



***Darwin Initiative for Survival of Species***

***Annual Report***

**April 2002 to March 2003**

**Biodiversity and Colombian Coffee Farmers:  
Capacity Building for Added Value**

***Project Reference No.:*** 162/11/014  
***Country*** Colombia  
***Contractor:*** CABI Bioscience

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### **1. Darwin Project Information**

Project title: **Biodiversity and Colombian Coffee Farmers: Capacity Building for Added Value**

Country: **Colombia**

Contractor: **CABI Bioscience**

Project Reference No.: **162/11/014**

Grant Value: **£134,677**

Start/Finishing dates: **2002 to 2005**

Reporting period: **April 2002 to March 2003**

### **2. Project Background**

Colombian coffee is cultivated on about 900,000 ha of the northern Andean chain and it has been a major factor in the relative economic success and stability of those regions where it is grown.

In recent years however, the Colombian coffee industry has faced a major and complex crisis, which globally has led to oversupply and nationally to loss of competitiveness with other countries. This has caused greater intensification of production on the one hand and some diversification on the other.

Both of these responses cause concern for their impact on the environment, including greater use of agri-chemicals and diversification to less suitable enterprises, e.g. beef production on steep mountainsides.

Colombian coffee officials are well aware of these problems and have carried out successful research and development of some environmentally friendly cultivation and processing techniques. They are also studying the biodiversity of coffee plantations, especially the bird fauna.

Little however has been done to understand farmers' knowledge and preoccupations over the environment. The main tenet of this project then is that since Colombia, the Coffee Federation and the coffee industry are all changing rapidly, farmers should be better understood, consulted and play a full part in the inevitable changes ahead.

### **3. Project Objectives**

**Purpose:** to develop coffee biodiversity concepts with Colombian coffee farmers in order to realise its commercial potential. (See Appendix 1 for Project Logical Framework).

**Objectives:** the project will undertake detailed participatory rural assessments of farmer knowledge, biodiversity concepts and vocabulary used so that a field manual can be prepared and tested with extensionists and researchers.

The project will also develop contacts with commercial companies and hold a stakeholder workshop to determine ways to promote and sell "biodiverse coffee".

Forest patches within the coffee region will also be identified and studied to assess their potential.

To this end the project will also assemble a database of plant and animal species with an extensive photo library that can be used in future promotional and commercial campaigns.

It will also produce a draft biodiversity policy document for consideration by the National Coffee Congress, a democratic farmers' decision-making body.

Promotional materials will be produced and used to promote the work of the project at an international trade event.

The objectives remain the same but we are somewhat concerned that sufficient progress will not be made in all areas during the project. As discussed below, the work to be carried out is ambitious and it may be necessary, during the next reporting period, to modify the goals to achieve a better impact for the most important areas.

### **4. Progress**

*Brief history of the project to beginning of reporting period.*

This is the first annual report.

*Summary of progress of the last year.*

The project started about three months late. A project launch was held in October (CDROM of main talks is available) and combined with the training event. 22 attendees, mostly extensionists, were trained in participatory techniques and taken to a farmer training centre to try them out on farmers attending a course at the centre.

An ambitious programme of farmer participatory studies has been undertaken with both individual and group encounters.

*An account of the project's research, training and technical work.*

Farm semi-structured interviews. Researchers from Cenicafé met with coffee extensionists and agreed to develop the project in two contrasting municipalities of the department of Caldas:

- Manizales: the veredas (parishes) of Manzanares, Santa Clara and Morrogordo. These three districts comprise many smallholder communities and have substantially traditional coffee producing technology under shade.
- Palestina: the veredas of EL Higuerón, La Muleta, La Plata and Los Alpes. This zone is characterised by intensive farms with little or no shade.

These veredas have a total of 477 farmers, of which 120 will be sampled. This is ambitious and by the end of the first year only 40 had been sampled. These veredas were visited to establish contact with farmers to explain the nature of the project before conducting questionnaires.

Group activities: in addition to the above individual encounters, group meetings have been carried out with farmers and extensionists in two municipalities in the department of Risaralda. In the municipality of Pereira group meetings have taken place in the veredas of Cantamonos, Guacarí and El Jordán, and in Marsella, the veredas of Cantadelicia and Las Tazas.

*Results*: a lot of basic data has been collected from farmers on water and energy sources, chemical and other inputs to the farm, as well as some basic socio-economic data. An interesting statistic is that nearly half of farmers interviewed get some income from non-agricultural sources and over a half contract manual labour, both of which may have implications for the way they manage their farms, use new information and handle change. Firewood sources are nearly all provided from the coffee part of the farm and there seems to be at least some water pollution control. But between only 5 and 10% of farmers' land is for non-agricultural use, and most of that small percentage seems to be just one species, *Bambusa guadua*, which they use for a variety of construction purposes.

Group meetings: these have been with groups of farmers (10 to 20 at a time) to ask them a variety of questions about the environment, their concepts of it, their main concerns. PB attended one of these sessions and was impressed by the free-ranging discussion that ensued with farmers who voiced a number of concerns.

The results are too preliminary for detailed analysis but the main theme that seems to be emerging is that of water availability, of springs drying up, which farmers attribute to loss of upland woods and forest and of water pollution from farms higher up the mountain. The older farmers affirm that several mammal species are seen less frequently nowadays, or is this because they go out less or have less acute eyesight?

## *Biodiversity*

Over 60 species of bird have been identified on farms during visits. Bird species and abundance will be used as bio-indicators for the areas studied.

## *Manual preparation*

One of the principal outputs of the project is a manual to inform and guide extensionists and NGOs about the issues, farmers' perceptions, knowledge and knowledge gaps etc. Project scientists have drafted out and agreed the following chapter headings and brief summaries. Chapters include:

1) Introduction to biodiversity issues: Agenda 21 and current efforts to protect biodiversity; sustainable farming; importance of biodiversity in coffee; the Coffee Federation's stance on biodiversity.

2) Introduction to coffee issues: world coffee crisis; the move to niche coffees, problems and opportunities; diversification, problems and opportunities.

3) Account of current use of biodiversity by Colombian farmers: coffee plots; gardens; other crops; streams; woods/forest remnants.

4) Account of farmers' perceptions on biodiversity: things they know a lot; things they know little or nothing; value they attach to biodiversity; views of the past and change; terms and vocabulary used.

5) Working with farmers: how to document and understand farmers' perspectives; monitoring and evaluating flora and fauna; estimating value of resource use to farmers.

6) Managing change: the changing coffee scene and diversification.

7) Working with other stakeholders: the role of research, extension, cooperatives, NGOs, traders, roasters, international organisations, etc. and how to work with them.

The manual will be in Spanish only.

## *Database construction*

Juan Carlos Ortiz, the project's systems expert, was invited to CABI UK to discuss the development of a database to carry all the information collected by the project and receive some training by CABI programmers. A main concern was to use software that would enable data to be readily accessible and available for other uses such as the Coffee Compendium (see Section 5, Partnerships below). We eventually decided that a web-based database would be most useful and indeed that it should be developed into a full-scale site called, provisionally, 'Colombian Coffee and Biodiversity'. This would

have a dual function of a) providing information and b) promoting Colombian coffee to a wider audience and would include substantial data about the whole region, its flora, fauna, climate, farmers and coffee culture.

The database will be in English with Spanish names and some documents in Spanish.

#### *Additional outputs*

An additional output of the project is a small shelter, which Cenicafé have built to house a collected sample of those garden and medicinal plants grown by the coffee farmers.

#### *Difficulties encountered.*

The appointment of the assistant biologist to evaluate biodiversity of the areas studied. A person was appointed, rather late and left soon after. Apparently there were personal and/or remuneration problems with this appointee. A replacement has been appointed and she seemed to be settling in when PB visited in March 2003.

The participatory visits to farmers are taking too long, the number will probably have to be reduced from the initial 120. If present data has an acceptable variance, the number could potentially be reduced by up to a half.

The stakeholders' workshop will take place later than planned since it proved difficult to fit in with other events. Thus in February 2003 there was an international sustainable coffee meeting in Geneva (attended by PB) and then the April Specialty Coffee meeting in Boston. With an external review of Cenicafé in May by ISNAR (PB is on the team) it seemed sensible to postpone the event to September when the International Coffee Organization is holding a conference in Colombia. It is planned to hold the event after this meeting to reduce costs of attendance of some invitees.

#### *Design of project enhanced?*

None to date, but some streamlining of field work may now be needed as we may be nearing enough farmer-related data from the identified areas. Additional or corroborating data may need to be collected, based on an analysis of the data to date.

*Workplan for the next reporting period.*

May: Chapter 1 of Manual in draft form

June: Chapter 2 of Manual in draft form

July: Chapter 5 of Manual in draft form

August: farm appraisals completed

September: stakeholder workshop takes place at Cenicafé with international invitees.

September: database (website) version available to project, but not 'live'.

October: initial survey of flora and fauna on farms completed

November: Chapter 3 in draft form

December: Chapter 4 in draft form

January assessment of Manual, is it ready to be tried out in the field with a group of extensionists? At this stage the manual concept should be circulated to some key stakeholders, e.g. Rainforest Alliance, Conservation International, for comment.

February to March:

either: start testing the manual with extensionists,  
or: collection of more data.

## **5. Partnerships**

*Between UK and host country partner*

Collaboration between CABI and Cenicafé has been good, they have appointed an excellent and hard-working researcher to carry out the farmer participatory work. It was clear to see, during a field visit by PB that the Cenicafé partners have a good rapport with both farmers and extensionists.

CABI is currently in the process of developing a new CDROM and web information product called the Coffee Compendium which will include encyclopedic information on all aspects of the coffee industry including growing and processing with much down-loadable information for use by extensionists and NGOs. CABI hopes to work closely with Cenicafé on this over the coming years and it is likely that some of the data, experiences and ideas generated by the present project will be incorporated into this compendium.

### *Collaboration with similar projects in-country or internationally*

PB was fortunate to have been invited to a major sustainable coffee workshop at UNCTAD in Geneva (Feb 2003) where he met a senior Rainforest Alliance official, Chris Wille. He has expressed interest in visiting the project and providing assistance at the stakeholder meeting now planned for September 2003.

CABI is now also an associate member of the newly-formed industry grouping called the Sustainable Agriculture Initiative (SAI, members include Unilever, Nestlé, Danone, Kraft) and coffee is one of the key products they are studying. Although it is too early to know how this initiative will develop we are hoping to involve Cenicafé in future activities of this initiative.

Furthermore PB, as technical adviser to the US Coffee Quality Institute, a specialty coffee industry-funded body, was invited to the annual meeting of the Specialty Coffee Association of America in Boston where he made contact with a coffee project in Mexico funded by Conservation International and another one in Colombia, in the Cauca valley. The latter is not exclusively coffee but in the coming year we will make further contact to look for possible collaboration. We hope to invite both these groups to our stakeholder workshop.

## **6. Impact and sustainability**

*Impact:* the project was initially promoted at the launch meeting (prior to the workshop) to which representatives from many universities, NGOs and government bodies were invited.

*Sustainability:* we are especially concerned with sustainability because the project is relatively small and the Colombian Coffee Federation is large and under new management. The Federation is likely to change radically over the next year or so as it repositions itself to retain competitiveness for Colombian coffee. An external review of research at Cenicafé has been ordered by Dr Junguito, Colombia's Chancellor of the Exchequer. PB has been asked to be part of this team, under the auspices of ISNAR, and will visit Cenicafé from 5<sup>th</sup> to 23<sup>rd</sup> May 2003.

As things stand, and considering the magnitude of the challenges ahead, we see only a small market for 'biodiversity' coffee *per se*, but a much larger market as part of the apparent growing tendency of major coffee companies to promote sustainable coffee brands. Hence the project may have its chief impact by producing 1) a useful and practical manual to assist extensionists manage change in ways that are congruent with farmers' needs and understanding, 2) a website that has a dual purpose to catalogue and inform a wider audience and 3) a policy document that lays down some ways to protect both biodiversity and farm profitability and hence that have the best chance of being adopted by farmers.



With regard to 3) our very preliminary conclusion is that farmers are most concerned with water availability and that a programme that promotes this through measures that include education and tree planting might be the best overall way to protect biodiversity in the coffee regions of Colombia.

## 7. Output, Outcomes and Dissemination

<b>Code No.</b>	<b>Quantity</b>	<b>Description</b>
6A, 6B	22	Launch workshop on farmer participatory techniques
6A	1	Database construction training
7	4	Staff visits

*Details of publicly accessible publications and material produced.*

None in the first year.

## 8. Project expenditure

<b>Item</b>	<b>Budget</b>	<b>Expenditure</b>

## 9. Monitoring, Evaluation and Lessons

*Monitoring.* PB has made three visits to the project, an initial one to develop workplans, a project launch workshop<sup>1</sup> visit with Dr van Mele (farmer participatory expert) and an end-of-year evaluation. Advances have been matched against the log-frame. Project personnel in Colombia were not familiar with working to a log-frame especially with quite tightly defined objectives.

*Indicators of achievement.* These are the same as in the log-frame and have readily measurable targets.

<sup>1</sup> See accompanying CD ROM of formal presentations at the workshop.

*Lessons.* It's hard to monitor a project from a distance with relatively few visits. In retrospect we were a bit too optimistic in our time-specific goals for the project and some have slipped.

Although we fully expect to have covered the ground by the end of the project, we have probably been too ambitious: to develop a good understanding of farmers' use of biodiversity, a useful and reliable manual, an interesting and informative website with extensive database, and a policy document maybe too much. It could be better to do a better job on fewer outputs. We will monitor the project closely over the next few months and at about half-way through the project decide whether it might be necessary to seek permission to modify some outputs.

## **10. Authors**

Peter Baker, Simon Lea, CABI Commodities, 15<sup>th</sup> May 2003

## Appendix 1: Logical Framework

<b>Project summary</b>	<b>Measurable indicators</b>	<b>Means of verification</b>	<b>Important assumptions</b>
<p><b>Goal</b></p> <p><i>To assist countries rich in biodiversity but poor in resources with the conservation of biological diversity and implementation of the Biodiversity Convention</i></p>		<p>A range of printed and digital media relating to conservation and sustainable use of biodiversity in coffee growing areas of Colombia</p>	<p>The Colombian Coffee Federation and CENICAFE continue in operation</p> <p>Civil unrest does not grow to the extent that field activities are judged to be dangerous</p>
<p><b>Purpose</b></p> <p>To protect biodiversity in coffee growing regions of Colombia by improving farmer knowledge.</p> <p>Enhanced economic viability of coffee produced under agro-forestry and shade conditions</p> <p>Enhanced understanding by roasters and traders</p>	<p>Extensive database of local knowledge and training needs</p> <p>New contacts with commercial coffee companies</p> <p>Exposition of Colombia's biodiversity knowledge and commitment</p>	<p>Database, manual and reports widely available</p> <p>Survey evidence of farmers producing coffee for specialty/bird-friendly markets</p> <p>Project representation at international coffee event(s)</p>	<p>Farmers in project areas continue to produce coffee</p> <p>Continued interest by consumers in biodiversity aspects of coffee</p> <p>Events continue to be held and well-attended</p>
<p><b>Outputs</b></p> <p>Researchers and Extensionists trained</p> <p>Farmer attitudes to biodiversity codified</p> <p>A regional policy developed</p> <p>Produced materials for marketing and farmers</p> <p>Extensive database created</p> <p>Links to roasters &amp; traders</p> <p>Forest patches identified and studied</p>	<p>Training course</p> <p>Rural appraisals</p> <p>Policy document</p> <p>Field manual elaborated</p> <p>Posters/TV slots, video</p> <p>Database constructed</p> <p>Promotion at trade fair</p> <p>Areas mapped out</p>	<p>Report of training course</p> <p>Report and database of farmer knowledge &amp; gaps</p> <p>Report</p> <p>Published field manual</p> <p>Copies of videos, posters etc. CD version of database</p> <p>Database of new contacts</p> <p>Conference proceedings</p> <p>Report of reserve potential</p>	<p>CENICAFE continues to function effectively</p> <p>Extensionists continue to be employed and have time to commit to biodiversity</p>
<p><b>Activities</b></p> <p>Participatory rural appraisal</p> <p>Biodiversity training manual</p> <p>Database and digital photo/video library</p> <p>Forest patches identified and studied</p> <p>Stakeholder workshop</p> <p>Training and promotion activities</p> <p>Commercial awareness activities</p>	<p>Inputs:</p> <p>Overall budget: £191,825</p> <p>Of which £ 62,576 counterpart funding</p>	<p>Invoices and receipts of project expenses</p>	<p>CABI and CENICAFE continue to function effectively and international travel is unhampered</p>