

## 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

## 2. Project Background/Rationale

The indigenous elders in Caquetá Medio, Amazon tropical forest, Colombia (Maps – see Appendix IV), identified the problem of deforestation being a problem, as they had to go further and further a field 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 (Maps – see Appendix IV), the problem is exaggerated due to the loss of traditional techniques of making traditional gardens (*Chagras*) and caring for the forest. In the area surrounding Leticia [lat. 4° S - 5° S and long. 69° W – 72° W] there is considerable deforestation “logging” 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” that has 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/aunt/grandmother how to take care of the environment and how to sow 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*. This deforestation has been caused by various entities including colonists using the area for livestock grazing and non-traditional farming and hunting during the course of the last century or so.

This project worked 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. The project lent UK expertise in the conservation of forest environment, planting techniques etc. to help the indigenous communities to appreciate the value of their own knowledge base and preserve/recuperate the traditional knowledge held by their elders. (See Appendix V Partner support letters)

### 3. Project Summary

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

- a) Collection and conservation of indigenous traditional knowledge (*Historia*, myth, story, legend (indigenous science) and its materialization in daily life), their methods and techniques relative to the rehabilitation and conservation of the tropical rainforest and its environment (indigenous applied science).
- b) 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.
- c) Documentation of biographies of the *Abuelos(as)-Sabedores(as)*, the traditional managers of the ecosystem complementing the documentation of the traditions.
- d) The development of traditional mixed species gardens (*Chagras*) for the cultivation and domestication of edible, medicinal and ritual plants.
- e) The reforestation of deforested areas close to the villages by a combination of traditional knowledge and scientific knowledge.
- f) 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.
- g) Dissemination of the understanding about indigenous knowledge acquired by the project. The scientific identification of plants that the “wise men and ladies” *Abuelos (as)-Sabedores (as)* of the community use for medicinal and other purposes.
- h) The scientific identification of the plants that the village elders know to be adapted to fit differing ecological niches.

As stated in the first and second year reports, due to the difficult security conditions in Colombia, it was necessary to modify some of the objectives.

In order to make plant and soil collections and set up plots it would have meant the team members staying for defined lengths of time in the field (outside the Leticia area). Our normal field methodology includes living with the indigenous co-investigators in their homes and also, when on field trips, making appropriate camps in the jungle. This was difficult throughout the project from a security point of view and something, which we assessed on a regular basis.

We originally discussed this problem with Ms. Valerie Richardson (April 25<sup>th</sup>, 2001) and it was decided that for objectives (g) and (h) 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. Many of the plants

encountered have been identified to the species level by indigenous parataxonomists such as Mr Elvis Cueva Márquez (Leticia), Oscar Román Enokayí (Araracuara, Caquetá), Eudocio Becerra Vigidimas (El Encanto, La Chorrera, Amazonas and Universidad Nacional, Bogotá) and by other experts at SINCHI.

As stated in our second year report, it was refreshing to note that, in many instances, after collecting a plant in one region, the people from another region recognised the plant by the same name and could lead us to the same or a related species in their area. This information is being used to construct a Catalogue/Database of Plants, etc., using local (vernacular, *idioma*) names and scientific (*Latin binomial*) names where possible. Fortunately, we have many years of experience in the field in Caquetá Medio, Colombia, observing the preparation of traditional *chagras* and indigenous reforestation techniques that we draw on for comparison with our more recent findings in the Leticia area. The material was gathered in the Leticia area by means of the Darwin-sponsored workshops and short field trips. We have strong contacts in the area built up over some time (particularly by BM de C, AMM, AAC and AIG) and we are able to work directly with the indigenous people in a way not normally possible. It is a huge piece of work to collate not only the name of the plant but the information on preparation, use, traditions, mythology for each plant. If approached completely from the indigenous point of view this would take several years for just one plant – illustrating just one of the many differences between learning approaches. We are working on this steadily, but it will take time to process this information but during this project, we have made a very firm start to this process and this will continue to be built on. (see point 13 of this report). In any case, many of the plants used in the communities for medicinal and other purposes have been identified and their cataloguing has been initiated by us and through local organisations.

We continue to investigate possibilities to, at some future date, make collections in collaboration with a local institution or organisation such as ICA, IES-CINOC, SINCHI, UMATA and/or U. Nacional-IMANI. Our Colombian colleagues (Dra Blanca de Corredor) have been approached by the Director of SINCHI (Dra Luz Marina Mantilla Cárdenas) who indicated that SINCHI are willing to collaborate with our Darwin team on the characterisation (botanical identification) of plants and other organisms. Dra. Mantilla has told us that SINCHI have a large data base and collections, mainly at head office, Bogotá with botanists willing to do identification. This has also been offered to the team by Dr. Nixon Cueva Márquez, agroforestry professor IES-CINOC, Caldas, but see Appendix VI for some research results.

Mapping of important ecological niches in the Amazon region has been carried out aided by the participants in the workshops (see examples in Second Year Report Exhibit Ib). The documentation of traditional knowledge was carried out on field trips, workshops and in Bogotá and this derived from active exchanges between the Project team members, indigenous experts and specialists from many institutions. This work is on-going with the Colombian Partners. Documentation of the biographies of the abuelos(as)-sabedores(as) was carried out at the same time (see CVs of abuelos, Appendix XI)

The project proposal had the objective (f) of setting up plots comparing reforestation techniques. This objective was modified, as it would have entailed us setting up and monitoring “*terra firme*” plots in specific areas outside Leticia, which are not entirely safe for “foreigners”. This problem was also discussed with Valerie Richardson in the first year. (First yr/second yr Reports Exhibits Ia and Ib). At that time it was agreed to avoid doing this until security conditions were more reliably stable. Unfortunately the political situation has got worse rather than better, during the period of our project.

However, as reported in our second year (Exhibit Ib), we have a trial plot in Barrio Costa Rica (Leticia) on *terra firme*, which is being monitored constantly by the Nejeteyes and, from time to time, by ourselves (*cf.* next paragraph). The UMATA (Alcaldía) have been keen to collaborate on this aspect but continual political changes have made this difficult. The Mayor, Juan Carlos Velásquez (Alcalde 2002-2005), approached us in April 2002 with a proposal for some joint project work. However, we would tend to consider this only if a local academic institution intervened as an intermediary. We still hope that the recent change of Government in the Amazonas Department, and even more recently in Colombia as a whole, will have some positive impact on the situation. Mixed species gardens (*chagras*) and rehabilitation of deforested and degraded areas (approximately 0.5 - 1 hectare each) have been set up at six different locations and are being monitored constantly by the local people who have set them up, and monitored by the project team members periodically. The fact that local people from a wide cross-section of the community have been involved in this work gives us confidence that it will continue. We originally proposed the setting up of two plots ourselves but already know of at least six plots, including our own, that have been set up by indigenous communities, colonists and local institutions. These can be viewed as additional outputs of the Project. In addition a group of local governors (*Cabildos*), ACITAM, has recently obtained Government funding for a pilot project on comparative chagra cultivation and they have asked for our assistance with the project.

With the Nejeteye branch of the Miraña Bora ethnic group we have set up a traditional plot on a piece of land (*terra firme*) in barrio Costa Rica, Leticia which was a *cananguchal*. The experimental *chagra* includes a number of ritual/medicinal plants and food/forest plants such as Cashew/Marañón (*Anacardium* spp), several different varieties of Yuca (*Manihot* spp), Pineapple (*Ananas* spp), Sugar cane (*Saccharum* spp), aji (*Capsicum* spp), Plátano and Banana (*Musa* spp), Rice (*Oryza* spp), Dormidera (*Mimosa* spp), Caimo (*Pourouma cecropiaefolia*), Guama/o (*Inga* spp), Asái (*Euterpe oleracea*), Canangucho/Aguaje (*Mauritia flexuosa*), Coco (coconut, *Cocos nucifera*), Copoazú, Lemon, Lime, Mandarin and Orange (*Citrus* spp), Guacuri (*Poraqueiba sericea*), Achapo (*Cedrelinga* spp). The Dormidera and Guamo are nitrogen-fixing plants that help to improve soil quality – rotting logs providing haven for saprophytic and other fungi left as in traditional chagra.

The yuca has been harvested and consumed and was very good quality. The vigour of the plants indicated that soil quality was good and that the mycorrhizae, that have a symbiotic relationship with *Manihot species* and assist the plant with phosphate utilisation, must also be present.





**Photographs 1, 2, 3 and 4**

Experimental Plot (*Chagra*) before (Photograph 1) and after planting (Photograph 2), Regina Nejeteye caring for the plants (Photograph 3), and a picture of a plantain tree this year (Photograph 4)

**Photograph 1**



**Photograph 2**

Also reported in our second year report, we were pleased to note that, as a direct result of our Darwin Workshops, some of the local Indigenous leaders, such as Señor Augusto Falcon P. from the community Macedonia (and the organisation of *Cabildos*, ACITAM), Amazonas,



**Photograph 3**

decided to set up comparative plots (*chagras*) to compare their methods of agriculture with those (European methods) demonstrated by us (Dr Jan Dick and Dr Philip Mason, CEH) in the workshops. We see this as part of the “legacy” of this project – locals carrying on the project themselves. In a more recent visit, October 2002, we have had reports of members of the Community ‘Nuevo Milenio’<sup>1</sup> at Km 6 comparing techniques in their *chagras*. Cacique Jitoma (Comunidad Km 7) was at the workshop in October 2002 and as a result visited SINCHI, Leticia to set up dialogue with this governmental organisation. This is a strongly positive move as indigenous people are notoriously suspicious of governmental and non-governmental organizations and this will also strengthen the legacy of the project. Cacique



Photograph 4

Jitoma (Uitoto) recently (April 2003) assisted Dra Blanca de Corredor during a seminar/workshop on Chamanismo and The *Maloca* Uitoto that she was invited to give at the Banco de La República, Área Cultural, Leticia (Exhibits XXr-t). During a National/International Radio Programme dedicated to the project (ExhibitXXIII), Josefina Teteye talked of the plots being set up combining traditional techniques with those taught in the workshop in Resguardo La Tacana Km 11 Carretera Leticia – Tarapacá. Ms Teteye talked not only of techniques brought from UK but also to combine those used by groups from other resguardos including those from Brazil and Peru..

As reported previously, additionally some members of local institutions, Dr Hugo Camacho (*Bienestar Familiar*) and his wife Fabiola, (*Red de Solaridad*), have set up plots at their *finca* (Km 15, Carretera Leticia-Tarapacá) to compare their local Tikuna agricultural methods with ‘Western’ methods (Dr Jan Dick, CEH) cf. Page 44 (photos 27/28) of our First Annual Report, 2000-2001 (Exhibit Ia). However, travel to these areas was problematic over the period of this project due to security issues in the country and we were not able to follow up on these plots personally during that time. However, on a recent visit (April 2003), after a conference given by Blanca de Corredor, Dr. Hugo Camacho reported that the propagator set up at Km 15 using the method thought appropriate by CEH, resulted in an overgrowth of fungi that overwhelmed the plantlets sewn therein. We have to perhaps accept that a “western” approach is not always applicable. The failure of the propagator in this case was probably due to the super-enhanced humidity generated inside the plastic chamber?

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<sup>1</sup> Comunidad “Nuevo Milenio” has now been renamed “Comunidad Asociación de Mujeres)

Another ‘plus’ for our Darwin Project is that a number of young participants in the workshops, e.g. Mr Luis Gabriel Teteye (*Indigena Bora*), have decided to return to their communities to study with their *Abuelos-Sabedores*. Our workshops have been open to school children and college/University students and we have had good attendance in the second and third year workshops from schools such as the NORMAL, INEM and San Juan Bosco, which also is an important factor in the legacy of the project. The directors of the primary/Nursery School “*Selva Alegre*”, Leticia requested that we try to set up a school exchange with a UK partner/school. This was achieved with George Watson’s College, Edinburgh with information passing between students and the Scots school raised funds that were donated for purchase of educational materials and hardware for *Selva Alegre* School (see Appendix X).

When this project (our Darwin-sponsored project) was originally proposed we were led to believe, by local contacts in Leticia City, that there were no *Abuelos-Sabedores* in the Leticia area. This prompted us to propose the involvement of elders (*Abuelos-Sabedores*) from Caquetá Medio, the plan being to bring two elders (Uitoto), who have retained their traditional knowledge, to Leticia for the workshops in the second year. However, during our initial visits to Leticia in 2000-2001 we encountered a number of *Abuelo(as) sabedores(as)/ Shamans* including Juan Andoque Andoque [ethnic group Andoque, originally from Aduche (Caquetá Medio) but now living on the Carretera Leticia-Tarapacá- – (see CD exhibit III) and Manoel Fernandes Moura (ethnic group Tucano, living in Tabatinga, Brazil). In our field trips to the rainforest, some of which have been to Peru and Brazil to avoid security problems in Colombia, we have also encountered Peruvian *Abuelos-Shamanes* such as the Shamans Juan Cobos Rios ethnic group Yagua/Quechua, Nueva Zelanda, Peru) and Humberto Campo Bruno, Ethnic group Tikuna, Laguiño, Peru. We also have an important colleague in Eudocio Becerra Vidigimas (ethnic group Uitoto, El Encanto, and his uncle Jacinto, Rio Carapaná, Amazonas), who is a Professor of Linguistics at the Universidad Nacional de Colombia, Bogotá, and lives in Bogotá most of the time. (Appendix VI).

We have discovered that the security situation has seriously affected the ability of the indigenous people to travel within their own *Resguardos* but especially to traverse outside these areas. For instance, Cacique Fisioi Andoque came out from the Resguardo Aduche to attend the first Darwin Workshop in Leticia in November 2000. He encountered difficulties returning home to Aduche owing to the security problems on the Caquetá River.

The project (Darwin 162/9/008) impinges on Articles 5 (cooperation), 8 (*in situ* conservation), 10 (sustainable use of components of biodiversity), 12 (research & training), 13 (public education & awareness), 14 (impact assessment & minimising adverse impacts), 15 (access to genetic resources), 16 (access to & transfer of technology), 17 (exchange of information) & 18 (technical & scientific cooperation) of the CBD and the *Declaration of Colombia*, made at the time of the adoption of the convention (p. 16, UNEP CoB 92), which emphasises that indigenous communities must be fully guaranteed participation in this process and this participation should be encouraged.

The project has experienced the cooperation between indigenous communities and ‘scientific’ communities/institutions nationally (eg. Caquetá, Putumayo, Miriti, Bogotá, Medellín,



Caldas) and internationally (eg. Brazil, Peru, Argentina, Chile, France, Spain, UK, USA) bringing them all together during field trips and workshops, in Leticia and the surrounding communities in the Amazonas region. We have managed to air and discuss ‘problems’ and aspirations for the survival and sustainable use/management of resources of this biologically rich area. The project has raised awareness of some of the problems caused by uncontrolled deforestation (e.g. the presentation of the situation of the Ancient Caledonian Forest in Scotland in comparison to other parts of the world) and allowed participation of indigenous communities who have broad knowledge of caring for, and sustainable use of, these natural forest resources. The project has involved elements of training and exchange of information in seminars and workshops for a large cross-section of the social spectrum, school/college students, young children, University students, experts from many disciplines/communities (indigenous & institution) coming together to compare methods & strategies for conservation. Overall this Darwin project has activated (positively) local thinking on the sustainable use and conservation of the Amazon forest.

Other additional accomplishments include;

- A greater international ‘flavour’ in project than originally expected, through contacts with indigenous elders and their communities in Brazil and Peru. These Amazonian communities with those of Colombia share similar problems of deforestation, etc.
- An international exchange between schools, *Selva Alegre*, Leticia / George Watson’s, Edinburgh was initiated through the project (See Appendix X).
- A comparison of Allopathic and Traditional or Alternative Medicines was presented at the Workshops.
- Presentations by Dr Xavier Hurtado, Universitat de Barcelona, Spain sought to bridge the ‘divide’ between cultures through the medium of art and modern technology.
- A comparison between problems of deforestation in the UK and those in Amazonia – the story of the loss of the ancient Caledonian forest and what Scotland is trying to do to (badly? by introducing exotic species such as Sitka & Norway Spruce to replace Scots Pine) redress the problem – was presented by us in workshops. The potential for introduced (exotic) species to harm a local environment was illustrated with worldwide examples eg. introduction of Eucalyptus from Tasmania (Australia) to Chile.
- The forest expedition (ecotourism) guide for the team, Mr Elvis Cueva Márquez, has benefited from the exchange of ideas/information/training during field expeditions and workshops.
- Blanca de Corredor, Ann M. Mitchell & Sandy Gray have been invited to speak about the project and the Darwin Initiative at various venues including St. Andrews University, Napier University, Strathclyde University Pharmacy School & ELTS Classes, Albatrees Plc, Church groups in Scotland, Helensburgh Geographic and Photographic Societies, Scottish School of Herbal Medicine, Banco de la República (events not organized by us), George Watson’s College, Universidad de Antioquia and



Cali (visits cancelled due to security problems), Universidad Nacional de Colombia (twice but one visit cancelled due to security problems).

#### 4. Scientific, Training, and Technical Assessment

##### Training

As we said in previous reports, the Darwin funding for this project was mainly channelled into workshops, which were 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 was intended as a catalyst to bring forward the importance of traditional indigenous expertise in preservation of the rainforest. Over the period of the project we have brought in a number of Colombian specialists in different disciplines to compliment and foster exchange with British expertise, in the hope that by facilitating these exchanges at a national level, this would create a successful exit strategy. The workshops acted as a platform to illustrate & highlight problems that are being faced by the indigenous communities in Leticia and the surrounding areas. The April 2002 and October 2002 workshops finished with a day for Sabedores(as) and a day for Institutions to discuss, at workshop level, conservation/ecological problems related to preservation of the rainforest together with possible solutions. For the indigenous sabedores this part of the workshop was viewed as a preliminary “opening” of discussion (“the tip of the iceberg”) as they have gone on to discuss this at ritual level (in the *Maloca*) in the communities for many weeks. For this reason the Sabedores suggested that the Darwin workshops should be at least 3 weeks long!

Workshops were operated on an ‘open door’ principle. However, considerable time was spent in the selection of appropriate leaders and monitors for the discussion groups during the pre-workshops. Certificates of participation were awarded to those who attended the complete workshop course (cf Exhibit of Certificate Appendix XXp-q)

The comparison of techniques for sustainable management of agroforestry systems presented by specialists from CEH, Scotland and Colombian experts such as Nixon Cueva Márquez at the Darwin Workshops, has spurred local communities in the Amazonas region to set up comparative plots comparing their *chagra* system of agriculture with ‘western’ methods. This can be seen as capacity building within the local communities, the leaders and elders now integrating ‘best practice’ techniques in their own communities utilising local species eg. Nitrogen fixing dormidera (*Mimosa spp*) to improve/maintain soil quality.

The animated discussions and number of participants, particularly indigenous, at all of the workshops would indicate that we have been successful at bridging teaching / communication between the cultures. Follow up with the communities has also indicated this. We believe this is in part due to:

The fact that our project team (Blanca de Corredor, Ann Mitchell, Sandy Gray, Andrés Corredor) have direct and lasting contact with locals and have worked and lived with

indigenous people for many years in Caquetá – Medio, Colombia (with about 75 years experience between us).

The design of workshops entitled “*Chagras of the Spirits*” in the *Maloca* at Km 6 and Banco de La República, charted the traditional indigenous knowledge with respect to the “*dueños*” i.e. spiritual ‘owners’ or ‘carers’ of the forest. This directly dealt with the relationship between man and the forest and traditional methods of conservation of the forest – these workshops/pre-workshops acting to bridge the “divide” between “ethnic” science and expertise and “Western” scientific cultures.

## **Workshops**

Workshops carried out were as described in First and Second Year reports (see Exhibits Ia and Ib) and Appendix VII of this report and consisted of the following:

- Pre workshops – bridging or connecting cultural knowledge or concepts with a more ‘western’ approach via the workshop “Chagras de los Espíritus” (see First and Second Year Reports, Exhibits Ia and Ib)
- Workshop(s) on deforestation issues held, Workshops with communities, institutions, youth (colleges, schools, universities) and families
- Workshops on chemical/biochemical/biotic symbiosis within ecosystems/who are the “*dueños*” or carers of the forest
- Workshops on traditional medicine *versus* allopathic medicine,
- Comparison of problems found after deforestation in UK with those in Amazonia – a reflection on the worldwide importance of conservation of our planet – e.g. The story of the Caledonian forest (where is it now, what are the consequences of losing most of it, and some of the real problems experienced/being experienced in restoring it). Comparisons were also made to examples worldwide – eg. Result of importing Eucalyptus from Tasmania to Chile.
- Field Visits for workshop preparation and for research purposes

The project progressed through the three years with five workshops held in the cultural area of the Banco de la República, five pre – workshops held in the *Maloca* Km 6 Comunidad Nuevo Milenio.

Original proposals for the workshops to involve about 20 people were exceeded in all five workshops, the number of participants ranged between 60 (3rd workshop) and 170 in the 4th workshop. The lowest number of participants was seen in the 3<sup>rd</sup> workshop in November 2001 [“*Métodos de Preservación, Recuperación y Manejo de la Selva Tropical Amazónica*” (Methods for the Preservation, Recuperation and Management of the Amazon Rainforest)], which attracted around 60 participants, the majority of whom were from indigenous communities. The numbers attending this workshop were less than other workshops but was probably due to the fact that the Workshop, originally planned for early October, had to be postponed due to the Banco de La República facilities being used as a venue for a Government Security meeting in the aftermath of September 11<sup>th</sup>, 2001. More important than actual numbers of participants, was that by the final workshop(5<sup>th</sup> workshop was held in

Leticia October 2002 [“Métodos de Preservación, Recuperación y Manejo de la Selva Tropical Amazónica” (Methods for the Preservation, Recuperation and Management of the Amazon Rainforest)], a number of individuals have emerged committed to continue the objectives of the project and in the process at least two indigenous leaders have been “formed”/”graduated” (eg. Augusto Falcon and Gabriel Teteye).

## Research

Due to conditions in Colombia, the research work with the indigenous people around Leticia has been limited to short visits. However, as the team already have many years of preparation, short visits are sufficient. The research is being carried out by three 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. Widening horizons to find contacts over the border in Peru and Brazil to be able to carry out fieldwork without so much threat of security problems. For this reason river trips were made to Manaus, Brazil to INPA and to *resguardos* in Peru – building on contacts already made as well as making new ones.
3. Working with Sabedores who either live in Bogotá (such as Eudocio Becerra Vigidimas) or who are visiting eg. Tio Jacinto visiting Bogotá (see Appendix VI) cataloguing the knowledge base of the Abuelos(as).this activity continues (see point 13)

## Research Activities

The following research activities carried on during the whole of the project:

- Investigation on the social aspects of the environment commenced in Bogotá and Leticia in the first year and this has continued throughout the second and third years. In Bogotá, Professor Eudocio Vigidimas works with Blanca de Corredor (Appendix VI) and this continues. When his uncle, Jacinto, is able to come from La Chorrera, (Putumayo – Amazonas) the work is carried on with both *Abuelos* in Bogotá. Commencing from the ritual knowledge, Eudocio and Jacinto are recording traditional indigenous methods of preservation and rehabilitation of the rainforest, methods of cultivation, identification of species of plants and animals. This involves recording the knowledge in Uitoto (dialect *Mínika*) and translating to Spanish. The information is being summarised by Eudocio and Blanca into a form more easily accessed and understood. Once this is ready it will be translated to English as well, but using translators versed in Uitoto culture. This work will form an important archive material for the indigenous collaborators (who have an oral tradition) as well as the project researchers (see appendix VI). This work is continuing in Bogotá, usually once per week on weekends.

- Survey of *terra firme chagras* where the indigenous people traditionally grow edible, medicinal and ritual crops continued throughout the three years of the project particularly in Brazil and Peru. A comparison is being built up between *terra firme chagras* in Leticia and surrounding areas with those studied in previous years by us in Caquetá Medio **234.5678** It is to be noted that this fieldwork will continue many years after the Darwin funding has finished, as it is very extensive work. We are now working with an increasingly diverse selection of tribes across three frontiers. The observation work alone is quite complicated, as the various agricultural practices must be observed in different seasons. In order to do justice to this type of work a complete understanding of the rituals involved has to be built up – this in itself requires years of patient fieldwork and observation/interaction.
- Observation and documentation of uses of plants from mixed species gardens or *terra firme chagras*, during the teams fifteen field trips to Leticia and surrounding area. This work is continuing both in the field and in Bogotá with the Colombian partners, especially Dra. Blanca de Corredor and Andres Corredor with *Abuelos* Eudocio, Jacinto, and other *Abuelos* visiting Bogotá. As outlined under ‘difficulties of the project’, protracted visits to field sites outside the town of Leticia were inadvisable during the lifetime of the project due to the security situation extant.

We suggested in the original project proposal the team had been led to believe that by some local institutions that there were no longer *sabedores* in the Leticia area. For this reason the project proposal had included 2-3 trips for *abuelos* from Caquetá Medio to come to workshops in Leticia. We, in fact have found that there are actually *sabedores* (eg. Juan “Jua” Andoque – Km 11 carretera Leticia - Tarapaca) in the Leticia area, but they are dispersely situated. Once we had found out who they were, Blanca de Corredor, accompanied by a Colombian student apprentice, made a journey, together with Elvis Cueva and Domingo over many miles of flooded forest to look for Don Humberto Campo Bruno Tikuna again and to

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7 Gray, Al., Mitchell, A.M., Rodriguez Jujúborre, N. Corredor, B. de. Robles C, J.E., Torrenegra G, R.D., Cole, M.D., Cifuentes, C., April 1996 “The ups and downs of the ethnobotanical approach to drug discovery”, presented at the Royal Society of Chemistry Conference, Brighton, England, UK. In press.

8 Pineda Camacho, Roberto 2000 “Holocausto en el Amazonas-Un historia social de la Casa Arana” Quebecor impreandes S.A.



locate a well-known Quechua Shaman in Peru, Juan Cobos Rios – one of the few *abuelo* shamans to be found in the area. They were successful in this difficult task – the indigenous families in these regions move about depending on the conditions – e.g. the forest floods periodically, where their *chagras* are, etc. Shamans and *Abuelo Sabedores* (see Appendix XII for definitions) are often extremely difficult to locate, firstly because information about them is scarce and secondly because they travel over great distances/areas treating their patients. Juan Cobos Rios in 2002 travelled in Brazil, visiting many patients and he attended an international symposium on shamanism in Rio de Janeiro, Brazil – a journey that took him away from home for about one month.

Fifteen field research/visits were made over the project period. Extra journeys were made over and above those originally proposed in order to allow the Colombian partners to closely monitor the security situation and/or to make preparations for, and to ensure the success and safety of, the forth-coming workshop(s). Journeys also made to deliver letters of thanks to communities and invitations to the next workshop, to local Amazonas communities in Colombia as well as contiguous areas of Brazil (eg. Tabatinga) and Peru (eg Vista Alegre, Sacambú, Laguño and Nueva Zelanda (see maps Appendix V).

In July / August 2001 field trip by Blanca de Corredor, Ann Mitchell and Sandy Gray to Leticia; to deliver letters of thanks/invitations to local communities and to carry out a field trip. A visit to Brazil (Tabatinga to Manaus, by ship, returning by air) to INPA, Manaus was made, to hold discussions with colleagues, Dr R. Piedade (chemoecologist) and Dra M.T.F. Piedade (biologist/limnologist) for preparing joint research proposals. This trip was also fruitful in that we made contact *en route* with a medical doctor from Antioquia /Medellin, Colombia, Dr Carlos Gutierrez T., with interests in the use of traditional medicines and working with abuelos. Of particular importance during this field trip was the fact that the team made the initial contact with the Peruvian Shaman Humberto Campo Bruno Tikuna, who lives with his family in Laguño, Peru (see Map 3, Appendix IV). He is one of the few Shamans in the region close to Leticia but, in fact, lives more than five hours river journey over the flooded forest into Peru.

A new proposal has been approved relating to the different methodology for handling the periodically flooded riverside plantations. The need for an investigation into sustainable management of riverine *chagras* was identified during this project. These plantations are flooded every year for extensive periods of time and the handling of these is therefore very different from *terra firme chagras*. The riverine Chagras impinge on a multitude of wildlife in this complex ecosystem, including animals, birds, fish, plants, reptiles, etc

**Over the whole project** we were able to carry out workshops with care in Leticia and so we concentrated our energy in workshops in the Amazon region rather than running any workshops in the Bogotá universities. The security has also affected the situation in the universities and there have been incidences of “indiscriminate” shootings, bombings and kidnappings in the universities in Bogotá from time to time.

The overall work ran to schedule given that timings of workshops had to be adjusted to suit local conditions (to cater for the needs of the wide variety of participants) and in particular to fit into the timetable of the organisations hosting workshops and pre-workshops (mainly Banco de la República and Comunidad Nuevo Milenio *Maloca* Km 6 and local schools and institutions).

### **Documentation, preparation of Booklet CD's and Film**

CDs and written reports as well as films have been submitted to the Library of the Banco de La República, Área Cultural, Leticia for deposition in their Library Archive. This Library is open to the general public so that all members of the local community(ies), Universities, colleges, schools and other institutions have access to these outputs from our Darwin Project.

The Área Cultural has computers and other hardware (e.g. video) required to visualise our data, some of which are roughly edited films of earlier workshops that were shown at subsequent workshops to let the local people, attending for the first time see and appreciate what had gone before. Some of this was used in the Darwin Initiative film, 2002 produced by DEFRA.

Our Colombian partners have complete copies, (more than 100 hrs) in video format (American System), of all the film footage taken at the Darwin Workshops and field visits. This means that they have a duplicate archive that they can draw on whenever they wish and are able to show the results of the workshops/field trips when needed eg. for teaching in the University or at invited lectures.

CDs of Seminars/Workshops were also prepared along with paper copies. Since among local indigenous communities the preferred form of communication is oral, then the video/interactive CD presentation may be deemed to be the most appropriate format for permanent availability. The interactive CDs are in bilingual format, Spanish/English.

An enormous amount of information has been collected and the project team will continue to seek funds for editing educational films and a variety of multilingual reports/films e.g. Spanish/English and Spanish/Uitoto or other *Idioma* (see point 13).

The project team have had their work cut out with preparing and following up the workshops. As has already been mentioned extra visits had to be made to check out security and conduct coordination in person (not via phone, e-mail or fax – which may compromise security – assisted in some of the transatlantic communication by the British Council “diplomatic bag” from time to time).

#### **Design:**

The project is built around, and centred on, working with indigenous *Sabedores (as)*. The methodology used has been developed over more than 20 years and has been found to be the most appropriate as feedback from indigenous leaders confirms (Radio interview – see Appendix 49). We continue to modify the design of the workshop depending on the feedback from participants – both indigenous (community) and non-indigenous (institution). We are

continually monitoring this directly with the indigenous people as far as we are able, considering security and funding, as many more communities are participating than originally anticipated. The design of the project with respect to research techniques and workshop activities 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. We continued to use the format of running a pre-workshop in the *Maloca* at Km 6 Leticia when possible (e.g. October 2001) and this continued to be very successful and enabled the selection of monitors for the main body of the workshops. This technique has been carried over to the third year.

## 5. Project Impacts

The purpose of this Darwin project was to work with the Amerindian communities in the Colombian Amazon in Leticia and surrounding areas implementing practical solutions to the conservation of the biodiversity of their environment as a means of elevating their standards of health and way of life. The project also sought to lend UK expertise in the conservation of the forest environment, planting techniques, etc and to help the indigenous communities preserve/recuperate the traditional knowledge held by the elders [*Abuelos(as)*].

This project has brought together hundreds of people from diverse communities, not only from Colombia but Brasil, Peru and a number of other countries, in Darwin Workshops held in Leticia. Discussions in these workshops were initiated through Pre-Workshop sessions (sometimes at *Maloca* level and sometimes *via* visits to *Chagras*) to focus participants' attention to the subjects under examination. The Workshops also consisted of lectures/seminars/group activities/question time and by 'open forum' session headed/chaired by experts from local/international institutions and indigenous communities.

The workshops have acted as a powerful stimulus for the cross-section of the local communities to work together and to compare **critically** methods for forest use and management. A direct effect of this Darwin project has been the involvement of indigenous communities in setting up comparative farming methods side-by-side to look for 'best practice' methods. For example, in the Amazonas River community Macedonia, Colombia, Señor Augusto Falcón P. has set up trial plots (*Chagras*) to compare the local techniques with methods demonstrated by the UK participants, Drs Jan Dick & Philip Mason. Señor Falcón and an association of local governors, ACITAM, applied to the Colombian Government for funding for their project and were successful in attracting funds. They have approached our Team (April 2003) seeking our help with aspects of the implementation of the project. This can be seen as a very positive impact of our Darwin Initiative Project.

In some cases the UK experts have also learned some lessons on plant propagation from the local indigenous community, so these Darwin interactions have definitely stimulated two-way traffic in knowledge and information. This might be seen by some to be an unexpected impact but we should never underestimate the knowledge base/breadth of the indigenous people.

Additionally, the Director of a local institution for Amazonian Studies in Leticia (SINCHI) has held discussions with us regarding the possibility for staff to be trained/undertake post-graduate study, either wholly or in part, in the UK. This can also be taken as a positive impact of the Darwin Project.

The project has also brought into close contact, through the Workshops, institutions and indigenous communities that might not otherwise have been willing to hold joint discussions. We have witnessed lively discussions between indigenous community elders/experts and staff of local scientific institutions who would not normally interact with one another across the cultural / 'scientific' divide.

This Darwin Project has definitely taken on board the CBD and the *Declaration of Colombia*, made at the time of the adoption of the Convention (p. 16 UNEP CoB 92), that emphasised that "indigenous communities must be fully guaranteed participation in the process" – i.e. the Articles (**Numbers**) of the CBD such as cooperation (**5**), *in situ* conservation (**8**), sustainable use of components of biodiversity (**10**), research & training (**12**), public education & awareness (**13**), impact assessment & minimising adverse impacts (**14**), access to genetic resources (**15**), access to & transfer of technology (**16**), exchange of information (**17**), technical & scientific cooperation (**17**) – "and this participation should be encouraged".

Our Darwin Project Team has actively invited leaders of Indigenous Communities, not only from local Colombian Communities but from neighbouring countries Brazil and Peru, to the Darwin Workshops in the *Maloca* Km 6 and the Banco de La República, Leticia. After these events we undertook field visits, to personally deliver letters of thanks to the Communities for sending their representatives to the workshops, and to monitor the reaction(s) of participants and their communities to the workshop 'content' i.e. to obtain feedback.

The Alcaldia (Mayor of Leticia) approached us to collaborate with local Government projects relating to conservation. We are considering this *via* liaison with local University colleagues who would 'front' the collaboration local changes in political attitudes could seriously affect the viability of our project if it is seen to favour a particular regime.

The project has raised awareness of some of the problems caused by uncontrolled deforestation (e.g. the film presentation, shot and produced by the Darwin Team in the Scottish Highlands, of the situation of the Ancient Caledonian Forest in Scotland) and allowed participation of indigenous communities who have broad knowledge of caring for, and sustainable use of, Amazonian natural forest resources. The project has involved elements of training and exchange of information in seminars and workshops for a large cross-section of the social spectrum, school/college students, young children, University students, experts from many disciplines/communities (indigenous & institution) coming together to compare methods & strategies for conservation. Some of the trainees, such as Señor Augusto Falcon P., have sought and successfully attained funds for their own conservation-related projects as a direct result of this Darwin project. Some are also seeking to improve their educational standard by enrolling on appropriate training courses in



Schools/Colleges/Universities. The Alcaldía (Mayors office in Leticia) has promised two scholarships to train indigenous personnel in librarianship. (ACITAM are looking for funding to make a library/computer room in their site in Leticia).

As mentioned above, the Alcaldía (Mayor's office in the Leticia Government) has been stimulated, through this Darwin project, to look more closely (carefully?) at what is going on in the local environs to seek positive routes to more sustainable management of regional resources.

The local 'Cámara de Comercio de Leticia' (Leticia Chamber of Commerce) has also been motivated by this Darwin project to think along the latter lines. They have assisted us recently in locating locally published literature on forest management issues and topographic and other forms of maps of the Amazonas region that have been produced in recent years. This resource centre will be a very welcome and useful aid in the future to our team effort and that of the local communities. We get the feeling that due to our Darwin Project local people have stood back, reflected and taken a fresh look at the local, national and international situation surrounding them.

As has been mentioned throughout our reporting, the project team has put a lot of energy into monitoring the results and impact especially of work done in the workshops. We have paid attention to comments and suggestions by local indigenous communities, local institutions and government, especially. We are particularly concerned with feedback from indigenous communities as we are guided by their needs for the work. In cultures, which have an oral tradition, it is difficult to actually record this in a report. However, the letter produced by Augusto Falcon (see Appendix IX) (ACITAM – the main indigenous organisations in the area) supporting the workshops and also requesting collaborative follow up work is more real evidence of a positive social impact. As mentioned in point 4 of this report, a direct social impact of the project was the formation of young indigenous leaders ready to defend their tradition and environment – in particular Augusto Falcon and Gabriel Teteye. Some of the impacts are subtle. In the first workshops, Augusto Falcon described himself as being of the Tikuna ethnica (a dominant ethnic group of the area), he now proudly owns up to his true ethnic group, which is Cocama.

The involvement of such a diverse selection of communities, organisations and institutions in the workshops is important as they are the bodies who govern the area, disperse the knowledge and in the case of institutions such as schools like Selva Alegre (kindergarten-primary 3) and INEM and San Juan Bosco are the future generation.

The main impact of the project has come in the successful outcome of the five workshops. These have brought together a diverse group of indigenous, institutional, local, national and international people to work on problems of degradation of the Amazonian environment and to look at solutions to those problems. As these workshops were based around the indigenous (Amerindian tribal) beliefs and knowledge this brought the tribes and communities together

and gave them confidence to discuss their views with specialists and experts from institutions. The workshops have at all times been based on an exchange of expertise rather than western specialists “teaching” techniques.

The proceedings of the workshops have been deposited in the Library of the Área Cultural of the Banco de La República, Leticia, in film and CD format. It is the intention (funding being sought) to publish the proceedings of the workshops in a wider context and multilingually (e.g. Spanish/English and Spanish/*Indigenous Idioma* versions). In any case the intermediate work has been handed over to the cultural section (library) of the Banco de la República – this has included environmental maps, worksheets from the ‘*Chagras de Los Espiritus*’ Spiritual Plantations workshops and CEH reports (see Appendix III Publications).

Many of the ethnic groups still work on an oral tradition system so that the impact of workshops has had to be investigated – visits by team members to leading communities to get feed back after the leaders have presented results to the communities. Feedback has also been given in the workshops themselves and this has been audio and videotaped. Requests have been made for material to be made available to schools and institutions and we have given copies of material to institutions requesting this as well as leaving the material available in the Banco de la República where it can be read and copied as required. A sample of video highlights from the first year has been sent to the Darwin Initiative (exhibit II)– selections from this and a few additional excerpts were included in the DEFRA film “The Darwin Initiative” 2002.

We have also left films of highlights of workshops in the library of the cultural area of the Banco de la República, Leticia.

Uncut film footage of all filming carried out in the field and at Darwin Workshops in Leticia has been converted to the American Video system and passed to our Colombian Team Partners for their archives. This will be used to prepare appropriate educational and demonstration films for further distribution in Colombia and elsewhere and will allow them use of the material in their University taught courses..

The outputs/results of the workshop have been processed in several forms of information including CD, film and in writing. Considering the latter case, i.e. written publications, the indigenous people that we are working with have an oral tradition for dissemination of information so, at present, they have little or no use for books/manuals. 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. A manual on Propagation of Tropical Plants using techniques from local people and CEH was put together in booklet and CD form by Dr. Jan Dick from CEH – this was presented in English and Spanish. Dr. Philip Mason, CEH put together a CD and booklet together entitled “Decline and Regeneration of Natural Caledonian Forests”. This together with the seminars given by Sandy Gray and Ann Mitchell on this topic done to show the importance of preservation of Amazon forest and the consequences of not taking care of the environment, made a surprisingly strong

impact on the indigenous people and school children. Into this work, Dr. Phil Mason brought in the importance of soil fertility as the basis of preservation and regeneration of natural forests and based on his March 2001 workshop. Jan Dick and Phil Mason reported on their Colombian visits and these reports were left in the Banco de la República. However, these reports were unfortunately in English and time and resources of the project were not sufficient to translate. We are working on presenting the workshop material from “*Chagras de los Espíritus*” in CD form – ideally this would also be an interactive CD in Spanish and other major indigenous *idiomas*, as well as English. However, funding and time has run out on us. We continue to work on a multilingual book of indigenous methods of conservation of the environment. At present, for the indigenous population, the actual oral presentations are the most important as they are being taken from the workshops and conveyed to the communities during their meetings and rituals. However, as a legacy for future generations, who will increasingly use the written language, it is important to have written documentation of this knowledge which has been recognised to be in the process of dying out with the elder generations.

We have openly encouraged comments and suggestions at all points in the project, in order to ensure that the project continued to make a positive impact in the local arena. The workshops were attended by a diverse group of participants and have had the impact of providing the opportunity for the indigenous communities to interact on an equal footing and work together with local scientific institutions. At times this has produced some animated discussion between communities, institutions and other local organizations. Constructive results have come out of the discussions. We have observed meetings between indigenous leaders and directors of local scientific institutions, which have come about as a direct result of our Darwin workshops.

We think that the local presentations were in the correct format to maximize impact taking into consideration security restrictions. The first and second workshops were open-door but the subsequent workshops, although opened to everyone were restricted by a matriculation date to keep the numbers under control. Personal invitations were delivered to the leaders of local indigenous communities and institutions. In the case of the indigenous communities messengers were sent with the invitations personally to ensure they ended up in the correct hands and because there is no reliable telephone communication with many of the remote areas. The second and third workshops were opened/inaugurated by the Governor of Amazonas himself and were attended not only by local government organizations and private sector/commercial interests but by consuls from Peru and Brazil and indigenous folk from both countries

## 6. Project Outputs

Project outputs are quantified and detailed in Appendix II. Details of material and publications produced by the project have been included in Appendix III. Copies of outputs have been left with Colombian partners, of film i.e. uncut video in American system, CD, hard copy via Banco de La República, Leticia, Área Cultural, which operates a Library that is

open to the public at large. The Darwin material resulting from this project will therefore be accessible to **any** interested party(ies). We have followed up the workshops by two more field visits to continue to develop the dissemination process. A request has been made by ACITAM to lodge material at their site and they are looking for funding to make a small library. We are helping the leaders at ACITAM look for education opportunities to train a librarian. We are following this up while commencing our new Darwin Project Indigenous Methods to Sustainably Manage Riverine Plantations, Amazon Region, Darwin Ref: 162/12/016. We would like to have our outputs available in Spanish and English as well as possibly other languages (indigenous/Portuguese), however time and money have run out for this particular project (see point 13).

## 6. Project Expenditure

**Table 1: Project expenditure during the reporting period**

<b>Item</b>	<b>Budget</b>	<b>Expenditure</b>
<b>Salaries</b>		
Principal researchers (2)		
Salary Project Assistant/Conservation Workshop		
Indigenous Specialists		
CEH Specialists (2)		
Office Administration costs		
Equipment		
Photography, snakebite serum etc		
Seminar/Workshop costs		
Travel and subsistence		
Printing		
Stationary/Phonecalls etc		
Production of Manual and Video		
<b>Total</b>		

Apart from the agreed changes to budget, the main variation to our budget occurred in the area of Seminar/Workshop and Stationary etc costs. Both were related to the fact that we anticipated workshops for around 20 people and nearly 200 people came to some of them! We could not have carried out all the workshops without the support (much of it in kind) of local institutions and communities.



## 8. Project Operation and Partnerships

### 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, phytochemists, artists, mycologists, biologists, medical specialists (surgery, homeopathy, traditional medicine), parataxonomists, linguists, ritual studies specialist, media studies specialist and indigenous *abuelos (as) Sabedores (as)* from many local communities/tribes. The project has concentrated on involvement of indigenous communities, which has been constantly augmented – for example we now have participation from representatives of communities over the Brazilian and Peruvian border. The workshops brought together many sectors of the Leticia community including indigenous leaders and personnel from *resguardos* (up and down the river Amazonas, the carretera and from Caquetá Medio, Colombia), institutions (Governmental and non-governmental) and the private sector. Many of these groups do not usually communicate (mix/interact) well together due to strong cultural barriers. The involvement of such diverse groups in this project surpassed expectations of the team.

##### International

Throughout the project, 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. International support from further afield was also received. For example, Dr Xavier Hurtado, specialist in Fine Art, Media and IT, Universitat Pompeu Fabra, Barcelona, España collaborated on several Workshops and field trips, bridging the cultural divides with his personal flair for multi-media communication methods.

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 (Pharmacy & Science) at Strathclyde and the Scottish School of Herbal Medicine, Glasgow and abroad (e.g. Malaysia). Lectures have also been given to community groups in Scotland including the Natural History Society in Helensburgh and ladies Church groups in Tranent and Edinburgh as well as the literary Society of Bearsden, Glasgow. Additionally, Blanca de Corredor, Ann Mitchell and Alexander I Gray gave a lecture to the IELTS (international students at Strathclyde University) and the University of Strathclyde Staff Club.

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

1. UNIVERSITIES: 11+
2. GOVERNMENT INSTITUTES: 6+
3. NGOs: 4+
4. COMMUNITIES: 30 + - at least 18 river communities, 12 carretera communities and representatives from Caquetá Medio, Mirití, La Chorrera in Colombia and Brazil (Tabatinga and communities from the Javari River region) and Peru (Laguiño, Nueva Zelanda, Sacambú / Sacambúzinho and other Amazonas communities.

**Names of Main Local Partners:**

ACITAM

Banco de la República (Cultural Section)

Bienestar Familiar

Unidad Municipal de Asistencia Técnica (UMATA)

Universidad Nacional de Colombia (IMANI)

Instituto Amazónico de Investigaciones Científicas (SINCHI)

ICA

*Maloca* Km 6, Nuevo Milenio

Policia Nacional, various sections including Medio-Ambiental (Environment)

Gobernación and Alcaldía of Amazonas

Departamento de Salud (Department of Health)

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 Mirití

Included were members of Andoke, Bora, Cocama, Muinane, Quechua Tikuna, Tukano

Uitoto, Yagua, Yukuna, and other Amazonian tribes such as Mayaruna from Brazil.

Shamans from Sacambú and Nueva Zelanda, Peru (Tikuna and Quechua)

President of Federação Indígena Pela Unificação e Paz Mundial FIUPAM – Manoel Fernandes Moura – ethnic group Tucano living in Tabatinga, Brazil.

Universidad de Tolima (Forestry Dept) sent postgraduate students to the course

Universidad de IES-CINOC, Pensilvania, Caldas

Universidad de Antioquia, Medellin

Universidad de Los Andes

## **9. Monitoring and Evaluation, Lesson learning**

The project team constantly directly monitored the progress of the project. This involved regular field visits by the Colombian partners and sometimes by UK Team partners with Colombian colleagues. The trips involved extensive river and forest travel to remote communities, extending invitations to the Darwin Workshops held in the Leticia area. Some time after the workshops trips were made, offering letters of thanks to Community Leaders and Institutions for their collaboration and obtaining feedback from participants and the rest of their communities alike, both on the outcomes of the Workshop and seeking suggestions for future Workshop subject matter and design/running. On the final day of the November 2002 workshop, Radio Ondas, Amazonas interviewed some members of the project team together with indigenous leaders to get feedback on the opinions of the communities of the workshops and their impact. This interview was filmed and the raw data is included in video form with this project (Exhibit XXIII). Unfortunately, we did not have time to translate this video into English for reporting purposes but it includes feedback form the most important indigenous representation of the area ACITAM (two leaders), one of whom found the confidence to do part of the interview in Tikuna. Representing Comunidad Takana, was Josefina Teteye who publicly asked that projects should be led using team leaders who have the depth of experience that our key members have. At the end of each workshop, opinions criticisms and evaluation was sought, in order to evaluate the way forward.

Due to the security problems in Colombia some of the physical outputs of the project proved, initially at least, difficult to achieve (discussed in detail under section 4, progress of project – first year report). On the positive side, this led to the team venturing across the contiguous borders with Colombia – to Brazil and Peru – which has led to fruitful collaboration with indigenous and institutional communities in these countries giving the project a greater international slant and impact spreading the knowledge of Darwin Initiative.

Additional monitoring was built into the project by the visits of CEH personnel who report to us on visits (CEH report for November 2000 workshop – Exhibit 1). Written material has been produced by workshop participants and this was processed for continued revision by workshop participants in proceeding years (e.g. By presenting video diaries of previous workshops for people, some of whom were coming to a workshop for the first time, and to continuously monitor progress).

This is a form of monitoring outputs by the workshop participants themselves and is especially important for the indigenous participants who have an oral tradition and therefore rely on visual/audio feedback/discussion on events and topics. The written and oral output of both the workshops has been a visible success. During the whole of the project, communities were visited informally (Jul 2001, Sep 2001, Nov 2001, Jan 2002, Apr, Jul and Oct 2002 and Apr 2003 with the view of monitoring feedback from the workshops, checking that community representatives have been bringing back the workshop experience to the communities in their rituals and disseminating the information. This part of the work has been led by our main Colombian partner Dra Blanca de Corredor who has extensive expertise in this form of work. Comments, criticisms and observations, which were made as part of the

workshops and the follow up (video taped) were taken forward for future planning. The final workshop in the series was planned for was October 2002 and workshop leaders were selected who emerged from previous workshops. Suggestions carried over from previous workshops were built into the final workshop. Selecting workshop leaders/monitors from the indigenous section of the community proved useful for us in the monitoring process of the project.

Photography, filming and tape recording proved to be very valuable and essential tools to record all outputs from the workshops and fieldwork. This was especially pertinent to this Darwin project, as it has been aimed at the indigenous people who do not have a written tradition. The project was built on an exchange basis directly with indigenous people as well as the local institutions, and we have been constantly learning from these experiences and developing our methods. Feedback on the workshops has also come back *via* the cultural section of the Banco de la República and it has been positive. Proof of this stems from the fact that they are in fact looking for ways to continue the Darwin-style workshops.

As outlined above, the participants at the workshops, their families/communities, the Darwin Team and the local institutions, especially the Banco de La República, have constantly monitored the work and reports have been sent to the Darwin Initiative and to the British Council from time to time. The British Council continues to support our team in many ways.

We originally had a problem of finding a reliable NGO/agent to assist with the overseeing and disbursement of funds in Colombia. We have been extremely lucky to have reliable Colombian team players especially Dra Blanca de Corredor. The indigenous people are sceptical of most organisations such as NGO's. This scepticism probably dates back to 'Casa Arana' and the Peruvian Amazon Rubber Company during the 19<sup>th</sup> and 20<sup>th</sup> centuries<sup>9</sup><sup>10</sup> and we have found that many communities are not prepared to work with researchers and specialists involved with many NGOs.

The Universidad de Los Andes and British Council were approached by us 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 and the team. 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 that would otherwise have been involved with an NGO/

The security problems together with the large numbers of participants in the workshops, have been mostly responsible for increased costs for the project, but were very worthwhile! As mentioned under 3 (objectives – page 12), some of the project objectives have had to be modified with these security considerations in mind.

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9 Casement Roger "Putomayo Caucho y Sangre – Relación al Parlamento Ingles (1911) Ediciones Aby Yala 1988

10 Pineda Camacho, Roberto 2000 "Holocausto en el Amazonas-Un historia social de la Casa Arana" Quebecor impreandes S.A.



The workshops all required very careful organization especially since we attracted such a diverse range of participants. We prepared for the workshops well ahead and followed up results in the communities. This was very time-consuming and sometimes difficult due to the number of communities attending, their disperse locations, and the security issues. The community leaders have indicated that they consider our Darwin workshop style a very important method of exchanging knowledge of ecosystem management and getting the people together to talk about important conservation issues and to seek solutions.

The workshops, however, have not begun nor ended at the workshops themselves. The local people spend many weeks preparing ritually in communities and then many weeks relating the information from workshops (orally) in ritual settings (e.g. the *mambeadero* of the *Maloca*) in their communities. This is an important (vital) consideration for anyone wishing to include indigenous communities in their programme. The project team must understand thoroughly local customs/culture so as not to jeopardise the project progress.

Through this Darwin project we feel that we have heightened the awareness among Amazonian communities across three frontiers, Colombia/Brazil/Peru, who are ready to work towards a more integrated approach to conservation, etc working together with the different institutions locally as well as nationally and internationally.

We have had practical help in the organisation of the workshops from local and National Institutions as well as from the indigenous people themselves. Without this help (much of it in kind) the workshops would not have been as successful and we could not have carried out the work on the scale achieved.

Nevertheless we have overspent our Darwin Initiative budget with the workshops – we would consider this to have been worthwhile when the people themselves are highlighting the need for the workshops. This is even more important when we consider that the indigenous people have to work hard and sacrifice a lot to attend the workshops (they give up more than a week of their work whether it be paid work or for daily subsistence for each workshop attended). We definitely also underestimated the time and effort necessary to translate during workshops and for write ups. For the translations to be wholly successful they must be done by personnel who not only know the language but also the cultures.

For the reasons stated in the 1<sup>st</sup> and 2<sup>nd</sup> year reports, the documentation and cataloguing of plant use etc. is being done so far on an observation and photographic level. For continuing work, firm contacts have been made with the Universidad Nacional de Colombia, IES-CINOC, Caldas and SINCHI, Leticia & Bogotá, to collaborate in the making of collections for herbarium specimens, etc. However, local, national and international institutions have also been restricted by the security situation – this has become more critical over the last few years with threats against many institutions including private and governmental and their employees– many of which have been followed up by bombings, and other acts of terrorism.



### **Possible Solutions to some of Problems encountered over the Project:**

1. Although we overspent our budget over the project, we decided to run a further workshop in Leticia, even though this was not in the original proposal. This was done due to requests from the indigenous leaders (ACITAM) and local institutions (particularly the Banco de La República). This workshop was run in October 2002 and we required a lot of voluntary contributions from team members, but we have a strong group of participants who are now firmly committed to working together towards preservation and conservation of their Amazon environment.
2. Film editing. We have presented our Colombian partners with full-uncut film footage of the Darwin Workshops and field trips, in the American format, which is being used by them for editing purposes. The Darwin team has also presented the library of the Banco de la República, Leticia, with films (in Spanish) of the first and second year workshops, as well as films of any material requested by participants. For this reason, we requested £6000 to be brought forward from the third to the second year. With this money we were able to buy another computer, scanner and printer and an extra camcorder, which have helped us edit material and in producing intermediate written and film material. This has enabled us to edit film from one camcorder to the other and to make film “grabs” to computer for editing purposes. We originally anticipated that ‘professionals’ would edit the film material for us but, after consultations with colleagues at Strathclyde University Audio-Visual Media Services, we were convinced that the Darwin team would have to retain control of film editing ourselves. The AV Media people did not understand the content of the films and therefore were not in a position to select the ‘grabs’ for presentation in different situations. As we also have a CD copier, we have presented the material in CD format to the Library in the Banco de la República and interested institutions, to disseminate the material more readily. We have had to learn to do a lot of this work ourselves as, on the one hand, it is too costly to employ others and, on the other hand due to the complicated nature and the diverse content of the material to be edited, the person employed does not understand the importance/significance of some material. Additionally we are dealing with various languages - Spanish, English, Portuguese, Idioma/indigenous languages and this requires the ‘team effort’.
3. As stated above, instead of making physical collections of plants we are now cataloguing the plants, together with the help of indigenous people with whom we have been working, using photographs, drawings and local names (See Appendix VI). We are also fortunate in being able to make direct comparisons with the work we have done with *Abuelos(as)*-*Sabedores(as)* in Caquetá Medio, Colombia in earlier years - work sponsored by DFID/British Council, Bogotá, University of Strathclyde and others.

## **10. Darwin Identity**

We have given priority to Darwin Identity where security conditions in Colombia permitted. In any case we have used the Darwin logo and described the Darwin Initiative in conferences and seminars. The logo has been used on all posters, programmes, manuals, certificates for conferences, seminars and workshops. These have been distributed in Amazonas – Colombia/Brazil/Peru – communities, institutions, public and private sector and in institutions in Bogotá. The Darwin Workshops have been advertised on local Amazonas Radio and posters ‘pasa calles’ (large posters that stretch across the main streets) and announcements for Workshops have been posted in the airport, shops, and other public places locally. (See , Exhibit XXI)

The Darwin Initiative is equated with aspects of protection, conservation and sustainable use of Biodiversity. Within the Universities, Institutions at Governmental, public and private levels, the British Council & British Embassy, nationally and at local level in Amazonas, in Colombia, Brazil and Peru, a multitude of Amazonas communities are discussing the project in particular and the Darwin Initiative in general. The Spanish version of the Darwin Initiative 2002 – 10 yrs since the CBD – has been passed to the Área Cultural and Library of the Banco de La República, Leticia along with all of the proceedings of our Darwin Workshops and other Darwin materials produced during the lifetime of this project. These data will serve as a legacy of Darwin in the area for the foreseeable future, and will be supplemented/augmented by further films and materials produced by our team from the mass of information and data accrued during our Darwin Project.

This project has always been seen as having its own identity. For instance, the director of the Área Cultural and Library and Director of the Banco de La República, Leticia (Appendix V, letter from the Gerente, Don Jairo Córdoba Pinto) have indicated that our Darwin Workshops have attracted larger participation from more diverse backgrounds than any other organised conferences in the area. The indigenous communities have also recognised the Darwin Initiative and our Darwin investigation team (Appendix V, letter from Sr. Augusto Falcon, P., of Asociación de Cabildos Indígenas del Trapecio Amazónico, ACITAM) and this recognition extends across the frontiers of Brazil (eg. FIUPAM, Tabatinga; INPA, Manaus) and Peru (nueva Zelanda, Sacambu/ Rio Javari communities – see Maps Appendix V).

**11. Leverage**  
**Table 2:Leverage**

<b>Item</b>	<b>Amount</b>
Banco de la República – rental for rooms, lending of secretarial and administration staff time, help for accommodation and food for indigenous participants coming from river communities. Accompanying project team on trips to communities sharing with transport costs.	
Alcaldía Leticia – accommodation indígenas during workshops, opening of April 2002 workshops	
Gobernación – accommodation indígenas during workshops,	
C.U.S. (Comando Unificado del Sur) Army lending of boat and outboard motor for transport of indígenas to workshop	
British Council/DIFID – Bogotá- organised and paid visa for Blanca de Corredor’s visit in March/April 2001 and August 2002, to help with final report and assist in writing next project proposal. They provided part of Sandy Gray’s airfare for a field trip in April 2003 to finalise project.	
Navy – lending of boat and motor in first workshop	
University of St. Andrews – lending of space for conference for Blanca de Corredor, Dr. Mario Aguilar – conference in Strathclyde Seminar April 11 <sup>th</sup> 2001	
CORPOAMAZONIA – conference within workshop /seminar	
Secretaria de Salud – petrol + lending of motorist, outboard motor and boat for transport of indígenas to workshop	
SINCHI – 3 conferences within workshop/seminars	
ICA – conference within workshop	
Dr. Carlos Gutierrez, from Medellin - conference within workshop	
Dr. German Benitez – two conferences within workshops	

Dr. Nixon Cueva Marquez IES-CINOC – Caldas two conferences/workshops	
Universidad Nacional de Colombia – conference within workshop/seminar	
Elvis Cueva (Guide) together with José Saavedra and Domingo lent boat, motor and their time etc. to transport indigenous leaders from remote river communities and for team river expeditions to visit chagras in remote communities.	
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 transport and additional security	
María Leticia Rabadan – petrol for transport of indígenas	
Indigenous people – each participant gave up at least a week’s work to participate in each of the five workshops. The Nuevo Milenio group at <i>Maloca</i> Km 6 offered their <i>Maloca</i> for two days in each workshop, we held a practical workshop in their chagras and they provided meals and hospitality.	
Bienestar Familiar – Hugo Camacho and Red de Solaridad – Fabiola Camacho lending of land for plant propagation workshop	
Dr. Xavi Hurtado (Universidad Pompeu – Barcelona) paid for his own flights from Spain and gave his time for workshops (2)	
British Airways Conservation Fund	
ECTF	
Darwin Project team	
INPA - Manaus	
Translations so far by project team and Mairi Mitchell	
Donation by George Watson’s College to the Selva Alegre Environmental School Project (see Appendix X)	
University of Strathclyde (Sandy Gray – Salary – to replace him while on Darwin project work/filed trips etc)	
Colombian specialists/researchers who	

gavetime to theproject – eg. Professor Roberto Pineda	
Ann Mitchell/Sandy Gray-film editing	
SINCHI Donation of books to Project (see Appendix IX)	

The funding situation in Colombia is chronic with very little interest in spending funds on conservation projects. We have left the decisions for seeking funding sources in the host country to our Colombian partners.

We have had support from British Airways in the form of travel tickets from their Conservation Fund, British Council/DFID for travel and subsistence, the University of Strathclyde in the form of salaries, etc while we are on field trips in Colombia. Additionally, the universities of St. Andrews and Strathclyde have provided space and facilities for meetings/seminars.

We were pleased to hear that Augusto Falcon and ACITAM had found government funding for a pilot project on techniques of cultivation in chagras.

Finally, to work in Colombia is not easy and in political climate not good to advertise donations!

## 12. Sustainability and Legacy

This Darwin Project has bridged the cultural divide that has been/still is a component of the National Colombian culture today. The project seems to have allowed the local indigenous people to see the value of their natural resources, knowledge and understanding of that massive ecosystem that is Amazonia, and to compare their methods with those of the local and international communities for development.

The project staff will continue to work together using the resources available and continue to monitor the progress of ‘spin out’ projects of the local communities that have arisen from this Darwin project. For example, the comparative *chagras* set up by communities on the Carretera Leticia-Tarapacá and those of the river communities, e.g. at Macedonia which is Government funded. In the latter case our Darwin team have been asked to assist in execution of the project.

Owing to the security problems extant in Colombia, the team always seemed to be wondering how the project would continue. However, the project has virtually taken on a life of its own with the additional involvement of Brazilian and Peruvian collaborators who are in contact with the Colombian partners/collaborators. It is therefore difficult to see how legacy could have been improved other than by a dramatic change in the political situation that is outwith the control of the Darwin team!



The team will continue to seek funds to develop the huge amount of film footage resulting from the many aspects of this project and wish to prepare multilingual films and other forms of outputs, on preservation and rehabilitation of the Amazonian rainforest, that will be a valuable resource and can be used by the indigenous and other local communities and institutions for educational and training purposes. These communities have supported this Darwin project and now form part of the legacy for the future sustainable management of the area.

Our Colombian partners are best placed to seek local Government funding for such activities that will benefit local and rural communities. For example, Augusto Falcon and ACITAM have attracted Government funds for their project to compare farming methods and seek “best practice” methods relating to conservation of biodiversity.

We would also seek funds from the Darwin Initiative to allow completion of some aspects of this work.

Additionally to the above, a new area of work has been opened out by Drs Carlos Gutierrez (Medical Surgeon) and German Benitez (Medical Doctor and specialist in Homeopathy). They are searching for funding and support for a project proposal to exchange western medical knowledge with traditional indigenous knowledge. In doing this they propose to offer to the area the services of their medical teams. The region of Leticia in Colombia, and Tabatinga in Brazil are very interested in looking for support for this project proposal. This is a direct output from this Darwin project we are very hopeful that these interested specialists will continue to look for ways to work with the sabedores of the indigenous communities.

### **13. Post-Project Follow up Activities**

Consolidation and embedding of this Darwin project would be facilitated if the valuable information deriving from it is available in multilingual format. One of the main ‘problems’ for us has been the sheer volume of information that has emanated from our Darwin Workshops & field trips.

‘The Workshops were some of the most attractive (well-attended) to the local communities ever held in the area’, says the Director of the Banco de La República, Don Jairo Cordoba Pinto. Thus the project team, working closely with strongly committed Colombian partners, has a mountain of information to be translated from Spanish, English and some of the local ‘Idiomas’ into another appropriate language. These translations do not lend themselves to simple use of a language conversion package on a PC (we have tried this!) but requires that we employ trained linguist(s)/secretary(ies) versed in the local idiomas to achieve accurate translations.

The work includes:

1. Information we have collected to construct a Catalogue/Database of important species of plants and other organisms, using local (vernacular, *idioma*) names and scientific (*Latin binomial*) names where possible, the preparation, use/function,

traditions, mythology (e.g. “*Chagras de los Espíritus*”) for each specimen. Ideally this would also be an interactive multilingual CD..

2. Book on Social Aspects of the Environment with Professor Eudocio Vigidimas and his family from La Chorrera, (Amazonas) and our main Colombian partner Dra Blanca de Corredor (Appendix VI) involves recording (tape/video) this knowledge in Uitoto language (dialect Minika).
3. Manuals on exchange of techniques of plant propagation by Dr. Jan Dick and soil fertility by Dr Phil Mason (CEH) in paper and CD form (Exhibits III, IV, X., XI XII,) require translation.

This work will directly benefit the local communities at all levels in Amazonia, including large areas of Brazil & Peru, who want this material collated in forms accessible to them. We therefore request that this project be considered for post-project funding.

#### **14. Value for money**

Excellent value for money (CBD +declaration of Colombia) – in that we succeeded in bringing indigenous people - not only Colombian, as stated in the application but Brazilian and Peruvian, together with institutions and they are still talking and working together eg ACITAM? Augusto Falcon. As a direct result of the project, the Alcaldia has promised to look for two scholarships for indigenous personnel to go to university. Notwithstanding working in a difficult political climate, we have achieved the main objectives of the project and quite few extra.

Author(s)/Date

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**Signed on behalf of complete project team (see front page of this report)**