentary medicine (medicinal plant extracts). This plant garden is being cared for and maintained by the Sabedora and midwife Carmen del Aguila, wife of sabedor Don Manuel Chota who organised and coordinated 10 local men to set up this plantation. All of the sabedores contributed to this physical and ritual work telling the history and mythology of each plant sewn in the garden. Another such garden was set up near the school in Santa Sofia by elders who now teach the children about the properties and mythology of each plant and their management. A third garden has been set up in the resguardos of Macedonia coordinated by German Pena. This was set up initially at the beginning of the project as a garden in a very public part of Macedonia but this reporting year had to be moved to more remote area where it can be protected by palms. It has now been set up in a way to combine rehabilitation of the area (reforestation), cultivation of medicinal plants and setting up of areas of fish nurseries. German Pena presented the results of this work in the Nov 2005 workshop. This was really a surprise to the project team as the work in Macedonia has had many difficulties and we commend this team of elders led by German Peña (see Appendix 7 and Exhibit 5).

Rehabilitation - Reforestation of an area of the Resguardo Santa Sofia:

The sabedor Mario Gutierrez (Wayuu) has commenced Rehabilitation of deforested areas near Santa Sofia. Mario has the triple work of carrying out the ritual, physically managing the forest and the daily extraction for sustenance of the family. He has planted over 500 specimens of medicinal plants from the forest in order to rehabilitate an area of secondary forest which had been damaged and had large clearings in it.

Educational Material – Centro Educativo Antonio Nariño – Community Santa Sofia:

A text on management of the várzea entitled “El Brazo de la Sirena” (or the “Arm of the Mermaid”) was produced by the Centro Educativo Antonio Nariño – primary school in Santa Sofia (see Exhibits 3 & 4). The work was based on a field expedition to the island of Sogamozo – Rio Amazonas opposite the *resguardo* of Santa Sofia - by teachers, elders, children and Andres Corredor (Sabedores – sabedoras coordination of educational material). This was designed by the elders and school teachers to combine traditional knowledge of management of the várzea with modern use and was based on mythology of the várzea area – in particular the formation and flooding of islands. The work is dedicated to the memory of sabedor Edinson Rivas who was key to the production of this work but who died in June 2005 (see p. 7, Exhibit 3).

Project Progress/Difficulties and development of design during this reporting Period

Since April 1st 2005 the project has progressed as per modified baseline (taking into account MTR in Nov 2004) with some additional outputs. Difficulties continue to exist with security of the project (as stated in previous documentation) and this is continually reviewed. The design of the project is continually reviewed taking into consideration work done in the field and the results and discussions presented in workshops. In particular, all of the communities involved in the project and internationally have come to the agreement that in order to preserve and conserve the várzea and forest and all that comes with it, it is vital to work on the recuperation of cultural identity commencing with language.

Project Progress/Activities:

April 2005 : 1 trip by Professor Blanca de Corredor (BdeC) to coordinate May workshop in Leticia.

May 5 – June 10, 2005: Dr. Ann Mitchell (AMM) to Colombia

May 5 – June 10, 2005– visit of AMM and BdeC to Leticia and surrounding areas for field work (May 12th – 30th, 2005) and workshop (see below)

Darwin Workshop May 16-19 2005 held in Area Cultural, Banco de la República, Leticia.

This workshop continued to work on themes of preservation of the várzea and jungle area, preservation and recuperation of identity as a key to preservation of environment, dissemination of results of educational workshop held by Andres Corredor (AC) Sofia communities, school, elders. The workshop was attended by 190 people for 1 week. Participants/organizers included indigenous organizations ACITAM (Colombia), FIUPAM, Brazil), Sabedores from 18+ communities *Trapezio Colombiana*, sabedores from Caqueta Medio: Professor Eudocio Vigidimas (EV, also of U.Nacional, Colombia), Professor Iziais Roman Sanchez (IRS), Sr. Ismael Mendoza Rivera, Prof. Jose Vicente, Director Anthropology U. Nacional, the medical team: Drs. German Benitez, Carlos Gutierrez & Rafael Andrade and local GO's and NGO's.

April 2005 – Preparation of material for May 2005 workshop – AMM, AIG with Dr. Philip Mason (Myconserve).

April – Sep, 2005 - Continuation of preparation of drafts of film, manual and educational material by Prof Andres Corredor, Prof Carlos Riaño Mocada (Design and Print specialist) together with Professor Daniel Bautista and other members of the Santa Sofia communities. Draft film presented in May 2005 workshop – discussed in and after workshop. Draft material presented to community for correction.

June/July 2005 – BdeC and Prof Andres Corredor working together with Srs. Augusto Falcon and Rosendo Ahue (ACITAM)

Aug/Sep 2005: 1 training workshop in UK Institution - As a result of the MTR-report it was decided that it would be more useful to exchange this for extra workshop (s) in Leticia. However, a Study day was held on 14th October by the Centre for Religion and Politics (CRSP), St Mary's College, University of St Andrews. This was arranged by the Dean of St Mary's College, Dr. Mario Aguilar (MA). MA invited the Ambassador of Colombia to the Study day and has himself now been appointed Ambassador of Chile in Scotland. BdeC arrived on 24th September for this study day, to visit UK institutions and to work on future applications with team.

August 22nd – September 24th 2005 AMM to Colombia, AMM to Brazil, Peru and Ecuador

August 26th September 5th 2005 BdeC and AMM to Leticia and surrounding areas (Colombia, Peru and Brazil) field trip and preparation of one week workshop (November 21st – 25th 2005). Documentation of results of extended drought evident in Amazonas

Sep 10 – 18th 2005 BdeC and AMM visited Ecuador to make contact with indigenous organizations and universities there commencing with the Shuar and Ashuar ethnic groups who have contacted the team expressing interest in the workshops and project. This visit turned out to be much more fruitful than anticipated and resulted in contacts being made with the Shuar and Ashuar in Taisha (a village in a clearing in the Ecuadorian Amazon forest only entrance is by army or light aircraft), INDESIC (Instituto para el Desarrollo Social y de las Investigaciones Cientificas – President: Dr. Angel Ramirez), Alberto Antún coordinator Taisha Universidad de las Nacionalidades Indigenas de la Amazonia Ecuatoriana (LEDA) and the Universidad Tecnológica América (UNITA) (Facultad Ciencias Administrativas) – Dean: Dr. Anibal Fuentes and Vicedean: Prof. Luis Huaraca.

Sep 23rd – Nov 10th 2005 – Visit of BdeC to UK to visit Universities of Strathclyde and St. Andrews (Dr Mario Aguilar – Dean of St. Mary's College, Director of CSRP), coordination of project work, work on proposals for continuation and new project funding.

October, 2005 Visit to Darwin Initiative – AMM, BdeC and AIG to present project progress.

Nov 10 – Dec 5 – Visit of AMM and AIG to Colombia, Brazil, Peru for field visit and workshop.

Darwin Workshop Nov 21 - 25 2005 held in Area Cultural, Banco de la República, Leticia. This workshop continued to work on themes of preservation of the várzea and jungle area, preservation and recuperation of identity as a key to preservation of environment. The final edition of the educational package – Book and film “El Brazo de la Sirena” was launched by the community, school (Centro Educativo Antonio Nariño), elders and Andres Corredor (See Exhibits 3 and 4). Dissemination of Material. The workshop was attended by around 200 people for 1 week. Participants/organizers included indigenous organizations ACITAM, AZCAITA, ASOAINAM (Colombia), FIUPAM, Brazil), Sabedores from 18+ communities Trapecio Colombiana, sabedores from Caquetá Medio: EV (U.Nacional, Colombia), IRS, Sr. Ismael Mendoza Rivera, Prof. Ignacio Prieto Universidad Central, Bogotá, the medical team: Dr. German Benitez, (Drs Carlos Gutierrez & Rafael Andrade were not able to come at the last minute because of emergencies with patients), Alberto Antun – Shuar leader and indigenous university coordinator from Taisha, Morona Ecuador and Luis Huaraca Vice de UNITA (Universidad Tecnológica de America – Quito, Ecuador) and local GO's and NGO's.

Jan 2006 Visit of BdeC and Andres Corredor to Leticia and surrounding resguardos. Work with Daniel Bautista in Sta Sofia – translating work on “El Brazo de la Sirena” from Spanish to Tikuna and planning next set of packages for wider age group – further funding is needed for completion of this work important for education of children on conservation of the environment – especially the várzea as Sta Sofia is situated in a várzea region.

February 2006: Elvis Cueva formed his organization “Los Niños de Brazos de Hierro” working towards better health and welfare of the children of Amazonas. Elvis Cueva has participated in Darwin project workshops and activities from their initiation. Extra output.

March 17th – April 17th 2006 Visit of AMM to Bogotá, Colombia, Curitiba, Brazil and Leticia and surrounding areas.

March 19th – April 1st – Visit of AMM, BdeC and Isais Roman (Sabedor) to Curitiba Brazil to COP8. Presentation of project in Darwin Side event , 29th March 2006 and Sabedores-Sabedoras side event March 30th 2006. networking with other organisations. Meetings with FIUPAM – President Manouel Fernandes Moura and President of INBRAPI, Brazil – President Dr. Daniel Munduruku.

March 2006 Formation of Project Organization AICSE.

Summary of Project against Implementation Plan for Current Reporting Period:

This reporting period is equivalent to second half of second year/first half of third year.

Year 2: 1 training workshop for techniques in river bank management and comparisons with western techniques (1 week). **DONE, Nov 04 (additional smaller workshop in July 04 & Jan 05)**

1-2 field visits by UK and Colombian team. **DONE, Apr/May 04, July 04, Sep 04, Nov/Dec 04, Jan 05**

1 training workshop/seminar in UK institution. **Cancelled to release funds for additional workshop in Colombia which was done Nov 2005. However, results were presented by Bdc in seminar in CSRP in St Andrews University Oct 2005, and by BdeC, AMM, IRS & Manouel Moura in COP8, Curitiba Brazil – in one side event run by project and other run by Darwin initiative.**

Preparation of drafts of film, manual & educational material. First stage of this material is in its final form – see final production of Book “El Brazo de la Sirena” was launched in Nov 2005. Accompanying DVD has been produced but not replicated yet (see Exhibits 3 & 4) **(ALMOST COMPLETED)**

Year 3: 1 training workshop to consolidate results of first two years and look at future work (exit strategy) planned for June 2006.

Production of manual and film on methods of management of riverine plantations **(ALMOST COMPLETED).**

Preparation of educational packages in various formats for dissemination to local & other communities/entities (**dissemination Nov workshop 2005**) – Spanish version of book “El Brazo de la Sirena”.

Timetable for next 6 month period:

April 1st – 6th 2006 – Coordination of work in Bogotá – BdeC, Andres Corredor, EV, IRS, AMM. Preparation of field work and reports.

April 7th – 14th 2006 – Field trip to Leticia and surrounding areas – river communities to Atacuari, Peru and Brazil BdeC and AMM. Preparation of final workshop (June 2006) of project..

April 20th, 2006 – AIG – Lecture to Schaw Court Group, Bearsden Glasgow – dissemination of project results.

May 29th – June 19th 2006 – Visit of AMM to Colombia, Peru and Brazil for final workshop and field tie up. Coordination and preparation for final reporting.

June 5th – 9th 2006 – Final workshop of this project – summarise results, continue with working on identity. Dissemination of results, working on way forward.

5. Actions taken in Response to Previous Reviews

This has been dealt with in previous reporting – see 2nd year annual 6 and 6 month reports.

6. Partnerships

Collaboration between UK and host country partners continues to be excellent and as time goes on these have been strengthened. The host country partners include Blanca de Corredor – Universidad Nacional, AICSE, Área Cultural, Banco de La República, ACITAM, Centro Educativo Antonio Nariño, FIUPAM – Brazil, INBRAPI – Brazil, Caquetá – Medio Communities, AZCAITA ASOINTAM, Colombian communities (see Workshop programmes – Exhibits 1a &b and 2a &b) but especially those of Atacuari, Puerto Nariño, Macedonia and Santa Sofia (5 *resguardos*). The partnership with Atacuari and Puerto Narino has developed substantially over the last year and in particular has resulted in presentation of new projects of recuperation of Identity with biodiversity and also the ambitious idea of the Indigenous University. This will be outside the scope of this project but the idea is so important to the successful continuation of preservation of the várzea and forest areas that are hoping to help these groups move forward with these proposals.

The collaboration with the medical doctors (German Benitez, Carlos Gutierrez, Rafael Andrade) on the position of conservation/recuperation of traditional medicine and the medicinal plants used in this has continued, with the group of medical doctors looking for funding to continue with this work. A result of this the project continues to link with the promoters of health in ACITAM and the communities e.g. in Sta Sofia, Loma Linda, Macedonia and Leticia. This also links up with the formation of the medicinal plant plots in Santa Sofia and the area of rehabilitation in Macedonia.

We have also visited Ecuador to make contact with indigenous organizations and universities there commencing with the Shuar and Ashuar ethnic groups who have contacted the team expressing interest in the workshops and project. This visit turned out to be much more fruitful than anticipated and resulted in contacts being made with the Shuar and Ashuar in Taisha (a village in a clearing in the Ecuadorian Amazon forest only entrance is by army or light aircraft), INDESIC (Instituto para el Desarrollo Social y de las

Investigaciones Científicas – President: Dr. Angel Ramírez), Alberto Antún coordinator Taisha Universidad de las Nacionalidades Indígenas de la Amazonia Ecuatoriana (LEDA) and the Universidad Tecnológica América (UNITA) (Facultad Ciencias Administrativas) – Dean: Dr. Anibal Fuentes and Vicedean: Prof. Luis Huaraca. Prof Huaraca and Alberto Antun then participated in the November workshop and a representative of UNITA is planning on participating in the June 2006 workshop.

The partnership with St Andrews University (Dr Mario Aguilar, Dean of St Mary's College) continues to develop with this Centre for the Study of Religion and Politics (CSRP) being particularly interested in the interdisciplinary nature of this project.

Written evidence of some of the progress of partnerships is included in the support letters (Appendix 10).

7. Impact and Sustainability

We, with our Colombian partners, advertised the workshops by sending out invitations to leaders of local communities, resguardos, schools, scientific institutions in Amazonia, as well as Posters and Programmes with timetables (see Exhibits 1a &b and 2a&b). These posters, etc, all carry the Darwin Logo. Indigenous people and institutions from further afield are seeking affiliation with the project. We now have made firm contacts with the Shuar community, Taisha, Morona and the UNITA, Quito, Ecuador.

As a direct result of our workshops and fieldwork, the indigenous people from the Colombian resguardos have started their own mini Botanic Gardens as showcases to the local population, especially the children/youth (Teachers at the schools/colleges are working with local sabedores to set up gardens e.g. in the community Sta Sofia at Centro Educativo Antonio Nariño), and as a means of preserving the valuable species, some of which are in danger of being lost. The work of local residents such as MG and others in Sta Sofia on forest recuperation & conservation of biodiversity is on-going (see Appendices 5a, 5b and 7). The elders and leaders with small funding from the project are now are organising their own workshops to motivate the people and raise awareness of te project. Other projects have been inspired form our Darwin Project such as a project which ACITAM has completed on plant species in chagras. Two communities (Macedonia and Santa Sofia are now looking at methods to recuperate fish population in várzea areas. The communities are now looking at the actual traditional knowledge of sustainable management of the environment held by their elders which is being lost and has not been appreciated.

ACITAM and the *Abuelos-Sabedores* are involved in all Darwin Workshops and are fronting other workshops in the Banco de La República and the communities. Youth from local schools and colleges (such as INEM & San Juan Bosco) are also invited to all our project activities. Our approach will hopefully yield sufficient critical mass from the local communities for the continued success of the project and on-going use & development of the educational packages produced.

The exit strategy is that the project will be left in the hands of the elders and local institutions. However, it is extremely difficult for them to raise funding alone and we will continue to endeavour to help them in this. The project has had a much greater impact than anticipated and it has opened up much more interest and momentum than we expected (e.g., in numbers of participants attending workshops, diversity of participants and geographical area from where participants are arriving form.

8. Outputs, Outcomes and Dissemination

No annual Newsletter (Output 16) has been produced. Indigenous people have an oral tradition thus video recordings of the Workshops (and Spanish transcriptions of these) have been deposited in the Library of the Banco de La República and in ACITAM, Leticia for public use.

Table 1. Project Outputs (According to Standard Output Measures)

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
4A	Apr 2004 Workshop Leticia (45 UG – Col,Braz,Per) Aug 2004 (18 UG – UK) Scottish School of Herbal Medicine (SSHM) 25 Oct 2004 (15 UG – UK) Napier University BSc in Comp Meds Oct 2004 (224 UG – UK/Malaysian) Strathclyde Univ MPharm Adv Drug Discovery Nov 2004 Workshop Leticia (30 UG – Col,Braz,Per) Feb – Apr 2005 33 UG – UK students Strathclyde Univ UG elective in Herbal Medicines May 2005 Workshop Leticia (40 UG – Col,Braz,Per) Aug 2005 x 20 students Scottish School of Herbal Medicine Jan 2006 15 students for Napier University BSc in Comp Meds Oct 2005 (220 UG – UK/Malaysian) Strathclyde Univ MPharm Adv Drug Discovery Nov 2005 Workshop Leticia (45 UG – Col,Braz,Per) Feb-Apr 2006 (47 UG-UK) Strathclyde Univ UG elective in		365	387		752

	Herbal Medicines				
4B	Apr 2004 5 ⁶ days Workshop Leticia Aug 2004 3hrs SSHM 25 Oct 2004 1.5hrs Napier University BSc in Comp Meds Oct 2004 2hrs Strathclyde Univ MPharm Adv Drug Discovery Nov 2004 2 days Workshop Leticia Feb – Apr 2005 12hrs Strathclyde Univ UG elective in Herbal Medicines May 2005 2 days Workshop Leticia Aug 2005 3hrs Scottish School of Herbal Medicine Jan 2006 1.5hrs Napier University BSC in Comp Meds Oct 2005 2hrs Strathclyde Univ MPharm Adv Drug Discovery Nov 2005 5 days Workshop Leticia Feb-Apr 2006 12 hrs Strathclyde Univ UG elective in Herbal Medicines	69	88		157
4C	Apr 2004 Workshop Leticia (10 PG – Col,Braz,Per) 19 Oct 2004 10 PG – UK Edin Univ MSc in Forestry Nov 2004 Workshop Leticia (10 PG – Col,Braz,Per) Jan 2005 (24 PG MSc – UK+others) Strathclyde Univ in Phytochem Option – additional outputs May 2005 Workshop Leticia (10 PG – Col,Braz,Per) Nov 2005 (20 PG – Col,Braz,Per including PG teachers – Santa Sofia) Jan 2006 (26 PG MSc – UK+others including China, France, Germany, Greece, India, Nepal) Strathclyde Univ in Phytochem Option – additional outputs (not included in totals need no of hours from AIG). 8 March 2006 University of the Highlands & Islands, Inverness – AIG lectured to 10 postgrad research students.	64	186		214
4D	Apr 2004 5 days Workshop Leticia Nov 2004 5 days Workshop Leticia 19 Oct 2004 2 hrs Edin Univ MSc in Forestry Jan 2005 1hr Strathclyde Univ in Phytochem Option – additional outputs May 2005 - 5 days Workshop Leticia Nov 2005 5 days Workshop Leticia Jan 2006 Strathclyde Univ in	134	32		164

⁶ 5 day workshops in Leticia are all at least 8 hours per day

	Phytochem Option – additional outputs – 2 hours. 8 March 2006 University of the Highlands & Islands, Inverness – 1 hr lecture.					
6A	Jan 2004: Workshop in <i>resguardo</i> Santa Sofia for 20 sabedores, elders, community leaders – elders training younger members of the community in identification, location and use of medicinal plants of the várzea – in Tikuna and Spanish. Exchange of knowledge between medical specialist and elders. Initiation of a communal botanical garden – additional output Apr and Nov 2004 Workshops in Leticia (190 ⁷ total) May 2005 and Nov 2005 Workshop Leticia (200 total – see footnote 7) 2005/2006 Santa Sofia – 2 Workshops run by School and elders for 40 participants total – organization /correction of educational material, prep for leticia workshops 2005/2006 3 Workshops run by leaders and elders in communities of Puerto Nariño, Atacuari and Macedonia (60 participants total) coordination community, follow up to large Leticia workshops activities/prep for Leticia workshops/ coordination of plantations/conservation in communities.	20	190	226		436
6B	Jan 2004: 3 day workshop in <i>resguardo</i> Santa Sofia. Apr and Nov 2004 Workshops in Leticia (10 days) May 2005 and Nov 2005 Workshop Leticia (10 days – see footnote 7) 2005/2006 Santa Sofia – 2 one day workshops. 2005/2006 3 one day workshops run by leaders and elders in communities of Puerto Nariño, Atacuari and Macedonia.	12	1,900	500		2412
7	2005: One draft edition of booklet and DVD entitled 'La Sirena' produced as a preliminary output of the Sta Sofia Community Workshop in Jan 2005. 2006: Final edition of booklet: "El Brazo de la Sirena" – 500 copies. (DVD final edition produced but still to be reproduced)		2	3		5

⁷ this is apart from undergraduates and postgraduates included in output 4

	2006: draft edition of video "Huerta (Medicinal Plant Garden, Santa Sofia")					
8	Weeks spent by specialist members of UK organisation	8	23	14		45
14A	Aug 2003 half day workshop/presentation of Project to leaders with indigenous leaders, heads of institutions, government (Mayor, Governor, Consuls – Peru, Brazil (14?) (40 participants) 15/16 July 2004 Mini - Workshop (Pre-taller) Leticia 50 participants – elders/local leaders together with local authorities. October 2005 CSRP – University of St Andrews Presentation of project results	1	1	1		3
14B	14 Jul 2004 Medicina y Interculturalidad Banco de la Republica, Leticia presentation by BdeC and IRS "La Formación del Sabedor" Mar 2006 COP8, Brazil presentation in Sabedores-Sabedoras and Darwin Initiative side-events		1	1		2
17A	Dissemination network has been established between Colombian researchers, indigenous leaders and elders in Colombian, Peruvian, Brazilian Amazon, UK institutions.	1				1
17B	Built up on in 2 nd year and in third year extended to other parts of Brazil and Ecuador		1	1		2
20	Reference Material handed over and lodged with ACITAM and in Area Cultural Banco de la República – films of all main Workshops and/or transcripts Educational Material (Books and films) left with <i>Resguardo</i> Santa Sofia Centro Educativo Antonio Nariño Colegio, ACITAM and Area Cultural Banco de la República (numeration for each type of material.		3	4		5
22	In <i>Resguardo</i> Santa Sofia Centro Educativo Antonio Nariño Colegio Group of teachers organised to use time dedicated for fieldwork (which they have an obligation to do for training) to continue with recuperation and preservation of traditional indigenous methods of conservation. Organisation formed: AICSE Asociación para la Investigación Científica Sociocultural y Ecológica			2		2

23	Support form Banco de la República for hosting workshops, use of facilities, help with coordination including river and carretera communities. Accommodation and daily support. Conferencistas and participants giving up their normal work duties each workshop and for project fieldwork eg. Medical Doctors.. Discounted viaies Pedro Botes.	£			
		£			

Table 2: Publications

Type *	Detail	Publishers	Available from	Cost £
Educational Book (See Exhibit 3)	"El brazo de la Sirena" Centro Educativo Antonio Nariño- Comunidad de Santa Sofia, Amazonas, 2005	Escala Ltda.. Bogotá, Colombia	Centro Educativo Antonio Nariño- Comunidad de Santa Sofia, Amazonas, 2005/ To be available from CBD Side-events	
Documentatio n of Side-event, Curitiba, Brazil, 30th March - Eighth Ordinary Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 8).	Corredor B., Mitchell A., Roman I., Fernandez Moura Tukano M. <u>Sabedores - Sabedoras</u> <u>Recognition of indigenous identity and ancestral knowledge as a means of defending Amazonia and the environment</u> , (2006)	COP8 – CBD Directory of Side-Events	directory COP8	
Course Notes	Course Notes for Undergraduate and Postgraduates in Pharmaceutical Sciences 2005	University of Strathclyde		

Copies of the Video which accompanies the educational book "El Brazo de la Sirena" have been lodged in the Area Cultural (Library) of the Banco d la República, Leticia, ACITAM and Centro Educativo Antonio Nariño, Sta. Sofia. This will be duplicated in DVD form, but the final was not available at reporting time. A draft DVD is included as an Exhibit – (Exhibit 4).

As part of the awareness of importance of respecting traditional methods of sustainable use of the environment generated by the workshops run by our Darwin Intiative project, ACITAM has developed its own projects and publications arising form these include:

A booklet, about natural sources of materials for making artesanias entitled: 'Oficios Artesanales del Trapeçio Amazónico Colombiano' published by Red de Solidaridad Social & ACITAM.

A poster entitled "La Chagra Conocimiento de Vida – Proyecto fortalecerla Diversidad del Cultivo y Productividad de la Chagra para el Mejoramiento de la dieta Alimentaria de las Comunidades Indígenas del Trapecio Amazonico" - produced by ACITAM supported by SINCHI and Red de Solidaridad .

9. Project expenditure

Table 3: Project expenditure during the reporting period (DEFRA Financial Year 01 April, 2005 to 31 March, 2006)

Item	Budget	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (e.g. postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others (film/tapes/devel etc)			
Audit			
Salaries:			
Blanca de Corredor			
Ann Mitchell			
Indigenous leaders/elders			
Consultant: Dr. Phil Mason			
Secretaries			
Andres Corredor/assistants			
Translators			
TOTAL			

Table3. shows we have an overall overspend of over This has been due to the large number of participants in our workshops in May and November, the high number of activities and the extra security precautions – such as hiring our own transport for land and water travel. As suggested in our MTR (Nov 2004) and agreed by Darwin, the expenditure assigned for Dr. Phil Mason was used to cover extra workshop activities.

10. Monitoring, Evaluation and Lessons

The UK and Colombian partners are visiting all the vital areas relating to the project despite the security problems faced from time to time. That is, we are monitoring progress directly. The purpose of the project is to work directly with the indigenous people. The fact that the indigenous people, *via* ACITAM (Augusto Falcon and its president Rosendo Ahue) are increasingly taking responsibility for the running of the project locally is very encouraging. By working in this way we continue to build towards a clear exit strategy. The elders themselves – particularly Don Efren Ayanari are also taking on the responsibility of funding pre-workshops in communities. Also, those that have truly worked with indigenous communities will readily know that indigenous elders are very strict about evaluating progress of work in their communities. They will readily throw out any project that is not functioning. Some of the pressure that is put on communities, may be measured a little by the presentation of German Pena (Exhibit 5) where he has had great difficulty in actually progressing with rehabilitation of an area in Macedonia and had to reform the project completely. Presenting this work in an open workshop is to open it to evaluating by all of the communities.

People with an oral tradition respond to audio-visual presentations more so than to written outputs. For example, many of the people we work with do not read or write Spanish and their native language (e.g. Yagua) is not yet a written one. We are presenting results as filmed (VHS or DVD media) reports that people can access *via* the Library of the Área Cultural, Banco de La República, Leticia who have equipment to view these on. We have been able to access without problem VHS tapes from our previous Darwin Project (# 162/9/008) that are held in the Library for public access.

We continue to monitor security in Colombia for our activities, especially in the more remote areas. Lessons learned from this year are that it is absolutely essential that UK and local specialists have the experience (our core team have more than 20 years working with indigenous communities) and are prepared to work side by side with indigenous specialists on an equal footing towards the goal of conservation of the biodiversity in the Amazon region.

11. Outstanding Achievements of this project during reporting period.

■ I agree for ECTF and the Darwin Secretariat to publish the content of this section

We continue to work as a team on an equal footing with the indigenous sabedores(as), leaders, ACITAM and other governmental (eg. Area Cultural Banco de la República) and non-governmental organizations from the Amazonas region. This project has now spread over four borders and in our latest workshop (Nov 2005) a young Shuar leader (from Taisha, Morona, Ecuador) participated together with the Vice dean of the Universidad Tecnológica América (UNITA), Prof. Luis Huaraca. We continue to work with many Colombian communities in the Trapecio Amazónico and of the people from these communities have accepted the Darwin project as their own.

The Centro Educativo Antonio Nariño has taken on a high portion of the responsibility of production of educational material and are looking at ways to continue this work into the future. Together with the teachers, children and elders of Santa Sofia they have carried out field work and produced an educational work “El Brazo de la Sirena” or “The Arm of the mermaid”. This is a practical look at conservation, sustainable use of the várzea from the indigenous point of view. It was based on field work carried out by the community, school and project in the island of Sogamozo – an island opposite the Stan Sofia community in the River Amazonas. It is based on the mythology – and the mythological figure of the mermaid

who is able to live in the water and the land as she is half fish, half human – representing the várzea – which can be land or water depending on the season.

The communities of Santa Sofia and Macedonia have set up Medicinal Plants gardens and areas of forest rehabilitation. The medicinal plant garden in the community of Santa Sofia run by Carmen del Aguila and her husband Don Manuel Chota is now mature and well kept. It was set up taking várzea plants to a higher area of terrain. Due to the extreme drought conditions of 2005 in Amazonia and subsequent flooding much of the vegetation of the várzea was lost, but this medicinal garden has not only survived, it has been a life saver for the local community who use these plants in their daily lives. Also in Santa Sofia, the elder Mario Gutierrez continues to rehabilitate an area of high várzea with native plants from the forest – in particular medicinal and other utilisable plants. This is a long term project, and was taken on by Don Mario on his own initiative after participating in our Darwin workshops. In Macedonia, after a disappointing start with making a medicinal plant garden, German Pena together with a small group of sabedores, has taken the initiative of setting up a plot, in an area of deforested land, an hour's walk away from the community which has now been set apart an experimental area of rehabilitation and to grow medicinal plants. It includes rehabilitation of palms and a lake area in which they are growing native aquatic plants. The latter are selected to be medicinal and/or food for fish. A type of fish nursery is being set up at the same time. This was commenced during this reporting year and is making good progress. The techniques used are being taught by the sabedores who still have traditional knowledge. These are extra outputs to our project and will form the base for new projects.

APPENDICES

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Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2005/2006

Project summary	Measurable Indicators	Progress and Achievements April 2005-Mar 2006	Actions required/planned for next period
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • The conservation of biological diversity, • The sustainable use of its components, and • The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose Work together with indigenous specialists, institutions and communities to investigate and promote methods of sustainable management of riverine plantations on periodically flooded banks of the River Amazonas and tributaries - frontier with Brazil and Peru. Production of educational packages to help conserve biodiversity and maintain viable habitats for indigenous fauna.</p>	<ol style="list-style-type: none"> 1. Documentation of methods of sustainable management of riverine plantations in areas surrounding Leticia by tape recording, photography, filming and written work. 2. Development of a publication documenting indigenous methods of management of river plantations. 3. Development of multilingual educational packages for schools, local institutions and indigenous communities 4. Joint team field research with indigenous people. Workshops & field trips which include UK and Colombian team members together with indigenous representatives from Colombia, Peru & Brazil, institutions and private sector. Biannual visits by UK team members and specialists. Presentation in UK workshops by 	<ol style="list-style-type: none"> 1. Documentation is well advanced with substantial volume of material, especially in film/video. This material continues to be edited, organised and catalogued. To date, the project is working with various sabedores in different locations under different forms of traditional methods of management of várzea/forest. Practical conservation is being carried out in two communities in particular Santa Sofia and Macedonia (See Exhibit 5 & Appendices 5a, 5b and 7). Material collected so far includes studies on conservation and recuperation of flora/fauna and importance to health e.g. the edible plants, & those used in preventative and curative medicine. 2. Preparation of publications planned for second half of project. 3. The production of the first educational booklet has been 	<p>The next period will be to tie up work done over the last two and a half years, to continue to look for funding to continue this work as it is a long term project. A final workshop is being held in June 2005, to disseminate results and to look to the way forward for continuation of this work in communities.</p>

	Colombian staff members. Final Report	<p>completed (See exhibit 3) in Community Santa Sofia (Centro Educativo Puerto Antonio). First consultations started at the commencement of project. The accompanying DVD has been produced but not replicated (see draft version Exhibit 4). Work continues on the translation of this material into Tikuna. We hope to get this finished by the end of the project, but funding is short for the publication of the translation.</p> <p>4. Joint team research continued with participation from UK members of the team. In the MTR 2004 it had been agreed to hold extra workshops in Leticia rather than present the work in UK workshops. We did this, but also BdeC presented work in CSRP, St Andrews University.</p>	
<p>Outputs</p> <p>1. Survey of indigenous riverine plantations</p>	<p>Reports and documentation of results. Tape recordings and film of work achieved with indigenous personnel. Training within workshops in exchange of techniques of sustainable methods of management of riverine farms (ca. 60 local people – representatives of communities, institutions, private sector). Feedback directly from local communities regarding progress and suitability of training workshops and materials. (insert original output level</p>	<p>1. Surveys well underway & focus on conservation and recuperation of forest and medicinal plants (See 1, above)</p>	<p>The next period will be to make a final monitoring of progress and to write up. We now realise that our methodology is different to other projects. It needs both native and UK specialists who are prepared to invest the time and work side-by side with the indigenous specialist so that a strong understanding is built up.</p>

	<p>indicators) Visits by UK staff. Production of 1 final training manual. Final report. Final seminar. Production of training film. Follow up of project after the end of Darwin funding to check on multiplication of techniques learned and spin off projects. Also to check up on use of educational material produced</p>		
<p>2. Study of mythology and rituals behind the indigenous techniques of forest management.</p>		<p>2. Studies underway working with several sabedores in Leticia, Sta Sofia, Pto Nariño, Atacuari as well as with Eudocio Bidigimas & others in Bogotá. Includes different ethnic groups – Tikuna, Cocama, Uitoto. See Exhibits 3 and 4 'La Sirena' (the Mermaid) that bridges the gap, in indigenous mythology, between the water and land. Mythology and rituals are built into the actual practical recuperation of biodiversity – eg ritual must be carried out before reforestation, formation of medicinal plant gardens or use of /teaching about várzea/forest/medicinal plants. The environment forms part of the sacred world for the indigenous cultures involved in the project.</p>	
<p>3. Workshops which will form a base for training in techniques of management of river plantations.</p>		<p>3. Two full workshops in Leticia and 3 community workshops held. The latter were organised and run by the communities. High ownership and interest by indigenous personnel. Participation exceeding expectation (>150 people at both the May and November 2005 full workshops) –</p>	

		<p>Exhibits 1a, 1b, 2a & 2b). Attendance extended to NGOs, GOs and indigenous elders from 4 South American countries (Colombia, Brazil, Peru and now Ecuador). Direct results from the workshops are the rehabilitation of a deforested area of várzea near Santa Sofia, the formation of two medicinal plant gardens in Sta. Sofia and one conservation area in Macedonia.</p>	
<p>4. Production of educational material usable by indigenous personnel as well as other members of the local communities/institutions</p>		<p>4. See 2 & 3, above. Written and video records of workshops presented to Banco de La República, Area Cultural & ACITAM. The Book "El Brazo de la Sirena" was launched in the November 2005 Leticia workshop. The planned annual newsletter was not produced.</p>	