

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
<i>Darwin Grant Value</i>	£179,100
<i>Start/End dates</i>	September 2003/August 2006
<i>Reporting period</i>	1 Apr 2004 to Mar 2005, Annual Report No. 2
<i>Project website</i>	
<i>Author(s), date</i>	Blanca de Corredor, Ann M. Mitchell, Alexander I. Gray,

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

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 the frontier between Colombia, Peru

and Brazil. The study seeks to compare traditional indigenous methods for management of low, mid and high riverine *chagras* (*chagras de vega*) 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 plants. A series of workshops will bring key personnel (indigenous communities, institutions, government, private sector, see Appendix 3) together to identify and address problems affecting riverine *chagras* and look at ways of implementing sustainable management. This has the 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* 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 inter-connection between their mythology and conservation / management of *várzea* and rainforest is being studied by the team (see Appendices 5-8, Exhibits 3-8).

The workshops and field research form the basis for the production of educational packages in a form useful to indigenous communities for local communities planned for the third year of this project. Already some outputs, such as video and written transcriptions of the workshops (Exhibits 6,7), have been deposited in the Library of the Banco de la Republica, Área Cultural, Leticia.

4. Progress

This reporting period covers the middle section of this project.

See first year report

Since April 1st 2004 the project has progressed as per baseline with some additional outputs. **April 1 – May 1, 2004** Field trip to Amazonas, Colombia by BdeC, AMM, AIG, GB, CG, Eudocio Becerra Vigidimas, Isaiás Román Sánchez, Ismael Mendoza Rivera to Leticia and to communities Santa Sofia, Ronda, Macedonia, Pto Nariño, La Tacana (Km 11) and community Km 14.5 Carretera Leticia – Tarapacá), Isla Cação and Caballo Cocha, Perú, and Tabatinga, Brasil.

April 2004 – visit of Andrés Corredor to Santa Sofia, Amazonas – commencement of planning of educational material by means of a short workshop. The plan is to prepare cartillas with pictures, drawn by the school children (mostly Tikuna), [and/or to produce songs] representing the indigenous knowledge of *várzea* use and management by the *Sabedores(as)* of Santa Sofia, and accompanying bilingual (Tikuna, Spanish) text. We are also going to compile video (with appropriate subtitles) film(s) along complimentary lines to the cartillas.

Andrés Corredor had meetings with professors of the local school, Daniel Bautista, Blanca Eida del Aguila and others to discuss these plans and to orientate the children and *sabedores(as)* such as Don Manuel Chota and Doña Carmen del Aguila.

April 12-16, 2004 - A training workshop for techniques in land management and comparison with western techniques brought forward by about one month to suit local participants availability. Around 150 participants from 18+ communities, NGOs, Govt organisations such as UMATA, Alcaldia, etc attended. Activities and details are shown in Appendix 3.

A proposal letter from the Health team (GB, CG and RA) relating to Indigenous rights, among other things, was directed to the Departmental and Municipal Secretaries of Health, Amazonas Department.

April 30, 2004 - A meeting of the project team including the health team held in Bogotá (BdeC, AMM, AIG, GB, CG, RA).

May 2 - June 10, 2004 Visit of Dra Blanca de Corredor to Scotland - coordination of work.

July 8-20, 2004 - Ann Mitchell visit to Colombia

July 13-15, 2004 - Short pre-workshop entitled: 'Interculturalidad y Pensamiento Indígena' - 2 x 3 days with 40 people (organised by ACITAM and leaders from *resguardos*) in Amazonian communities held at Santa Sofia and Leticia (Banco de La República), the latter programme was at the invitation of the Bank.

Preparation and coordination for November workshop entitled 'Sabedores, sabedoras: metodos de recuperación, preservacion y manejo de la selva y de la várzea'.

Jul 2004 - Pre-workshop - Planning of Educational Cartillas with ACITAM and communities - memorandum of intent, discussions/agreements. Meeting in ACITAM with Augusto Falcon, Rosendo Ahue (President ACITAM), BdeC, AMM, CG, GB and RA.

July 15/16 - Meetings held with the sabedores-sabedoras in Leticia and Puerto Nariño and Sta Sofia - for project evaluation.

July 17, 2004 - Fieldwork in Sta Sofia - evaluation of conservation plots. Health team met with the Health Promoter Nilo Tamaní and Professor Daniel Bautista.

August 04 - Scotland; filmed coastal regions in Fife (St. Monans and Crail). Appendix 9.

September 2-20, 2004 - AIG, AMM + project assistant (Mairi Mitchell) visit to Colombia.

Sep 3 and 16-17, 2004 field trip to Leticia.

Sep 4-16, 2004 visit to Manaus (BdeC, AIG, AMM, MM) INPA to seek field experts to help in várzea agroforestry eg. Consulting contacts in INPA such as Dra. Maria Teresa Fernandes Piedade (Limnologist) and colleagues working with Max Planck Institute. We invited staff from INPA to November Workshop in Leticia.

Oct 13, 2004 - Scotland - filmed Water of Leith - wildlife/environmental problems (Appendix 9)

Oct 22, 2004 - BdeC and CG met in Bogota - preparation for November 2004 workshop.

Oct 29, 2004 - CG meeting with Amazonas Secretary of Health, Dr. Fernando Gutierrez. CG also met with ACITAM representative, AF.

Nov 18-10 Dec, 2004 - AIG and AMM to Colombia

Nov 22 - 27, 2004 - Workshop Leticia - Banco de la República. See Appendix 3.

Nov 26, 2004 - CG, GB and RA and Rosendo Ahue (President of ACITAM) presented the Health project to the conference: Mesas de Concertación en Salud - and accord defined in the Circular/No Feb 18, 2004 issued by the Ministerio de Protección Social.

Nov 27 - 29, 2004 - Field trip to Trapecio Amazonico - Atacuari, Puerto Nariño, Sta Sofia.

Dec 15, 2004 - CG met in the Ministerio de Protección Social with Dra. Gina Carrioni, Doctor Adolfo Ramos, Dr. Lucio Robles and Dra. Belkis Izquierdo.

Jan 2 - 21, 2005 - BdeC to Amazonas - coordination with Gobernación, ACITAM, FIUPAM, Communities eg Puerto Nariño.

Jan 7 - 21, 2005 - Prof. AC to Amazonas. Workshop held in Sta Sofia, preliminary Educational Material e.g. 'La Sirena' (The Mermaid) is a character from indigenous mythology who bridges the 'gap' between the world below water and the world above (dry land), i.e. the várzea. See Exhibit 7 and Appendix 5c.

Jan 22, 2005 – CG met in Leticia with Daniel Bautista, Sta Sofia.

Jan 24, 2005 – CG met with representatives of ACITAM – Rosendo Ahue, Orlando rayo, Jorge Ahuanari.

Jan 27 – 28, 2005 – CG and AR - fieldwork in Sta Sofia with Nilo Tamani (Health Promoter, Sta Sofia), Anibal Ayambo (Curaca Loma Linda), Magno Cariwasari (Health Promoter, Loma Linda) and Sabedores Manuel Chota, Carmen del Aguila, Alvaro Curico, Mario Gutierrez. Definition of method of evaluation of patients and a timetable of visits form a proposal to the Departmental and Municipal Secretaries of Health.

Mar 16 and 18, 2005 – CG met in ACITAM, Leticia with Rosendo Ahue and Jorge Ahuanari to look at health problems related to local epidemics. Meeting with Dr. Mauricio Rodriguez coordinator PAB at the Secretariat of Health and Drs. Roberto Sierra, Edison Soto, Paola Chaparro of the Municipal Secretariat of Health as well as Dr. Luis Aguilar, Head of Integral treatment for Childhood Diseases (AIEPI) (see Appendix 13).

Mar 16, 2005 – Meeting with Phil Mason, Myconserve.

Timetable for next 6 month period

Apr 4, 2005 – Scotland filming in Crammond with Phil Mason.

April 05 – BdeC to Amazonas – coordination of forthcoming workshop

May 5 June 10, 2005 – AMM to Colombia.

May 16 – 19, 2005 – Workshop, Área Cultural, Banco de la República, Leticia.

June/Jul, 2005 – BdeC and AC working in Bogotá with AF and Rosendo Ahue (ACITAM), Eudocio Bigidimas, Marceliano Guerrero, Isaías Román Sanchez, Carlos, Riaño Moncada (design and print), GB, CG, RA.

Aug 22 – Sep 23 – AMM to Colombia. Possible trip to Ecuador to meet the Schuar & Aschuar who sent messages to us in Leticia announcing that they were interested in meeting the Darwin team to discuss collaborations.

Sep 05 – 1 training workshop in Scotland. MTR suggested that this be cancelled and replaced by a workshop in Colombia. (See Appendix 15b)

Sep 23 – Nov 10 – BdeC to UK

5. Actions taken in Response to Previous Reviews (if applicable)

See Appendix 14 – Six Month report.

6. Partnerships

The partnership with Dra Blanca de Corredor, Univ. Nacional, continues to flourish, as does the collaboration with the Área Cultural, Banco de La Republica, Leticia (Director, Dra. Gloria Revello). We have set up an association with Colombian colleagues called, Asociación para la Investigación Científica, Sociocultural y Ecologica (AICSE) and the act of constitution is being prepared with legal help in Bogotá

A partnership has been forged with the Association of Governors of Communities in the Trapeçio Amazonico (ACITAM) See Appendix 10. The members of the Council of ACITAM take an active part in the planning, scheduling and running of Darwin workshops in Leticia and the communities.

Collaborations have expanded with the inclusion of Colombian medical doctors (GB, CG, RA), interested in traditional medicine use by indigenous people (see Appendix 13). This health team has forged links with the promoters of health in ACITAM and the communities e.g. in Sta Sofia, Loma Linda, Macedonia and Leticia.

The partnership forged with IES-CINOC, Pensilvania, Caldas, has suffered from problems due to the security situation extant (see Appendix 15b, the MTR). This has not impeded the progress of the project. The security problems have also made us wary of bringing other British experts (such as Dr Philip Mason, who does not speak Spanish) over to Colombia. We (AMM, AIG & BdeC) have translated into Spanish and presented the work prepared by them (e.g. in Powerpoint presentation) for workshops and publications, etc. ourselves.

Dra Lucy Hoyos Ocampo (Nutritionist & Dietician), Universidad Nacional, Federación Naturista Colombiana (FENAT) and Naturaleza Y Vida in Bogotá, has shown interest in our project and presented a paper entitled: 'Alimentos autóctonos regionales de alto valor biológico' (Regional aboriginal food of high biological value) at the Darwin workshop in Leticia (Apr 2004, see plegable (Appendix 3 & Exhibit 3). Dra Hoyos demonstrated the high diversity and the value of local fruit & vegetable crops from the várzea of the Trapeçio Amazonico in diet and health by providing a banquet lunch prepared from these products for participants on the final day of the April workshop.

The partnership with St Andrews University (Dr Mario Aguilar, Dean of St Mary's College) has developed via the setting up of the Department of Religion & Politics and the Darwin team (BdeC, AMM & AIG) was included as research collaborators.

7. Impact and Sustainability

We, with our Colombian partners, advertised the workshops on local radio (Radio Hondas, Amazonas) by sending out invitations to leaders of local communities, resguardos, schools, scientific institutions in Amazonia, as well as Afiches (Posters) and Plegables (Programmes with timetable) announcing the workshop (see Exhibits 1-5 & Appendix 3). These posters, etc, all carry the Darwin Logo [in some cases including the 'original' Darwin logo, which looked like an Amazonian parrot, that the local people really like!]. Indigenous people and institutions from further afield are seeking affiliation with the project (see 12 below). For example the Schuar & Aschuar from Ecuador have contacted us to say that they would like to collaborate in a Darwin Project.

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 Amtonio 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 5-8).

ACITAM (Appendix 10) and the *Abuelos-Sabedores* are involved in all Darwin Workshops and are fronting other workshops in the Banco de La Republica and the communities (see Timetable 13-15 Jul, 2004 in 4 above and Appendix 10). 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.

8. Post-project follow up activities

N/A

9. Outputs, outcomes and dissemination

This reporting period was for the second year (really the second and third 6-month periods) of this project. The first main workshop in Leticia was originally scheduled for March 2004 but was moved to April 2004 to suit the timetable in the Banco de la Republica and the local communities. A number of other pre-workshops and mini-workshops were carried out (see Timetable in 4 above) and a large workshop was carried out in Leticia in November 2004.

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

Code No.	Quantity	Description
4A, 4B, 4C, 4D	45 UG/college students for 5days 30 UG/college students for 2 days 324 students for a total of 21.5hrs as per list on right	Apr 2004 Workshop Leticia Nov 2004 Workshop Leticia Aug 2004 18 students for 3hrs Scottish School of Herbal Medicine (see Exhibit 8) 19 Oct 2004 10 students for 2 hrs Edin Univ MSc in Forestry 25 Oct 2004 15 students for 1.5hrs Napier University BSc in Comp Meds Feb – Apr 2005 33 UG students for 12hrs Strathclyde Univ UG elective in Herbal Medicines Oct 2004 224 UG students for 2hrs Strathclyde Univ Mpharm Adv Drug Discovery Jan 2005 24 MSc students for 1hr Strathclyde Univ in Phytochem Option – additional outputs
6A	150 participants for 10 days 20 participants for 3 days	Apr and Nov 2004 Workshops in Leticia 3 day 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
7	1	One booklet and DVD entitled 'La Sirena' produced as a preliminary output of the Sta Sofia Community Workshop in Jan 2005 (see Exhibit 7)
8	23	23 weeks spent by specialist members of UK organisation
16A, 16B, 16C		No annual booklet 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 Republica, Leticia for public use.
17A, 17B	1	Dissemination network has been established between Colombian researchers, indigenous leaders and elders in Colombian, Peruvian, Brazilian Amazon , UK institutions

Table 2: Publications –

A preliminary booklet and DVD, entitled ‘La Sirena’, was produced by our Colombian partners as sample outputs from a workshop held in Sta Sofia Community in Jan 2005 has been produced (see Appendix 5c and Exhibit 7 that carries the Darwin Logo).

An indirect output from this Darwin Project is a publication, produced by Red de Solidaridad Social & ACITAM as a booklet, about natural sources of materials for making artesanias entitled: ‘Oficios Artesanales del Trapeçio Amazónico Colombiano’. (See Appendix 10).

10. Project expenditure

Table 3: Project expenditure during the reporting period (Defra Financial Year 01 April, 2004 to 31 March, 2005)

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			
Audit			
Salaries:			
Blanca de Corredor			
Ann Mitchell			
Indigenous leaders/elders			
Consultant: Dr. Phil mason			
Secretaries			
Andres Corredor/assistants			
TOTAL			

Table3. shows we have an overall overspend of over This has been due to the large number of participants in our workshops in April and November, the high number of activities and the extra security precautions – such as hiring our own transport for land and river travel.

11. Monitoring, Evaluation and Lessons

See MTR for specifics (Appendix 15).

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.

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. 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. Security problems have made it difficult for IES-CINOC personnel to travel from Caldas and impossible for the rest of the project team to travel there. Additionally, we have noted that our Colombian specialists from IES-CINOC have a very “western” approach to the work, which may not be very appropriate when working with *Abuelos-Sabedores*. This subject was broached with the reviewer during the MTR (Appendix 15). This has highlighted one of the local problems (security) but also that education (formation/attitude) of potential co-workers can be very important to the smooth running of the project.

The Finance Dept of the Univ of Strathclyde has experienced difficulties in transferring project funds from their British Bank to our partners Colombian Bank. It remains unclear to us precisely why the problems arise, as transactions (in US\$) have sometimes taken months to arrive in the project account in Bogotá. This, when it happens, has tended to delay project progress in Colombia. Recently we tried changing the currency by sending £stg but this did not make a difference!

The time difference between Scotland and Colombia can sometimes cause problems in communications.

12. Outstanding achievements of your project during the reporting period – will be reported in next year’s report.

We are working as a team with the indigenous sabedores(as), leaders, and ACITAM from the Amazonas region. Many of the people from these communities have accepted the Darwin project as their own. For example, the multi-ethnic community of Santa Sofia has set up demonstration plots (mini Botanic Gardens, Appendix 5) as examples, for their community and others, of *várzea* plants that they consider important to conserve for health and other uses. Neighbouring communities are following Sta Sofia’s lead, to have similar plots in their communities!! – e.g. Macedonia and Puerto Nariño. They have also taken the initiative in

planning workshops in their communities and in Leticia with help from the Área Cultural, Banco de La Republica. These are very positive achievements for the project.

In this year's Workshops, invitations were sent to (and accepted by) Sabedores from other regions of the Amazon forest e.g. Caquetá Medio, to draw comparisons between their expertise in relatively remote forests areas with those extant on the greater Amazon river where exploitation of natural resources and people over the past 200yrs or so has been extreme. This allows us to compare our past British Council-sponsored research experiences in Caquetá Medio (an area that we haven't been able to visit for about seven years because of the security situation) with our current Darwin-sponsored work. Having sabedores like Isafas Román Sánchez (from Araracuara), Eudocio Becerra Vidigimas (from El Encanto), Ismael Mendoza Rivera (from Monochoa) and Marceliano Guerrero Jekone (from Araracuara), all of whom are from the *Uitoto*, tribe in the project is viewed by us, and the indigenous leaders/ACITAM of the Trapeçio Amazonico, as a very positive achievement. The *Uitoto* tribe in general has been a powerful 'force' in the region and our collaborators in Leticia/Tabatinga, e.g. ACITAM & FIUPAM, are benefiting from the positive interactions being fostered by our Darwin Project.

The project design that we have adopted is transferring the responsibility to the indigenous leaders, as co-organisers of events and taking the initiative in local activities of the project. This we view as essential to the ultimate success and exit strategy for the project. To this end more indigenous people than expected have been attending the workshops/meetings, which is encouraging (but expensive!). Indigenous groups from further afield, e.g. Araracuara (Caquetá), Guaiania, Vaupés, La Chorrera (Sr. Reinaldo Jiagrecudu, *Uitoto*) and Putumayo (Sr. Nubia Deka, *Uitoto*) have contacted Dra Blanca de Corredor requesting that we invite them to workshops / hold workshops in those locations as well!

News of this Darwin Project has reached remote areas of Ecuador and we have had an invitation from the Schuar and Aschuar people to discuss a possible collaboration with them.