



Preservation and Rehabilitation of the Colombian Rainforest by Indigenous People

Colombia-Scotland

Reference No. 162/9/008

Annual Report: April 2000 – March 2001 (First Year)

Blanca de Corredor, Anthropologist, Universidad Nacional de Colombia
Ann Mitchell, Pharmacist/Microbiologist, Universidad de Los Andes/University of Strathclyde
Alexander Gray, Pharmacist/Phytochemist, University of Strathclyde, Scotland
Alvaro Andrés Corredor, Fine Arts, Universidad Nacional de Colombia
Roberto Pineda Camacho, Anthropologist, Universidad de Los Andes
Odo Bigidima, Linguist, Sabedor-Uitoto, Universidad Nacional de Colombia
Indigenous abuelos(as) Sabedores(as), Amazonas / Caquetá, Colombia
Jan Dick, Centre for Ecology and Hydrology, Scotland
Philip Mason, Centre for Ecology and Hydrology, Scotland
Mario Aguilar, Scotland-Colombia Link - University of St. Andrews
Marta Alzate Nejeteyez, coordination/secretarial work Leticia workshops
Norma Elena Nejeteyez and **Elvis Cueva** together with “**José**” guides/river transport



Contents:

Preservation and Rehabilitation of the Colombian Rainforest by Indigenous People	1
1. Darwin Project Information	3
Project Reference No.: 162/9/008	3
2. Project Background	3
3. Project Objectives	4
4. Progress	5
Progress of Project	6
Table 1	6
Progress of Project	6
Project Research and Training	11
Training	11
Workshops	12
Research	12
Research Activities	12
Documentation, preparation of Manual and Film	13
Difficulties	13
Possible Solutions to some of Problems:	14
Design:	15
Workplan/timetable:	15
Table 2	15
Workplan/timetable:	15
Partnerships	16
Collaboration between UK and Host Country (Colombia)	16
National	16
International	17
Number of local partners who have worked to date on project activities:	17
Names of Main Local Partners:	17
7. Impact and Sustainability	18
Impact:	18
8. Outputs, Outcomes and Dissemination	18
Table 3. Project Outputs (According to Standard Output Measures)	18
9. Project Expenditure	20
Table 4: Project expenditure during the reporting period	20
Table 5: Additional Funding and contribution in Kind	20
10. Signatures of UK leaders	21
Appendices	22
Appendix 1	23
Workshops “Chagras de Los Espíritus”	23
Appendix 2	23
Workshop “Métodos de Propagación vegetativa Para la Superación de Problemas en el Manejo del Bosque”	23
Appendix 3	23
Workshop “Métodos de Manejo del Suelo y Preservación de la Selva Tropical Amazonica”	23
On going Project Research	23
Example of Introduction to Research with Professor Odo Bigidima	23
Acknowledgements	23



1. Darwin Project Information

Project title:	Preservation and Rehabilitation of the Colombian Rainforest by Indigenous People
Countries:	Colombia, UK.
Contractor:	
Project Reference No.:	162/9/008
Grant Value:	£175,500.00
Start Date:	April 2000
Finish Date:	March: 2003
Reporting Period:	April 2000 – March 2001

2. Project Background

The indigenous elders in Caquetá Medio, Amazon tropical forest, Colombia, identified the problem of deforestation being a problem, as they had to go further and further afield to find their medicinal plants. Their food sources such as forest animals were now scarcer and due to deforestation the streams were disappearing which had been sources of fish for family consumption. In Leticia, Amazonas, the problem is exaggerated due to the loss of traditional techniques of making traditional gardens (*chagras*¹) and caring for the forest. In the area surrounding Leticia there is considerable deforestation and use of inappropriate farming methods. This has resulted in difficulties for the indigenous people in the area to feed their families in the traditional way. The indigenous people have identified a need for a solution to this problem, as have some organisations such as “Bienestar Familiar” who have set up projects with selected indigenous groups with a view to recuperation of some of these lost traditions – mainly by teaching very young children. These projects, however, only partly address the problem because the young child (from 0-5 years) is taught by his /her mother/grandmother how to take care of the environment and how to plant their plants in the *Chagras*. The woman traditionally works with her partner – the men and women having defined roles. The elders of the Amerindian groups in the mid-Caquetá and Leticia (Amazonas) areas of the Colombian Amazon rainforest have expressed a concern about the deforestation and inappropriate management of some areas of their *Resguardos*². This deforestation has been caused by various entities including colonists using the area for

¹ *Chagras* are traditional indigenous mixed species gardens cultivated by the indigenous peoples. They are of one to two hectares in size, are to produce edible, ritual and medicinal plants for the family.

² *Resguardo* is an area set aside by the Colombian Government for the benefit of the indigenous inhabitants and the conservation of the ecosystem.



livestock grazing and non-traditional farming and hunting during the course of the last century or so.

This project aims to work together with the Amerindian communities in the Colombian Amazon in Leticia and surrounding areas looking for practical solutions to the conservation of the biodiversity of their environment as a means of elevating their standard of health and way of life. Not only will the project lend UK expertise in the conservation of the forest environment, planting techniques etc. it will help the indigenous communities preserve/recuperate the traditional knowledge held by their elders.

3. Project Objectives

The **overall general objectives** for the project are as follows (from project proposal):

- a) The scientific identification of plants that the “wise men and ladies” *Abuelos (as)-Sabedores (as)*³ of the community use for medicinal and other purposes.
- b) The scientific identification of the plants that the village elders know to be adapted to fit differing ecological niches.
- c) Collection and conservation of indigenous traditional knowledge (*Historia*⁴, myth, story, legend and its materialization in daily life), their methods and techniques relative to the rehabilitation and conservation of the tropical rainforest and its environment.
- d) Exchange of knowledge and techniques with respect to reforestation, rehabilitation and conservation of the Amazonian ecosystem between indigenous experts and specialists from the institutions involved in the project.
- e) Documentation of biographies of the *Abuelos(as)-Sabedores(as)*, the traditional managers of the ecosystem complementing the documentation of the traditions.
- f) The development of traditional mixed species gardens (*Chagras*) for the cultivation and domestication of edible, medicinal and ritual plants.
- g) The reforestation of deforested areas close to the villages by a combination of traditional knowledge and scientific knowledge.
- h) Research to explain the biological reasons behind the indigenous knowledge associated with the insects, animals, plants, soil microflora/fauna and minerals within the tropical forest.
- i) Dissemination of the understanding about indigenous knowledge acquired by the project

Due to the difficult security conditions in Colombia it has been necessary to modify some of the objectives. In order to make plant, soil collections and set up plots it would mean the team members staying for defined lengths of time in the field (outside the Leticia area). Normally we live with the indigenous co-investigators in their homes and also, when appropriate, making camps in the jungle. This is definitely difficult at the moment from a security point of

³ *Abuelo-sabedores (as)* are indigenous wise men or wise ladies who have gained expert knowledge of plants, traditions such as medicines, managing the environment by following careers (e.g. dance, medicine, basket making). These careers are profound and can last as long as forty-five years.

⁴ The *Historia* or *History* is only related in the *mambeadero* (location of sacred communication with gods and ancestors within the *maloca*). It contains all the secrets necessary for the optimum manipulation and satisfaction of the material necessities of the group.



view. After discussing this problem with Ms. Valerie Richardson (April 25th, 2001) it was decided that for objectives (a) and (b) we (in particular, Blanca de Corredor, Ann Mitchell and Andrés Corredor) would collate this documentation of plant-use, etc., using photography and documented material (taped and written but so far unpublished) which we have collected over the past 20 years and which we continue to acquire. This would be used to construct a Catalogue/Database of Plants, etc., using local (vernacular, *idioma*) names and scientific (Latin Binomial) names where possible. We have many years of experience in the field in Caquetá Medio observing the preparation of traditional *chagras* and indigenous reforestation techniques which we can draw on for comparison purposes with our more recent findings in the Leticia area. The material will be gathered in the Leticia area by means of the Darwin-sponsored workshops and short “casual” visits to the field. We are fortunate to have strong contacts in the area built up over some time (particularly by B de C, AMM & AAC) and we are able to work directly with the indigenous people in a way not normally possible.

It may be possible at some future date to make collections in collaboration with a local institution or organisation. However, we note that at the moment indigenous people are generally reluctant to work with most NGO's.

The original project proposal had the objective (f) of setting up plots comparing reforestation techniques. This objective has also been modified, as it would entail us setting up and monitoring plots in specific areas outside Leticia. This problem has also been discussed with Valerie Richardson. It has been agreed to avoid doing this until security conditions are more reliably stable.

4. Progress

The project has progressed via implementation of workshops and field research/visits, [some of which were added to allow close monitoring of the security situation by the Colombian partners and/or to ensure the success of the forth-coming workshop(s)], involving local communities/institutions in the Leticia, Amazonas and Caquetá areas and British and Colombian experts. Original proposals for these workshops to involve about 20 people were greatly exceeded. In reality the first workshop in November 2000 [“Métodos de Propagación Vegetativa para la Superación de Problemas en el Manejo del Bosque” (Methods of Vegetative Plant Propagation to Overcome Problems in the Management of the Forest)] attracted around 180 participants, the majority of whom were from indigenous communities. The numbers for the second workshop in March 2001 [“Metodos de Manejo del Suelo y Preservación de la Selva Tropical Amazonica” (Methods of Soil Management and Preservation of the Amazon Tropical Rainforest)] were curtailed to just over 100 participants. The workshops successfully drew together active participation from around 60 indigenous communities, academic, governmental, non-governmental and private institutions, which far exceeded our original expectations. The documentation (audio-taped, filmed & written), of research work with indigenous specialists, the *Abuelos(as)*, was carried on in Bogotá and Leticia during the whole year.



Progress of Project

The following Spreadsheet, with Appendices, provides a full account of the years' activities and outputs, which included early, pre-Darwin, support from British Council/DFID to facilitate preparations for the Darwin activities.

Table 1
Progress of Project

Month	Original Projected Key Milestones	Actual Progress/activities
Feb–Apr 00	British Council Link visit of Ann Mitchell to Colombia and Leticia enabling coordination and planning of Darwin project activities	British Council-sponsored link visit (Feb 27 –Apr 2) of Ann Mitchell to Colombia and Leticia enabling coordination and planning of Darwin project activities
Mar 00	Blanca de Corredor and Ann Mitchell used the opportunity of a field trip to locate indigenous and other personnel beneficial to future of the project.	Blanca de Corredor and Ann Mitchell made a field trip (Mar 3–18) to Leticia, Amazonas to locate indigenous and institutional personnel who will assist with the logistics and forward planning of the Darwin project.
Mar–Apr 00	British Council link visit of Sandy Gray to Colombia enabling coordination and planning of Darwin project activities	British Council-sponsored link visit (Mar 19–Apr 2) of Sandy Gray to Colombia meeting with team in Bogotá for coordination and planning of Darwin project activities
Apr 00	Initial field visit made by Dr Alvaro Andrés Corredor to follow up visit made by Dras Blanca de Corredor and Ann Mitchell in March 2000 to Leticia (British Council Link scheme). Commencement of implementation of project.	Alvaro Andrés Corredor field trip (Apr 17 – 24) to Leticia to build on previous field trip contacts made by team in March. In particular firmed up agreement of support from the Banco de la República in providing us a location for at least one training workshop. He made firm contacts with the indigenous communities in the Malocas of Km 11 (La Tacana) and Km 6 (Asociación de Mujeres, Nuevo Milenio). He paved the way for his planned workshops on conservation (to be presented through the media of artwork and map-making) with families and young people as well as forming the foundation for all of the workshops.



Apr- May 00	Preparation of fieldwork. Purchase of project equipment in UK and Colombia.	Preparation of fieldwork, Colombia, Penicuik & Glasgow. Purchase of project equipment was commenced. There was a delay initially due to a delay in the flow of funding to Bogotá but this was resolved. It was decided to purchase some equipment, particularly the computer, in UK following advice of the Colombian partners on problems of 'ringers' on the market in the host country.
Jun 00		Ann Mitchell visited Colombia (Jun 4–28) to participate in field trip in Leticia and to coordinate all project activities. Meetings were held with Roberto Pineda (Universidad de Los Andes), Blanca de Corredor (Universidad de Los Andes), Andrés Corredor (project assistant and leader of indigenous young peoples workshops), Odo Bigidima (Uitoto, Professor of Linguistics, Universidad Nacional de Colombia), Marceliano Jekone Guerrero (Cacique Uitoto, Caquetá Medio)
Jun 00		Blanca de Corredor and Ann Mitchell made a field trip (Jun 10 – 24) to Leticia to visit the indigenous people such as Regina Nejeteyez and her family, Teresa Fairito (Uitoto, Asociación de Mujeres), Josefina Teteye (Bora, La Tacana), Cacique Eduardo Bakì (Cacique Muinane, Caquetá Medio in process of migrating to Leticia). They visited local institutions, following up on contacts made over the last 18 months (British Council Link). Gloria Revello, director of the cultural section of the Banco de la República proposed we hold our first Darwin training workshop on plant propagation techniques in the Banco de la República together with IMANI (Instituto Amazónico de Investigaciones, U. Nacional de Colombia) in November. This was to be a two-day workshop and labelled as an academic workshop but included representatives of the local institutions and leaders/healers of the local indigenous <i>resguardos</i> and actually lasted 4 days (Nov 7-10) ⁵ . Organization was put in place for another workshop to be held for local indigenous and non-indigenous land users. The proposal for a second workshop on soil fertility in 2001 was made at this time. This was originally planned for Jan 2001, but was judged not a good time as schools in Leticia are on vacation, Bank facilities are closed for holidays, and heavy teaching commitments of British academics; this workshop was re-scheduled to Mar, 2001. Institutions showing particular interest in participation included Bienestar Familiar (= "Family Welfare") and UMATA (Unidad Municipal de Asistencia Técnica Agropecaria = "Municipal Union for Technical Assistance in Agriculture/Fisheries").
Jun 00		Roberto Pineda made a short field trip (Jun 9 – 11) to Leticia and coordinated work with the IMANI (U. Nacional de Colombia).
Jun 00	Investigation on the social aspect of the environment commenced.	Investigation on the social aspect of the environment started in Bogotá and Leticia. In Bogotá this investigation commenced by working with Prof. Odo Bigidima and this continues. When his uncle, Jacinto, is able to come from La Chorrera, the work is carried on with both abuelos.
Jun 00 – Apr 01	Abuelos (as) visit Leticia for around three months of the year depending on availability and	It was planned to take two abuelos to Leticia in November: Prof. Odo Bigidima (Uitoto) and Cacique Fisioi—Andoque for a short visit to participate in workshops, exchange techniques of forest management, participate in rituals and confirm local expertise. In practise Prof. Bigidima was unable to take leave-of-absence from his work in the University but

⁵ Cf Appendix 2



	conditions.	Cacique Fisioi Andoke was able to attend. Around 60 indigenous leaders (or their appointed representatives) were invited to the November and March workshops. Since making the application it has been found that, contrary to previously received local information, there are a few wise ladies and men in the area who still hold a broad traditional knowledge. We are continuing to investigate this further before planning for abuelos (as) from other, more remote, resguardos becoming involved in Leticia. We are finding that due to the political situation abuelos from other resguardos in Amazonas/Caquetá are appearing more frequently in Leticia. We plan to continue to invite abuelos from other areas to the workshops, funding permitting.
Jun - Jul 00	Survey of areas where the indigenous people grow their plants starts.	Survey of chagras where the indigenous people grow their crops begun. Commenced on field trips made by Alvaro Andrés Corredor in April and on field trip by Ann Mitchell, Blanca de Corredor and Roberto Pineda in June. This survey will continue throughout the three years of the project.
Jun – Jul 00	Recording and documentation in native tongue of traditional knowledge on forest issues starts.	Recording and documentation in native tongue (Uitoto Language) of traditional knowledge on forest issues started in Bogotá - Blanca de Corredor with Odo Bigidima and his uncle Jacinto from La Chorrera in Bogotá. (Need for good recording devices). We are now filming parts of this research. See Appendix 5 for narrative by Odo.
Jul 00	Start observation and documentation of uses of plants from mixed species gardens.	Observation and documentation of uses of plants from mixed species gardens (Chagras) in field trip to Leticia begun by Blanca de Corredor and Ann Mitchell in June and continued during Blanca de Corredor's visit in September. This work is continuing in the field and in Bogotá with Abuelos Odo and Jacinto, and other Abuelos visiting Bogotá. As outlined under 'difficulties of the project', protracted visits to field sites outside the town of Leticia are inadvisable due to current security situation.
Sep - Oct 00		Blanca de Corredor travelled (Sep 19 – Oct 1) to Leticia to make final arrangements for the November workshops on plant propagation. As on previous occasions Blanca surveyed the security situation. She reported that there was enormous support and interest from the local Leticia/Amazonas people for the forthcoming workshop.
Sep 00	Commencement of setting up two plots to compare techniques	Blanca de Corredor and Ann Mitchell have been researching these possibilities during their field trips. The UMATA have expressed interest in a collaboration/assisting with this, as have other local indigenous groups and individuals. However, as this would obviously require prolonged visits by the project team to areas outwith Leticia town we have put this on hold due to security (discussed at meeting with VR 25/04/01)
Sep 00	Workshop(s) to train personnel in Bogotá and Leticia on plant propagation techniques	A four-day workshop (Nov 7-10) entitled "Métodos de Propagación Vegetativa para la Superación de Problemas en el Manejo del Bosque" (Methods of Vegetative Plant Propagation to Overcome Problems in the Management of the Forest) was held in Leticia. This took advantage of the favourable conditions in Leticia and was run in the Banco de la República, Leticia. In practice it was combined with the workshop on deforestation issues "Chagras de Los Espíritus" (Plantations with Spiritual Owners, ⁶) led

⁶In the indigenous belief the land, rivers, air, plants, animals all have spiritual owners. They believe we must respect this and not use more than we require for subsistence. They can not indiscriminately fell trees just as they do not believe they should plant in just any location. For us to successfully carry our intercultural workshops a bridge has to be made between the cultures as a platform to work from.



		by Andrés Corredor and, rather than being restricted to a training workshop, was a workshop for exchange of ideas among all the participants. Dr. Jan Dick (CEH) led the section of the workshop on plant propagation techniques. This was a very challenging workshop to lead. The participants were from diverse backgrounds and included indigenous people from different tribal groups (e.g. Bora, Uitoto, Andoke, Tikuna, Yagua, Yukuna, Muinane, Cocama), academic, governmental, non-governmental and private sector institutions. (Ann Mitchell travelled out to Bogotá on 27 th October and Jan Dick on 3 rd November ready to make the trip to Leticia). Cf.. Appendix 2.
Oct – Nov 00		Ann Mitchell travelled out to Bogotá to prepare for workshop outlined above.
Nov 00		Jan Dick travelled to Bogotá to prepare for workshop outlined above.
Apr – Oct 00		Sandy Gray and Ann Mitchell coordinated project activities and planned workshops with CEH and Colombian Institutions. Preparation of audio/visual material by Dr Jan Dick, CEH and preparation of Manual/handout for (Nov 00) Workshops. The Darwin project work is already being included in Sandy Gray’s undergraduate and post-graduate course work and Scottish School of Herbal Medicine. Both Ann Mitchell and Sandy Gray include the project work in lectures given (St. Andrews University, Oct 2000, Helensburgh Photographic Club, Sept 2000).
Jan-Feb-Mar 01	Workshop(s) on deforestation issues held. Commencement of workshops with children and families	The first workshop was held in November 2000. This was led by Alvaro Andrés Corredor and combined indigenous with Western thinking. The title of these workshops was projected as “Cuando El Padre Pinta el Mundo” [when Our Father (spiritual) painted the world]. The actual title chosen for the workshop was “Chagras de Los Espíritus” The objective was to weave the indigenous beliefs with the ‘western scientific approach’, emphasizing the importance of conservation of the forest for the day-to-day survival of the local communities and, at the same time, the long-term global importance. (See Appendix 1 for more detail)
Jan-Feb 01	Start work on booklet on plant propagation.	The report and manual worked by Jan Dick together with her slides and visual material will form a good basis for the western propagation techniques. As the workshop participants have requested we publish proceedings of the workshops we are looking at ways to achieve this first. This will at the same time help us with the plant propagation manual.
Jan-Feb 01		Blanca de Corredor went to Leticia for 10 days to make final plans for Workshop and prepare the indigenous people for the March 2001 events.
Jan 01	Collection of soil samples from different areas to look for mycorrhizas commences.	The visit of Dr Philip Mason, originally proposed for January, was rescheduled to Mar 01. However, collection (and taking out) of samples of any type is strictly controlled and therefore ‘collection’ was restricted to Data Collection e.g. film/ taped information/ written documentation. Contact was made with researchers at SINCHI & UMATA who already research in mycorrhizae, etc and are willing to collaborate cf. Appendix 3/4.



<p>Jan 01</p>	<p>Workshop(s) to train personnel in Bogotá and Leticia on soil fertility</p>	<p>These workshops were entitled “Metodos de Manejo del Suelo y Preservación de la Selva Tropical Amazónico” (Methods of Soil Management and Preservation of the Amazon Tropical Rainforest) took place in Leticia in March 2001. This was rescheduled due to staff teaching commitments, availability of Banco de La República facilities, and it being a better date for inclusion of local school children (<i>cf.</i> Above June 00, p 9 - Workshop(s) on deforestation issues held. Commencement of workshops with children and families). The programme included a pre-workshop (Mar 3) “Chagras de Los Espiritus” presented by Dra Ann Mitchell and Dr Alvaro Andres Corredor at the Maloca Km 6, Nuevo Milenio. The full workshop (Mar 5-9) was held in the Salon of the Banco de La República and included (translation for Dr Philip Mason by Drs Ann Mitchell or Sandy Gray):</p> <ol style="list-style-type: none"> 1. “Palo Sangre – Usos Sostenibles en Interrogación” by Dr Pablo Palacios, Universidad Nacional de Colombia. 2. “Investigaciones en Suelos de La Amazonia Colombiana y su Microflora” by Dra Clara Patricia Peña, SINCHI. 3. Taller “Chagras de Los Espiritus” by Dr Alvaro Andres Corredor, U. Nacional, Dra Ann Mitchell U. of Strathclyde, and Dra Blanca de Corredor, U. Nacional. 4. “Química en Los Ecosistemas” by Dr Sandy Gray, U. of Strathclyde, delivered in Spanish. 5. “Mycorrhizas: Microbios de Suelo” by Dr Philip Mason, CEH, delivered in English with consecutive translation into Spanish by Dras. Clara Patricia Peña or Ann Mitchell. 6. “Practicas de Terreno”. A field trip to Km 6, Nuevo Milenio, Maloca and surrounding areas of <i>Chagra</i> and tropical forest, for Philip Mason and the team to see some traditional indigenous <i>chagras</i>/plantations. <p>The above workshops are set out in greater detail in Appendices 3/ 4. Feedback came from participants in both workshops: Requests for documented outputs in the form of published proceedings (written & film) and teaching / educational packages suitable for local primary and secondary schools / colleges were received. Request for assistance with local environmental problems (e.g. pollution with plastics, sewage, etc) also received. In consultation with Dra Gloria Revello, Banco de La República, the local communities have been stimulated to propose their own workshops adopting the format of our Darwin workshops. For example, they held a workshop in the Banco de La República in late March 2001 (which was complementary to our Nov 2000 and Mar 2001 workshops), on the nutritional and medicinal value of Yuca (<i>Manihot esculenta</i> and related <i>chagra</i> species of the plant family Euphorbiaceae). Contribution to OUR ‘exit strategy’ They are also looking forward to our future Darwin activities.</p>
<p>Mar 01</p>	<p>Workshops in Bogotá to train personnel in Phytochemical,</p>	<p>Philip Mason presented (Mar 15) a workshop on soil fertility in the Universidad de Los Andes. Sandy Gray was to present a workshop on phytochemical analysis techniques (similar to that presented in Leticia) in the U. Nacional but this was cancelled at short notice due to security</p>



	etc techniques	considerations.
Mar – Apr 01		Blanca de Corredor visited (Mar 23 – Apr 29) UK to coordinate project, meet with CEH, U. of Strathclyde and U. of St Andrews personnel. Build up planning on booklet and film and facilitate preparation of the first year report (Collaborator Information Package for ECTF Darwin Initiative Evaluation). Lecture on the management of the environment from the indigenous point of view in Napier, Strathclyde and St. Andrews Universities.

For the reasons stated above the soil fertility workshop planned for January 2001 was programmed for March 2001. Also for the reasons stated above, the plant propagation and soil fertility workshops were held in Leticia, making the most of the presence of the CEH experts Jan Dick and Philip Mason on the field site. The precise timing and length of these visits based on security considerations, being subject to change as the situation dictated. The overall work for the year ran to schedule. We have been particularly fortunate in having the participation this year of Andrés Corredor who set up the series of workshops entitled “Chagras de los Espíritus”. These workshops were planned but in a much simpler format to involve families in investigation and consideration of the problems of conservation of the environment. In actual fact they have been taken much further. They have formed a platform for the whole series of workshops. They have motivated the indigenous people to participate in the workshops in a form not normally in their tradition.

Project Research and Training

Training

The Darwin funding for this project is mainly channelled into workshops, which are based on an exchange of techniques and knowledge with an overall view to recuperation and preservation of the Colombian rainforest. The training provided by British specialists is intended as a catalyst to bring forward the importance of traditional indigenous expertise in preservation of the rainforest. At the same time the workshops are intended as a platform to highlight problems, which are being faced by the indigenous communities in Leticia and the surrounding areas.

In order to bring the workshops into context, a bridge must be made to the indigenous people in order for them to participate fully in the workshops. This was enabled in two ways:

- a. Visits to the local communities by project team members (Blanca de Corredor, Ann Mitchell, Andres Corredor building on contacts, which this team has had over many years in Leticia and Caquetá Medio.
- b. The design of a workshops entitled “Chagras of the Spirits” which looked at the traditional indigenous knowledge with respect to spiritual owners of the forest. This directly dealt with the relationship between man and the forest and traditional methods of conservation of the forest.



Workshops

Workshops carried out were as summarised in table 1 and appendices 1 – 4 and consisted of the following:

- Workshop(s) on deforestation issues held. Commencement of workshops with children and families
- Field Visits for workshop preparation and for research purposes

Research

Due to conditions in Colombia, the research work with the indigenous people around Leticia is being limited to short visits. However, as the team already have many years of preparation, the research is being carried out by two main methods:

1. Visits to Leticia and surrounding area to observe and document traditional method of preservation of the environment, chagras, chagra plants, plants used to recuperate the forest.
2. Working with Sabedores who either live in Bogotá (such as Odo Bigidima) or who are visiting (see Appendix 5).

Research Activities

- Jun 00 Investigation on the social aspect of the environment started in Bogotá and Leticia. In Bogotá commenced by working with Odo Bigidima and this continues. When his uncle, Jacinto, is able to come from La Chorrera, the work is carried on with both Abuelos.
- Jun - Jul 00 Survey of the Chagras where the indigenous people grow their crops was initiated. This commenced on the field trips made by Alvaro Andrés Corredor in April and on field trip by Ann Mitchell, Blanca de Corredor and Roberto Pineda in June. This survey will continue throughout the three years of the project.
- Jun – Jul 00 Recording and documentation, in native tongue (Uitoto Language), of traditional knowledge on forest issues started in Bogotá - Blanca de Corredor with Odo Bigidima and his uncle Jacinto from La Chorrera in Bogotá. (Need for another camcorder as backup, for audio tape recorders as we are now filming parts of this research. These will be important archive material for the indigenous collaborators as well as the project researchers. See Appendix 5 for narrative by Odo.
- Jul 00 Started observation and documentation of uses of plants from mixed species gardens (Chagras) in field trip to Leticia made by Blanca de Corredor and Ann Mitchell in June and during Blanca de Corredor's visit in September. This work is continuing in



the field and in Bogotá with Abuelos Odo and Jacinto, and other Abuelos visiting Bogotá. As outlined under 'difficulties of the project', protracted visits to field sites outside the town of Leticia are inadvisable due to current security situation.

(see Appendix 4 for examples of research being carried out)

Documentation, preparation of Manual and Film

Jan-Feb 01 Start work on booklet on plant propagation.

As can be seen the project team have had their work cut out with preparing and following up the workshops under. As has already been mentioned extra visits had to be made to check out security and conduct coordination in person (not via phone, Email or fax).

Difficulties

Problem of finding a reliable NGO/agent to assist with disbursement of funds in Colombia. The Universidad de Los Andes and British Council were approached but required that we pay 'overheads' of 30% or 10% of managed funds, respectively. Ultimately we opened a separate account in a Bank in Bogotá, in the name of the project, that is controlled by Dra Blanca de Corredor. Transfers from U. of Strathclyde to this account only attract the normal bank transfer charges (US\$ 15.00-50.00) and our Colombian partners do not incur the additional costs of travel, etc within Bogotá which would otherwise have been involved with a NGO/agency.

Security problems mostly responsible for increased costs for year, but were worthwhile! As mentioned under 3. Some of the project objectives have had to be modified with these security considerations in mind.

As we mentioned in the six-month report, workshops with indigenous people require careful organization. We commenced the preparation of the indigenous communities for the workshop in March 2000. Visits by Andrés Corredor, Blanca de Corredor and Ann Mitchell were made to Leticia to continue preparation of the indigenous people and to make formal contact with the local institutions to test their interest in participation and sharing in the organization of the workshop. As Blanca de Corredor, Ann Mitchell, and Andrés Corredor have had contacts in Leticia for many years the organization was relatively straightforward. Dra. Gloria Revello, Banco de la República (Cultural Section) offered us the space to hold the workshop and to help in advertising the event and to share in catering for the indigenous visitors. The Alcaldía and gobernación (local government) offered us two houses to shelter the people. The Secretaria de Salud (Secretary of Health) offered to share petrol expenses to enable us to invite people from the communities situated on the river Amazonas and its tributaries (see map on program). The Universidad Nacional (IMANI) also offered practical help. We invited a representative from Caquetá Medio (Cacique Fisioi Andoke) for the November workshop and had invited Professor Odo Bigidima from Bogotá for both



November and March workshops but he was unfortunately unable to be released from the Universidad Nacional.

Having been assured of all this support (mainly in kind) we invited heads of communities from the river resguardos, the road (to Tarapaca) communities and local institutions. As it is known to be difficult to attract the indigenous people to workshops and lectures (because they are busy with daily subsistence etc.) Gloria Revello also advertised the event near the date to the workshop using posters and announcements/commentaries on the local radio station. We were advised that we would be fortunate if 20 people attended (the number predicted in our original project timetable). In fact, 130 people registered for the whole of the November course and there were 50 more people who attended part of the course. The course was intended to run four days in total – three days of plant propagation techniques and one for the spiritual chagra workshop. Due to the number of people involved, we unfortunately had to cut the workshop down to two and a quarter days plant propagation and one day for the spiritual workshop. The workshop was overall a success – one of the main complaints from local people being that it was not long enough. For the March workshop there was so much interest the Banco de la República invited registration until 21st February to control numbers and kept radio advertising to a minimum (security considerations). The collaboration in both workshops was outstanding.

1. We are now realizing that to make a physical collection of the plants is difficult for four reasons:
 - a. We are requiring everybody in our team to work on the workshops – the enormous preparation and follow up – writing up, film editing etc. to maximize the results of the workshops
 - b. Due to the doubtful security in the area surrounding Leticia it is not convenient to have someone down in the field for lengths of time
 - c. We are tight for finance
 - d. There is a sensibility in Amazonas with institutions collecting samples from indigenous territories so we would prefer to avoid any difficulty in this area.

Possible Solutions to some of Problems:

1. We over-spent the budget for seminars on the first workshops. As we do not wish to continue the momentum of the workshops and activities we would be looking at additional funding possibilities.
2. Film editing. As the people are interested in having a copy of the film of the seminar placed in local institutions, we are trying to do this as soon as we can. (N.B. request for funding transfer from 3rd year to present, of £6000 was granted).
3. As stated above, instead of making physical collections of plants we now propose cataloguing the plants, together with the indigenous people we have been working with, using photographs, drawings and local names. We are also fortunate in being able to run direct comparisons with the work we have done in Caquetá Medio in earlier years.



Design:

The project is built around, and centred on, working with indigenous Sabedores. The methodology used has been developed over more than 20 years and has been found to be the most appropriate. The design of the workshops is being continually modified depending on the feedback from participants – both indigenous and non- indigenous personnel. We are continually monitoring this directly with the indigenous people as far as we are able considering security, funding. As many communities are participating. The design of the project with respect to research techniques, projection of workshops has not changed. For this reason also the main researchers in the project have made additional visits to the communities of Leticia and surrounding areas, preparing the people from at least six months in advance of the actual formal workshops. The indigenous people have then had time to prepare themselves ritually for these events. Running a pre-workshop (by Andrés Corredor and Ann Mitchell) in the maloca for the March workshop proved a particularly successful idea and enabled the selection of monitors for the main body of the workshops. We would hope to adopt this format for the next workshop in year 2.

Workplan/timetable:

Table 2

Workplan/timetable:

Month	Proposed Activity
April 01	Visit of Blanca de Corredor (March April) to coordinate work, participate in workshop ‘Preservation and Rehabilitation of the Colombian Rainforest by Indigenous People’ 1 st year Darwin, lecture on indigenous religion in St. Andrews as well as to impart results of 1 st year Darwin. Additionally a lecture was given in Napier University on traditional medicine/recuperation of the forest by indigenous people (Faculty of Complimentary Medicine). The visit also included a meeting with Valerie Richardson (DARWIN, DETR) in Edinburgh (25/04/01) to discuss progress of project, security measures, modification of project objectives (see above) and to look for advice for searching for funding.
July 01	Sandy Gray and Ann Mitchell visit Colombia for one month to coordinate activities, and participate in a field expedition to Leticia and surrounding areas with Blanca de Corredor and Andrés Corredor. This field trip is to follow up on first year workshops, commence preparation for next workshop and to carry out field research. The team will be listening to the indigenous people, researchers and institutions monitoring the impact of the first year’s activities and planning for the next. The team will be looking for leaders and monitors for the October/November workshop.
Sep or early Oct 01	If regarded necessary, Blanca de Corredor will make a brief trip to Leticia of around 10 days for final coordination of October/November workshop



Oct - November 01	Workshops in Leticia – continuation of Chagras de Los Espíritus and plant propagation methods. Workshop will be coordinated and run by Dras Blanca de Corredor and Ann Mitchell together with the Universidad de Los Andes (Prof. Roberto Pineda). It is proposed to hold the formal part of the workshop again in the Banco de la República with Dra. Gloria Revello. Visiting specialists will be Dr. Jan Dick (Plant propagation methods) and Ann Mitchell (coordination, participation, translation, research). Depending on timetable commitments, Dr. Sandy Gray will continue his workshop on chemical ecology and phytochemistry as part of this workshop or the March workshop. Dr. Mario Aguilar (St. Andrews University, faculty of Divinity) – has been invited to compare his research in Africa and to continue to strengthen the interdisciplinary aspect of this project
Feb 01	If regarded necessary, Blanca de Corredor will make a quick trip to Leticia of around 10 days for final coordination of March workshop
March 01	Workshops in Leticia – depending on availability of Andrés Corredor a continuation of Chagras de Los Espíritus and soil fertility. Visit of Dr. Philip Mason (CEH) - continuation of soil fertility and importance of mycorrhizas. Visit of Ann Mitchell (coordination and participation in workshop/research activities), possibly Sandy Gray (continuation of chemical ecology and phytochemistry workshop and participation in activities – see Oct/Nov above in this table).
Apr 01 – Mar 02	Continuation of documentation of traditional indigenous methods of preservation of the environment with Odo Bigidima and his uncle when available aided by video recordings, tape etc.
Apr 01 – Mar 02	Coordination of workshops and projects both in UK and Colombia
Apr 01 – Mar 02	Editing of film material continues
Apr 01 – Mar 02	Looking for funding sources to continue project, write up proceedings of workshops, also for possible Multilanguage book – Odo Bigidima, Blanca de Corredor, Ann Mitchell, Sandy Gray
Apr 01 – Mar 02	Documentation field observations, collating material, organising data for production of a catalogue of Chagra plants

Partnerships

Collaboration between UK and Host Country (Colombia)

National

This project was set up by the international team of researchers, thus project identification was shared. The project was a spin-out from a British Council Academic Link, which brought together a British and Colombian nucleus of people including anthropologists, microbiologists, pharmacists, plant physiologists and phytochemists. The project has concentrated on involvement of indigenous communities, this is being constantly augmented. The workshops bring together all sectors of the Leticia community including indigenous leaders and personnel from resguardos (up and down the river Amazonas, the carretera and



from Caquetá Medio), institutions (Governmental and non-governmental) and the private sector. Many of these groups do not usually communicate (mix) well together due to strong cultural barriers. The involvement of such diverse groups in this project has surpassed expectations.

International

Seminars and workshops in Leticia were attended by folk from the neighbouring countries, Brazil and Peru some from Government Institutions as well as private sector. Seminars were also presented at Universidad Nacional and Universidad de Los Andes, Bogotá, mainly to under- and post-graduate students.

Seminars, presented by team members, were also held in various Universities in Scotland, including Napier's, St. Andrews and Strathclyde, and Dr Gray has presented lecture courses to under- and post-graduates (Science) at Strathclyde and the Scottish School of Herbal Medicine, Glasgow.

Number of local partners who have worked to date on project activities:

- a) UNIVERSITIES: 4
- b) GOVERNMENT INSTITUTES: 6+
- d) NGOs: 2
- e) COMMUNITIES: 12+

Names of Main Local Partners:

Universidad de Los Andes
Banco de la República
Unidad Municipal de Asistencia Técnica Agropecaria (UMATA)
Universidad Nacional de Colombia (IMANI)
Instituto Amazónico de Investigaciones Científicas (SINCHI)
Maloca Km 6, Nuevo Milenio
Policia Nacional, various sections including Medio-Ambiental (Environment)
Gobernación and Alcaldía of Amazonas
Departamento de Salud
Wisemen, Wiseladies, healers etc. from communities in Leticia and coming from over a local 60Km radius from river and carretera communities and from Caquetá Medio and Miriti.
Included were members of Uitoto, Muinane, Bora, Tikuna, Andoke, Yukuna, Yagua, Cocama tribes
Universidad de Tolima (Forestry Dept) sent postgraduate students to the course



7. Impact and Sustainability

Impact:

The indigenous people that we are working with have an oral tradition for dissemination of information so, at present, they have no use for books/manuals. However they have requested teaching aids for schools and colleges. We have used audiotapes and DV-camcorders to record meetings and field conversations and we are building up a library of information. We hope to publish proceedings of the workshops (in process of seeking finance for collation/translation of information) and are working on a multilingual book of indigenous methods of conservation of the environment. We are also putting together the foundation of a manual on indigenous and western techniques of forest management. Dr Jan Dick (CEH) produced a manual on Plant propagation techniques that resulted from the first workshop in Leticia, Nov. 2000 and Dr Philip Mason; CEH is in the process of doing the same in the area of soil fertility based on his March 2001 workshop. These will form the basis for production of the final manual.

In consultation with Dra Gloria Revello, Banco de La República, the local communities have been stimulated to propose their own workshops adopting the format of our Darwin workshops. For example, they held a workshop in the Banco de La República in late March 2001, on the nutritional and medicinal value of Yuca (*Manihot esculenta* and related species of the plant family Euphorbiaceae). They are also looking forward to our future Darwin activities.

8. Outputs, Outcomes and Dissemination

Table 3. Project Outputs (According to Standard Output Measures)

Code No.	Quantity (Actual Output)	Predicted Output	Description
4a	200 (UK= 140 COL= 60)	0	Number of undergraduate students receiving training in UK – Dr. Gray – Strathclyde and Colombia – Leticia workshops.
4b*	1	0	Number of training weeks provided to undergraduate students
4c*	27	0	UK postgraduate students receiving training (Dr. Gray – Strathclyde University)
6A/B *	20	0	One day workshop for indigenous families to select leaders and monitors for environmental management workshops “Chagras de Los Espíritus”
6A/B	Training workshop held in Leticia for 3 days for 180 people – around 60% indigenous and rest institutions etc and in Universidad de Los Andes on	As under description	Training workshops held in Leticia for 3 - 5 days (</= 20 people - indigenous) and in Universidad de Los Andes on Plant Propagation techniques (1 day for 20 students, timetable permitting).



Preservation and rehabilitation of Colombian rain forest by indigenous people

	Plant Propagation techniques (2 hours for 20 students).		
6A/B	Training workshop held in Leticia for 4 days for 100 people – around 60% indigenous and rest institutions etc and in Universidad de Los Andes on Soil Fertility techniques (2 hours for 40 students).	As under description	Training workshops held in Leticia for 3 - 5 days (</= 20 people - indigenous) and in Universidad de Los Andes on Soil fertility (1 day for 20 students, timetable permitting).
6A/B	8 people for 1 day	0	Training workshop at Km 14 Leticia on building a plant propagator
6A/B	Planned workshop in Nacional not accomplished due to security problems but workshop in Leticia was (additional output)	20	Training workshop on Phytochemistry techniques in Universidad de Los Andes (one day for 20 students).
6A/*B	Half day workshop for around 100 people 100 people – around 60% indigenous and rest institutions etc	0	Training workshop on Chemistry of Ecosystems
6A/*B	Lecture given by Dra Blance de Corredor as opening part of Seminar “Antropología Medio Ambiente y Territorialidad en la Amazonia” – 1hr. 30 - lecture “Management of the environment in Caquetá Medio” – comparing management to that of Leticia.	0	
7*	3		Number of training materials produced for use by host country
8	17	17	17 weeks spent in Colombia by UK team including Ann Mitchell (now living in UK but continuing as research fellow in Universidad de Los Andes).
13A Δ	Indigenous species collection commenced in form of photographic and identification from indigenous point of view – this will be on going for duration of project	As description	Species collection established at the Universidad de Los Andes
14a*	9	0 in first year	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work in host country
22Δ	None (see explanations)	As description	Two permanent plots established to compare planting techniques
15b*	3	0	Number of local press releases or publicity articles in host country(s)
19c*	3	0	Number of local radio interviews/features in host country(s)

* extra output

Δ modified output



9. Project Expenditure

Table 4: Project expenditure during the reporting period

Item	Budget	Expenditure ⁷
Salaries: Principal researchers(2) Salary Project Assistant/Conservation Workshop Indigenous Specialists CEH Specialists(2)		
Office Administration Costs		
Equipment		
Photography, snakebite serum etc		
Seminar costs		
Travel and subsistence		
Printing		
Stationary/Phonecalls etc.		
Total	£60,340.00	£62,907.00

Funding was short for the workshops due to the numbers involved. The workshops basically could not have been operated without the institutional help involved. The following table gives an idea of the enormous support given and this in turn reflects on the interest in the workshops.

Table 5: Additional Funding and contribution in Kind

<i>Banco de la República (Leticia)</i>	
<i>Alcaldía Leticia – accommodation indígenas, opening of first workshop</i>	
<i>Gobernación – accommodation indígenas, opening of second workshop</i>	
<i>Secretaria de Salud – petrol + lending of motorist, outboard motor and boat for transport of indígenas to workshop</i>	
<i>María Leticia Rabadan – petrol for transport of indígenas</i>	
<i>C.U.S. (Comando Unificado del Sur) Army lending of boat and outboard motor for transport of indígenas to workshop</i>	

⁷ We covered extra expenditure ourselves out of salaries



<i>Universidad Nacional de Colombia – conference within workshop/seminar</i>	
<i>SINCHI – conference within workshop/seminar</i>	
<i>Bienestar Familiar – Hugo Camacho and Red de Solaridad – Fabiola Camacho lending of land for plant propagation workshop</i>	
<i>Elvis Cueva (Guide) and José lent boat, motor and their time etc. for river expedition to visit chagras</i>	
<i>Navy – lending of boat and motor in first workshop</i>	
<i>Policia Nacional: Tourist Police, Environmental Police and National Police accompanied us during all workshops in and outwith Leticia – participating in and helping with the workshops and providing additional security</i>	<i>Difficult to put monetary value on this. Very valuable for the team and for on-going success of project.</i>
<i>Indigenous people – each participant gave up a week’s work to participate in the workshops. The Nuevo Milenio group at Maloca Km 6 offered their Maloca for two days, we held a practical workshop in their chagras and they provided meals.</i>	<i>Difficult to put monetary value on this. Very valuable for the team and for successful on-going of project.</i>
<i>British Airways Conservation Fund</i>	<i>One fare for Ann Mitchell to travel to Colombia</i>
<i>ECTF</i>	<i>4 videos (Spanish version) on plant propagation techniques distributed in Leticia & Bogotá</i>

10. Signatures of UK leaders

D. A.I. Gray

University of Strathclyde

Dr. A.M. Mitchell

**University of Strathclyde
Universidad de Los Andes**



Appendices



[Appendix 1](#)

Workshops “Chagras de Los Espíritus”

[Appendix 2](#)

Workshop “Métodos de Propagación vegetativa Para la Superación de Problemas en el Manejo del Bosque”

[Appendix 3](#)

Workshop “Métodos de Manejo del Suelo y Preservación de la Selva Tropical Amazonica”

[Appendix 4](#)

On going Project Research

[Appendix 5](#)

Example of Introduction to Research with Professor Odo Bigidima

[Appendix 6](#)

Research

[Appendix 7](#)

Maps

[Appendix 8](#)

Outputs – Summary

[Appendix 9](#)

Attendance

[Appendix 10](#)

Acknowledgements

[Appendix 11](#)

Published Posters etc.

