

**MONITORING OF THE CGIAR PROJECTS CO-FUNDED BY THE EUROPEAN
COMMISSION IN 2004 IN A.C.P., ASIA, LATIN AMERICA
AND THE MEDITERRANEAN REGIONS**

CIFOR

Centre for International Forestry Research

Latin America component (Brazil & Bolivia)



BIODIVERSITY AND MANAGED FORESTS

Czech Conroy and Emmanuel Torquebiau

November 2005

Santa Cruz de la Sierra, Bolivia, 5 November 2005

Dear Sir,

Please find attached the report from the monitoring of CIFOR's "Biodiversity and managed forests" Programme carried out from 23 October to 5 November 2005 by Mr Czech Conroy, senior socio-economist, NRI, UK and Dr Emmanuel Torquebiau, senior scientist in plant ecology and agroforestry, CIRAD, France.

We hope you will find the report useful and wish you good receipt of it.

We thank all the persons we met in Brazil and Bolivia and at the Commission in Brussels; they all made our job an interesting and gratifying one. Particular thanks are extended to the direction of CIFOR in Bogor, Indonesia, for a careful preparation of the monitoring mission, and to the Commission in Brussels for accepting unexpected delays in implementing the monitoring mission.

Sincerely yours,

Czech Conroy
Emmanuel Torquebiau

ACRONYMS

ACM	Adaptive Collaborative Management
AI	Amazon Initiative
AMDEPANDO	Association of Municipal Authorities of El Pando Department, Bolivia
ANP	Amboro National Park
BIO	Biodiversity and Managed Forests Project
BMZ	Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung, Germany
CBD	Convention for Biological Diversity
CDM	Clean Development Mechanism
CFM	Community Forest Management
CG	Consultative Group
CGIAR	Consultative Group on International Agricultural Research
CI	Conservation International
CIAT	Centro Internacional de Agricultura Tropical
CIFOR	Center for International Forest Research
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
COINACAPA	Brazil Nut Cooperative in Porvenir, Bolivia
DFID	Department For International Development
EC	European Commission
EMBRAPA	Empresa Brasileira de Pesquisas Agropecuarias
EMPR	External Management Programme Review
ES	Environmental Services
FAO	Food and Agricultural Organisation of the United Nations
FN	Fundacion Natura
FS	Future Scenarios
GPS	Global Positioning System
IBAMA	National Environment Protection Agency (Brazil)
ICRAF	World Agroforestry Centre (International Centre for Research in Agroforestry)
IDRC	International Development Research Center, Canada
IFPRI	International Food Policy Research Institute
IIED	International Institute for Environment and Development
IMAZON	Institute for Man and the Environment in the Amazon, Brazil
INRA	Instituto Nacional de la Reforma Agraria
IPGRI	International Plant Genetic Resource Institute
ITF	Institute of tropical Forestry
MDG	Millennium Development Goals
MLA	Multidisciplinary Landscape Assessment
MTP	Medium Term Plan
NARS	National Agricultural Research System
NGO	Non-Governmental Organization
NRI	Natural Resources Institute, UK
NTFP	Non Timber Forest Product
PEN	Poverty and Environment Network
PES	Payment for Environmental Services
PRA	Participatory Rural Appraisal
RESEX	Extractive Reserves, Brazil
RHA	Rapid Hydrological Assessment
RUPES	Rewarding Upland Pooors for the Environmental Services they provide
S&B	Stakeholders and Biodiversity
SDC	Swiss Development Cooperation
TFBL	Tropical Forest Budget Line (EC)
WWF	World Wildlife Fund

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EXECUTIVE SUMMARY

1. THE CG CENTRE:

CIFOR is one of the newer CGIAR centres, having been established in 1993. Its mission is to improve the well-being of forest-dependent people, reduce poverty and ensure the survival of the world's tropical forests through high-quality research. CIFOR's research seeks to reduce poverty among the hundreds of millions of people who rely heavily on forests for their livelihoods. CIFOR is committed to alleviating rural poverty by helping poor people retain access to forest resources, create new resources and earn more from those they have. Its research also encourages the sustainable use of forests and the protection of biodiversity.

CIFOR is organized according to 3 research programmes:

- Environmental services and sustainable uses of forests
- Forests and livelihoods
- Forests and governance.

CIFOR scientists working on biodiversity in Latin America belong to Forests and Livelihoods and Forest and Governance programmes.

2. PROJECT:

Biodiversity in Fragmented Landscapes Project (BIO)

This was called the *Biodiversity and Managed Forest* project, but was recently re-named as the *Biodiversity in Fragmented Landscapes* project. BIO aims to contribute to the conservation and sustainable use of forest biological diversity through generation and diffusion of improved knowledge about biodiversity in forested rural landscape mosaics. It has two specific objectives, namely:

1. To promote the integration of biodiversity conservation into improved management practices for managed natural forests and forest plantations.
2. To contribute to the conservation and sustainable use of forest biological diversity through the collection and use of better information regarding biodiversity in landscape mosaics for priority setting and problem diagnosis.

Activities related to the project in Latin America fall under 3 main headings:

- Stakeholders and biodiversity at the local level
- Biodiversity in the Brazilian amazon: protecting species that sustain livelihoods
- Vulnerability and resilience: the response of women and non-timber forest products to illegal logging in the Brazilian Amazon.

This evaluation also examines some other initiatives and cross-cutting issues.

3. CONCLUSIONS AND RECOMMENDATIONS:

3.1 Project Design and Implementation¹

Performance ²		HS	S	LS	HUS	Comments
RELEVANCE						
2.1	Paying for environmental services (PES)	x				A key research topic, innovative and linked to actual problems
2.2	Multidisciplinary landscape assessment (MLA)			x		Has lost some of its biodiversity relevance
2.3	Future scenarios (FS)			x		Biodiversity relevance is weaker than it could be
3	Biodiversity and livelihoods	x				Well designed project
4	Vulnerability and resilience	x				Adequate relevance to people's needs, especially women
	Overall		x			
EFFICIENCY						
2.1	Paying for environmental services (PES)	x				High level of efficiency
2.2	Multidisciplinary landscape assessment (MLA)		x			Satisfactory efficiency within revised objectives
2.3	Future scenarios (FS)	x				Rapid widespread use (due to good institutionalization and relationship with stakeholders)
3	Biodiversity and livelihoods	x				Original and efficient approach
4	Vulnerability and resilience		x			Leverage effect for other funds, but CIFOR's role not always clear
	Overall	x				

¹ **References:** project description included in the EC/CGIAR-World Bank contract 2002, EC-CGIAR strategy document

² *HS: Highly Satisfactory, S: Satisfactory, LS: Less than Satisfactory, HUS Highly Unsatisfactory*

EFFECTIVENESS					
2.1	Paying for environmental services (PES)		x		Too early to assess effectiveness
2.2	Multidisciplinary landscape assessment (MLA)		x		Difficult to assess effectiveness on provided indicators
2.3	Future scenarios (FS)	x			Intended beneficiaries actually reached and involved
3	Biodiversity and livelihoods	x			Effective reaching of expected beneficiaries and multiplier effect
4	Vulnerability and resilience	x			Effective reaching of beneficiaries
	Overall	x			
IMPACT & SUSTAINABILITY					
2.1	Paying for environmental services (PES)		x		Too early to assess impact and sustainability
2.2	Multidisciplinary landscape assessment (MLA)		x		Good signs of future impact
2.3	Future scenarios (FS)	x			Good institutionalization
3	Biodiversity and livelihoods		x		Adoption studies required
4	Vulnerability and resilience	x			Good prospect, but adoption studies required
	Overall		x		
TECHNICAL MATTERS					
	Quality of the science	x			Good science, but possible confusion with development related activities - needs to be regularly checked

Quality of the project management	x				High motivation of staff, leading to easy management
INSTITUTIONAL MATTERS					
Co-ordination with the Centre's other activities		x			Relationship with similar subjects elsewhere not always clear (e.g. MLA and FS in South East Asia)
Co-ordination with other CGIAR Centres		x			Biodiversity platform with ICRAF not yet operational
Co-ordination with NARS		x			Variable
Diffusion of the findings / results / outcomes (including training activities)	x				Excellent
Involvement of stakeholders	x				Good
<ul style="list-style-type: none"> in the project design / reorientation 					Not known
<ul style="list-style-type: none"> in the research activities 	x				
<ul style="list-style-type: none"> in the results dissemination 	x				
<ul style="list-style-type: none"> in the project evaluation 					Not monitored

OTHER RELEVANT ISSUES TO BE MENTIONED					

3.2 Recommendations linked to project design and implementation

Recommendation 1 – The evolution of MLA since the inception of the methodology (back in 2000) has made its objectives rather confused and its biodiversity focus somehow diluted. CIFOR should not transform MLA into an improved PRA approach (which has its own value) and should consider streamlining the MLA methodology to a clear landscape level biodiversity focus, or discontinue it.

Recommendation 2 – We recommend that both the FS and MLA work are linked to follow up activities (or methodologies for follow up activities). The purpose of such activities would be to stimulate greater interest, awareness and skill levels on the part of local communities and professionals in the potential for harvesting, and generating income from, a wide range of NTFPs. This could include similar activities to those being undertaken by CIFOR in Brazil (e.g. identification of urban markets for NTFPs; description and/or assessment of management practices; and documentation of relevant cases.). In addition, the kind of FS exercise that CIFOR conducted with professionals could potentially be undertaken with local communities, given a certain amount of capacity development.

Recommendation 3 – Although Brazil nut tree / grove maps have been found useful by communities, it is recommended that once the methodology has been fully tested and developed CIFOR does not continue this activity, which can then be seen as a development activity. Rather, it is recommended that trained partners be encouraged to implement it themselves.

Recommendation 4 – CIFOR should make sure that it sticks to similar headings from project proposal to report submission (even if a slight degree of flexibility to respond to changes in circumstances can be accepted) in order to ease the monitoring of its activities and make sure that it does not lose visibility for its results.

Recommendation 5 – Some of the milestones announced by CIFOR in its proposal document for Latin America activities in 2004 refer to Asia. The milestones are not organized by programme or project. Some expected gains refer to the Tropics at large. In submitting its annual research plan to the EC, CIFOR should streamline its proposed activities to the essential, and write them in a concise and more coherent manner. CIFOR should improve its list of projects' milestones for the EC as a function of related projects and / or more precise objectives.

Recommendation 6 – CIFOR should continue producing a diversity of outputs for this type of stakeholder driven research. A balance between published research results, training and stakeholder targeted products should be able to maintain efficiency and effectiveness at a good level.

Recommendation 7 – In order to further strengthen the important results it has obtained on NTFPs issues dissemination, CIFOR could consider undertaking research on the adoption of NTFP innovations by farmers and its impact on marketing NTFPs and on forest conservation. The monitoring team recommends that funding for this type of research be favourably considered by the EC.

Recommendation 8 – For its long-term, on-going activities, CIFOR should state annual expected outputs, in order to ease monitoring and evaluation.

Recommendation 9 – In dealing with local partners, such as farmers or women's groups, CIFOR should make sure that it clarifies its mandate as a research organization, in order not to raise inappropriate and undeliverable expectations.

Recommendation 10 – Despite the difficulties in working with EMBRAPA, we recommend that all CIFOR staff working in Brazil make a concerted and persistent effort, even if progress seems painstakingly slow at times, to strengthen collaboration between the two organisations on research related to biodiversity conservation. This is because EMBRAPA, with its huge technical and financial resources, has the potential to be CIFOR's most important partner on biodiversity research in Brazil, and indeed in Latin America, and to maximise the sustainability and impact of CIFOR's research.

Recommendation 11 – CIFOR should review its programme in Latin America and decide whether its current staffing levels and portfolio are adequate; and, if it agrees with our judgement that they are not, CIFOR should develop and implement a strategy for bringing about the necessary strengthening of its presence in the region, in relation to both its research and capacity-building work. CIFOR should avoid appearing as giving low priority to a continent where tropical forest issues are important.

3.3 Overall recommendation on future support by the European Commission

Recommendation 12 – CIFOR should continue its effort to combine funds from different sources for a given project. However, this should be done in a manner which does not jeopardize a project’s future if some of the expected resources do not materialize. The cross-submission of the same proposal to several donors can be suggested, or the mentioning of complementarity between several proposals.

Recommendation 13 – The European Commission should favourably consider proposals which mention several sources of funding with the same research objective (s).

	Yes / no	Comment
Termination		
Continuation	Yes	Innovative, high-quality research; good, motivated staff; adequate relations with stakeholders; relevance to initial objectives to be regularly checked.

1 . INTRODUCTION

CIFOR

CIFOR is one of the newer CGIAR centres, having been established in 1993. Its mission is to improve the well-being of forest-dependent people, reduce poverty and ensure the survival of the world's tropical forests through high-quality research. CIFOR's research seeks to reduce poverty among the hundreds of millions of people who rely heavily on forests for their livelihoods. CIFOR is committed to alleviating rural poverty by helping poor people retain access to forest resources, create new resources and earn more from those they have. Its research also encourages the sustainable use of forests and the protection of biodiversity.

CIFOR is organized according to 3 research programmes:

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Overview of Biodiversity Research at CIFOR

CIFOR research on forest biodiversity, carried out through partnerships with NARS and other local and international institutions, aims to address poverty alleviation and sustainable forest management by seeking to define and promote the critical balance between conservation and sustainable use of forest products and genetic resources. This balance will strengthen the assets of individuals, especially among forest dependent communities, and improve the sustainability of natural resource management for the benefit of all. The research is organized around three major themes:

- Development of tools to assess/manage biodiversity from various stakeholders' perspective
- Analysis of important direct causes/mechanisms of forest biological diversity loss.
- Exploring the links between livelihoods, forest biodiversity and institutional mechanisms for their use, access and management.

Results are fed into the international and national policy dialogues on conservation and sustainable use of forest biological diversity in an attempt to influence the global agenda on forests and livelihoods. Through partnerships with major conservation and development agencies (governmental and non-governmental), CIFOR seeks to influence their strategies, and provide recommendations on institutional mechanisms and tools to better monitor and evaluate the implementation of these strategies. CIFOR's present Medium Term Plan has evolved since its inception in 2004, as shown on Figure 1.

Figure 1. The evolution of CIFOR's MTPs

Project	MTP 2004-2006		MTP 2005-2007		MTP 2006-2008
1	Forests, Society and Policy		Sustainable Use of Forests	→	Sustainable Use of Forests
2	Adaptive Co-Management of Forests		Biodiversity in Fragmented Landscapes	→	Biodiversity in Fragmented Landscapes
3	Sustainable Forest Management		Ecosystem Functions and Services in Forested Catchments	→	Forest Ecosystem Services
4	Plantation Forestry on Degraded or Low Potential Sites		Governance of multi-stakeholder forested landscapes	→	Governance of multi-stakeholder forested landscapes
5	Biodiversity and Managed Forests		Forest Finance, Trade, Corporate Accountability and Illegal Forest Activities	→	Forest Finance and Trade, Law Enforcement and Corporate Accountability
6	Forest Products and People		Implementing Decentralization for Forest Sustainability, Rights and Livelihood Security	→	Managing Landscapes for Sustainable Livelihoods
7	Research Impacts, Priorities and capacity evaluation		Managing Landscape Mosaics for Sustainable Livelihoods	→	Improving Human Well-being through Forests
8	Policies, Technologies and Global Changes		Improving Human Well-being through Forests	→	Global Public Goods and Impact Assessment
9			Global Public Goods and Impact Assessment	→	

Biodiversity in Fragmented Landscapes Project (BIO)

This was called the *Biodiversity and Managed Forest* project, but was recently re-named as the *Biodiversity in Fragmented Landscapes* project (see Figure 1). This re-naming reflects a broadening of the project focus, which still includes managed forests. One of the reasons to change the name was linked to the CIFOR / ICRAF biodiversity platform, an inter-Centre initiative designed to address biodiversity issues across land use types (see Section 5). BIO aims to contribute to the conservation and sustainable use of forest biological diversity through generation and diffusion of improved knowledge about biodiversity in forested rural landscape mosaics. It has two specific objectives, namely:

1. To promote the integration of biodiversity conservation into improved management practices for managed natural forests and forest plantations.
2. To contribute to the conservation and sustainable use of forest biological diversity through the collection and use of better information regarding biodiversity in landscape mosaics for priority setting and problem diagnosis.

The activities in this project contribute to CIFOR's goal through the capture and analysis of information on biodiversity in landscape mosaics, where CIFOR's primary interest is in the forest components of the landscape. Capacity building is central in the project. It uses research activities to build capacity in several countries (with a strong emphasis on Central Africa). The activities related to biodiversity in managed forests focus on large-scale plantations in China, Indonesia and Vietnam; and on managed natural forests in Indonesia, and the Congo and Amazon Basins (Cameroon, Gabon, Bolivia, Brazil, Peru).

Biodiversity-related Cross Programmatic Linkages

Project 2 (see Figure 1) is implemented through integrated research initiatives that 'cut across' all three CIFOR programmes and, therefore there are strong links between several component projects within CIFOR's research portfolio. The Environmental Services and Sustainable Use of Forests Program will generate outputs that focus on "biodiversity in fragmented landscapes" i.e. conservation of forest biodiversity in rural landscape mosaics through the development of integrated approaches. It will also generate outputs that contribute to the sustainable management and conservation of biodiversity in managed forests.

Close linkages with Project 4, 'Governance of multi-stakeholder forested landscapes', will ensure that the use of ACM tools and multi-stakeholder processes consider the use and management of biodiversity occurring in productive landscapes. Land use planning situations in complex landscape mosaics frequently centre on competing demands for land. To capture biodiversity-related benefits CIFOR builds upon and expands the previous Adaptive Collaborative Management (ACM) initiative. Approaches and tools developed and tested at the community level are scaled up for application at higher levels of government and with key forestry planning, management and support institutions at national and regional levels. Research that identifies the conditions under which less powerful stakeholders can effectively be involved in decision-making and negotiation that identifies how conflict can be effectively managed will be a key focus. This has large strategic significance for the maintenance and effective sustainable use of biodiversity, since much of the world's biodiversity resides outside of protected areas but within 'managed' landscapes which support the livelihood of the rural poor. Efforts that develop and strengthen the multi-stakeholder mechanisms are needed to capture potential benefits for communities through payments for environmental services, and to create the conditions for forms of sustainable management across landscapes that will generate international public goods.

Illegal logging, law enforcement and conflict can have profound implications for the maintenance, management and protection of biodiversity. In this regard there are close connections between this project and the CIFOR Project entitled 'Forest Finance, Trade, Corporate Accountability and Illegal Forest Activities' (Project 5).

Another CIFOR project is aimed at highlighting the importance of biodiversity for poverty reduction strategies (Project 7). To this end, the Poverty and Environment Network (PEN) of 15-20 PhD students working in a range of locations is being established. Ways of enhancing the 'safety-net' functions of forest biodiversity, both through improved subsistence uses of forest products for nutritional, health and construction purposes, and through more rewarding trade in forest goods, by expanding the range of value-adding activities and improving access to markets, are being explored with communities throughout the globe.

CIFOR scientists and international experts are also collaborating on the topic of Forests and Human Health, sharing their expertise to better understand the contributions of forests to public health; the impacts of land use, forest-cover change, and vector borne diseases; and the potential for integrating environmental and population-health efforts. This initiative brings together a multidisciplinary team of scientists from all three of CIFOR's programmes, together with collaborators. The work focuses on the biodiversity impacts of women's

participation, and the incorporation of their knowledge in forest management decision-making in multi-stakeholder negotiating contexts.

All of CIFOR's biodiversity-related research activities promote the sustainable use of forest genetic resources through processes and initiatives that go across national, regional and sometimes global scales. Although there are some opportunities for more or better linkages (e.g. between NTFPs and MLA), biodiversity research at CIFOR thus appears to be reasonably well integrated across programmes and forms a coherent set of activities.

EC Support for Biodiversity Research at CIFOR

EC Food Security funds contribute to the BIO project. In a sense BIO is a programme rather than a project, and is composed of numerous projects funded by a variety of donors.

The Present Monitoring Mission

This mission focused on the use of EC Food Security funds to support CIFOR's biodiversity research in Latin America, particularly Brazil and Bolivia. A previous mission had focused on Asia. The amount of EC Food Security funds allocated by CIFOR to research in Latin America is considerably less than for Asia. This reflects CIFOR's overall geographical priorities, which appear to be based primarily on poverty reduction. Thus, Sub-Saharan Africa receives the highest priority, followed by Asia and then Latin America. Given the global importance of certain Latin American forest regions in biodiversity terms, the low priority accorded to Latin America is an issue.

The principal projects for which EC Food Security funds were used in 2004 in Latin America were:

- Stakeholders and Biodiversity at the Local Level;
- Biodiversity in the Brazilian Amazon: Protecting Species that Sustain Livelihoods;
- Vulnerability and Resilience: The Response of Women and Non-Timber Forest Products to Illegal Logging in the Brazilian Amazon

These projects form the main focus of this report and each is reviewed below in sections 2 to 4. Other cross-cutting issues are discussed in Section 5.

2 . STAKEHOLDERS AND BIODIVERSITY AT THE LOCAL LEVEL

Background, objectives and milestones

EC Food Security funds have been used to co-fund biodiversity work in Bolivia that is being funded by Swiss Development Cooperation, under a CIFOR project entitled 'Stakeholders and Biodiversity in the Forest at the Local Level' (S&B). This is a three year project that started in July 2003, and follows a previous related project (Phase 1). Its goal is to enhance livelihoods of the rural poor and achieve sustainable forest use. The main thrusts are developing tools to give the rural poor a voice in negotiations that affect forests, and to enhance environmental service trading. The project is working in Bolivia and Vietnam.

This project contains the following components:

- Payment for Environmental Services (PES)
- Multi-disciplinary Landscape Assessment (MLA)

- Future Scenarios (FS).

Relevant milestones are:

1. Reviews of existing cases of environmental service trading in at least two countries (interim results to evaluate the potential for biodiversity payments)
2. Draft planning tools (e.g. negotiation support system, spatial planning system) for conservation and development agencies (including district governments).

2.1 Environmental Services Trading / Payment for Environmental Services

PES relates to Output 1 (i.e. Strategic Principles and Policy-Relevant Information), and is Component 1 under this output in CIFOR's 2004 report to the Commission. The first milestone cited above is also the objective of this component. In the SDC proposal the objective is: "To assess and evaluate viable opportunities for environmental service trading and communicate results to key stakeholders".

PES is a potential mechanism by which local stakeholders will receive payments from other parties (especially private sector, e.g. downstream farmers or foreign electricity companies) may pay for the cost of environmental protection and biodiversity conservation. PES has been defined by CIFOR as "voluntary contingent transactions around well-defined environmental services, including at least one buyer and one seller". A key feature of PES schemes is their conditionality, i.e. payments are only made if the provision of the service is secured, or the agree-upon ceilings on land use change (forest removal) are complied with, on a *quid pro quo* basis. There are four existing types of PES 'markets', namely:

- Carbon
- Watershed
- Recreation (landscape beauty/tourism)
- Biodiversity.

During 2004 CIFOR researchers completed field work for the assessment of environmental service trading initiatives in Bolivia; and they also carried out a similar assessment in Vietnam. In Bolivia they looked at 9 'primary' cases in considerable detail (including visits to 8 of them); and reviewed a further 8 'secondary' cases on the basis of existing documentation and interviews with their implementers. CIFOR produced a detailed summary of these initiatives in 2004, which was published (in English) by CIFOR in June 2005 – *Fresh Tracks in the Forest – Assessing Incipient Payments for Environmental Services Initiatives in Bolivia*, Nina Robertson and Sven Wunder.

The review found that in Bolivia watershed protection and landscape beauty / tourism were the dominant environmental services being paid for. Biodiversity *per se* is not something that local or global stakeholders are much inclined to pay for. Watershed protection is probably the service that local stakeholders are most likely to be prepared to pay for, because under certain circumstances they could derive direct livelihood benefits from this. The conservation of biodiversity can sometimes be 'bundled' with watershed protection, as in the Fundacion Natura scheme near Santa Cruz (see below).

The review did not identify any schemes that satisfied all elements of the definition of PES quoted above – in other words, the principle of PES had not yet been fully implemented anywhere in Bolivia. (In Vietnam they found even fewer PES-type experiences, due to a strong tradition of state-led command-and-control schemes and State-owned land, only recently supplemented by land allocation and economic incentives to households.) One

widespread weakness of the schemes was that local users were not yet paying for environmental services: rather, there was a dependence on donors to make the payments to the sellers. This kind of arrangement is likely to prove unsustainable, as donors cannot be expected to continue these payments indefinitely. Sooner or later local users must be prepared to pay for the services they receive.

Action-oriented case study

The PES scheme in Bolivia that came closest to the definition of PES quoted earlier was a small-scale watershed protection scheme managed by a Bolivian NGO, Fundacion Natura (FN), near Santa Cruz. Supported by pilot funding from the US Fish and Wildlife Service and technical support from Conservation International, this is a scheme operating in the buffer zone of Amboro National Park (ANP), an area of high biodiversity including over 800 bird species. The scheme envisaged watershed protection payments being made by downstream water users in Los Negros to upstream land users in Sta Rosa to conserve forest on their land, although at the time of the CIFOR review donor funds were being used to make the payments. However, we were informed by FN that in late 2004 downstream water users made payments for the first time, via the local municipal government, and again in 2005. The downstream users are farmers who irrigate vegetable crops using water from ANP, many of whom have been experiencing a lack of water flow in the dry season that could be linked to deforestation upstream.

CIFOR decided to support and develop this scheme through action research. Based on a first assessment, CIFOR scientists provided a five-page report with suggestions for redesigning certain management features. Some of these recommendations have already been taken into account by FN and thus resulted in changes on the ground. CIFOR is also helping to develop a rapid hydrological assessment (RHA), through financial and technical support, to confirm (or disconfirm) the link between upstream cloud forest and increased dry season water flows. This should provide empirical underpinning for the PES agreement that FN has been negotiating with downstream water users. The relationship between upstream forest cover and downstream water flows is highly controversial, and hence this methodology could be very valuable. There is an international consensus, however, that the relationship between *cloud forest* cover (as in the ANP case) and downstream dry-season water flows is generally a positive one.

Relevance

PES systems may have the potential to protect environmental services (including biodiversity) while at the same time improving local livelihoods. As such, they could be a valuable tool for sustainable biodiversity conservation and development. During the last decade PES systems have been evolving in many parts of the tropics, particularly in Latin America and South East Asia (e.g. ICRAF's programme on Rewarding Upland Pooors for the Environmental Services they provide: RUPES), but there is still a lot to learn about how, and under what circumstances, they can be viable. This research is at the forefront of this important research area and cuts across CG centres. The Bolivian review has brought a conceptual clarity to a range of PES initiatives in this country and has thereby helped to move forward the debate.

Efficiency

The time spent on this component in 2004 by CIFOR's principal researcher, Sven Wunder, was about 5 months (for work in both Bolivia and Vietnam), of which 2.3 months was paid

for from SDC funds. He also had the support of Nina Robertson, a Fulbright Scholar who was based in Santa Cruz at the time. The methodology of reviewing existing schemes through a series of case studies was sound, and the use of site visits to many schemes was important in terms of providing a sound understanding of the local situation and verification of claims from secondary sources. The published version of the Bolivia PES review is of a very high quality academically, and also in the clarity with which it is written, which makes it reasonably accessible to non-academics with an interest in the subject. It considers systematically the environmental, economic and social effects of all the case study schemes reviewed, and identifies generic PES design issues emerging from the review.

The case study action research with FN on the ANP scheme, which was initiated in 2004 and is currently ongoing, involves about one month of Wunder's time in 2005 and small payments from CIFOR to FN in each year. CIFOR is supporting work by FN with USD 5,000 in 2004 and an additional USD 1,000 in 2005. (USD 6,000 in total) The RHA approach that is being developed under this research represents excellent value for money, and is a low cost method that may be applicable elsewhere in Bolivia, and in other countries where watershed PES schemes are being set up. Overall, therefore, CIFOR's PES work in Bolivia has been carried out to a high level of efficiency.

Effectiveness

FN said that they found Wunder's written comments on the ANP scheme to be "incredibly useful", which is reflected in the fact that they have acted on several of them in modifying the scheme. They have also found the inputs from CIFOR scientists to the design of the RHA to be extremely valuable. FN's ANP scheme now satisfies all the criteria specified in the definition of PES, since the downstream users are now paying upstream land-users for their services, and hence it appears to be the first true or 'pure' PES scheme in Bolivia. As such it is a pioneering scheme of great practical interest and potentially wider relevance.

The EC funds were critical in covering part of the time Sven Wunder spent in Bolivia, enabling the work to be completed, and in embedding the Bolivia work into global-comparative and methodological aspects of PES.

The key beneficiaries of this work include national policy and decision-makers. These groups have not yet been reached by the project to any significant degree, and hence it is too early to reach any definitive conclusions on the effectiveness of this work. It should be borne in mind that the Bolivia PES review was only published in June 2005, and this was in English. Several dissemination activities that may influence key beneficiaries in Bolivia are planned over the next year or so, including:

- A Spanish version of the PES review
- A national workshop (in collaboration with IIED) in Bolivia, scheduled for March 2006
- Policy briefs.

The effectiveness of this component should be much clearer after these dissemination activities have been implemented.

Donors and other members of the international community are also key target groups. The project has contributed to some global information products of relevance to these groups. The lessons from the Bolivia work have fed into a widely distributed CIFOR Occasional Paper on the "nuts and bolts of PES", and into a guest editorial in The Ecosystem Marketplace, thus also using the Bolivia results to produce global public goods. In addition, Sven Wunder initiated a collaboration with IIED to develop outputs that deal with methodological questions

(including a joint international PES workshop held in June 2005 in Germany), and specific collaboration in Bolivia. A first paper dealing with the impact of existing PES schemes on poverty alleviation was published in *World Development* in September 2005 (with two IIED co-authors).

CIFOR has been getting involved in activities related to the Bolivia work in other South American countries. In early 2005 a similar national assessment to those completed in Bolivia and Vietnam was carried out in Ecuador using CIFOR core funds - Ecuador is a relatively advanced country in terms of pioneering PES schemes. More recently CIFOR became involved in a project with Conservation International, entitled ‘Uncovering the Scope for PES in the North-Andean Corridor’ (start: November 2005). The project will work in Colombia and Venezuela, and is a scoping exercise to assess whether watershed payments can be used to help finance biodiversity conservation. This is seen by CIFOR as a good example of a biodiversity-oriented activity that has been ‘leveraged’ by the EC Food Security funds; and, given the clear biodiversity focus, CIFOR is planning to use some EC funding as counterpart for this project in 2006.

Impact and sustainability

As with ‘Effectiveness’ it is rather early to be assessing impact and sustainability, so only a very preliminary assessment can be made here.

The PES work has already had a major impact on the FN PES scheme. However, there are still modifications and improvements that need to be made, and the upstream-downstream link still needs to be confirmed through the RHA. FN expects that it may take another five years to fine-tune the PES design to the point where the scheme is likely to be robust and self-sustaining. Only when the RHA has confirmed the link, and the social and institutional issues have been resolved satisfactorily can the ANP scheme be said to be sustainable. The cost of FN’s inputs into the ANP scheme has been high relative to the benefits, and FN recognises this. However, the ANP scheme should be seen as a pilot project, and FN has begun an 18-month study (funded by DFID) on the replicability of this type of scheme elsewhere in Bolivia; and, taking account of several key factors, has identified 10 highly promising medium-sized cloud forest watersheds and another 20 that also have some potential.

Capacity building The close collaboration between CIFOR and FN has developed FN’s capacity to understand conceptual issues relating to PES, and to undertake their own research on PES in Bolivia. In addition, Sven Wunder gave a keynote address and organized group work at a three-day CARE/WWF/CI workshop in Lima in 2004 on Payments for Environmental Services, which was a capacity building event for project managers and other staff. He also delivered three further presentations on this topic in Brazil.

Performance

	Highly Satisfactory	Satisfactory	Less than Satisfactory	Highly Unsatisfactory
Relevance	X			
Efficiency	X			
Effectiveness		X		
Impact		X		

2.2 Planning Tools for Conservation and Development Agencies

Background, Objectives and Milestones

These activities relate to Output 4, Component 1, i.e. *Biodiversity Surveys, Local People's Preferences and Information for Improved Land Use Decisions*. Both MLA and FS are seen by CIFOR as innovative analytical approaches to local biodiversity management. For some reason CIFOR's report to the EC on its activities in 2004 (a) only refers to the MLA work done in Asia (Indonesia, Papua and Vietnam), and (b) makes no reference at all to the Future Scenarios work.

Objectives The objectives of this research that were identified in CIFOR's 2004 report to the Commission were: (a) development of tools to assess/manage biodiversity from various stakeholders' perspective; and (b) analysis of important direct causes/mechanisms of forest biological loss. The objective in this document goes on to say that "Results will then be fed into the international and national policy dialogues on conservation and sustainable use of forest biological diversity in an attempt to influence the global agenda on forests and livelihoods". This objective appears to relate solely to the MLA work.

The relevant *objective* in the Stakeholders and Biodiversity (S&B) project proposal, which applies to both MLA and FS, is: "To develop appropriate mechanisms for integrating local perceptions and views in decision making and planning". The associated expected result is: "appropriate tools for aiding decision makers integrate local perceptions and needs into decision-making frameworks are developed and disseminated".

CIFOR gave us a Powerpoint presentation by the CIFOR consultant on the MLA and FS work carried out in Pando, Bolivia, which identified the following *objectives for the work in this department*:

- Adapt methods to the Pando context
- Evaluate methods, identify new applications and train local people
- Encourage ownership and institutionalisation.

One of the activities of the Stakeholders and Biodiversity (S&B) project is to complete a critical review of the methods and tools developed under phase one of the project, and compare these to other tools that have been developed elsewhere, or that are currently in use. During 2004 a beginning was made with the review of MLA and FS methods, and other methods developed by CIFOR for similar purposes. The review of MLA, FS and related methods was to be followed up by additional testing and further refinement. The latter did not take place until 2005, but we have described and commented upon it here as very little could be said about effectiveness and impact of the research if our observations were based solely on the 2004 work.

Multidisciplinary Landscape Assessment

Background, objectives and milestones

The Multi-disciplinary Landscape Assessment (MLA) adopts a landscape level and people-centred approach, focusing on the uses and values people in communities ascribe to different species, in different local land-use units. MLA represents an attempt to integrate local peoples' knowledge, perceptions, needs and preferences with regard to biodiversity into forest management decisions. It is a methodology with potentially global applications for improving systems of forest and land management. Its innovation lies not so much in the tools and

approach, which are slightly adapted PRA (mapping, transects, ranking and scoring) and ethnobotanical methods, but in its attempt to make biodiversity monitoring useful to people's livelihoods. It does place more than usual emphasis on peoples' knowledge and use of biodiversity, by involving them in the field work. The explicitly people-centered approach sends an important message to conservationists who typically consider biodiversity from the perspective of wildlife and protected areas. It also intends to inform forest managers on how to incorporate peoples' needs and preferences in forest management decisions. The methodology should help assert the interests of villagers, who have to contend with more powerful timber companies and government authorities, and help identify incentives for them to participate in forest management activities.

Objectives: a) development of tools to assess / manage biodiversity from various stakeholders' perspective, and b) analysis of important direct causes / mechanisms of forest biological diversity loss.

The milestones which apply to the MLA activity (although not only) are:

- Draft planning tools (e.g. negotiation support system, spatial planning system) for conservation and development agencies (including district governments)
- Framework for examining strategies for making poor people better off in forest areas through use and management of biodiversity
- Analytical reports and case studies on the utility of adaptive learning approaches to sustainable forest management in Latin America.

Simplified versions of the MLA were applied in Bolivia in 2005, in 2 communities of the Municipality of El Sena, in the Pando Department (Northern Bolivia). As compared to the initial method, the simplified version of MLA is faster, less expensive, more participatory and more adapted to local needs. It is presented as a series of participatory tools to collect information and build capacity with local people. These changes have (probably) been made in response to comments by the EC monitoring team which reviewed MLA in 2003 in Indonesia. At that time, the main recommendations and comments were:

- CIFOR should make the biodiversity sampling component of the MLA approach simpler, and more flexible, so that it can be applied in parts only, or by small teams, or in a reduced period of time, etc.
- The appropriation of MLA method and data by the people for the sustainable management of their resources is key to the long term impact of MLA.
- Communities and local government are to some extent unclear about what MLA is about and how MLA can be integrated into other activities conducted by CIFOR.

The monitoring team was able to meet 5 representatives of the 2 Bolivian communities and 2 members of the El Sena Municipal Council who implemented the MLA. Discussions were also held with WWF partners and members of the COINACAPA Brazil nut cooperative who participated in some of the MLA activities, especially those dealing with Brazil nut forest mapping.

Outputs:

- Web site in 4 languages (English, Indonesian, French, Spanish)
- Methods books in 4 languages (English, Indonesian, French, Spanish)
- MLA methods presented in 3 workshops
- MLA results presented at 4 meetings in Bolivia
- Request from WWF Bolivia to apply MLA
- Application of MLA to Brazil nut forest mapping
- Improved relationships between Municipal Government and Communities in La Sena
- Requests from communities to Municipal Government for other MLAs

- Improved awareness of local people on natural resources and the environment
- Improved decision making and planning skills for local people.

In Bolivia, not many MLA activities took place in 2004. Before 2004, some MLA work was done according to the initial MLA methodology. This was presented by CIFOR in a document which was not seen by the review team. The corresponding site (Luz de America) could not be visited either. For the sake of continuity between funding years, and the lack of MLA activities in 2004, the present section of this report focuses on MLA activities implemented in 2005.

Relevance

The stated objectives of the simplified MLA have taken into account the recommendations made by the former EC monitoring team. As such, they better address the needs of the local communities and appropriation of the tools by the people. The training component also better addresses scaling up. Unfortunately, some coherence may have been lost in the process. MLA was not perceived by the people we met as an activity clearly distinct from the future scenarios work and, especially, from the land use planning (mapping) of the Brazil nut trees. The reason behind this confusion can be positively analyzed: mapping people's forests came out as a result of the MLA. Thus, participation in the mapping activity was good and the appropriation of the tools effective. However, the biodiversity focus has weakened as a result. The persons we met simply commented that MLA is a useful approach to identify and improve the economic value of their natural resources through the mapping of their forest. The community members even forgot to mention MLA in their list of activities implemented with CIFOR. WWF persons with whom we met mentioned it as an approach which was not appropriate for biodiversity studies when applied at the community level, because this is too small-scale (although this is the initial objective of the MLA approach).

From what the monitoring team was presented, it appears that the words Multidisciplinary Landscape Assessment do not correspond to the reality. The reality in Pando was an inventory of important forest resources at the community level. The ideal should be "Biodiversity conservation and development at landscape level".

These remarks add to concerns by the former monitoring team that local people do not have a good understanding of MLA. However, since MLAs in Pando were immediately followed up by action (forest mapping) they nevertheless can be seen as useful activities. This usefulness, however, will be discussed below under "Brazil nut forest mapping".

Recommendation 1 – The evolution of MLA since the inception of the methodology (back in 2000) has made its objectives rather confused. The biodiversity focus is somehow diluted and there is a lack of biodiversity-related follow up. CIFOR should not transform MLA into an improved PRA approach (which has its own value) and consider streamlining the MLA methodology to a clear landscape level biodiversity focus, or discontinue it.

Efficiency

The time spent for MLAs in Pando was about one week per community. Given the simplified objectives given to these MLAs, it can be said that the – modified – expected results were achieved. The specific activities implemented were: (a) Recognizing resources workshops, (b) Household interviews, (c) Brazil nut ranking??, (d) Family register, (e) Mapping and GPS and

(f) Transects. Most of these are widely used PRA approaches which give the results a good guarantee of quality provided they are applied properly. The mapping with GPS component is particularly innovative and is said by CIFOR to have great success because it provides farmers with a negotiating power with INRA, the land reform agency.

The partners we met all confirmed that the relationships with CIFOR staff were excellent, including with various institutions (e.g. Municipal Government).

Effectiveness

The intended beneficiaries of MLA are the local community members. The project also focuses on situations where decentralization has given local governments larger authority and responsibility over forests. It fosters better engagement by local decision makers with the needs and preferences of local people, especially poor communities. As will be discussed below under “Forest mapping”, these beneficiaries have been clearly reached and products (i.e. MLA tools) have been made available to them. As a result, communities have modified some of their practices (e.g. working with a map: see Brazil nut tree mapping). Additionally, community members and some staff of the Municipal Forestry Units and members of the COINACAPA Brazil nut cooperative have been trained and said that they could use the tools in other sites and with other communities without the assistance of CIFOR. The fact that CIFOR was approached by WWF to further train the COINACAPA cooperative members to use the methodology on other sites is a good sign of effectiveness as well. Under the modified objectives of MLA for Bolivia (see Relevance), effectiveness of MLA is thus very good.

Indicators in the logframe of SDC proposal (items 1 to 7 common to FS and MLA) are:

1. Results presented in a paper.
2. Extent of consultation and participation by other stakeholders in the review.
3. Draft manual ready for evaluation
4. Summary results of the tests available.
5. Level of interest and use regarding project generated information among intended stakeholders and assessment of policies, plans and processes in place that would reflect level of adoption.
6. Feedback from target groups adopted into methods (see above)
7. Guidelines for how information generated by these tools should be summarized for key-audiences.
8. Degree of availability of tools (and derived information regarding local perceptions and views) to a wide audience and familiarity with the tools among key stakeholders
9. At least one press article in each country
10. At least one presentation to a key international organization
11. Level of interaction and dialogue among stakeholders achieved at the end of the project is higher than that at the start of project
12. Policy briefs presenting opportunities and challenges for involving multiple stakeholders in decision-making.

It is difficult to assess achievement of the project purpose with some of these indicators, as can be seen in the list of outputs provided above. Items 1 (only for Future scenarios?), 3, 5(partly?), 8, 10 and 11 have been achieved. It does not seem that other stakeholders (than communities and local governments) have been reached.

Impact and sustainability

CIFOR envisages that MLA approaches developed in Bolivia will be tested and validated in other parts of Latin America, and that these approaches will empower local communities to participate in decision-making processes relating to forest management and biodiversity conservation, and in particular will ensure that the views of the poor and marginalised are taken into consideration. Provided the objectives are made clear (see above), this can be encouraged. Before going to other countries, implemented training activities have made it possible for MLAs (and associated FS and Forest mapping) to be applied in neighbouring communities. This is a good sign of existing and future impact. Although CIFOR is not supposed to repeat the same exercises in many communities, it could be good to follow-up on the way the tools are used by other communities and provide support in an ad-hoc manner, perhaps through its national counterparts.

A comprehensive website about MLA and related activities is now available in four languages (English, Indonesian, French, Spanish), and method books are also available in the same languages. CIFOR has developed an attractive and comprehensive online introduction and guide to MLA concepts, methods and case studies. See: <http://www.cifor.cgiar.org/mla>

Performance

	Highly Satisfactory	Satisfactory	Less than Satisfactory	Highly Unsatisfactory
Relevance			x	
Efficiency		x		
Effectiveness		x		
Impact		x		

2.3 Future Scenarios

Future Scenarios (FS) is a methodology for facilitating local stakeholders to explore vital choices and options in terms of producing desired outcomes.

During 2004 progress was made in Bolivia with the preparations for further testing of FS. The first half of 2004 saw actual field work being completed in Bolivia related to FS. The testing of scenarios methods has been closely linked with another CIFOR-led project, funded by BMZ, and entitled *Poverty and Decentralization*, which is being carried out in the Pando department of northern Bolivia. (This department has high levels of forest cover, biodiversity and poverty.) This project aims to increase the positive impact of local government's policies and activities to address poverty under decentralization. Other work undertaken as part of the BMZ project identified that the involvement of local communities in municipal planning, which is supposed to take place according to the national law on popular participation, was not functioning properly in Pando. CIFOR, with the agreement of the municipal government of El Sena, decided to address this issue through the use of the Future Scenarios methodology. In this way, the Scenarios testing also contributed to the Poverty and Decentralization project objectives.

One month of field work was completed in 2004, and was continued in 2005. During November and December 2004 Kristen Evans (a CIFOR consultant who is a biologist) conducted a literature review (*Future Scenarios Testing Project, Literature Review, 5 December 2004*) focusing on Scenarios methodologies, in preparation for their use with forest-dependent communities in Pando, Bolivia, early in 2005. In the first half of 2005 FS

was carried out in 2 communities in Pando's El Sena municipality. This generated interest from 4-5 of El Sena's other communities, in the form of letters from these communities to the municipal government requesting that similar exercises be carried out with them. As a result, the municipal government decided to carry out FS exercises in all of its communities as an important input to its municipal planning process. In the middle of 2005 CIFOR provided FS training to the two officers of the municipality's forest management unit, three of its council members (elected politicians), and three community volunteers. FS work was then conducted in 13 of the 14 Communities in El Sena during July-August, 2005, with technical back-stopping from CIFOR.

CIFOR used EC food security funds to co-fund the organization of a workshop on community forest management in Pando in 2004 for professionals working on community forest management (CFM). The workshop included a FS exercise with participants, in which they analyzed two possible futures for forests in Pando, one good and one bad. The EC funds were also used to pay for the publication of a booklet describing this exercise and its results, entitled 'El Futuro del Manejo Forestal Comunitario en el Norte Amazonico'. Of the 500 copies of this publication that were produced, more than 400 have been distributed to relevant organizations in Bolivia. The booklet was launched at three events in different parts of the country – Cobija (the capital city of Pando), La Paz and Santa Cruz.

Relevance

If FS is used in a fully participatory way the contents of scenarios envisaged by participants may not be exclusively oriented towards forest management and biodiversity. Indeed, in principle forest management and biodiversity need not be included at all, although that would be unlikely in a highly forest-dependent community. Nevertheless, the linkage between FS, on the one hand, and biodiversity conservation and forest management on the other, has been rather weak in CIFOR's work in Pando. As with the MLA work, the forest-related aspects have been almost entirely concerned with Brazil nuts as a source of income. Effective forest biodiversity conservation requires the maintenance of a largely intact forest, with only limited removal (if any) of timber species. However, when frontier areas are opened up smallholders tend to conserve little of their forest: instead they sell a lot of their timber trees, and often convert some of their forest to pasture land. For households and communities to decide to maintain multi-species and bio-diverse forests they need to be motivated to do so; and adequate motivation is likely to be at least partially dependent on perceived financial benefits from NTFPs for several species. Retention of one key species only, such as Brazil nut trees, might not be a wide enough basis for forest biodiversity conservation.

Recommendation 2 – We recommend that both the FS and MLA work are linked to follow up activities (or methodologies for follow up activities). The purpose of such activities would be to stimulate greater interest, awareness and skill levels on the part of local communities and professionals in the potential for harvesting, and generating income from, a wide range of NTFPs. This could include similar activities to those being undertaken by CIFOR in Brazil (e.g. identification of urban markets for NTFPs; description and/or assessment of management practices; and documentation of relevant cases.). In addition, the kind of FS exercise that CIFOR conducted with professionals could potentially be undertaken with local communities, given a certain amount of capacity development.

Efficiency

The speed with which CIFOR has trained communities and municipality staff in El Sena, and facilitated widespread use of FS and also its institutionalisation has been commendable. It has

established a very positive relationship with the municipality of El Sena, and also with the association of municipalities in Pando (see below).

Effectiveness

As far as we could ascertain the use of FS has been inclusive and has involved poor people and women in El Sena, i.e. the key beneficiaries. The FS work carried out in the various communities culminated in a Municipal Planning Summit in El Sena, September 9-11, 2005, at which all of the communities presented the results of their FS work. The FS process appears to have given communities a greater sense of involvement in the municipality's planning, as suggested by the fact that the 2005 summit was the first such summit (an annual event) that all El Sena communities had attended. In a meeting with the monitoring team, members of two communities plus two council members (both women) of the municipality said that they had found the FS work useful. Thus, the use of FS in El Sena has, as envisaged by CIFOR, been useful to and been supported by decentralization processes in Bolivia, including the law on popular participation.

Written outputs have been limited to date, and there is a need to document the El Sena experience, and to produce a guide to the use of FS in the Pando region. Publications so far include:

Cronkleton, P. and Pacheco, P. (2005) '*El Futuro del Manejo Forestal Comunitario en el Norte Amazonico*'. CIFOR.

Cronkleton, P. "Gender, Participation and the Strengthening of Indigenous Forestry Management". In: *The Equitable Forest*. Edited by Carol J. Pierce Colfer. RRF 2005.

Impact and sustainability

It appears that the use of FS has now been institutionalised in El Sena's municipal planning process. The council members and forestry officers have received adequate training and practice to continue to use FS without further CIFOR support. FS appears to have been established as a key part of community planning processes and preparation for negotiation with local government, whose validity is recognized by the El Sena local government. Its use is a great improvement on the previous situation, in which communities tended to make no organized or democratic input into the planning process. The election of a less democratic council in El Sena might be a potential future threat. However, CIFOR is planning further FS work in Pando that could also institutionalize the use of FS at higher levels in the government structure.

The Department of Pando has an association of municipal authorities, AMDEPANDO, that is interested in the FS methodology. The association has its own officers, some of whom attended the training provided by CIFOR for people from El Sena; and it wants to use FS in some planning activities that it will be carrying out with its members (i.e. municipalities). In addition, CIFOR intends to carry out similar work in a second municipality in Pando (also as part of the Stakeholders and Biodiversity project); and related work with the Department of Pando, the tier of local government that is the next level up from the municipalities. Until now, Bolivia's *departamentos* have been an unelected and inefficient tier of government, but the Government has announced that there will be elections in 2005, and CIFOR envisages that this could pave the way for more democratic and effective processes at this level. The rating of 'Impact and Sustainability' given below assumes that CIFOR's work and performance in El Sena will be extended to other municipalities in Pando, as envisaged in the plans just described.

Performance

	Highly Satisfactory	Satisfactory	Less than Satisfactory	Highly Unsatisfactory
Relevance			x	
Efficiency	X			
Effectiveness	x			
Impact	x			

Land use planning in Brazil nut forests / groves

As said above (see MLA), land use planning in Brazil nut (*Bertholettia excelsa*, Lecythidaceae) forests (*Ordenamiento de Castaños*) was implemented in 2005 as a follow-up to MLAs implemented in Pando. As an output which was not initially planned in the project proposal, but a by-product which emerged from other activities, this land use planning does not have its own milestones and is not discussed here in terms of EC's monitoring criteria.

The decision to implement these Brazil nut forests land use mapping was taken following a request by the communities, who were experiencing a variety of conflicts (intra- and inter-community) over rights to specific Brazil nut trees, which had been accentuated by the recent high prices for Brazil nuts. The objectives were to empower communities and provide them with tools for mapping their Brazil nut forests, train them to use those tools and collect the basic information with them. Broader objectives were to clarify / improve farmers' access rights to these lands and decrease conflicts among farmers and between farmers and institutions. The expected output (a map showing boundaries, trails, and people's Brazil nut trees) is expected to be recognized by the state as a forest management instrument by the community. It should be replicable in other sites.

In the Palma Real Community (case study presented to the monitoring team), the land use planning was articulated with MLA and FS as follows:

- February: Future Scenarios
- April: MLA
- July: Land use planning in Brazil nut forest.

The broad milestones indicated for MLA and FS apply here, plus a specific one of producing with the community a document (map) which is appropriated by them and can be used by the community for future activities, resolving conflicts, negotiations with institutions, etc.

The maps produced were presented to the monitoring team as very innovative and useful outputs. It can actually be said that this is the case. Traditionally, communities collect forest products according to verbal rules and informal customary rights between neighbours and neighbouring communities. Under the new decentralization law, the land reform agency (INRA) grossly plotted the land assigned to each community through a reduced number of geo-referenced points identifying a "polygon" for each community. In this polygon, communities recognize trails (each with a name!) and individually owned Brazil nut trees. The mapping implemented as a result of the MLA exercise allowed communities to clearly identify and record these, through GPS-measured reference points. At the same time, the geo-referencing made it possible to identify discrepancies with the INRA polygon, which was not always congruent with the reality of forest use by people. This also strengthens farmers'

negotiating position with INRA over the removal of any discrepancies arising from errors made by INRA. Thus, farmers acknowledged the final map as a very useful product, allowing them to better know and protect their forest and better manage their resources. However, the monitoring team had the impression that the only considered resource was the Brazil nut trees. No other NTFPs were mentioned. At an average 0.5 tree per hectare, it is clear that Brazil nut trees deserve a careful monitoring, yet it is the entire forest biodiversity, at both ecosystem (i.e. different forest types) and specific (i.e. useful and other species) levels which deserves to be considered.

The Brazil nut forest maps were also mentioned as an extremely useful product by members of the COINACAPA Brazil nut cooperative. This cooperative is engaged in a certification process where organic nuts are exported on the international market. For traceability and quality control requirements of this market, farmers need to present a management plan of their forest, with the number of trees harvested. Obviously, the map is extremely useful for this. When this is achieved and other quality control measures are also performed during transport and processing (done by the cooperative), these nuts reach a higher price than conventionally harvested nuts. In some years, this price was twice the price of the conventional market, and the cooperative, through 2-3 instalments, could guarantee an income to farmers spread over the year. When extra requirements of the fair trade market were met, nuts could fetch an additional premium.

So, while it is unfortunate that the Brazil nut forest mapping did not generate extensive scientific biodiversity data, it is nevertheless a useful product which is improving people's management of forests by reducing conflicts and clarifying and securing rights to community forests and individuals' Brazil nut trees. This methodology could be part of a range of tools used in following up an initial MLA. Indirectly, protection of forests for the Brazil nut trees, may contribute to protection of a forest's biodiversity in general. Given the fact that training of community farmers, municipal officers and cooperative members was done, scaling up to other communities can be anticipated. However, CIFOR's role in these mapping activities – in terms of biodiversity research – does not appear to be very clear.

<p>Recommendation 3 – Although Brazil nut tree / grove maps have been found useful by communities, it is recommended that once the methodology has been fully tested and developed CIFOR does not continue this activity, which can then be seen as a development activity. Rather, it is recommended that trained partners be encouraged to implement it themselves.</p>

3 . BIODIVERSITY IN THE BRAZILIAN AMAZON: PROTECTING SPECIES THAT SUSTAIN LIVELIHOODS

Background, objectives and milestones

This project is actually a series of activities dealing with the benefits of biodiversity in terms of how locally valued resources can be conserved in dynamically changing landscapes. Locally valued resources are those tree species that have a special importance to farmers, i.e. timber or non-timber-forest-products (NTFPs). Dynamically changing landscapes refer to areas in the Brazilian Amazon which are subject to various pressures, from logging activities to land development by newly arrived farmers and to different land classifications, such as protected areas or extractive reserves (RESEX). Such landscapes form a gradient, from old to new frontiers, protected or degraded areas, peri-urban zones, etc.

This project is closely linked with the one described in Section 4 of the present report (Vulnerability and resilience: the response of women and non-timber forest products to illegal logging in the Brazilian Amazon) and has several objectives and outputs in common. The project combines EC funds with funding from the Overbrook Foundation. It is implemented in partnership with the Institute for Man and the Environment in the Amazon (IMAZON) and the Institute for Tropical Forestry (ITF), both Brazilian NGOs.

The project is alternatively called “Forests for people”. It has as a main objective to strengthen the governance capacity of rural communities to manage forest resources, particularly vulnerable and valuable fruit and medicinal species that are useful to health, nutrition and culture. The research aims to offer predictive power for future scenarios and to promote knowledge sharing across the region. In its 2004 report to the EC, CIFOR presented most of the results under this topic in a section called “Identifying local innovations to manage valuable forest species (NTFPs)”. Although these alternative titles all lead to a same concern, they probably generate some lack of visibility for the results obtained.

Recommendation 4 – CIFOR should make sure that it sticks to similar headings from project proposal to report submission (even if a slight degree of flexibility to respond to changes in circumstances can be accepted) in order to ease the monitoring of its activities and make sure that it does not lose visibility for its results.

Important aspects of the project are:

- The research is driven by Community questions, i.e. people want to know whether their forest is worth more for timber or NTFPs
- Long term, participatory approaches are used
- Species were prioritised for research if they were vulnerable (due to their timber value) and also had local value, ample geographic range and were multi-purpose species, i.e. timber and NTFP. On this base, 5 key-species were selected, 2 of them fruit species, 2 of them for their latex, and a creeper.

Project’s milestones are:

- Transform outreach materials and renovate existing extension programs in the Brazilian Amazon to include a strong biodiversity component.
- A framework for examining strategies for making poor people better off in forest areas through use and management of biodiversity.
- Analytical reports and case studies on the utility of adaptive learning approaches to sustainable forest management in Latin America (also a milestone for Section 4).

Recommendation 5 – Some of the milestones announced by CIFOR in its proposal document for Latin America activities in 2004 refer to Asia. The milestones are not organized by programme or project. Some expected gains refer to the Tropics at large. In submitting its annual research plan to the EC, CIFOR should streamline its proposed activities to the essential, and write them in a concise and more coherent manner. CIFOR should improve its list of projects’ milestones for the EC as a function of related projects and / or more precise objectives (see also ‘Relevance’, Section 4).

The monitoring team could visit one site which typically represents activities under this project: the town of Ponte de Pedras, considered as the peri-urban zone of Belem, where farmers tapping the *Amapa* tree (*Parahancornia fasciculata*, Apocynaceae) could be met. Amapa is a highly valued medicinal product in Brazil, for respiratory problems. On this site, project staff are undertaking a study on the ecology and management of the Amapa tree. Another similar (peri-urban) site, called Boa Vista, could not be visited, due to lack of time. In this site, livelihood and management studies have been undertaken in communities where local fruit trees are important and are being actively managed. The site commented under Section 4 (Porto De Moz) partly falls here, and represents a frontier area with conflicting land uses between logging, cattle-rearing and NTFPs. Research in these sites addresses adequately the milestone on examining strategies for making poor people better off in forest areas through use and management of biodiversity.

Relevance

The project is relevant. Its first objective addresses the actual problem of conflicting land uses (timber vs NTFPs) and states it in terms of “governance” of rural communities. Although the term may sound somehow pompous, it does express adequately what the problem is, i.e. a problem of governance of land and resources: what to do, how, with whom, etc? The next objective adequately refers to scaling up, i.e. providing inputs for scenarios and regional impact. Between the time of writing the proposal and the time of monitoring, a slight shift can be observed from the generic level (biodiversity strategies) to some site-specific activities but this does not affect project’s relevance (see below: efficiency).

In order to identify real issues, CIFOR’s scientist-in-charge (Patricia Shanley) and her team opted for a market-based approach where important NTFPs were identified in Belem’s Ver o peso market and other outlets for these products, and traced them back along the marketing chain to the producers, through discussions with the traders. The approach is time consuming (several scientists and students involved, and the need to build trust with the vendors and intermediaries) but, in conjunction with CIFOR’s long term survey of the market (10 years), proved to be efficient in reaching relevant farmers.

Broadly speaking, the idea of looking at NTFPs in order to indirectly protect forests (as opposed to look at forests only as a source of timber) is coherent with a present worldwide move towards forests for people, and not forests for forests. This is the case for other CIFOR activities, as well as in tropical forestry research institutions and international calls for forestry research proposals, including EC’s Tropical Forestry Line. A strong point made to justify the work on NTFPs is the amazing ratio that is sometimes observed between the price of timber and the corresponding NTFP from the same species: the price paid to farmers for the log can be in the order of 30-40 Reals (or less) (paid when the logger has himself sold the log to another buyer!), while the same species can provide an annual income of about 10

Reals with e.g. latex or fibres. This information is particularly important to farmers in frontier regions who are making decisions about what proportion of their trees to sell to loggers.

No specific Log Frame for this project is available, and we were told that there is no project log frame. (However there is a log frame available at the level of the BIO project which is discussed in Section 5.) It is thus not possible to comment in detail on the assumptions, risks and conditions of the project. However, this is done in an ad-hoc manner in the different parts of the present report.

Efficiency

Efficiency of the project cannot be discussed against financial resources brought by the EC only. These amount to a total of approximately 80 K€ for Latin America in 2004, thus an approximate 25 K€ only for the present project. This funding was combined with funding from the Overbrook Foundation to produce the outputs presented here, and it is not possible to discriminate outputs as a function of donor. Thus for the EC, the results obtained, thanks to this combining of resources, are excellent value-for-money. Although it is not always possible to know other sources of funding at the time of financing a project, this “pulling together” of donors has to be praised. Of course, this should not become a reason not to fund an interesting project if no other donor has shown interest.

The project is based on a combination of a social entry (stakeholder identification, through market studies), and an environmental concern (promoting “useful” biodiversity in natural forests can lead to a better protection of forests). Inevitably, this includes an economic component, i.e. how to make sure that the highest possible share of the NTFPs revenue goes to the farmers.

The main outputs for this project in 2004 were:

1. 21 amply distributed timber and non-timber species with priority importance for the livelihoods of rural and urban Amazonians documented
2. Five at-risk species documented in terms of management and marketing by local farmers
3. Three scientific papers and two reports
4. A book on forest management for fruits and other NTFPs in Brazilian Amazonia, designed as a negotiation support tool directed to rural stakeholders (in Portuguese, published in early 2005)
5. A book on NTFPs in forests of Latin America (in English, not exclusively linked to the present project)
6. A book on animal indicators to assess logging effects (produced in partnership and with support from USAID and the Ford Foundation).
7. Presentations and posters in various regional and international meetings
8. Various workshops and visits organized for farmers
9. Training on forest management for NTFPs for school children, adults and trainers
10. Capacity building on NTFPs for students at the Federal Agricultural University of Para.

Output 4 is the key output. The book represents a major undertaking and was launched with wide publicity. As underlined in CIFOR’s 2004 report to the EC, the format and philosophy underlying this type of research, challenge scientists and research organizations to question to whom their science is for and how it is delivered. Although this will be discussed again under

Effectiveness, it can be said that the diversity of outputs produced allows for the reaching of varied stakeholders, and not only scientists reading papers in refereed journals. Provided scientific papers keep being produced (and not only in “Bois et Forêts des Tropiques”, but also in highly ranked journals with a wider audience), this balance of outputs should be pursued. It is in accordance with Priority 5 of the CG (Capacity building for the NARS and other partners) supported by the EC at the same level as Priority 3 (Biodiversity).

Recommendation 6 – CIFOR should continue producing a diversity of outputs for this type of stakeholder driven research. A balance between published research results, training and stakeholder targeted products should be able to maintain efficiency at a good level.

Numerous interactions with project staff during a week (including 2 field trips) did not reveal any day-to-day management problem for the project. No particular issues arose during discussions with staff in the absence of the project leader. The monitoring team was impressed by the enthusiasm of the different scientists involved and the good team spirit created by the project leader.

Effectiveness

The intended beneficiaries of the project (i.e. implicitly, of the book on forest management for NTFPs) are marginalized small holders lacking key information by which to make more informed decisions regarding forest management. To effectively reach this audience, CIFOR’s strategy is to “train the trainers” of selected networks which effectively reach the grassroots. Simultaneously, important publicity has been organized around the launching of the book on forest management for fruits, with the presence of the Minister for the Environment (who had requested that the book be produced), Government officials and numerous national media. The same was done for the film produced on women of the forest (see Section 4). Copies of the book have been widely distributed (e.g. 5000 copies to smallholder organizations and educational institutes (with support from GTZ). There is a demand from various agencies for an additional 20,000 or so copies in total.

The book is used for follow-up training and workshops. The major uptake pathways have been different agencies for community forest management, technical training institutions, educational institutes and various agencies from the civil society. The monitoring team had the opportunity to visit a “pilot forest school”, where environmental education is a priority (for both children and adults) and where a CIFOR staff member has been active in dissemination activities on NTFPs based on the book. The visit was covered by local newspapers and articles appeared in the press the following day (see Annex 5).

Indicators to assess the effectiveness of the project are figures on the number of media which covered the launching of the book and the film and the number of persons reached through training and related activities. Key figures are:

- 25 media (including 3 international, including New Scientist, UK) covered the book launching.
- The launch of the film was covered by 10 national media, including the famous Brazilian “Globo” TV channel.
- 700 foresters reached through technical training in 5 training centres.
- Several thousand people reached via training and other activities, including participatory work with communities.
- Several curriculum reforms in educational institutes.

- Various educational and dissemination activities (e.g. in Belem's Botanical Garden).
- etc.

These figures are the result of the combined long term effort of several donor agencies. Production of the book entailed interacting with 90 Brazilian collaborators from 23 Brazilian governmental and non-governmental organizations across the Amazon basin over a period of four years. During this time, CIFOR scientists worked with local researchers to build their capacity to write and publish for both scientific and popular audiences. The reference work synthesizes dispersed, hard-to-find data on the ecology, management and economics of widely used species, conveying information in an illustrated, easy to understand form, accessible even to semi-literate audiences. The information is likely to be particularly useful for immigrant farmers of land reform settlements, who have less knowledge of NTFP uses and management than long settled farmers. Data are considered to have a generic value for most of the Amazon basin. As far as the methodology is concerned, the relevance of the book and video arguably go well beyond the Amazon basin. The World Bank has expressed interest in developing a tool kit based on these products and the methodology for international use. The book and associated products have been nominated by CIFOR for the CGIAR Science Award for Outstanding Communications.

It can be said that the effective reaching of the expected beneficiaries of the project is being achieved; and further planned activities will expand the coverage. This set of activities very well matches with the milestone about the transforming of outreach materials and the renovation of extension programs to include a biodiversity component. CIFOR is collaborating with IFT, a Brazilian NGO involved in training foresters, in developing a proposal that would include an input from CIFOR on management of NTFPs. This would be the first time that such training has been provided to foresters in Brazil, the focus until now having been on timber. What remains now to be secured is that the information effectively reaches its ultimate beneficiaries, i.e. the farmers themselves, in a significant manner. While this is beyond CIFOR's mandate (except in site-specific pilot activities, e.g. with a farmer or a community), it can be suggested that some future research focuses on the forest management decisions (including the adoption of NTFP management innovations) made by farmers, particularly in frontier regions, as a result of the various activities of this project. The key issue is 'Does the information made available to smallholders in frontier regions lead to decisions by them that result in greater conservation of biodiversity than would otherwise be the case?'

Recommendation 7 – In order to further strengthen the important results it has obtained on NTFPs issues dissemination, CIFOR could consider undertaking research, in locations where the information has been made available, on the adoption of NTFP innovations by farmers and its impact on marketing NTFPs and on forest conservation. The monitoring team recommends that funding for this type of research be favourably considered by the EC.

Impact & sustainability

As said earlier, outputs of this project are going beyond academic norms in which scientific products are directed to a narrow, elite audience with the assumption (often incorrect) that changes will result through top-down policies. Rather, impact is expected to be achieved through network processes where trainers and various stakeholders take up recent scientific information produced in a format accessible to a wide audience. Given these assumptions, good long term impact and sustainability of the project can be expected, but has yet to be demonstrated. This long term effect will only be confirmed when it can be shown whether

farmers have conserved forest and modified or adopted NTFP innovations, as suggested in recommendation 9.

Some evidence of positive changes in resource management by communities resulting from workshops is given in a paper by Aluna and Gloria Gaia in *Agricultural Systems*. Examples given are: restoration of degraded areas using economic species; creation of fire barriers; implementation of community regulations regarding placing of swidden fields; increased processing of native fruits into jams and juices; sales of fruit instead of timber; improved negotiations with loggers limiting the area or species extracted; creation of community forest reserves. These impacts were gleaned as a result of spontaneous post workshop contact with communities, but authors insist that adoption and impact assessment needs to be done on a systematic basis to detect what changes are made and if these hold over time.

Performance

	Highly Satisfactory	Satisfactory	Less than Satisfactory	Highly Unsatisfactory
Relevance	x			
Efficiency	x			
Effectiveness	x			
Impact		x		

4 . VULNERABILITY AND RESILIENCE: THE RESPONSE OF WOMEN AND NON-TIMBER FOREST PRODUCTS TO ILLEGAL LOGGING IN THE BRAZILIAN AMAZON

Background, objectives and milestones

This project shares its broad objectives and some outputs with the project discussed in Section 3. It is co-funded by the EC and IDRC. Its particular focus is on vulnerable people living in or near forests, especially women and children, who rely on forests for part of their health care and nutritional needs. Thus, while both projects deal with the sustainable use of biodiversity, the present one is more geared towards poor people, living in isolated conditions of frontier areas (far away from urban centres and their markets) and experiencing landscape changes, especially those due to logging. Timber is extracted without the knowledge of market value of NTFPs (as markets are limited or non-existent in frontier regions), and the low prices paid by loggers (who often also default on payments) for timber mean that only limited benefits accrue to the local communities, which continue in the same situation, but without forest.

Part of the project has to do with the new conservation units created by the Brazilian Government (e.g. extractive reserves, RESEX) and the rights they confer to smallholders. Although those rights exist, there is an asymmetry of information about them between stakeholders, which is typically in favour of the large industries (logging) or land owners and against smallholders. This assumption is important: the hypothesis that frontier farmers will keep a large portion of their land (private or communal) under NTFPs forest instead of selling the timber will hold only if the right conditions exist. For example, unfavourable macro-economic conditions include subsidies for ranching and soya bean; whereas favourable local conditions include strong and democratic social organization and a strong role for women in decision making.

Although women are perceived as repositories of an important part of botanical knowledge and the direct uses of NTFPs, their socio-economic status means that they generally have little say regarding the fate of the forests on which they depend. Thus, within a broader objective of ensuring availability of goods and forest services, for multiple stakeholders, the project aims at identifying the strategies developed by women (and households) in response to land use pressures, comparing logging impact on livelihoods between peri-urban areas and forest / frontier areas, and identifying the socio-economic, ecological and cultural factors that influence forest management for NTFPs. Its major objectives are:

- To examine the issue of access to NTFPs in frontier and peri-urban areas and describe the gender role in this access
- To examine the issue of indigenous knowledge in these 2 contrasted situations as it relates to markets, the role of women and the use of NTFPs.

Project's milestones are:

- A framework for examining strategies for making poor people better off in forest areas through use and management of biodiversity (also a milestone for section 3).
- Analytical reports and case studies on the utility of adaptive learning approaches to sustainable forest management in Latin America (also a milestone for Section 3).
- A series of papers focused on the effects of conflict and illegal activities on the sustainable management of forests and biodiversity particularly within decentralized governance structures
- A framework for the assessment of the impacts of governance mechanisms and processes on sustainable forest management.

Relevance

The objectives of the project address adequately the problem of biodiversity use by vulnerable people. The Brazilian situation, with its huge distances and difficult links with markets actually leads to very different socio-economic conditions for farmers. Among these, it is clear that women are important beneficiaries, as they commonly deal with some NTFPs for different uses. Work of the project with a women's association on the harvesting and marketing of a fiber confirms this (see below: Effectiveness). Unfortunately, project's milestones do not provide easily-verifiable indicators which could be used to assess relevance precisely. It is understood and accepted that women are important in this process, but the milestones proposed do not precisely match with project's objectives, thus making it difficult to monitor progress.

This drawback is partly due to the fact that activities reported here come from the combining of a well-defined IDRC-funded project on vulnerable people with a broader EC-funded project on assessment and management of biodiversity from various stakeholders' perspective and linkages with livelihoods. As said above, this cross-strengthening of funding sources is commendable, so the point is not to question it, but to make sure that objectives and milestones between projects are more coherent.

Efficiency

The efficiency of activities under this project can be assessed through the following outputs (items 7 to 13 are common to Section 3):

1. Gathering of local stakeholders' knowledge for input into the book (item 10 below)
2. Assistance to women's group for the writing of project document for the extractive reserve in Rio Majari Community.
3. Facilitation of women's participation in seminars, workshops and visits.
4. A documentary film (Daughters of the canopy) describing the reliance of forest people on forest biodiversity (with support from the Ford Foundation)
5. Two scientific papers and one report
6. On-going multi-stakeholder dialogue for adaptive learning with women, farmers and workers organizations
7. 21 amply distributed timber and non-timber species with priority importance for the livelihoods of rural and urban Amazonians documented
8. Five at-risk species documented in terms of management and marketing by local farmers
9. A book on forest management for fruits and other NTFPs, designed as a negotiation support tool directed to rural stakeholders (in Portuguese, published in early 2005)
10. A book on NTFPs in forests of Latin America (in English, not exclusively linked to the present project)
11. A book on animal indicators to assess logging effects (produced in partnership and with support from USAID and the Ford Foundation).
12. Presentations and posters in various regional and international meetings
13. Capacity building on NTFPs for students at the Federal Agricultural University of Para.

Given the objectives stated in the EC proposal (biodiversity assessment from various stakeholders perspective / links between livelihoods and biodiversity) and the modest amount of funds involved (see Section 3), it can be said that things have been done according to plans and that research and research-linked activities are efficient. However, it is clear that this set

of activities is still on-going and it is difficult to monitor them on a single-year basis unless annual objectives are stated. Typically, output 4 (multi-stakeholder dialogue) is a slow process which is crucial for the project and cannot be assessed presently. It links with another EC project (Bridging the Divide, funded under the Tropical Forest Funding Line) that is just starting and represents a good case where EC money of the present project was used as leverage money for another project to start. So, in the absence of clear indicators of efficiency, the monitoring team considered that this linkage between EC funded projects is a parameter of good efficiency.

The monitoring team nevertheless had the opportunity to meet with the representatives of the women's group and the Sustainable Development Committee (SDC, a committee of farmers and other organizations concerned with sustainable forest management for improved livelihoods in the municipality of Porto de Moz, including effective regulation of logging activities). These are important partners of the project. Comments all converged to recognize the importance of the CIFOR partnership, including for all matters dealing with relationships with the loggers and land tenure issues. The partnership goes to the level where a CIFOR staff member is locally hosted in the office of the SDC. Although this is the proof of excellent relationships, and should be credited to the enthusiasm of the CIFOR staff member in question, it should not go to the level where local stakeholders could become confused about CIFOR's role and see it as a development agency. This was actually partly the case when some committee members mentioned that they would like CIFOR to provide assistance not only for environment / forest matters, but also for health, education and transport problems!

Recommendation 8 – For its long-term, on-going activities, CIFOR should state annual expected outputs, in order to ease monitoring and evaluation.
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Recommendation 9 – In dealing with local partners such as farmers or women's groups, CIFOR should make sure that it clarifies its mandate as a research organization, in order not to raise inappropriate and undeliverable expectations.

Effectiveness

The expected beneficiaries of the present project are the vulnerable people, especially women, of the frontier zones. These have been reached (and continue to be reached) and some benefits delivered to them. The representative of the women's group in Porto de Moz confirmed that they contributed inputs for the book on forest management for NTFPs and that they are keen to put some knowledge into practice in the newly created extractive reserve (RESEX) within the municipality (whose creation is largely due to the efforts of the SDC) and with other species. A visit by the monitoring team to a partially logged forest conserved by a community associated with the SDC for the harvesting of *Cipo Titica* (*Heteropsis* spp, Araceae), a liana creeping on large trees (used in handicrafts and furniture making, and seen on the Belem market), was a proof of this move. However, the species, which obviously cannot survive after logging, is presently harvested only, not grown, as very little is known on its ecology and management, hence the rationale for more studies on NTFPs rightly advocated by CIFOR.

Committee members met also insisted on the importance of scaling up via the distribution of the book and the dissemination of information to other families. The leader of the women's association mentioned that there was initially some resistance by men -who perceive a loss of

power- to their wives getting involved in the women’s association; but that they eventually changed their attitude when they saw the revenue that can be generated through the sale of products made from *Cipo tipica*.

Finally, a mention was made that information on NTFPs is useful for IBAMA, the national environment protection agency, which so far does not have criteria for the certification of forests managed for NTFPs.

Indicators mentioned under Section 3 to assess effectiveness can also be used here. Another important one here is the number of communities reached, and within these, the number of women. From the sample seen in Porto de Moz, this seems adequate: women’s group with 69 representatives and the SDC with 14 community associations plus numerous other interest groups. The gender specialist of the national association of rubber tappers, a major NGO in Amazonia, has expressed interest in distributing the fruit book and other related information on NTFP management. This would be a major multiplier for the project’s written outputs.

Impact & sustainability

As said under Section 3, long term effect will only be confirmed when it can be shown whether women have modified or adopted NTFPs innovations (as suggested in recommendation 6) and whether this has had an effect on their livelihood. While it is too early to make a statement on this, the motivation of the persons met by the monitoring team is positive. A survey on adoption and impact is definitely required. Given the evidence available so far, the prospect for good impact and sustainability are highly satisfactory but only time will tell.

Performance

	Highly Satisfactory	Satisfactory	Less than Satisfactory	Highly Unsatisfactory
Relevance	x			
Efficiency		x		
Effectiveness	x			
Impact	x			

5. CROSS-CUTTING ISSUES

5.1 CIFOR's Relationship with other CGIAR Centres

CIFOR and ICRAF have biodiversity as a common topic at the landscape level in their research agendas but this is done differently within the two centres. The core of the idea was that CIFOR and ICRAF are marketing a similar message to the outside world: **biodiversity matters** and it matters **outside** of protected areas. In 2002 an internally commissioned review (Cunningham, Scherr and McNeely, *Matrix Matters*) recommended strengthening the collaboration between the two centres on biodiversity research. The Matrix Matters report proposed the idea of a "Joint CIFOR-ICRAF Biodiversity Unit", and this was approved by the Boards of Trustees of both centres. However, there is as yet no formal agreement between CIFOR and ICRAF on this.

The term 'Joint CIFOR-ICRAF Biodiversity Unit', as it emerged from the Matrix Matters report, has, however, been difficult to implement, given the different ways in which the two centers are organized and the lack of resources both financial and human. We were advised that discussions in both centers have made clear that nearly all work done in CIFOR and ICRAF has some relationship with biodiversity, and 'claiming' the term for a small group of staff may suggest and enhance boundaries that need not exist. Within CIFOR, biodiversity is an issue of Livelihoods, and also Governance as well as Environmental Services. Within ICRAF it is linked to Land and People, Trees & Markets, and Environmental Services as well as Strengthening Institutions. Instead, there will be a relatively simple 'platform' that will allow CIFOR and ICRAF staff to work on projects administered by the other centre.

Both institutions have started independently to look for resources to implement the platform initiative, and it is due to become fully operational in January 2006. The term "platform", as opposed to "unit", reflects the fact that there will be joint planning (to be inserted in the MTPs) and execution of activities; but that each Center will be responsible for their own staff (re. contracts, etc.).

In September-October 2005 CIFOR and ICRAF had several planning meetings in Bogor, and defined the next steps for the platform, including:

- 1) Inventory of ongoing work & 'sites' (CIFOR & ICRAF)
- 2) Brainstorming workshop in March 2006
- 3) Preparation of MTPs 2007-2009 (both CIFOR & ICRAF) (in June 2006) in the new CGIAR Science Council format
- 4) A larger workshop in October 2006 defining the details of the future activities.

The next challenge facing improved collaboration between the two centres on biodiversity research will be for them to formulate a shared set of deliverables for the MTP 2007-2009, using the new CGIAR Science Council priority structure. (The Science Council requires that 80 percent of the research in a CG Center has to be within the five recently defined CG Science Council Priorities for 2005-2015.) Linkages between CIFOR and ICRAF at the operational level in Latin America appear to be very good. An ICRAF staff member is housed in CIFOR's regional office in Belem, and attends their monthly staff meetings, thereby facilitating exchange of information about the activities and plans of the two organisations.

CIFOR and ICRAF are collaborating with two other CGIAR centres, CIAT and IPGRI in the 'Amazon Initiative (AI) Consortium for Conservation and Sustainable Use of Natural Resources'. We were told that IFPRI has also recently expressed interest in joining this

initiative. AI's aim is to implement collaborative programs to reverse resource degradation through sustainable land use systems. AI was created in mid-2003 and formalised in 2004, both by the four CGIAR centres and also by the national agricultural research institutions of Bolivia, Brazil, Colombia, Ecuador, Peru and Venezuela. Associate institutions include regional research centres and universities. Consortium partners are creating an inter-institutional and inter-disciplinary team that will function as a 'distributed network' of scientists, working at different sites in the Amazon.

5.2 CIFOR's Status in Brazil

CIFOR does not have a legal status in Brazil and hence can only access donor funds via partners. This poses major problems in obtaining funds from certain donors, and means that CIFOR is obliged to receive funds through other organisations rather than directly, unless CIFOR leads the proposal from head office in Indonesia, as it sometimes does. In practice this is usually via the Brazil office of the Inter-American Institute for Cooperation in Agriculture (IICA). A current illustration of the problems that can arise is the new project funded from the EC's TFBL (Bridging the Divide). This project is managed by IMAZON (an NGO), with CIFOR as a major collaborator; but at present IMAZON is not releasing the relevant funds to CIFOR. We were advised that this blockage will be removed once a tri-partite agreement has been signed between Imazon, IICA and CIFOR, which is planned to happen during the next few weeks. We were told by people both within and outside CIFOR that the lack of legal status has been a serious constraint on the size of CIFOR's programme in Brazil, and some staff were critical of CIFOR's head office in Bogor for allowing this state of affairs to persist for so long (it is seven years since CIFOR's regional office in Belem was established). CIFOR is currently seeking to obtain status as a legal entity in Brazil, and to obtain this it needs the formal support of EMBRAPA.. This support was verbally obtained in a recent meeting attended by CIFOR's Director General. Brazil's Ministry of Foreign Affairs will inevitably consult EMBRAPA regarding CIFOR's application, and hence CIFOR is counting on EMBRAPA to confirm its support when this happens.

5.3 CIFOR'S Relationship with its Regional Host

EMBRAPA As far as we could ascertain, CIFOR's relationship with EMBRAPA, the Brazilian Agricultural Research Centre, its host and one of its partners is generally positive. Nevertheless, we detected various tensions in the relationship. One relates to the above point regarding CIFOR's lack of any formal status. CIFOR staff feel that the relationship is not a true partnership while this state of affairs persists.

Another issue is that EMBRAPA staff gave the monitoring team the impression that they feel that CIFOR does not collaborate with them as much as they would like. They said that this is: (a) partly related to differences in the scales/levels at which the two organisations work, with EMBRAPA working primarily at the population/species level, and CIFOR more at the landscape level (they would like to see greater emphasis within CIFOR on the former); and (b) partly due to the lack of full-time CIFOR research staff based in Brazil. The latter issue is discussed further in section 5.4.

Some CIFOR staff, on the other hand, argued that EMBRAPA has been heavily focused on timber, and has tended not to give enough emphasis to NTFPs and multi-purpose forest management (which are more closely related to biodiversity conservation) to be a suitable partner for research in these areas. Another point made by CIFOR staff was that sometimes when they do ask EMBRAPA if it wants to be a partner in a new research proposal

EMBRAPA might not react quickly enough to confirm that is does, and due to tight deadlines might be omitted from the proposal.

Recommendation 10 – Despite difficulties in working with EMBRAPA, we recommend that all CIFOR staff working in Brazil make a concerted and persistent effort, even if progress seems painstakingly slow at times, to strengthen collaboration between the two organisations on research related to biodiversity conservation. This is because EMBRAPA, with its huge technical and financial resources, has the potential to be CIFOR’s most important partner on biodiversity research in Brazil, and indeed in Latin America, and to maximise the sustainability and impact of CIFOR’s research.

EMBRAPA staff expressed the view that, while they promote and disseminate CIFOR publications (such as the ‘Fruit book’), CIFOR has not done enough to promote EMBRAPA publications. They showed some examples of fact sheets they had produced about different species, and also two children’s book they have produced; one about pollinators and another about the natural history of the *piquia* tree. Their funds for disseminating these materials are apparently exhausted, and they would like some of CIFOR’s funds to be used for this purpose. They think that it may be possible to use AI funds for this purpose.

5.4 The Status of CIFOR’S Latin American Programme

Two of CIFOR’s main partners in Brazil, EMBRAPA and IMAZON, were of the opinion that CIFOR’s presence in Brazil and Amazonia is inadequate. This view was also echoed by CIFOR staff whom we met in Brazil. CIFOR’s highest priority region, in terms of the resources allocated to it, is Sub-Saharan Africa; followed by Asia and then Latin America. The ratio of the EC’s Food Security funds allocated to Asia and Latin America is roughly 7:3. The Amazonian region is very important in relation to the world’s tropical forests. The Amazonian rain forest is the largest tropical forest on the planet, accounting for about 50 percent of the world’s tropical forests; and five of the top 11 countries in the world, in terms of biodiversity concentration, are in Latin America. At the same time, we were advised that Latin America has the highest deforestation rate of any region. Of course, the poverty status of a region’s people also has to be taken into account. However, although several Latin American countries are relatively wealthy compared to Sub-Saharan Africa and some Asian countries, higher national mean incomes per capita should not obscure the fact that many of the people in the region, and particularly those living in forested areas, are poor.

We believe that to be *fully* effective in Latin America CIFOR needs to have a core of researchers (with a range of natural and social science disciplines) based in the region, at a small number of sites. In our opinion, the requisite critical mass and mix of disciplines does not currently exist in Bolivia and Brazil.

Recommendation 11 – CIFOR should review its programme in Latin America and decide whether its current staffing levels and portfolio are adequate; and, if it agrees with our judgement that they are not, CIFOR should develop and implement a strategy for bringing about the necessary strengthening of its presence in the region, in relation to both its research and capacity-building work. CIFOR should avoid appearing as giving low priority to a continent where tropical forest issues are important.

6 . GENERAL CONCLUSIONS AND RECOMMENDATIONS

Overall, we rated the set of research activities on biodiversity implemented by CIFOR in Brazil and Bolivia as ‘Highly Satisfactory’ (see Table below). We recommend, therefore that the EC’s funding to CIFOR for this work be continued. Other more specific recommendations are given in the main text and the Executive Summary.

On a general level, we appreciate the fact that CIFOR has been able to implement projects funded from different sources in a coherent manner.

Recommendation 12 – CIFOR should continue its effort to combine funds from different sources for a given project. However, this should be done in a manner which does not jeopardize project’s future if some of the expected resources do not materialize. The cross-submission of the same proposal to several donors can be suggested, or the mentioning of complementarity between several proposals.

Recommendation 13 – The European Commission should favourably consider proposals which mention several sources of funding with the same research objective(s).

	Highly Satisfactory	Satisfactory	Less than Satisfactory	Highly Unsatisfactory
Paying for environmental services (PES)	X			
Multidisciplinary landscape assessment (MLA)		X		
Future scenarios (FS)	X			
Biodiversity and livelihoods	X			
Vulnerability and resilience	X			

Annex 1



EUROPEAN COMMISSION
EuropeAid Cooperation Office
Horizontal operations and Innovation
Food security

TERMS OF REFERENCE

FOR MONITORING OF THE CGIAR³ PROJECTS

CO-FUNDED BY THE EUROPEAN COMMISSION IN 2004

**IN A.C.P., ASIA, LATIN AMERICA AND THE MEDITERRANEAN
REGIONS**

Through the “Food Security and Food Aid” Budget line

Final2

1) BACKGROUND

Investments in agricultural research are needed in order to develop the most appropriate agricultural technologies, management strategies and policies for sustainable development. Environmentally and socially responsible increases in agricultural productivity and diversification of agriculturally based livelihood options, will enable developing countries to take advantage of new opportunities offered by national, regional and world markets. The **CGIAR** established in the early Seventies, aims at contributing to food security and poverty eradication in developing countries through strategic research, research partnerships, capacity building and policy advice.

Europe has been involved in the CGIAR since its beginning in 1971 and it represents now the most important share of the overall funding (about 45% of the annual CGIAR budget of roughly 400 M€). The EC, as one of the largest EU contributor (about 22 M€ in 2004), has a vital interest to participate in the strategy formulation and agenda setting of the CGIAR, including current discussions for policy and institutional reform. In order to provide a solid basis for continued support, the elements of a strategy for EU's investments in the CGIAR have been formulated (Annex 1).

EC resources are allocated to a defined number of CGIAR projects that are generally co-funded by several donors. Budgets and work-plans are proposed by Centres, reviewed by the CGIAR Science Council, and examined / endorsed by the CGIAR Members for funding each year for the following year. Pledges are then made at the end of the calendar year at the latest with advance payments due at the beginning of the following year.

Annual donor commitments are made against a budget on a project basis, in principle without

³ Consultative Group on International Agricultural Research

any breakdown for each individual donor. At the end of each budget period, Centres provide detailed financial reports for each donor. The annual allocations of EC funds to specific projects may vary from one year to another, as a consequence of changing priorities in the wake of the CGIAR restructuring and reform process. However, a lot of attention is given to ensure continuity in the EC support provided to selected projects. The methodology for selecting the projects to be supported by the EC annually and the resource allocation mechanism is described in Annex 2.

The detailed list of programmes / projects targeted by EC funding through the "Food Security and Food Aid" budget line in 2004 is given in Annex 3. A "sample" will be subject to the present monitoring exercise.

2) OBJECTIVES

The monitoring exercise is clearly foreseen in the Financing Proposal endorsed by the EU Member States in May 2002. Its main purpose is to review the progress made by the selected projects according to their milestones (as described in the medium-term plan of the respective Centres) and to evaluate accordingly the possible need of reorienting the EC funding to these projects in the coming years.

More specifically, the experts will assess mainly, as defined below, the relevance, efficiency and effectiveness of each of the EC supported projects selected for monitoring, and particularly with regard to the EC support strategy for the CGIAR and to the needs of targeted partners. The expertise has to be regarded as a monitoring exercise rather than a full project evaluation per-se. The consultants need to take a broader look than a single year time frame. In addition, since not all outputs from a particular project are necessary dependent on EC funding, it might be necessary to examine components of projects that were not directly linked to EC-funding.

For that purpose, it will be necessary to examine, among others, the following issues:

At the level of the projects:

- ⇒ Is the project designed with the participation of intended beneficiaries and in response to their specific and defined needs?
- ⇒ Does the project effectively focus on small-scale farmers' needs?
- ⇒ Is it likely to contribute to food security and rural poverty alleviation?
- ⇒ Will the project contribute to improving knowledge and techniques, as well as ensuring their adaptation and adoption by the NARS and target groups?
- ⇒ Are dimensions such as social, economic, local and personal producer strategies for food security and the environment taken into account?
- ⇒ Are the project objectives relevant to current ARD state of the art and does the project not replicate known research?
- ⇒ Is the team best placed to conduct research on the proposed issues?
- ⇒ Do the individual scientists or teams involved have the necessary capabilities to carry out the project?
- ⇒ Are adequate scientific, technical and social partnerships implemented?
- ⇒ Does the project promote inter-institutional co-operation with other stakeholders?
- ⇒ Can the equipment and methods to be employed in the project lead to the expected results?
- ⇒ Are the work programme, budget, human resources and timetable, as well as management procedures, adequate to achieve the expected results of the project?
- ⇒ Are proper monitoring and evaluation systems incorporated, including farmers' perspectives?

- ⇒ In which way does the research project contribute to an (intended or ongoing) innovation process that is carried forward by private sector firms, by collective organisations in agriculture and by development agencies?
- ⇒ The monitoring exercise requires an examination of project outputs in terms of reports and technical papers. Therefore the monitoring teams should also examine the quality of such reports, along with the usefulness of the project logical framework and how well it has been used as a planning tool.

At the level of the Centres

- ⇒ How does the Centre support the project and ensure the quality control of their activities?
- ⇒ Is the support process enforced by the Centre's headquarters and/or local offices to the project, efficient and adapted to its needs?
- ⇒ How does the project contribute to the overall objectives of the Centres and to the CGIAR as a whole? How does it fit the general policy of the Centre and of the CGIAR?

During the missions in countries, a visit to some EC rural development projects or projects (co-) funded by Member States or FAO and to the local NARS will be included in order to assess the synergies among the results of the research carried out by the Centres and their adoption by the beneficiaries.

3) SELECTED PROJECTS

A sample of projects among those co-funded in 2004 by the EC through the “Food Security and Food Aid” budget line has been selected for monitoring:

- **WORLDFISH (ICLARM)**
Project No1 : Conservation of aquatic biodiversity
- **ICRISAT**
Project GT1: Harnessing biotechnology for the poor
- **IRRI:**
Project 1: Germplasm conservation, characterization, documentation and exchange
- **CIFOR:**
Project 5: Biodiversity and managed forests
- **SSA Challenge programme**
- **WARDA:**
Project 3.2: Policy environment and rice market development

Annex 4 provides the main features of these projects.

4) METHODOLOGICAL ASPECTS

a) **Main reference documents** to be made available by the Centres:

- ⇒ CGIAR Centres Medium Term Plans 2002-2004 / 2005-2007
- ⇒ CGIAR Centres external reviews and relevant Cross-Centre and Programme Reviews
- ⇒ CGIAR Centres reports (technical, financial, audit reports, etc.) relating to the projects.

b) **Monitoring criteria to be utilised for each selected project**

i) **Relevance:** the relevance of a project relates primarily to its design and concerns the extent to which its stated objectives correctly address the identified problems and real needs at two points in time: when the project was designed and at the time of monitoring.

- ⇒ Identification of real (as distinct from perceived) problems or needs and of the correct beneficiaries, and how well the project's initial design addressed them,
- ⇒ Complementarity and coherence with related activities undertaken elsewhere,
- ⇒ The quality of the entries in the assumptions, risks and conditions column of the of Log Frame at the appropriate levels,
- ⇒ overall design strengths and weaknesses including :
 - quality of the Log Frame ,
 - clarity and internal consistency of the stated overall objectives, purpose and results,
 - whether the objectively-verifiable indicators of achievement (OVIs) were well-chosen and widely agreed,
 - realism in choice and quantity of inputs,
 - overall degree of flexibility and adaptability to facilitate rapid responses to changes in circumstances.

ii) **Efficiency:** The efficiency criterion concerns how well the various activities transformed the available resources into the intended results (sometimes referred to as outputs), in terms of quantity, quality and timeliness. A key question it asks is "were things done right?" and thereby also addresses value-for-money, that is whether similar results could have been achieved more by other means at lower cost in the same time. The analysis of the efficiency will therefore focus on:

- ⇒ The quality of the research from various points of view :
 - scientific,
 - technical,
 - social,
 - policy, etc
- ⇒ The quality of day-to-day management, for example in :
 - management of the budget (including whether resources allocated were utilised as planned in the project descriptions, e.g. geographical areas) ;
 - management of personnel, information, property, etc
 - whether management of risk was adequate, i.e. whether flexibility was demonstrated
 - in response to changes in circumstances ;
 - relations/co-ordination with local and national authorities, institutions, beneficiaries, other donors ;
 - respect for deadlines ;

- ⇒ costs and value-for-money : how far the costs of the project were justified by the benefits - whether or not expressed in monetary terms - that they generated , in comparison with similar projects or known alternative approaches, taking account of contextual differences ;
 - ⇒ Contributions from donors: were they provided as planned, were communications good?
 - ⇒ quality of internal CGIAR Centre monitoring : its existence (or not), accuracy and flexibility, and the use made of it,
 - ⇒ whether the chosen indicators of efficiency were suitable and, if not, whether management amended them ;
 - ⇒ did any unplanned results arise from the activities ?
- iii) **Effectiveness:** the effectiveness criterion concerns how far the project's results were used or their potential benefits were realised - in other words, whether they achieved the project purpose. The key question is what difference the project made in practice, as measured by how far the intended beneficiaries really benefited from the products or services it made available. The analysis of the effectiveness will therefore focus on :
- ⇒ whether the planned benefits have been delivered and received, as perceived mainly by the key beneficiaries,
 - ⇒ the appropriateness of the indicators of benefit used in the above assessment to measure achievement of the project purpose; this should include a judgement on how promptly and effectively the Centre management reacted to any changes that occurred following the initial design by amending indicators found no longer to be appropriate ;
 - ⇒ whether behavioural patterns have changed in the beneficiary organisations or groups at various levels; and how far the changed characteristics have produced the planned improvements (e.g. in productivity or ability to generate actions which lead to economic and social development) ;
 - ⇒ whether any shortcomings at this level were due to a failure to take account of cross-cutting or overarching issues such as gender, environment and poverty during implementation ;
 - ⇒ whether the research outputs represent added value to existing / new (sub-) regional / national initiatives and are supported by related policies / measures at these levels.
- iv) **Impact and sustainability:** these two important issues relate to the longer-term effect of the project on beneficiaries. Though difficult to fully appraise through a short-term mission, some indication should be stated on these issues.
- v) **Performance rating:** monitoring teams should include in their assessments an overall performance rating for each of the above three monitoring criteria, on the basis of the following scale :
- ⇒ highly satisfactory : fully according to plan or better ;
 - ⇒ satisfactory : on balance according to plan, positive aspects outweighing negative aspects ;
 - ⇒ less than satisfactory : not sufficiently according to plan, taking account of the evolving context; a few positive aspects, but outweighed by negative aspects;
 - ⇒ highly unsatisfactory : seriously deficient, very few or no positive aspects).

Each rating should be stated as part of the conclusions for each of the three criteria.

5) REPORTING

- c) **Reports, presentations required for each selected project** : debriefing presentations to the EC, draft report, final report
- d) **Language** : English
- e) **Date of delivery** : draft report within 15 days after the mission, final report within 10 days after reception of the comments from the EC (due 30 days after reception of the draft report)
- f) **Number of copies required** : 5 copies of the draft reports and 10 copies of the final reports
- g) **The main text** of a monitoring report should not exceed 20 pages, plus Annexes, plus an Executive Summary of no more than 2 pages with fully cross-referenced findings and recommendations.
- h) **The main sections** of the monitoring report for each selected project will be as follows :

1- Executive Summary: a tightly drafted, to the point and free-standing Executive Summary is an essential component. It should be short, no more than two pages. It should focus mainly on the key purpose or issues of the monitoring, outline the main analytical points, and clearly indicate the main conclusions, lessons learned and specific recommendations. Cross-references should be made to the corresponding page or paragraph numbers in the main text that follows. See format in annex 5

2- Main text: the main text should start with an introduction describing, first, the project to be monitored and, second, the monitoring objectives. The body or core of the report should follow the three monitoring criteria mentioned above, describing the facts and interpreting or analysing them in accordance with the key questions pertinent to each criterion.

3- Conclusions and recommendations: these should be the subject of a separate final chapter. Wherever possible, for each key conclusion there should be a corresponding recommendation. The key points of the conclusions will vary in nature but will often cover aspects of the key monitoring criteria (including performance ratings - see above), that is :

- ⇒ *Relevance* : whether the design of the project was originally, and still is, sound as regards targeting the real needs and problems of the right beneficiaries;
- ⇒ *Efficiency* : whether the same results could have been achieved at lower costs; or whether there might have been different, more appropriate ways of achieving the same results;
- ⇒ *Effectiveness* : whether the planned benefits were in fact realised, whether the beneficiaries' behavioural patterns changed, whether neglect of cross-cutting issues affected the achievement of the project purpose;

Recommendations should be as realistic, operational and pragmatic as possible; that is, they should take careful account of the circumstances currently prevailing in the context of the project, and of the resources available to implement them. They could concern policy, organisational and operational aspects.

4- Annexes: the report should include the following annexes:

- ⇒ The Terms of Reference of the monitoring
- ⇒ The names of the evaluators and their companies (CVs should be shown, but summarised and limited to one page per person)
- ⇒ Map of project area implementation,
- ⇒ Calendar of visit and list of persons/organisations consulted
- ⇒ Literature and documentation consulted
- ⇒ Other technical annexes (e.g. statistical analyses)
- ⇒ 1-page DAC summary, following the format incorporated in the contract and annexed to this document (see Annex 6 attached).

6) EXPERTISE REQUIRED AND CONTRACTOR'S REQUIREMENTS

6.1. for all Centres

The contractor will have to provide, for each selected project, two high level experts:

- One specialised on the scientific area of the project
- One specialised on the assessment of economic and social impact of agricultural research projects

Criteria for selecting experts are:

- Strong experience in monitoring and evaluation of ARD projects
- Strong background in the socio-economic approaches for assessing the impacts of ARD projects, ,
- Significant background in management of scientific projects
- Good knowledge of the CGIAR system, without any current commitment in Centres management (e.g. Board member) or projects

For each project to be monitored, a short-term mission is foreseen, combining:

- a visit to the CGIAR Centre in charge of its implementation and
- a field visit to a characteristic component of the project on the following basis (location to be proposed by the Contractor):
 - Outside the country of location of the Centre's headquarters,
 - Preferably in one of the priority countries of intervention of the "Food Security / Food aid" budget line, or
 - Possibly in a country where significant EC funded rural development projects, or projects (co-) funded by Member States or FAO, related to the CGIAR visited project theme, are implemented.

In each country, a visit to the EC Delegations, to the local NARS and when relevant to the above mentioned development projects will be included during the missions.

6.2. Other considerations

The contractor will submit up to four Curriculum Vitae for each required expert, ranked by order of preference, for a final choice by the European Commission.

Experts will have debriefing meetings at the European Commission in Brussels, before and after their mission.

The contractor is invited to send to the European Commission a technical and a financial offer. The total amount for the monitoring of the selected projects should not exceed € 300,000.

The contractor will have to complete the work, i.e. to send the final reports to the EC, within a six-month period after signature of the contract.

Annex 2

CIFOR: Project 5: Biodiversity and Managed Forests (BIO)

LATIN AMERICA

Objectives:

To effectively reduce food insecurity, the world community must simultaneously address the issues of (i) poverty, (ii) tenure and resource access, (iii) environmental degradation, and (iv) erosion of genetic resources. CIFOR research on forest biodiversity, carried out through extensive partnerships with NARS and other local and international institutions, aims at addressing the above mentioned issues by seeking to remove constraints to the critical balance between conservation and sustainable use of forest products and genetic resources. This balance will strengthen the assets of individuals, especially among forest dependent communities, and improve the sustainability of natural resource management for the benefit of all. The research is organised around three major themes:

- Development of tools to assess/manage biodiversity from various stakeholders' perspective
- Analysis of important direct causes/mechanisms of forest biological diversity loss.
- Exploring the links between livelihoods, forest biodiversity and institutional mechanisms for their use, access and management.

Results will then be fed into the international and national policy dialogues on conservation and sustainable use of forest biological diversity in an attempt to influence the global agenda on forests and livelihoods. Through partnerships with major conservation and development agencies (governmental and non-governmental), we plan to influence their strategies, and provide recommendations on institutional mechanisms and tools to better monitor and evaluate the implementation of these strategies.

Outputs

The program will determine the impacts of human disturbance, non-timber forest products extraction, and fragmentation on the environment and on the conservation of genetic resources, and produce tools for assessing and using biodiversity from a local livelihood perspective. The program will also examine whether and to what extent these impacts are affected by characteristics of institutional processes for decision-making, negotiation and conflict resolution among different stakeholders at various levels. Active participation in the international policy dialogue and influencing the global agenda on forests are considered as important components of the activity, and several outputs will be specifically designed to address this particular constituency (international policy makers and Conventions). We will bring enhanced understanding, approaches and tools to major conservation and development agencies.

1. Strategic principles and policy-relevant information concerning the opportunities and constraints for sustainable use of genetic resources and biodiversity in different contexts to ensure availability of goods (foods, fibers, building materials) and services for multiple stakeholders in a manner that would enhance security of rights and access of forest dependent poor people;
2. Guidelines and evaluations of harvesting methods for non-timber forest products (NTFP) to reduce impacts on biodiversity and to ensure proper gene conservation of the harvested

population, and their implications of such harvesting methods on with regards to costs and benefits for local users;

3. Improved technologies and implementation strategies for ecologically-based and economically sound harvesting practices for small-scale forestry operations that will preserve genetic resource pools;
4. Models and software to improve resource management, at the scales of forest stands (e.g. the efficiency of planning harvesting operations to reduce impacts on biodiversity and genetic resources); and landscapes (e.g. negotiation support tools for better managing landscape mosaics for biodiversity and livelihood goals)
5. Publications on improved, ecologically-based forest management to sustain flows of resources and environmental services, including quantification of the associated costs and benefits.

Gains:

There are several major pathways that link research and information delivery to changes in and the use of forest biological diversity for the ultimate beneficiaries: forest dependent peoples. Natural resource planners, policy makers and managers of forest resources are the primary intended recipients or target groups of this research. However, important intermediary beneficiaries are other scientists, who may benefit from the development of research methodologies and novel approaches derived from CIFOR's work. In addition, collaboration with partners at the local level designed for rapid information flow is expected to generate direct immediate inputs for decision-making on the ground. Publications and professional interactions will be important for influencing 'conventional wisdom' and the international agenda in relation to processes and policies that affect biodiversity. More precisely the research is aiming at:

- Strengthening the capacity of national research partners in the tropics to undertake research to support the conservation and sustainable use of biodiversity and genetic resources.
- *Contributing to the understanding of the costs and benefits for different stakeholders of the conservation and sustainable use of biodiversity and genetic resources and therefore ensuring a better equity for local people;*
- Enhancing the incentives for improved forest management through contributions to institutional development and in identifying opportunities and systems of payment for the cost of environmental protection by local stakeholders;
- *Developing and evaluating harvesting and management recommendations to sustain simultaneous production of both commodities (non-timber forest products including bushmeat, food, timber, etc.) and environmental values from tropical forest ecosystems over the medium to long term;*
- Improving the level of adoption by forest managers including local communities of scientific findings and existing knowledge of 'best practices'.

Duration:

2002 - 2008

Milestones

2004

- Two peer-reviewed articles based on surveys in Indonesia
- Design of corridors and decision support system for landscape scale planning of plantations (at least two peer-reviewed articles submitted)
- Improved Reduced Impact Logging guidelines taking into account biodiversity concerns for Indonesia and Vietnam

- Participation to and preparation in collaboration with the Executive Secretariat of the 7th Conference of the Parties to the Convention on Biological Diversity
- Beginning of the implementation of the “Matrix matters” (joint environmental services /biodiversity related work between ICRAF and CIFOR) on one pilot site in Indonesia
- Better understanding by conservation and development agencies (governmental and non-governmental) of how livelihood improvement and forest conservation/use converge or diverge as development goals
- Transform outreach materials and renovate existing extension programs in the Brazilian Amazon to include a strong biodiversity component.
- Draft planning tools (e.g. negotiation support system, spatial planning system) for conservation and development agencies (including district governments)
- Critical review of the Ecosystem Approach, the over-arching principle guiding the Convention on Biological Diversity
- Framework for examining strategies for making poor people better off in forest areas through use and management of biodiversity
- Reviews of existing cases of environmental service trading in at least two countries (interim result to evaluate the potential for biodiversity payments)
- Analytical reports and case studies on the utility of adaptive learning approaches to sustainable forest management in Latin America
- Series of papers focused on the effects of conflict and illegal activities on the sustainable management of forests and biodiversity particularly within decentralized governance structures
- Framework for the assessment of the impacts of governance mechanisms and processes on sustainable forest management

Location of Research Activities:

Bolivia, Brazil

Users (Beneficiaries):

Natural resource planners, policy makers, managers and local decision-makers are the primary intended recipients of the outputs of research. However, important intermediary beneficiaries are other scientists, who may benefit from the development of research methodologies and novel approaches derived from CIFOR’s work. Publications and professional interactions will be important for influencing ‘conventional wisdom’ and the international agenda in relation to processes and policies that affect biodiversity.

Beneficiaries

Include rural people living in production forests and on their margins; small-scale forestry companies; professionals, practitioners and extensionists; and the national and global community that benefits from the environmental services provided by of tropical forests.

Target groups include international organizations and development banks, policy makers, government forestry agencies, timber concessionaires and timberland owners, forestry research/technical institutes and universities; certification organisations; regional and international forestry and environment projects, forest communities, harvesters of NTFPs, rural communities on the forest/agricultural frontier.

Collaborators (not exhaustive):

Latin American countries

Brazil: EMBRAPA Belem, IMAZON (Brazilian NGO), IPAM (Brazilian NGO)

Bolivia: PROMAB, BOLFOR, National Museum (Botany Dept.)

France: CIRAD-forêt, IRD

Netherlands: Tropenbos Foundation, Utrecht University

International: Executive Secretariat of the CBD, Secretariat General of UNFF, Collaborative Partnership on Forests

Linkages to CGIAR Outputs:

Saving Biodiversity	55 %
Enhancement & Breeding	0 %
Crop Production Systems	5 %
Protecting the Environment	25 %
Strengthening NARS	15 %

Annex 3

CVs of evaluators

Torquebiau, Emmanuel (CIRAD, FRANCE)

Expertise

Agroforestry, Tropical rain forest, Natural resource management, Agrobiodiversity
Sustainable Development and Participatory interdisciplinary research
Teaching, training management
International Agricultural Centers
Indonesia, Kenya, Burundi, Zambia, Burkina Faso, Bangladesh, Niger, Ethiopia, Mexico

Education

PhD Ecology, University of Toulouse, France, 1997
Doctorate Tropical ecology and Botany, University of Montpellier, France and University of Mexico, Mexico, 1981
MSc. Applied ecology / tropical botany, University of Montpellier, France, 1979
HDR (Research Director), University of Toulouse, France, 1998

Experience

Sept 04 – present	Associate Director of Research and Senior Scientist (Agroforestry). CIRAD Montpellier, France.
March 00 – Aug 04	Head of Unit, French Agricultural Research Center for International Development, CIRAD TERA, Montpellier, France.
July 94 – March 00	Senior Scientist, International Center for Development Oriented Research in Agriculture, Wageningen, The Netherlands, and Montpellier, France
May 91- June 94	Senior Scientist, Tree - Crop Ecological Interactions. International Center for Research in Agroforestry (ICRAF), Nairobi, Kenya.
Sept. 87- May 91	Scientist / Training Officer, Ecology of agroforestry International Council for Research in Agroforestry (ICRAF) Nairobi, Kenya.
Oct. 81-Aug.1987	Scientist, Forest ecology, Agroforestry and Tropical silviculture. BIOTROP, Bogor, Indonesia (Regional Center for Tropical Biology of South East Asian Ministers of Education Organization).
1978 -1981	Research fellow, Tropical forest architecture and ecology, Department of Plant Ecology, University of Mexico, Mexico and University of Montpellier, France.

Other activities

Agroforestry Systems Journal: referee, since 1994
Associate Professor, Senghor University, Alexandria, Egypt, since 1998

Recent Publications

2002 Torquebiau E, Mary F et Sibelet N. Les associations agroforestières et leurs multiples enjeux. Bois et Forêts des Tropiques, 271 : 23-36.
2003 Bayala, J., van der Hoek, R., Nouatin, G.S., Randrianarisoa, M. et Torquebiau, E. L'arbre dans l'espace agricole du plateau de Vineta, Madagascar. Cahiers Agricultures 12 (1) : 15-21.
2005 Augusseau X., Nikiéma P. and Torquebiau E. Tree biodiversity, land dynamics and farmers' strategies on the agricultural frontier of southwestern Burkina Faso. Biodiversity and Conservation: in press.

**Czech Conroy
NRI, UK**

CURRICULUM VITAE

1. **Surname:** CONROY
2. **First Name:** Martin (known as 'Czech')
3. **Date of Birth:** 5 July 1949
4. **Nationality:** British
5. **Civil Status:** Divorced/single

6. Education

B.A. in Economics, History and Psychology, University of London.
B.A. in Psychology, University of London.
Diploma in Economic Development (Distinction), The Polytechnic of North London.
M.Sc. in Agricultural Economics (Distinction), University of East Anglia.

7. Language skills

	Speaking	Reading	Writing
English (mother tongue)	Excellent	Excellent	Excellent
French	Fair	Fair	Fair
Spanish	Fair	Fair	Fair

8. Membership of Professional Bodies

- Development Studies Association
- ODI Agricultural Research & Extension Network
- Tropical Agriculture Association
- International Goat Association

9. Other Skills

- Computer literate - familiar with MS Word, Excel, Powerpoint

10. Present Position

Reader in Rural Livelihoods,
Livelihoods and Institutions Group
Natural Resources Institute, University of Greenwich

11. (a) **Years within the Company:** 12 ½
(b) **Years of professional experience:** 20

12. Key Qualifications:

General Themes, Knowledge and Skills

I have been doing research and consultancy on agricultural and rural development and sustainable livelihoods for nearly 20 years, particularly in Asia and Sub-saharan Africa. My work has covered a wide range of subject areas, from weed management, agro-forestry, crop storage and livestock to community forest management and household livelihood and coping strategies.

Key experience in:-

- Analysis of household livelihood and coping strategies and vulnerability
- Contribution of forests, including non-timber forest products, to livelihoods
- Contribution of livestock to livelihoods, including food security and vulnerability reduction
- Community-based natural resource management
- Innovative methods for improving the efficacy of extension systems (e.g. use of GIS in identifying recommendation domains for technologies, Participatory technology development (PTD), studies of farmers' agricultural knowledge and information systems)
- Project preparation for both development and research
- Team leader for a range of research projects and consultancy
- Experience of working with governments and multilateral and bilateral donors
- Training in livelihoods analysis and planning, PTD and participatory survey methods

Country Experience:

Bangladesh, India, Indonesia, Oman, Pakistan

Tanzania, Zimbabwe, Kenya, Uganda, Namibia, Nigeria, Senegal.

Annex 4 - Programme of the mission and people met

- ❖ Saturday, 22nd October
 - Departure Greenwich / Montpellier
- ❖ Sunday, 23rd October
 - Arrival Belem (Brazil): evening work on preparation of monitoring mission
- ❖ Monday, 24th October
 - Visit to Ver-o-Peso market and natural products shop, Belem
 - CIFOR Office, Belem: meeting with Alvaro Luna, Swen Wunder, Cesar Sabogal, Patricia Shanley: presentation of CIFOR and CIFOR's projects in Latin America
- ❖ Tuesday, 25th October
 - Flight to Ponta de Pedras with Patricia Shanley and Murilo Serra: visit to farmer's forest where latex of the Amapa tree is collected for medicinal use (sold on urban markets)
 - Visit to Escola Bosque (Outeiro): meeting with school staff members, journalists and CIFOR's Flavio Contente
- ❖ Wednesday, 26th October
 - Flight Belem - Porto de Moz with Patricia Shanley and Tadeu Melo; Briefing by Gabriel Medina
 - Meeting with women's group
 - Meeting with the Sustainable Development Committee
- ❖ Thursday, 27th October
 - Travel by boat from Porto de Moz to Rio Majari community where CIFOR is implementing field work. Visit to forest: collection of the Titica liana.
- ❖ Friday, 28th October
 - Meeting with CIFOR staff in Porto de Moz
 - Flight Porto de Moz – Belem
 - Meeting with EMBRAPA: Milton Kanachiro, Silvio Brienza and Natalino da Silva
 - Meeting with AMAZON: Adalberto Verissimo and Valmir Santos
- ❖ Saturday, 29th October
 - Belem: report writing and e-mailing to CIFOR staff
- ❖ Sunday, 30th October
 - Flight Belem – Sao Paulo – Santa Cruz de la Sierra (Bolivia)
- ❖ Monday, 31st October
 - Visit CIFOR Office: meeting with Peter Cronkleton, Pablo Pacheco and Marco Antonio Albornoz
 - Meeting with IBIF: Bonifacio Mostacedo and Marielos Peña
 - Meeting with NATURA: Esteban Cardona, Maria Teresa Vargas and Nigel Asquith
- ❖ Tuesday, 1st November
 - Report writing in Santa Cruz
 - Flight Santa Cruz – Cobija
- ❖ Wednesday, 2nd November
 - Fundacion Juan Manuel Pando (CIFOR's office), Cobija
 - Meeting with CIFOR staff: Peter Cronkleton, Marco Antonio Albornoz, Gladys Guanacoma and Rolando Haches
 - Meeting with El Sena / Palma Real Community members
 - Meeting with WWF: Ruth xxx and Fabio xxx
 - Road travel to Porvenir: meeting with members of COINACAPA Brazil nut Cooperative
- ❖ Thursday, 3rd November
 - Fundacion Juan Manuel Pando (CIFOR's office): Meeting with CIFOR staff
 - Flight Cobija – Santa Cruz

- ❖ Friday, 4th November
 - Report writing and e-mailing to CIFOR staff
 - Flight Santa Cruz – Sao Paulo (ET)
- ❖ Saturday, 5th November
 - Flight Santa Cruz – Sao Paulo (CC)
 - Arrival Europe (ET)
- ❖ Sunday, 6th November
 - Arrival Europe (CC)