

# INTERNATIONAL TROPICAL TIMBER ORGANIZATION

## ITTO

### PROJECT DOCUMENT

TITLE	PROMOTING ADOPTION OF SUSTAINABLE FOREST MANAGEMENT IN THE BRAZILIAN AMAZON
SERIAL NUMBER	PD 432/06 Rev.2 (F)
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF BRAZIL
ORIGINAL LANGUAGE	ENGLISH

#### SUMMARY

The project will help operationalize the Brazilian government's new forest management policies and initiatives in the Brazilian Amazon and contribute to the consolidation of forest management as an economic activity for communities, rural producers and timber companies in the Amazon through (i) practical training and capacity building, and (ii) awareness-raising activities. The project will raise awareness through extension events that will promote forest management (FM) as an economically viable option for the region. Training targets (i) the actors noted above (decision-makers), (ii) the technical staff of governmental environment agencies responsible for formulating and executing forest policy at the federal and state levels, (iii) instructors from other training centers in the regional, government-supported network, and (iv) forest workers (technicians, engineers, managers and operators) responsible for the field implementation of forest management plans in the Amazon. Training focuses on building capacity where approved forest management is already underway. The project also responds to the increasing demand for FM training and for qualified, trained professionals across the Amazon by offering courses for students and graduates of technical and forestry schools. The project will improve and increase the institutional FM training capacity in the Brazilian Amazon through intensive in-service training offered by the Instituto Floresta Tropical (IFT). The project's training program is central to the success of the government's forestry policies and governance effort that are stimulating responsible access to forest resources. This is particularly true under the present circumstances where many changes have occurred in decentralization, government policy, and regulation.

EXECUTING AGENCY Instituto Floresta Tropical (IFT)

COOPERATING GOVERNMENTS ---

DURATION 24 MONTHS

APPROXIMATE STARTING DATE TO BE DETERMINED

BUDGET AND PROPOSED SOURCES OF FINANCE	Source	Contribution in US\$	Local Currency Equivalent
	ITTO	508,464	
	IFT	678,651	
	TOTAL	1,187,115	



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## List of Acronyms

ABC	Agência Brasileira de Cooperação (Brazilian Cooperation Agency)
ACTO	Amazon Cooperation Treaty Organization
CENAFLO	<i>Centro Nacional de Apoio a Manejo Florestal</i> (National Centre for the Support of Forest Management)
CIFOR	Centre for International Forestry Research
FAO	Food and Agriculture Organization of the United Nations
IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute for the Environment and Renewable Natural Resources)
HDI	Human Development Index
<b>IDEFLOR</b>	<b><u>Instituto Florestal do Pará</u></b>
IFT	<i>Instituto Floresta Tropical</i> (Tropical Forest Institute)
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
MMA	<i>Ministério de Meio Ambiente</i> (Ministry of the Environment)
NGO	Non Governmental Organization
PA	<i>Projeto de Assentamento</i> (Settlement Project)
PAE	<i>Projeto de Assentamento Extrativo</i> (Extractive settlement project)
PAF	<i>Projeto de Assentamento Florestal</i> (Forest settlement project)
PDS	<i>Projeto de Desenvolvimento Sustentável</i> (Sustainable Development settlement Project)
RIL	Reduced Impact Logging
SFB	Brazilian Forest Service (newly created in 2006)
SFM	Sustainable Forest Management
SFMP	Sustainable Forest Management Plan

## PART I. CONTEXT

### 1.1 Origin

The *Instituto Floresta Tropical* (IFT) was officially established as a Brazilian NGO in 2002 as the successor organization of Fundação Floresta Tropical (FFT), a major program established in 1995 in Brazil by the Tropical Forest Foundation (TFF). FFT sought to accelerate the adoption of forest management (FM) and reduced-impact logging (RIL) techniques across the Amazon through practical training, demonstration, and applied research. FFT's FM-RIL training program has been the major source of skilled labor for the forest industry and has been cited as one of the best NGO conservation programs by the Pará State Government.

IFT (and previously FFT) has been supported by many international donors, including among others: USAID, PROMANEJO-PPG7, and ITTO. By funding two previous projects—PD 45/97 Rev. 1(F), *On-site training of tropical foresters and forestry trainers*, and PD 206/03(F), *Development of human resources in sustainable forest management and reduced impact logging in the Brazilian Amazon*—ITTO is largely responsible for the content and success of IFT's training program. The first project resulted in 138 people (including decision-makers, forest auditors and inspectors, forest managers, and operators) trained in 9 courses and in the publication of a series of well-illustrated field manuals, including one in Spanish, and a variety of other training materials. Results from the training and from a series of related field trials carried out by FFT were also incorporated into other publications, including a set of RIL technical guidelines published by Embrapa and CIFOR (Sabogal *et al.* 2000), a field manual developed by IBAMA for use by its field inspectors (IBAMA undated), and two publications on the economics of RIL released by TFF (Holmes *et al.* 2000a and 2000b). This project's ex-post ITTO evaluation concluded

*...that the ITTO-FFT RIL training project was remarkably successful. Through a series of interviews with representatives of government agencies, the private sector, NGOs, research institutes, and universities we learned that FFT's influence on the adoption of sustainable forest management in the Brazilian Amazon has been substantial, going far beyond the direct effect of the training program. FFT's procedures for reduced-impact logging have been encoded in regulations and in field guides prepared by IBAMA and other agencies. FFT's methods for auditing forest operations and monitoring their impacts have been widely adopted by forest certifiers and by inspectors charged with enforcing Brazil's new statutes related to forest management. But perhaps most importantly, people who have taken FFT's RIL training are putting into practice on a daily basis what they learned in the training course. As a result, forest management is advancing rapidly within the Brazilian Amazon and the region seems poised to make a significant improvement in the status of forest management over the next few years. For this to happen, however, it is essential that the type of training offered by FFT be continued and the quantity of courses available be increased to meet the growing demand...*

Lessons identified by the ex-post evaluation were:

- Hands-on training of loggers, their supervisors, forestry technicians, and foresters in the techniques of sustainable forest management, including reduced-impact logging, might well be the *single most important investment that can be made to advance the status of forest management in tropical countries*.
- In training courses of the type offered by FFT, heterogeneous groups of participants have proven to be better than homogeneous groups. When participants in any one course are drawn from government agencies, private companies, NGOs, and research institutes, all participants benefit from the discussions, interactions, and variety of viewpoints that are represented.

- If future efforts by FFT are to emphasize training of participants from countries other than Brazil, it will be important to engage an agency with region-wide experience in recruiting participants for training or educational activities. FFT should delegate recruitment of participants from outside of Brazil to a third party because such recruitment activities would not constitute the best use of its limited resources.

These lessons have been incorporated in this proposal and in IFT's work generally. The first has encouraged IFT to continue submitting proposals to donors for investment in training. The second is the basis of how IFT organizes its courses and why its training proposals always seek to meet training demand from different stakeholders (government, private sector and communities, operational and management level). The third on overseas training has been followed, and in its current overseas training efforts, trainee recruitment is the responsibility of the interested overseas party and/or the Amazon Cooperation Treaty Organization (ACTO or OTCA). For example, through an initiative of the Brazilian government and ACTO, IFT provided training for policy makers from seven countries of the region in 2006 and will provide similar training in 2007.

As successful as PD 45/97 was, IFT believes PD 206/03 was even more successful. The project trained nearly twice as many people as planned and explained (via extension events) the importance of forest management to nearly 5 times as many people as planned (Table 1). Demand for places on the courses was consistently higher than availability showing substantial unmet demand (Table 1).

Table 1. FFT/IFT Courses and Extension Events Conducted during PD 206/03 (9/03–8/05)

Training Courses					Extension Events			
Total #	Courses	Participants *	Applicants		Events	Target**	Participants	Target**
			Target**					
	75	737	940	410	19	16	1860	400

\*Refers to requests for training received by FFT/IFT without any effort by FFT to promote the courses.

\*\*Target anticipated in Original Project Document

In addition to these specific outputs the project also installed a new monitoring system to evaluate the impact of the courses on trainees, and produced a series of training materials (including 20 lesson plans, 9 manuals, and 15 flip charts), trainer lesson plans, and a trainer's manual for use in other FM training projects.

One of the key lessons from the last ITTO project was the need for IFT to modify its training program to emphasize forest management in the broadest sense. Thus, IFT's courses increasingly emphasize landscape-scale planning (or macro-zoning), post-harvest silviculture, and management for a diversity of forest (both timber and non-timber) products and values (including conservation of biodiversity and maintenance of ecosystem services). Forest management planning at this scale entails working across the whole property, and includes consideration of preservation areas, areas converted for other uses, and areas bordering the property to be managed. It also considers social and economic factors including how adjacent communities will be affected by the management plan, labor sources, and the location of processing facilities. This new emphasis reflects a shift in Brazilian priorities away from a narrow focus on reduced-impact logging for timber products only, and includes consideration of the need to establish successful models of community forestry in the Amazon. This new emphasis was one impetus for this proposal.

Additional motivations include:

- The passage of the Public Forest Management Law on 24<sup>th</sup> October 2006, which led to the

- Creation of the Brazilian Forest Service;
  - Transfer of authority for regulation of forestry activities on private lands to state agencies;
  - Establishment of Forestry Districts (BR-319 Amazonas, Acre, Rondonia), BR-163 (Para), and Carajas (Para, Tocantins, Maranhao)
- Increasing demand to harvest legal reserves of Settlement Projects (PDS, PAF, PA, PAE); and
  - The IBAMA and MMA initiative to develop new forest management regulations including the development of new procedures and methodologies for field inspection of management plans;

In the proposed project, IFT will collaborate with the *Centro Nacional de Apoio a Manejo Florestal*<sup>1</sup> (CENAFLO) and the newly created Brazilian Forest Service (SFB) to operationalize the Brazilian government's new forest policy, and to support and reinforce the government's national priorities. Specifically, the project will help ensure that ongoing and planned policy initiatives have a training component that provides the necessary knowledge and skills base for forest management implementation. This proposal will provide short-term (24 months) financing while the Brazilian government prepares a wider proposal for ITTO's thematic program to deal more comprehensively and over a longer period with the need to build training capacity and offer training.

## 1.2 Sectoral Policies

Forest policy is determined by the Ministry of the Environment and implemented by the SFB, however, it is recognized that in the Amazon region forestry policy must take account of other sectors and the Brazilian Government has sought to take a cross-cutting approach as epitomized by its creation of forestry districts for sustainable development (e.g., the BR-163 sustainable development initiative) involving 13 government ministries.

National forest policy objectives are: the promotion and execution of sustainable forest development; the protection of biodiversity of forest ecosystems; the harmonization of sustainable forest development with sectoral policies and other sectors; and institutional development which has sought not only to increase organizational efficiency but to develop new mechanisms to broaden civil society participation in forestry fora.

An important component is the regulation of access to forest resources. In part this deals with land titling issues but it also creates new mechanisms in public lands such as different forms of settlement (Sustainable Development Project, Forest Settlement Project, Settlement Project, Extractive Settlement Project). It also includes a new Law on Management of Public Forests, which created a Brazilian Forest Service, established a concession system for community and industrial access to forest resources on public lands, and gave state agencies authority for regulation of forestry activities on private lands.

Amongst the institutional arrangements was the creation of CENAFLO in 2003 to promote the adoption of forest management and RIL practices, and more recently the creation of the SFB, concession system, and forestry districts.

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<sup>1</sup> Since the project was reviewed, CENAFLO was transferred from the Brazilian Environment Agency (IBAMA) to the Brazilian Forest Service. CENAFLO's role is to support forest management in the Amazon region by fomenting training and extension activities. One of its targets is to establish a network of forest training centres in the Brazilian Amazon and IFT has been formally recognized as a reference centre for this network.



### 1.3 Programs and Operational Activities

The National Forestry Program is the governmental instrument to support the application of its policies in practice.

The major components of the program are:

- Access to forest resources – settlements, concessions.
- Monitoring and control including new forest regulations.
- Support of good practice through credit and training and extension.

The major investments have been in the first two parts given the need to halt the negative impacts of recent undesirably high deforestation rates, which have considerable impact on national and international public opinion. They are also prerequisites for large-scale implementation of forestry programmes.

Successful programs include the establishment of the DETER real time forest cover monitoring system and its use by IBAMA in its inspection and control operations but also by other organizations such as state level environmental bodies, for example, in Mato Grosso.

Innovative new legislation has prepared the legal framework for industrial and community forest concessions for the use of public lands.

Past training programs have had an important impact by establishing examples of independently certified forest management and building training capacity adapted to local realities. However they have had limited structural impact because of the broad forest sectoral weaknesses and have tended to focus first on flagship industrial enterprises and more recently on community forestry initiatives. The creation of CENAFLO to some extent was to provide the necessary direction and support to align training programs with other strategic programs and initiatives at federal and state level such as the multi-ministerial BR163 Sustainable Development program.

## PART II: THE PROJECT

### 1. Project Objectives

#### 1.1 Development Objective

To promote sustainable multiple-use forest management on public and private forests in the Brazilian Amazon while increasing the socioeconomic and conservation benefits of forest management activities.

#### 1.2 Specific Objectives

- 1.2.1 Strengthen the capacity of government agencies (especially the newly created Brazilian Forest Service) and other key stakeholders to promote, implement, supervise, regulate, and monitor good forest management in the Brazilian Amazon (with an emphasis in the recently established Forestry Districts) through practical training.
- 1.2.2 Raise awareness about the role of forest management (FM) in the sustainable development of the Brazilian Amazon and promote good FM practices through educational outreach that targets forest sector stakeholders with a particular emphasis in the newly created federal Forestry Districts and state forests.

## 2. Justification

### 2.1 *Problem to be addressed*

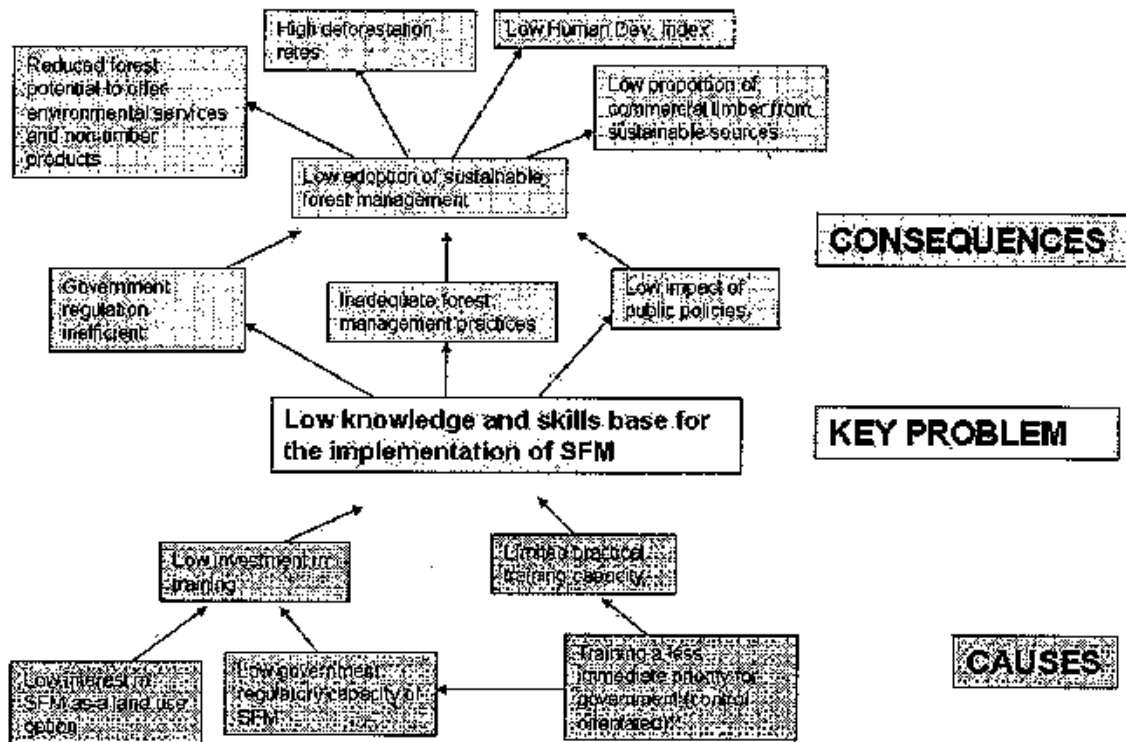
The Brazilian Amazon forest ecosystem covers an area of about 400,000 km<sup>2</sup>. Deforestation is considered undesirably high at around 20,000 km<sup>2</sup> per year. Despite this liquidation of the natural resources, especially timber, the region's populations can be considered marginalized within Brazil as indicated by a relatively low Human Development Index. A significant proportion of tropical timber historically comes from illegal sources. Forest management is poorly established as a viable alternative land use. Few government staff have up-to-date understanding of forest management practice or how to assess it in the field thus weakening incentives for forest owners to invest in capacity building. The resource is perceived as abundant due to the large area of tropical forest, so economic incentives to improve efficiency are also weak. New public policies which focus on giving legal access to forest lands e.g. through concessions in public forests, the establishment of different categories of conservation reserve with usage rights and through land reform programs all run the risk that they will be unsustainably managed due to limited technical know-how. Government priority has been on resolving land access through legal reform and detection and control of illegal practice. There has been comparatively little investment in establishing training capacity or supporting capacity building programmes for the sector. However the very success of these more immediate priorities dictates that capacity development becomes the new priority. If good practices are not widely disseminated, to both government agencies and the producing sector, the increased access to resources will lead to increased destruction of forest resources.

As government inspection and control has been limited and economic efficiency incentives are also weak, the private sector has followed low investment strategies and not invested in training. Until recently, most communities did not have access to harvesting technology or marketing expertise, and have either not managed their forests commercially or have sold rights to timber companies at unfavourable terms. Thus, the adoption of sound forest management practices is still limited, and forest management, in general, is still perceived in many parts of the Amazon as economically unattractive.

To date, almost all of the practical FM training in the Brazilian Amazon has been carried out by IFT. Some 3500 people have received training in the last 10 years, and courses are routinely over-subscribed. During much of this period, IFT's program (supported by ITTO, USAID, PPG-7, Promanejo, and others) along with changing markets, and increased awareness of the value of Amazonian forests stimulated much of the demand for training. Now, however, the surge in demand for training is being driven principally by the government's new forest policies (especially the creation of forestry districts, the concession system, and transfer of authority from IBAMA to the states for regulating forestry activities on private lands), stronger enforcement efforts, and a greater interest in multiple-use forest management. The new Brazilian Forest Service will probably monitor forest management performance closely based on the assumption that a forest engineer should not be responsible for more than one or two forestry estates (Natalino Silva – pers. comm.), the need for qualified and trained forest engineers is expected to increase. This increasing pressure for quality management is a significant achievement but its impact will be severely limited if there are not sufficient training opportunities.

The problem is described graphically on the following page.

## Problem Tree



**\*\* complex dynamics affect different stakeholders incentives differently and so any diagram is a simplification. Many private sector actors facing increased government control close down or move to more remote areas but there are some who seek subsidized training and are faced with limited capacity and limited supply of subsidized training. Once this begins to act as a major constraint to SFM training is likely to be an increasing government priority. This proposal seeks to anticipate this situation.**

## *2.2 Intended situation after project completion*

On project completion government capacity to regulate and promote sound FM will be improved, especially in the newly created forestry districts, which is where training and extension efforts will focus. Similarly, and in the same regions, the capacity of managers and practitioners (from companies as well as from communities with approved FM plans) to implement sound FM will be improved. At least six examples of good practice will be operating within management units with formally approved FM plans in three of the states of the Legal Amazon. IFT's two demonstration models of multiple use management (one at its principal training site and one on the Transamazon highway) will continue to be used as an extension resource and to enhance understanding of forest management during training courses. Improved capacity to inspect and control forest management activities on both public and private lands will improve regulatory enforcement and increase incentives for the private sector and others interested in forest management to seek training or to employ trained staff.

A greater proportion of the annual demand for FM training will be met and the national training network, supported by CENAFLO, strengthened.

Local communities and other stakeholders—especially those living along the Transamazon and BR-163 highways—will have increased awareness and belief in FM as a viable land use option for the region. They will have increased technical capacity to implement it. This will result in improved perspectives for a sustainable contribution of forests to local livelihoods and the local and national economy over the medium term.

The government will be able to adjust the implementation of the Brazilian Forest Service to take account of the project pilot scale activities in capacity development. The Brazilian Forest Service will be stimulated to coordinate a Brazilian Amazon training proposal to be submitted to the ITTO under its thematic program. The GoB (MMA) has already made a verbal commitment (see attached letter, Annex D) for IFT to provide training and capacity building courses to help operationalize the three recently created forestry districts (BR-164, BR-319, and Carajás). As per attached letter of recommendation (Annex D) the SFB will require a major training effort in these forestry districts for government employees, potential concessionaires, and regional communities.

## *2.3 Project strategy*

The project strategy addresses two key aspects of the problem described above: (i) strengthening the capacity of the forest sector to implement sound forest management practices and the ability of federal and state agencies to monitor and regulate those practices, and (ii) raising awareness about the value of forests and the role of forest management in the sustainable development of the Brazilian Amazon.

One component of the strategy will focus on strengthening the capacity of organizations that are already implementing approved forest management plans and developing the capacity of governmental regulation authorities with responsibility for the same plans. This approach will ensure that the trainees will be able to put their new knowledge and skills into practice immediately. To maximize the influence of good practice in action, this part of the strategy will focus training and capacity building efforts in the 3 recently created forestry districts: BR-163 (Para), BR-319 (Acre, Amazonas, Rondonia), and Carajás (Para).

The second component of the strategy addresses the need to improve and increase the institutional FM training capacity in the Brazilian Amazon by providing practical capacity building through short secondments to the IFT training centre for instructors from other training centres.

The third component of the strategy responds to the demand for trained staff and addresses the need to increase the number of qualified forest managers, foresters, and technicians. The project will provide hands-on, practical training at its principal training center for technical school professors and students as well as decision-makers.

The fourth component of the strategy addresses the need to raise awareness about the value of forests, the role of FM in the sustainable development of the Brazilian Amazon, and the feasibility of implementing sound FM under a variety of conditions. The project will promote FM through extension events, which when possible will make use of demonstration areas established by IFT. In addition to raising awareness about the value of forests and the viability of FM as an economic activity in the Amazon, the extension events will stimulate demand for training and trained staff.

An alternative strategy to reach the development objective would have been to take a geographic rather than technical approach. In this case a pilot area would be selected and different aspects necessary for the adoption of SFM would have project support. So, rather than a focus on technical training, other policy arenas such as the provision of credit, land access mechanisms, and institutional and business training would have been included. This has not been chosen as it is believed that such an approach would make replication more difficult and fails to take account of promising initiatives or respond to demand across the Amazon Basin. The geographic approach also tends to be supply driven whereas a focus on technical themes can be demand responsive.

#### *2.4 Target beneficiaries*

The main beneficiaries of this project are:

- Government agencies responsible for the regulation of forestry activities in the Amazon will benefit from a staff training program to enhance their knowledge and skills. The newly created Brazilian Forest Service (see attached letter), whose demand will be extremely large due to the training of their staff and potential concessionaires, will especially benefit. In addition, the individual state agencies, which due to the decentralization, are now responsible for forest management on private land and have each created new agencies to do so.
- Forestry practitioners in the target areas (managers, foresters, technicians, machine operators, sawyers and rural laborers) as well as land-holders (especially communities) will benefit from professional development (improved ability to implement required practices) and improved availability of qualified professionals, and enhanced conservation of the resource on which they depend;
- Training and education professionals will have improved practical skills to support the teaching of sound FM practices.
- Wood industry sector (i.e. landowners, millowners, & companies engaged in forest management) will benefit from (i) enhanced conservation of the resource on which they depend and (ii) potential economic benefits, both of which may be achieved through more efficient wood extraction;
- The local and global community by contributing to (i) a reduction in logging damage resulting in greater efficiency in the utilization of forests throughout the Amazon; and (ii) a reduction in ecological impacts resulting from current practices (e.g. losses to biodiversity, greater fire vulnerability, and decreased carbon sequestration potential);

#### *2.5 Technical and scientific aspects*

##### 2.5.1 Training courses and extension

The training courses will emphasize principles of forest management consistent with ITTO's guidelines<sup>2</sup> and the implementation and training of forest management and RIL practices<sup>1</sup>. The courses

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<sup>2</sup> ITTO Policy Development Series 1.

will be practical, hands-on, and tailored to the level and needs of trainees. The number and type of courses will be based on the demand from different levels and different parts of the forest sector expressed in each of the pilot areas. In general, at the end of the courses, participants will be able to:

- explain basic principles of forest management for wood resources;
- explain the benefits and constraints of each component of RIL;
- conduct, demonstrate and/or supervise all forest management-RIL components; and
- in some cases, train foresters, technicians and other forestry practitioners in the implementation of forest management-RIL methods.

During the courses, the participants will be divided into small groups in order to better carry out the practical fieldwork. At this time, everyone shall have the opportunity to observe and practice forest management and reduced impact logging field activities, as well as first aid and workplace safety practices. The participants will undertake pre-harvest activities, harvest planning, logging, and post-harvest activities. They will gain practical and theoretical knowledge on the use of suitable forest management techniques. The number of participants accepted will depend on the type of course but will vary between 6 and 24. IFT is committed to mixed courses so, for example, a decision-makers course will have participants from the government, private and community sectors. This is assured at the time of candidate selection. However, to ensure that training meets identified needs targets are set by stakeholder group.

IFT has a specialist training centre in the eastern part of the Brazilian Amazon with infrastructure for training and demonstration and training forests totalling 6000 hectares. This allows trainees to see good and bad practices in the field and the effect of time on forest impact. Demonstrations areas include 100 hectares managed for multiple use objectives. Two similar demonstration areas will be established in two of the areas selected for training in the BR163 region.

Field days will be held at the new demonstration sites to stimulate interest in forest management among a wide variety of stakeholders in the region. IFT will provide information and basic education about forest management through lectures, audio-visual presentations, and practical field demonstration. These events will allow IFT to de-mystify the terms 'forest management' and 'reduced-impact logging' and reach a broader target audience than through courses alone.

The target audience for these activities includes the following stakeholders/beneficiaries:

- Forest land owners
- Forest products industry owners and managers
- Independent forests and forest technicians
- Employees of government organizations
- Researchers and NGOs
- University and technical school teachers and students
- Forest community workers

The following topics will be emphasized:

- the principles of forest management and why its adoption is essential in Amazonia
- the importance of using safety equipment
- costs and productivity of using Forest management-RIL relative to conventional practices highlighting results of IFT's cost-benefit study
- mechanisms for adopting Forest management-RIL in the Amazon and constraining factors in the region

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<sup>3</sup> See, for example, Dykstra, D. and R. Heinrich. 1996. FAO model code of forest harvesting practice. Food and Agriculture Organization of the United Nations, Rome, Italy.

- alternative (traditional low-impact) extraction systems for forest communities and/or small producers
- forestry laws, policies and regulations and management implications
- disincentives to management and efforts to remove them
- market access and certification and their importance in the region

## **2.6 Economic aspects**

The project will improve the economic efficiency of forest management by stimulating the adoption of good practice. See **Annex E** for a discussion of the cost-benefits of RIL in tropical forest management.

The proposed project will have a positive impact on the region's economy because it will promote and create enabling conditions for more efficient use of the forest resource. This will safeguard the subsistence contribution of forests within the rural economy. It will also strengthen forest commercial production (timber and non-timber products) by increasing efficiency and safeguarding the productive base.

## **2.7 Environmental aspects**

This project aims to promote sustainable forest management as a viable land use alternative to those options which lead to forest degradation and deforestation. Importantly, the project strategy is focused on areas already implementing plans effectively creating models that can serve as demonstrations. The project is therefore expected to reduce the loss of environmental values compared to the without project scenario.

## **2.8 Social aspects**

The overall social impact of the project in the region is expected to be positive because SFM creates quality employment opportunities in rural areas. It ensures that subsistence uses of the forest are contemplated within the management plan. It ensures that land ownership is legitimate thus it acts as a driving force to reduce conflicts over land and access to forest resources. The project will channel training support to social actors that are priority under government policies such as those benefiting from settlement programmes and communities along highway developments.

## **2.9 Risks**

Risks at the operational or project execution level have not been identified as the lead executing agency has an established record of operational capability and an established relationship with its government partner, CENAFLO. The following risks have been identified that concern whether training will achieve its higher objectives of advancing Sustainable Forest Management in the Brazilian Amazonian context. The assessment has changed as since first writing there has been progress towards the implementation of a new Brazilian Forest Service and following Brazilian elections there is greater security on continuity of policy approach. The more important risks concern organizational aspects of the two main target groups, government officials and rural producers. The former's performance incentives have not historically been strongly aligned to effective support of SFM. The creation of a Brazilian Forest Service offers a new opportunity for a performance-based organization with a more specific focus on forestry issues. The latter generally lack the non-technical skills to make SFM viable from a marketing point of view and in terms of multiple smallholders collaborating to achieve a viable scale of production or to participate in forest concessions. However there are programs addressing this in the project areas with capacity building

programs e.g. the Green Highways Consortium<sup>4</sup>. The project addresses these risks by focusing on areas with Sustainable Forest Management Plans already in implementation and strengthening training capacity in accordance with the government priorities developed by Cenaflor ensuring that training is not provided in isolation but as a component of a broader government support program.

	Risk	Probability	Mitigation
1	Performance based incentives do not encourage staff to apply improved capacities	Low—organizational incentives have not been supportive of staff performance that supports SFM. The establishment of a Brazilian Forest Service alters the incentive regime.	Focus on new Forest Service and certification
2	Business and other skills are inadequate for SFM implementation	Medium-high—among small producers and communities; technical skills without organizational and business skills may not enable participation in SFM	Collaborate with social NGOs and other entities that develop the requisite skills in the target groups
3	Target groups do not have legal access to a viable forest area	Low-Medium—many of the target groups may not have the organizational capacity to access public lands through concessions or achieve a viable production scale in private holdings	Collaborate with the SFB to train INCRA officials working along the Transamazon to help resolve the legal access problem
4	Market conditions are unfavourable for timber and non-timber forest products	Low-medium—Transport costs vary widely across the Amazon	Emphasize value-added processing
5	Training has inadequate support of higher management	Low-medium—support exists but is not pro-active	Conduct educational outreach and extension events to promote forest management
6	Public policies do not create a favourable environment (land tenure, credit)	Low—The national forestry program has launched new initiatives	Collaborate with key stakeholders including federal and state agencies to improve policies affecting forests
7	Unfavorable exchange rates and inflation may cause the actual project costs to exceed the budget	Low-medium—In PD 206/03, this risk became real and created financial challenges for the project, although eventually all objectives were realized and outputs exceeded	Seek additional counterpart funding
8	Momentum for forest management training may diminish if IFT's program is not adequately supported before the proposed project starts.	Low-medium—PD 206/03 faced this same risk, but IFT & FFT secured adequate support to maintain a strong program.	Seek additional funding

<sup>4</sup> This is a USAID supported consortium of Brazilian NGOs, including IFT, whose objective is to promote socio-economic development through forest management along major highways in the Brazilian Amazon.



### 3. Outputs

#### *Specific Objective 1*

- 1.1 Forty technical staff and managers from the Brazilian Forest Service and state regulatory agencies with up-to-date knowledge of forest management and improved technical capacity to regulate and monitor forest management activities on public and private lands.
- 1.2 Forty-eight practitioners from the private sector and 36 practitioners from communities with approved FM plans in the newly established forest districts (see map in Appendix Z) trained to implement sound FM practices.
- 1.3 Twelve instructors from other Training Centres with enhanced forest management technical skills and improved teaching abilities.
- 1.4 Increased technical capacity of 144 other stakeholders from the Brazilian Amazon (including 120 students or graduates of forestry and technical programs and 24 decision makers) to apply sound FM practices.

#### *Specific Objective 2*

- 2.1 Four hundred and eighty individuals from government (60), the private sector (150), communities (120), and educational institutions (150) with increased awareness about the feasibility and importance of forest management as an economic activity in the Brazilian Amazon. Extension efforts will be focused in the newly created federal Forestry Districts and state forests.
- 2.2 IFT's training and extension materials (lesson plans, presentations, operational and training manuals, graphical aids) updated, refined, and tailored to the specific target audiences; distributed to participants in training courses and extension events; and made accessible to the public on IFT's web page.

### 4. Activities

Output 1.1      Forty technical staff and managers from the Brazilian Forest Service and state regulatory agencies with up-to-date knowledge of forest management and improved technical capacity to regulate and monitor forest management activities on public and private lands.

- 1.1.1 Meet and coordinate with the federal and state agencies involved in FM to define an appropriate capacity building strategy for each one. The newly created Brazilian Forest Service (SFB), responsible for oversight of FM in Forest Districts, will be a primary target for this activity.
- 1.1.2 Prepare training and demonstration areas for courses designed for federal and state agencies.
- 1.1.3 Conduct on-site and off-site training courses for the federal and state agencies in accordance with the particular needs of each agency defined in the capacity building strategy. IFT will tailor these courses to agencies' specific needs in regulating and monitoring forest management activities on public and private land.
- 1.1.4 Conduct evaluations and competency tests.
- 1.1.5 Process, analyze, and synthesize participant and trainer evaluations for Final Report.

**Output 1.2** *Forty-eight practitioners from the private sector and 36 practitioners from communities with approved FM plans in the newly established forest districts (see map in Annex F) trained to implement sound FM practices.*

- 1.2.1 **Liaise with and mobilize community associations, forest businessmen and producers' associations in the newly established forest districts to promote and organize training courses in sound forest management practices.**
- 1.2.2 **Schedule specific courses (tailored to each different target audience) for training in sound forest management practices. Develop the schedule based on training priorities in each region and the specific stakeholder needs for on- and off-site courses.**
- 1.2.3 **Select course participants for each module based on training needs and priorities.**
- 1.2.4 **Prepare training site for specific needs of each course and prepare training materials for off-site training courses.**
- 1.2.5 **Conduct capacity building courses for representatives of companies and forest communities with FM plans from the priority areas.**
- 1.2.6 **Process, analyze & synthesize participant and trainer evaluations for Final Report.**

**Output 1.3** *Twelve instructors from other Training Centres with enhanced forest management technical skills and improved teaching abilities.*

- 1.3.1 **Collaborate with CENAFLO to define the specific training needs of the other regional training centers within the network.**
- 1.3.2 **Define a course schedule with CENAFLO for training the selected individuals from the regional training centers.**
- 1.3.3 **Provide two intensive 2 week training courses for trainers. Courses will be designed not only to upgrade trainee instructors' specific FM specialty or skill set, but also include cover methods of instruction and use of training materials (e.g., lesson plans, flip charts, power point presentations and training manuals).**
- 1.3.4 **Under IFT supervision, each trainee instructor will conduct a course lecture in his particular area of FM expertise using the tools he learned during the course.**
- 1.3.5 **Upon course completion, provide a written evaluation of the specialized FM knowledge and teaching ability of instructors-in-training.**
- 1.3.6 **Offer internships for interested graduates of instructor training courses to hone teaching skills working along side staff at the IFT Training Centre**

**Output 1.4** *Increased technical capacity of 144 other stakeholders from the Brazilian Amazon (including 120 students or graduates of forestry and technical programs and 24 decision makers) to apply sound FM practices.*

- 1.4.1 **Training camp prepared and upgraded at the beginning of each training field season. Access infrastructure (roads, bridges, culverts) maintained and prepared for season. FM demonstration area prepared and active training site for RIL and forest management activities primed for training courses.**
- 1.4.2 **Harvest plan submitted to and approved by IBAMA (this activity not in project budget)**
- 1.4.3 **Schedule and promote courses in consultation with Forest Technician Schools, and Forestry Universities**

- 1.4.4 Screen applications; select course participants for decision-maker courses and university level forestry courses (all participating universities are allotted a set number of openings for each course and students are selected from each based on individual merit).
- 1.4.5 Arrange travel, lodging, etc. of participants, trainers.
- 1.4.6 Conduct training courses for technicians, foresters, and decision-makers (TD). Although the course might be attended by up to 20 people, field activities will be conducted by groups of no more than 5-6 people. These courses cover the full range of RIL and FM activities at both the industrial and community scales.
- 1.4.7 Conduct evaluations and competency tests.
- 1.4.8 Award course diplomas based on review of evaluation forms and competency tests.
- 1.4.9 Process, analyze & synthesize participant and trainer evaluations for Final Report.

Output 2.1      *Four hundred and eighty individuals from government (60), the private sector (150), communities (120), and educational institutions (150) with increased awareness about the feasibility and importance of forest management as an economic activity in the Brazilian Amazon. (Extension efforts will be focused in the newly created federal Forestry Districts and state forests).*

- 2.1.1 Schedule extension program (with focus on newly created Forest Districts and state forests) by stakeholder group.
- 2.1.2 Arrange travel and logistics for extension program
- 2.1.3 Conduct extension events (seminars, workshops, & lectures) for a total of 480 participants.
- 2.1.4 Conduct evaluations of events by stakeholder group.
- 2.1.5 Process, analyze, and synthesize evaluations for Final Report

Output 2.2      *IFT's training and extension materials (lesson plans, presentations, operational and training manuals, graphical aids) updated, refined, and tailored to the specific target audiences; distributed to participants in training courses and extension events; and made accessible to the public on IFT's web page.*

- 2.2.1 Annually update and peer review lesson plans, presentations, operational manuals and other training materials for courses and extension events
- 2.2.2 Revise and tailor manuals and other training materials for each type of course and target audience
- 2.2.3 Print all training and extension materials and refine (or prepare) all presentations for courses and extension events
- 2.2.4 Update IFT web page with upgraded operational and training manuals
- 2.2.5 Distribute manuals and other materials to course and extension event participants

5. Logical Framework Worksheets

PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<b>DEVELOPMENT OBJECTIVE</b> To promote sustainable multiple-use forest management on public and private forests in the Brazilian Amazon while increasing the socioeconomic and conservation benefits of forest management activities	<u>10% increase in forest area under approved management and harvested with sound FM methods</u>	<u>Data and reports from Brazilian Forest Service (SFB) and state regulatory agencies</u>  <u>Number of hectares harvested and being managed with sound FM practices as determined by government and independent audits</u>	<u>Baseline data exist and are accessible; data needed to verify indicator will be obtained by the SFB and state agencies</u>  <u>Means exist to verify indicator in the field</u>
	<u>Increased number of companies and forest-based communities using sound FM methods</u>	<u>Number of companies using sound FM practices; Company reports; independent audits; ITTO monitoring</u>	<u>National policies do not deter use of FM practices or preclude developing human resources</u> <u>Continued cooperation between government and forest stakeholders to accelerate adoption of sound FM practices</u>
	<u>Increased proportion of timber sourced from certified sites and those progressing to certification</u>	<u>Number of certified companies &amp; hectares</u> <u>Brazilian government (GoB) and independent monitoring reports; production and trade statistics; monitoring of certification approvals and expressions of interest</u>	<u>Certification is a valid indicator of progress toward sustainable forest management</u>
	<u>Increased employment and benefits for rural populations</u>	<u>GoB statistics on employees in forest sector; uptake of trained personnel; feedback interviews from employers</u>	<u>GoB statistics accurate and up to date at time of reporting</u> <u>Continued commitment by forest stakeholders to adopt FM-RIL</u>

PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<b>SPECIFIC OBJECTIVES</b>  1. <u>Strengthen the capacity of government agencies (especially the newly created Brazilian Forest Service) and other key stakeholders to promote, implement, supervise, regulate, and monitor good forest management in the Brazilian Amazon (with an emphasis in the recently established Forestry Districts) through practical training</u>	In post-course evaluations 75% of immediate superiors reported quantitative and qualitative improvement in trainees' performance	Training Evaluation reports	Public policies create a favourable environment (land tenure, credit) Market conditions are favourable for timber and nontimber forest products  <u>Supervisor evaluations are not biased by pressure to demonstrate competency of government agencies to skeptical public</u>
	25% reduction in technical restrictions to new Forest Management Plans submitted to IBAMA and state regulatory agencies in evaluations of ongoing plans	IBAMA and State regulatory agency reports	<u>Reduction of restrictions accurately indicates improved technical capacity of regulatory agency personnel</u>
	<u>Training and capacity-building program completed, and at least 240 individuals with increased ability to apply, supervise, audit, or teach sound FM practices.</u>	<u>IFT courses offered and training activities conducted by staff; course evaluations; post-project surveys of course participants;</u>	<u>Performance in training courses is an indicator of ability to apply principles and lessons in other contexts; surveys adequately assess beneficial effects of training; trainees and supervisors respond to surveys</u>
	<u>Forestry Districts and State production forests operational within 2 years of project termination</u>	<u>SFB and State regulatory agency reports</u>	<u>CoB and regional support for the federal and state production forests persists, and the forests are not converted to other uses; conflicts between government agencies (e.g., BFS &amp; INCRA) can and will be resolved</u> <u>The source of timber can be accurately traced</u>
	<u>Increased proportion of timber produced from areas under forest management vs. from deforestation (legal or otherwise)</u>	<u>CoB and industry statistics</u>	

PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
2. <u>Raise awareness about the role of forest management (FM) in the sustainable development of the Brazilian Amazon and promote good FM practices through educational outreach that targets forest sector stakeholders with a particular emphasis in the newly created federal Forestry Districts and state forests</u>	20% increase in number of applications for forest management plans in the targeted area	IBAMA and state regulatory agency reports	Interest in obtaining a forest management plan represents genuine interest in FM and not an attempt to obscure origin of illegal timber; targeted groups have legal access to the forest; market conditions are favourable for forest products
	Increase in proportion of requests for FM training originating from inhabitants of Forestry Districts during and after project	IFT records of demand for FM training and the source of training requests	IFT can accurately quantify training demand; demand for training is a result of extension work and not an inevitable consequence of sectoral, market, and development trends; exposure to information and ideas during a single event is sufficient to stimulate interest in FM and desire for training
<b>OUTPUT 1.1</b> <u>Forty technical staff and managers from the Brazilian Forest Service and state regulatory agencies with up-to-date knowledge of forest management and improved technical capacity to regulate and monitor forest management activities on public and private lands.</u>	Number of actual participants in courses (for forest management auditors and decision-makers) targeting SFB and state regulatory agencies	Project reports Course evaluations by trainers and participants; IFT progress reports. Number of training certificates issued.	Training program has the support of higher management; performance based incentives encourage staff to apply improved capacities; IFT management and training crew remain intact; SFB and state regulatory agencies maintain interest in receiving FM training
	Increase by at least 40 the number of federal and state government officials capable of regulating and monitoring FM activities on public and private lands.	Course evaluations by trainers Results of competency evaluations SFB and State regulatory agency reports	Performance based incentives encourage staff to apply improved capacities; IFT management and training crew remain intact; SFB and state regulatory agencies maintain interest in receiving FM training

PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<b>OUTPUT 1.2</b> <u>Forty-eight practitioners from the private sector and 36 practitioners from communities with approved FM plans in the newly established forest districts (see map in Appendix Z) trained to implement sound FM practices.</u>	<u>Number of actual participants in courses targeting private sector and communities</u>	Project reports  <u>Course evaluations by trainers and participants; IFT progress reports.</u>  <u>Number of training certificates issued.</u>	
	<u>Increase by at least 84 the number of practitioners from the private sector and communities with approved FM plans capable of implementing sound FM practices.</u>	<u>Course evaluations by trainers</u>  <u>Results of competency evaluations</u>  <u>SFB and State regulatory agency reports</u>	<u>Performance based incentives encourage staff to apply improved capacities; IFT management and training crew remain intact; private sector and community interest in receiving FM training maintained</u>
	<u>Participants completing courses fulfill competency standards</u>	<u>Competency based final evaluations consistent with final exam and trainer evaluations.</u>	<u>Appropriate exam or trainee evaluations are developed and fairly administered</u>
	<u>Participants selected from full range of practitioner levels within the selected stakeholder groups</u>	<u>Records of course participants and selection process</u>	
<b>OUTPUT 1.3</b> <u>Twelve instructors from other Training Centres with enhanced forest management technical skills and improved teaching abilities.</u>	<u>Number of actual participants in courses targeting trainers from other training centers</u>	Project reports  <u>Course evaluations by trainers and participants; IFT progress reports.</u>  <u>Number of training certificates issued.</u>	<u>Performance based incentives encourage trainers to apply improved capacities; IFT management and training crew remain intact; instructors at other training centers interested in receiving FM training; appropriate exam or competency evaluations are developed and fairly administered; CENAFLO and SFB support maintained</u>
	<u>Increase by at least 12 the number of skilled FM trainers capable of teaching practitioners from all sectors and levels how to apply sound FM practices</u>	<u>Course evaluations by trainers</u>  <u>Results of competency evaluations</u>  <u>CENAFLO and SFB reports</u>	

PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	Participants completing courses fulfill competency standards	Competency based final evaluations consistent with final exam and trainer evaluations.	Appropriate exam or trainee evaluations are developed and fairly administered
	Increase in trainees receiving training at other Amazon training centers and improvement in the quality of training received by end of project	CENAFLO and SEB reports; trainee evaluations from courses offered by newly trained instructors at other training centers	Evaluations are accessible and accurately reflect quality of instruction
<b>OUTPUT 1.4</b> Increased technical capacity of 144 other stakeholders from the Brazilian Amazon (including 120 students or graduates of forestry and technical programs and 24 decision makers) to apply sound FM practices.	Number of actual participants in courses targeting private sector and communities	Project reports Course evaluations by trainers and participants; IFT progress reports. Number of training certificates issued.	
	Increase by at least 120 the number of forestry and technical school graduates and by at least 24 the number of decision makers capable of implementing sound FM practices.	Course evaluations by trainers Results of competency evaluations	Performance based incentives encourage staff to apply improved capacities; IFT management and training crew remain intact
	Participants completing courses fulfill competency standards	Competency based final evaluations consistent with final exam and trainer evaluations.	Appropriate exam or trainee evaluations are developed and fairly administered
	Participants in decision-maker courses selected from full range of stakeholder groups	Records of course participants and selection process	



PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<b>OUTPUT 2.1</b> Four hundred and eighty individuals from government (60), the private sector (150), communities (120), and educational institutions (150) with increased awareness about the feasibility and importance of forest management as an economic activity in the Brazilian Amazon. (Extension efforts will be focused in the newly created federal Forestry Districts and state forests).	Number of participants from each target audience attending the programmed extension events	Records of participants in extension activities; evaluations	IFT management and training crew remain intact; IFT; target audiences interested in learning about FM and have means to attend extension events;
	Increased demand for FM training in the region by the end of the project; Number of management plans submitted for approval from the targeted areas within 1-2 years of project termination	Records of requests for IFT training IBAMA and state regulatory agency records	Requests for training and elaboration of new forest management plans are valid indicators of increased understanding and awareness of benefits of FM-RIL
<b>OUTPUT 2.2</b> IFT's training and extension materials (lesson plans, presentations, operational and training manuals, graphical aids) updated, refined, and tailored to the specific target audiences; distributed to participants in training courses and extension events; and made accessible to the public on IFT's web page.	Extension and training materials (presentations, flip charts, manuals, etc.) completed in time for events and courses	Number and type of presentation and lecture materials developed and / or upgraded	IFT management and training crew have time to develop / refine training and extension materials

PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	Existence of revised manuals, other training materials, presentations, lectures, lesson plans, etc. for use in courses and extension events, and on IFT web page	ITTO audits and IFT reports; participant and trainee evaluations; independent checks on courses in progress; number of downloads of training and extension materials from IFT's web page	Adequate funding for developing and printing materials, and adequate time to upload materials to IFT's web page

ACTIVITIES	INPUTS	INPUT CATEGORIES
1.1.1 Meet and coordinate with the federal and state agencies involved in FM to define an appropriate capacity building strategy for each one. The newly created Brazilian Forest Service (SFB), responsible for oversight of FM in Forest Districts, will be a primary target for this activity.	Project personnel, travel and allowances for meetings, office, computers, printer, office supplies; communications equipment	Personnel, duty travel, consumable materials
1.1.2 Prepare training and demonstration areas for courses designed for federal and state agencies.	Project personnel, travel, vehicle, forestry equipment, food, fuel, technical supplies, maps, processed inventory data, safety equipment and materials.	Personnel, duty travel, capital equipment, consumable materials
1.1.3 Conduct on-site and off-site training courses for the federal and state agencies in accordance with the particular needs of each agency defined in the capacity building strategy. IFT will tailor these courses to agencies' specific needs in regulating and monitoring forest management activities on public and private land	Project personnel, travel, allowances, vehicle, forestry equipment, food, fuel, technical supplies, safety equipment and materials.	Personnel, duty travel, consumables, capital items
1.1.4 Conduct evaluations and competency tests.	Project personnel, vehicle, forestry equipment, food, fuel, technical supplies, safety equipment and materials, competency tests and evaluation forms	Personnel, consumable materials
1.1.5 Process, analyze & synthesize participant and trainer evaluations for Final Report.	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials

ACTIVITIES	INPUTS	INPUT CATEGORIES
1.2.1 Liaise with and mobilize community associations, forest businessmen and producers' associations in the newly established forest districts to promote and organize training courses in sound forest management practices.	Project personnel, travel and allowances for meetings, office, computers, printer, office supplies; communications equipment, and maps	Personnel, duty travel, consumable materials
1.2.2 Schedule specific courses (tailored to each different target audience) for training in sound forest management practices. Develop the schedule based on training priorities in each region and the specific stakeholder needs for on- and off-site courses.	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
1.2.3 Select participants for each module based on training needs and priorities.	Project personnel, office, computers, printer, office supplies;	Personnel, consumable materials
1.2.4 Prepare training site for specific needs of each course and prepare training materials for off-site training courses.	Project personnel, travel, vehicle, forestry equipment, food, fuel, technical supplies, maps, processed inventory data, safety equipment and materials.	Personnel, duty travel, capital equipment, consumable materials
1.2.5 Conduct capacity building courses for representatives of companies and forest communities with FM plans from the priority areas.	Project personnel, travel, vehicle, forestry equipment, food, fuel, technical supplies, maps, safety equipment and materials.	Personnel, duty travel, capital equipment, consumable materials
1.2.6 Process, analyze & synthesize participant and trainer evaluations for Final Report.	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
1.3.1 Collaborate with CENAFLO to define the specific training needs of the other regional training centers within the network.	Project personnel, travel and allowances for meetings, office, computers, printer, office supplies; communications equipment	Personnel, duty travel, consumable materials, EA management costs
1.3.2 Define a course schedule with CENAFLO for training the selected individuals from the regional training centers.	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
1.3.3 Provide two intensive 2-week training courses for trainers. Courses will be designed not only to upgrade trainee instructors' specific FM specialty or skill set, but also include cover methods of instruction and use of training materials (e.g., lesson plans, flip charts, power point presentations and training manuals).	Project personnel, travel, vehicle, forestry equipment, food, fuel, technical supplies, safety equipment and materials.	Personnel, duty travel, capital equipment, consumable materials
1.3.4 Under IFT supervision, each trainee instructor will conduct a course lecture in his particular area of FM expertise using the tools he learned during the course.	Project personnel, forestry equipment, technical supplies, safety equipment and materials.	Personnel, duty travel, capital equipment, consumable materials

ACTIVITIES	INPUTS	INPUT CATEGORIES
1.3.5 Upon course completion, provide a written evaluation of the specialized FIM knowledge and teaching ability of instructors-in-training.	Project personnel, office, computers, printer, office supplies; communications equipment, evaluation forms	Personnel, consumable materials
1.3.6 Offer internships for interested graduates of instructor training courses to hone teaching skills working alone side staff at the IFT Training Centre.	Project personnel, travel, food, technical materials, safety supplies	Personnel, consumable materials
1.4.1 Training camp prepared and upgraded at the beginning of each training field season. Access in infrastructure (roads, bridges, culverts) maintained and prepared for season. FIM demonstration area prepared and active training site for RIL and forest management activities primed for training courses	Project personnel, travel, vehicle, forestry equipment, food, fuel, technical supplies, maps, processed inventory data, safety equipment and materials,	Personnel, duty travel, capital equipment, consumable materials
1.4.2 Harvest plan submitted to and approved by IBAMA (this activity not in project budget)		
1.4.3 Schedule and promote courses in consultation with Forest Technician Schools, and Forestry Universities	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
1.4.4 Screen applications; select course participants for decision-maker courses and university level forestry courses (all participating universities are allotted a set number of openings for each course and students are selected from each based on individual merit).	Project personnel, office, computers, printer, office supplies;	Personnel, consumable materials
1.4.5. Arrange travel, lodging, etc. of participants, trainers.	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
1.4.6 Conduct training courses for technicians (MF), foresters (GM), and decision-makers (TD). Although the course might be attended by up to 20 people, field activities will be conducted by groups of no more than 5-6 people. These courses cover the full range of RIL and FIM activities at both the industrial and community scales.	Project personnel, travel, vehicle, forestry equipment, food, fuel, technical supplies, safety equipment and materials	Personnel, duty travel, capital equipment, consumable materials

ACTIVITIES	INPUTS	INPUT CATEGORIES
1.4.7 <u>Conduct evaluations and competency tests.</u>	Project personnel, vehicle, forestry equipment, food, fuel, technical supplies, safety equipment and materials, competency tests and evaluation forms	Personnel, consumable materials
1.4.8 <u>Award course diplomas based on review of evaluation forms and competency tests.</u>	Project personnel, technical materials and supplies	Personnel, consumable materials
1.4.9 <u>Process, analyze &amp; synthesize participant and trainer evaluations for Final Report.</u>	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
2.1.1 <u>Schedule extension program (with focus on newly created Forest Districts and state forests) by stakeholder group.</u>	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
2.1.2 <u>Arrange travel and logistics for extension program.</u>	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
2.1.3 <u>Conduct extension events (seminars, workshops, &amp; lectures) for a total of 480 participants.</u>	Project personnel, travel and related expenses, vehicle, technical materials and supplies	Personnel, duty travel, consumable materials
2.1.4 <u>Conduct evaluations of events by stakeholder group.</u>	Project personnel, evaluation forms	Personnel, consumable materials
2.1.5 <u>Process, analyze, and synthesize evaluations for Final Report.</u>	Project personnel, office, computers, printer, office supplies; communications equipment	Personnel, consumable materials
2.2.1 <u>Annually update and peer review lesson plans, presentations, operational manuals and other training materials for courses and extension events</u>	Project personnel, external peer reviewers, office, computers, printer, office supplies; communications equipment, training and extension materials (lesson plans, lectures, presentations, graphical aids, maps, photographs, manuals, etc.)	Personnel, consumable materials
2.2.2 <u>Revise and tailor manuals and other training materials for each type of course and target audience</u>	Project personnel, office, computers, printer, office supplies; communications equipment, training and extension materials (lesson plans, lectures, presentations, graphical aids, maps, photographs, manuals, etc.)	Personnel, consumable materials
2.2.3 <u>Print all training and extension materials and refine (or prepare) all presentations for courses and extension events</u>	Project personnel, office, computers, printer, office supplies; communications equipment, training and extension materials (lesson plans, lectures, presentations, graphical aids, maps, photographs, manuals, etc.)	Personnel, consumable materials

ACTIVITIES	INPUTS	INPUT CATEGORIES
2.2.4 <u>Update IFT web page with upgraded operational and training manuals</u>	Project personnel, office, computers, printer, office supplies; communications equipment, training and extension materials (lesson plans, lectures, presentations, graphical aids, maps, photographs, manuals, etc.)	Personnel, consumable materials
2.2.5 <u>Distribute manuals and other materials to course and extension event participants</u>	Project personnel, office, computers, printer, office supplies; communications equipment, training and extension materials (lesson plans, lectures, presentations, graphical aids, maps, photographs, manuals, etc.)	Personnel, consumable materials

6. Work Plan

OUTPUTS / ACTIVITIES	Responsible	2008												2009												2010	
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		
<b>Output 1.1</b> <u>Forty technical staff and managers from the Brazilian Forest Service and state regulatory agencies with up-to-date knowledge of forest management and improved technical capacity to regulate and monitor forest management activities on public and private lands.</u>																											
<b>1.1.1</b> <u>Meet and coordinate with the federal and state agencies involved in FM and define a capacity building strategy. A primary target for this activity would be the newly created Brazilian Forest Service (SFB) who's responsibility will be FM, in the also recently created Forest Districts.</u>	IFT SFB INCRA IDEFLOR Other state agencies. IBAMA																										
<b>1.1.2.</b> <u>Training and demonstration areas prepared for specific course requirements for federal and state agencies.</u>	IFT																										
<b>1.1.3</b> <u>Conduct on-site and off-site training courses for the federal and state agencies in accordance with the particular needs of each agency defined in the capacity building strategy. IFT will tailor these courses to their specific needs in regulating and monitoring forest management activities on public and private land.</u>	IFT																										





OUTPUTS / ACTIVITIES	Responsible	2008												2009												2010													
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		
1.2.5 Conduct capacity building courses for private sector and forest communities with FM plans from the priority areas.	IFT																																						
1.2.6 Process, analyze & synthesize participant and trainer evaluations for Final Report.																																							
Output 1.3 Twelve instructors from other Training Centres with enhanced forest management technical skills and improved teaching abilities.																																							
1.3.1 In cooperation with CENAFLO define the specific training needs of the other regional training centers within the network.	IFT CENAFLO SFB																																						
1.3.2 Define a course schedule with CENAFLO for training the selected individuals from the regional training centers.	IFT CENAFLO																																						
1.3.3 Provide two intensive 2 week training courses for trainers. Courses designed not only to upgrade trainee instructors' specific FM specialty or skill set, but also include cover methods of instruction and use of training materials (e.g., lesson plans, flip charts, power point presentations and training manuals).	IFT																																						
1.3.4 Under IFT supervision, each trainee instructor will conduct a course lecture in his particular area of FM expertise using the tools he learned during the course.	IFT																																						

OUTPUTS / ACTIVITIES	Responsible	2008												2009												2010	
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Jan	Feb
1.3.5 Upon course completion, provide a written evaluation of the specialized FM knowledge and teaching ability of instructors-in-training.	IFT																										
1.3.6 Offer Internships for interested graduates of instructor training courses to hone teaching skills by working with staff at the IFT Training Centre.	IFT CENAFLO																										
Output 1.4 Increased technical capacity of 144 other stakeholders from the Brazilian Amazon (including 120 students or graduates of forestry and technical programs and 24 decision makers) to apply sound FM practices.																											
1.4.1 Training camp prepared and upgraded at the beginning of each training field season. Access infrastructure (roads, bridges, culverts) maintained and prepared for season. FM demonstration area prepared and active training site for RIL and forest management activities primed for training courses.	IFT																										
1.4.2 (Harvest plan submitted and approved by IBAMA – this activity not in project budget).	CIKEL IBAMA																										

OUTPUTS / ACTIVITIES	Responsible	2008												2009												2010																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.4.3 <u>Schedule and promote courses in consultation with Forest Technician Schools, and Forestry Universities.</u>	IFT Tec.Sch For. Univ SFB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

OUTPUTS / ACTIVITIES	Responsible	2008												2009												2010	
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
<u>evaluations for Final Report.</u>																											
<u>Output 2.1 Four hundred and eighty individuals from government (60), the private sector (150), communities (120), and educational institutions (150) with increased awareness about the feasibility and importance of forest management as an economic activity in the Brazilian Amazon. (Extension efforts will be focused in the newly created federal Forestry Districts and state forests).</u>																											
2.1.1 <u>Schedule extension program (with focus on newly created Forest Districts and state forests) by stakeholder group.</u>	IFT SFB INCRA Association																										
2.1.2 <u>Arrange travel and logistics for extension program.</u>	IFT																										
2.1.3 <u>Conduct extension events (seminars, workshops, &amp; lectures) for a total of 480 participants.</u>	IFT																										
2.1.4 <u>Conduct evaluations of events by stakeholder group.</u>	IFT																										
2.1.5 <u>Process, analyze, and synthesize evaluations for Final Report</u>	IFT																										
<u>Output 2.2 IFT's training and extension materials (lesson plans, presentations, operational and training manuals, graphical aids) updated, refined, and tailored to the specific target audiences; distributed to participants in training courses and extension events; and made accessible to the</u>																											

OUTPUTS / ACTIVITIES	Responsible	2008												2009												2010		
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb			
<u>public on IFT's web page.</u>																												
2.2.1. Annually update and peer review lesson plans, presentations, operational manuals and other training materials for courses and extension events.	IFT																											
2.2.2. Revise and tailor manuals and other training materials for each type of course and target audience.	IFT																											
2.2.3 Print all training and extension materials and refine (or prepare) all presentations for courses and extension events.	IFT																											
2.2.4 Update IFT web page with upgraded operational and training manuals.	IFT																											
2.2.5 Distribute manuals and other materials to course and extension event participants.	IFT																											

## 7. Budgets

### 7.1 Overall Project Budget by Activity (US\$)

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity	10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	ITTO	IFT/ Cenario	GRAND TOTAL
<b>OUTPUT 1.1</b>										
Forty technical staff and managers from the Brazilian Forest Service and state regulatory agencies with up-to-date knowledge of forest management and improved technical capacity to regulate and monitor forest management activities on public and private lands										
<u>1.1.1 Meet and coordinate with the federal and state agencies involved in FM to define an appropriate capacity building strategy for each one. The newly created Brazilian Forest Service (SPB), responsible for oversight of FM in Forest Districts, will be FM, in the also recently created Forest Districts.</u>	I	2,000	2,000					4,000		
	E	1,500	1,000		1,200		Q 1, Yr 1&2		3,700	7,700
<u>1.1.2 Prepare training and demonstration areas for courses designed for federal and state agencies.</u>	I	5,000	2,000	500	1,500		Q 1&2, Yr 1; Q 2-4, Yr 2	9,000		
	E	1,500	1,000	700	22,300				26,000	35,000
<u>1.1.3 Conduct on-site and off-site training courses for the federal and state agencies in accordance with the particular needs of each agency defined in the capacity building strategy. IFT will tailor these courses to agencies' specific needs in regulating and monitoring forest management activities on public and private land.</u>	I	19,000	3,000	4,500	5,500			34,000		
	E	20,000	2,000	4,500	24,100		Q 2-4, Yrs 1&2		51,200	85,200
<u>1.1.4 Conduct evaluations and competency tests.</u>	I	1,200					Q 2-4, Yrs 1&3	1,200		
	E	1,500							1,500	2,700

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity		10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	ITTO	IFT/ Censifer	GRAND TOTAL
1.1.4 Conduct evaluations and competency tests.	I	1,200						Q 2-4, Yrs 1&3	1,200		2,700
	E	1,500								1,500	
1.1.5 Process, analyze & synthesize participant and trainer evaluations for Final Report.	I	3,500						Q 1&4, Yr 2	3,500		7,500
	E	4,000								4,000	
Sub-total 1.1		I 30,700	2,000	7,000	5,000	7,000			51,700		
		E 28,500	1,100	4,000	5,200	47,600				86,400	138,100
OUTPUT 1.2											
Forty-eight practitioners from the private sector and 36 practitioners from communities with approved FM plans in the newly established forest districts (see map in Appendix Z) trained to implement sound FM practices.											
1.2.1 Liaise with and mobilize community associations, forest businessmen and producers' associations in the newly established forest districts to promote and organize training courses in sound forest management practices.	I	2,000		2,000				Q 1&2, Yr 1&2	4,000		7,000
	E	1,500		1,500						3,000	
1.2.2 Schedule specific courses (tailored to each different target audience) for training in sound forest management practices. Develop the schedule based on training priorities in each region and the specific stakeholder needs for on- and off-site courses.	I	4,000		2,000		500		Q 1, 2&4, Yr 1; Q 1&3, Yr 2	6,500		18,500
	E	4,500		2,000		5,500				12,000	
1.2.3 Select participants for each module based on training needs and priorities.	I	3,000				500		Q 2&4, Yr 1; Q 1&2 Yr 2	3,500		8,000
	E	3,500				1,000				4,500	

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity		10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	JTTO	IFT/ Cenaflo	GRAND TOTAL
1.2.4 Prepare training site for specific needs of each course and prepare training materials for off-site training courses.	I	5,000	-	2,000	500	4,700	-		12,200		
	E	5,000	100	1,500	1,000	17,400	-	Q 1&3, Yr 1&2		25,000	37,200
1.2.5 Conduct capacity building courses for representatives of companies and forest communities with FTM plans from the priority areas.	I	21,000	2,000	2,000	4,500	12,000	-		41,500		
	E	23,000	250	2,000	4,500	22,000	-	Q 3&4, Yr 1&2		51,750	93,250
1.2.6 Process, analyze & synthesize participant and trainer evaluations for Final Report.	I	3,500	-	-	-	-	-		3,500		
	E	4,000	-	-	-	-	-	Q 1&4, Yr 2		4,000	7,500
Sub-total 1.2	I	38,500	2,000	8,000	5,000	17,700	-		71,200		
	E	41,500	350	7,000	5,500	45,900	-			100,250	171,450
<b>OUTPUT 1.3</b>											
Twelve instructors from other Training Centres with enhanced forest management technical skills and improved teaching abilities.											
1.3.1 Collaborate with CENAFLO to define the specific training needs of the other regional training centers within the network.	I	1,000	-	1,500	-	-	-		2,500		
	E	1,500	-	1,500	-	-	-	Q 1, Yr 1&2		3,000	5,500
1.3.2 Define a course schedule with CENAFLO for training the selected individuals from the regional training centers.	I	4,000	-	1,500	-	2,500	-		8,000		
	E	5,000	-	1,500	-	4,000	-	Q 1&2 Yr 1&2		10,500	18,500



Based Expenses OUTPUTS, ACTIVITIES + Non-Activity	10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	ITTO	IFT/ Center	GRAND TOTAL
<u>1.3.3 Provide two intensive 2-week training courses for trainers. Courses will be designed not only to upgrade trainee instructors' specific FM specialty or skill set, but also include cover methods of instruction and use of training materials (e.g., lesson plans, flip charts, power point presentations and training manuals).</u>	I 12,000	1,000	1,000	4,500	7,900	-		26,400		
	E 18,000	300	1,000	3,000	23,500	-	Q 3&4, Yr 1; Q 3, Yr 2		45,800	72,200
<u>1.3.4 Under IFT supervision, each trainee instructor will conduct a course lecture in his particular area of FM expertise using the tools he learned during the course.</u>	I 2,000	-	-	500	2,500	-		5,000		
	E 2,000	-	-	1,000	4,000	-	Q 1,2&4, Yr 1; Q 2&3, Yr 2		7,000	12,000
<u>1.3.5 Upon course completion, provide a written evaluation of the specialized FM knowledge and teaching ability of instructors-in-training.</u>	I 2,500	-	-	-	750	-		3,250		
	E 2,500	-	-	-	1,500	-	Q 1,2&4, Yr 1; Q 2&3, Yr 2		4,000	7,250
<u>1.3.6 Offer internships for interested graduates of instructor training courses to hone teaching skills working along side staff at the IFT Training Centre.</u>	I 5,000	-	1,000	-	1,000	-		7,000		
	E 5,500	-	1,000	-	7,800	-	Q 2-4, Yr 1&2		14,300	21,300
<u>Sub-total 1.3</u>	I 26,500	1,000	5,000	5,000	14,650	-		52,150		
	E 34,500	300	5,000	4,000	40,800	-			84,600	136,750

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity	10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	ITTO	IFT/ Censfor	GRAND TOTAL
<b>OUTPUT 1.4</b>										
Increased technical capacity of 144 other stakeholders from the Brazilian Amazon (including 120 students or graduates of forestry and technical programs and 24 decision makers) to apply sound FM practices.										
1.4.1 Training camp prepared and upgraded at the beginning of each training field season. Access infrastructure (roads, bridges, culverts) maintained and prepared for season. FM demonstration area prepared and active training site for RIL and forest management activities piloted for training courses	I	10,490	1,500	579	4,100	950		17,619		
	E	2,500	3,600	500	21,600		Q 1-4, Yr 1; Q 1-3, Yr 4		29,200	46,819
1.4.2 Harvest plan submitted to and approved by IBAMA (this activity not in project budget)										
1.4.3 Schedule and promote courses in consultation with Forest Technician Schools, and Forestry Universities	I	5,000			2,500			7,500		
	E	5,000			4,000		Q 1-4, Yrs 1&2		9,000	16,500
1.4.4 Screen applications; select course participants for decision-maker courses and university level forestry courses (all participating universities are allotted a set number of openings for each course and students are selected from each based on individual merit).	I	4,000			500			4,500		
	E	4,000			1,000		Q 1-4, Yrs 1&2		5,000	9,500

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity		10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	JTTO	IFT/ Censfor	GRAND TOTAL
1.4.5. Arrange travel, lodging, etc. of participants, trainers,	I	1,600	-	1,145	-	-	-	Q 1-4, Yrs 1&2	2,745	-	5,245
	E	1,500	-	1,000	-	-	-	-	-	2,500	-
1.4.6 Conduct training courses for technicians (MF), foresters (GM), and decision-makers (TD). Although the course might be attended by up to 20 people, field activities will be conducted by groups of no more than 5-6 people. These courses cover the full range of RIL and FM activities at both the industrial and community scales.	I	53,000	1,500	2,000	15,000	21,000	-	Q 1-4, Yrs 1&2	92,500	-	187,910
	E	54,000	300	2,000	9,010	30,100	-	-	4,000	95,410	-
1.4.7 Conduct evaluations and competency tests.	I	3,000	-	-	-	1,000	-	Q 1-4, Yrs 1&2	-	-	11,500
	E	3,000	-	-	-	4,500	-	-	-	7,500	-
1.4.8 Award course diplomas based on review of evaluation forms and competency tests.	I	950	-	-	-	400	-	Q 1-4, Yrs 1&2	1,350	-	3,550
	E	1,000	-	-	-	1,200	-	-	-	2,200	-
1.4.9 Process, analyze & synthesize participant and trainer evaluations for Final Report.	I	4,000	-	-	-	500	-	Q4, Yrs 1&2	4,500	-	13,700
	E	4,000	-	-	-	5,200	-	-	-	9,200	-
Sub-total 1.4	I	82,040	1,500	4,645	15,579	30,000	950	-	134,714	-	294,724
	E	75,000	3,900	4,000	9,510	67,600	-	-	-	160,010	-

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity	10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	ITTO	IFT/Conafor	GRAND TOTAL
<b>OUTPUT 2.1</b>										
Four hundred and eighty individuals from government (60), the private sector (150), communities (120), and educational institutions (150) with increased awareness about the feasibility and importance of forest management as an economic activity in the Bra										
<u>2.1.1 Schedule extension program</u> (with focus on newly created Forest Districts and state forests) by stakeholder group.	I 10,000	-	-	-	2,500	-	Q 1, Yrs 1&2	12,500	-	-
	E 10,000	-	-	-	4,000	-	-	-	14,000	26,500
<u>2.1.2 Arrange travel and logistics for extension program.</u>	I 3,000	-	1,500	-	-	-	Q 1, 2&4, Yrs 1&2	4,500	-	-
	E 3,932	-	1,251	-	-	-	-	-	5,183	9,683
<u>2.1.3 Conduct extension events</u> (seminars, workshops, & lectures) for a total of 480 participants.	I 44,000	1,000	5,000	-	10,000	-	Q 1-2, Yrs 1&2	60,000	-	-
	E 45,500	500	2,000	-	15,000	-	-	-	63,000	123,000
<u>2.1.4 Conduct evaluations of events by stakeholder group.</u>	I 2,000	-	-	-	1,000	-	Q 1-2, Yrs 1&2	3,000	-	-
	E 2,500	-	-	-	1,500	-	-	-	4,000	7,000
<u>2.1.5 Process, analyze, and synthesize evaluations for Final Report.</u>	I 4,000	-	-	-	1,500	-	Q 2, Yrs 1-2	5,500	-	-
	E 5,000	-	-	-	2,500	-	-	-	7,500	13,000
<u>Sub-total 2.1</u>	I 63,000	1,000	6,500	-	15,000	-	-	85,500	-	-
	E 66,932	500	3,251	-	23,000	-	-	-	93,683	179,183

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity OUTPUT 2.2	10. Project Personnel	20. Sub-contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscellaneous	Quarter	ITTO	IFT/Cenafar	GRAND TOTAL
IFT's training and extension materials (Lesson plans, presentations, operational and training manuals, graphical aids) updated, refined, and tailored to the specific target audiences; distributed to participants in training courses and extension events; a										
2.2.1 Annually update and peer review lesson plans, presentations, operational manuals and other training materials for courses and extension events	I	4,000	-	2,000	-	-	-	8,000	-	-
	E	4,500	-	-	3,000	-	Q 1, Yr 1, Q 1&2, Yr 2	-	7,500	15,500
2.2.2 Revise and tailor manuals and other training materials for each type of course and target audience	I	8,000	607	-	2,000	-	-	10,607	-	-
	E	8,000	-	-	5,500	-	Q 1&2, Yr 1&2	-	13,500	24,107
2.2.3 Print all training and extension materials and refine (or prepare) all presentations for courses and extension events	I	3,000	-	-	4,035	-	-	7,035	-	-
	E	3,000	530	-	8,400	-	Q 1-3, Yr 1&2	-	11,930	18,965
2.2.4 Update IFT web page with upgraded operational and training manuals	I	1,500	-	-	500	-	-	2,000	-	-
	E	2,000	500	-	1,599	-	Q 2, Yr 1; Q 1, Yr 2	-	4,099	6,099
2.2.5 Distribute manuals and other materials to course and extension event participants	I	1,000	-	-	1,000	-	-	2,000	-	-
	E	1,500	-	-	3,500	-	Q 1-4, Yr 1-2	-	5,000	7,000
Sub-total 2.2	I	17,500	607	2,000	-	-	-	29,642	-	-
	E	19,000	1,030	-	21,999	-	-	-	42,029	71,671
Sub-Total Activities ITTO										
	I	258,240	8,107	33,145	30,579	93,885	950	424,906	-	-
Sub-Total Activities IFT										
	E	245,432	7,180	23,251	24,210	246,899	-	-	566,972	991,878
Sub-Total Activities										
		523,672	15,287	56,396	54,789	340,784	950	-	-	991,878

Based Expenses OUTPUTS, ACTIVITIES + Non-Activity	10. Project Personnel	20. Sub- contracts	30. Duty Travel	40. Capital Items	50. Consumable Items	60. Miscella- neous	Quarter	ITTO	IFT/ Cenallor	GRAND TOTAL
<b>Non-Activity Based Expenses</b>										
Project Accountant	E	23,856	-	-	-	-	-	-	23,856	23,856
Office equipment & supplies	E	-	-	-	10,415	-	-	-	10,415	10,415
Independent Audit	I	-	6,000	-	-	-	-	6,000	-	6,000
Contingency & petty cash	I	-	-	-	-	2,050	-	2,050	-	2,050
Insurance	I	-	-	-	-	2,844	-	2,844	-	2,844
Sub-Total Non-Activity ITTO	I	-	6,000	-	-	4,894	-	10,894	-	-
Sub-Total Non-Activity IFT	E	23,856	-	-	10,415	-	-	-	34,271	45,165
Sub-Total Non-Activity		23,856	6,000	-	-	4,894	-	-	-	-
<b>Sub-Total ITTO</b>										
Sub-Total ITTO		258,240	14,107	33,145	30,579	93,885	-	435,800	-	-
Sub-total IFT		289,288	7,180	23,251	24,210	257,314	-	-	601,243	1,037,043
TOTAL		547,528	21,287	56,396	54,789	351,199	5,844	-	-	1,037,043

I – contribution of the ITTO  
E – contribution of the Executing Agency

## 7.2 Yearly Project Budget by Source

### Yearly project budget by source – ITTO

Annual Disbursements				
BUDGET COMPONENTS		TOTAL	Year 1	Year 2
10	Project Personnel (salary + legal burden)	258.240	129.120	129.120
20	Sub-Contracts	14.107	4.053	10.054
30	Duty Travel	33.145	16.573	16.573
40	Capital Items	30.579	30.579	-
50	Consumable Items	93.885	46.943	46.943
60	Miscellaneous	5.844	2.922	2.922
Sub-Total 1		435.800	230.189	205.611
80	ITTO Administration, Monitoring & Evaluation			
81	Monitoring & Evaluation	20.000		
82	Ex-post evaluation	15.000		
83	Program Support Costs ( 8% of ITTO portion)	37.664		
Sub-Total 2		72.664		
ITTO TOTAL		508.464		

### Yearly project budget by source – Executing Agency (IFT)

Annual Disbursements				
BUDGET COMPONENTS		TOTAL	Year 1	Year 2
10	Project Personnel (salary + legal burden)	289.288	144.644	144.644
20	Sub-Contracts	7.180	3.590	3.590
30	Duty Travel	23.251	11.626	11.626
40	Capital Items	24.210	12.105	12.105
50	Consumable Items	257.314	128.657	128.657
60	Miscellaneous	-	-	-
70	Ex. Agency Mgt Total	67.408	34.378	33.030
Sub-Total 1		668.651	335.000	333.651
80	ITTO Administration, Monitoring & Evaluation			
84	ABC Monitoring Costs	10.000	5.000	5.000
Sub-Total 2		10.000	5.000	5.000
Executing Agency / Host Gov't Total		678.651	340.000	338.651

### 7.3 Consolidated Yearly Project Budget (US\$)

	BUDGET COMPONENT	Qr.	Unit Cost Month	UNIT Months	TOTAL	ITTO funding	IFT counterpart	Year 1	Year 2
10	<b>Project Personnel (salary + legal burden)</b>								
11	<b>National Experts</b>								
	11.1 Project Director	1	8,125	6	48,750	48,750	0	24,375	24,375
	11.2 Forest Operations Manager	1	4,780	11	52,580		52,580	26,290	26,290
	11.3 Senior Forester	1	3,072	11	33,792	33,792	0	16,896	16,896
	11.4 Forester	1	2,676	11	29,436		29,436	14,718	14,718
	11.5 Executive Assistant	1	3,678	6	22,068	22,068	0	11,034	11,034
	11.6 Course Coordinator	1	1,399	11	15,389	15,389	0	7,695	7,695
	11.7 Technician Instructor I	2	2,543	11	55,946		55,946	27,973	27,973
	11.8 Technician Instructor I	1	2,543	11	27,973	27,973	0	13,987	13,987
	11.9 Technician Instructor II	1	2,237	11	24,607		24,607	12,304	12,304
	11.10 Technician Instructor II	1	2,237	11	24,607	24,607	0	12,304	12,304
	11.11 Technician Instructor III	1	1,480	11	16,280	16,280	0	8,140	8,140
	11.12 Operator Instructor I	1	1,438	11	15,818	15,818	0	7,909	7,909
	11.13 Operator Instructor II	3	1,183	11	39,039		39,039	19,520	19,520
	11.14 Operator Instructor III	1	1,668	11	11,748	11,748	0	5,874	5,874
	<b>Sub-total National Experts</b>	<b>17</b>			<b>418,033</b>	<b>216,425</b>	<b>201,608</b>	<b>209,017</b>	<b>209,017</b>
12	<b>ITTO Project Administration Personnel</b>								
	12.1 Course Logistics & Materials Coordinator	1	4,791	6	28,746		28,746	14,373	14,373
	12.2 Accountant	1	3,976	6	23,856		23,856	11,928	11,928
	<b>Sub-total Project Administration Personnel</b>	<b>2</b>			<b>52,602</b>	<b>0</b>	<b>52,602</b>	<b>26,301</b>	<b>26,301</b>
13	<b>Consultants</b>								
					0		0		0
	<b>Sub-total Consultants</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
14	<b>Other Labor</b>								
	14.1 Camp Nurse for major courses	1	213	6	1,278	1,278	0	639	639
	14.2 Cook I	1	846	11	9,306	9,306	0	4,653	4,653
	14.3 Cook II	1	763	11	8,393	8,393	0	4,197	4,197
	14.4 Drivers I	1	778	11	8,558		8,558	4,279	4,279
	14.5 Drivers I	1	778	11	8,558	8,558	0	4,279	4,279
	14.6 Traditional Harvest Specialist	1	122	6	732	732	0	366	366
	14.7 Para-Botanist	1	258	6	1,548	1,548	0	774	774
	14.8 Rural Labor	6	442	10	26,520	0	26,520	13,260	13,260
	<b>Sub-total Other Labor</b>	<b>13</b>			<b>64,893</b>	<b>29,815</b>	<b>35,078</b>	<b>32,447</b>	<b>32,447</b>
16	<b>International Experts</b>								
	16.1 Science Support & Technical Materials Specialist and Reporting Supervisor (bilingual)	1	1,000	12	12,000	12,000	0	6,000	6,000
	<b>Sub-total International Experts</b>	<b>1</b>			<b>12,000</b>	<b>12,000</b>	<b>0</b>	<b>6,000</b>	<b>6,000</b>
19	<b>Personnel Total</b>	<b>33</b>			<b>547,528</b>	<b>258,240</b>	<b>289,288</b>	<b>273,764</b>	<b>273,764</b>
20	<b>Sub-Contracts</b>								
	21 Translation Services				8,107	8,107	0	4,054	4,054
	22 Printing Services				7,180	0	7,180	3,590	3,590
	24 Independent Audit				6,000	6,000	0	0	6,000
29	<b>Sub-Contracts Total</b>				<b>21,287</b>	<b>14,107</b>	<b>7,180</b>	<b>7,644</b>	<b>13,644</b>



			Unit Cost Month	UNIT Months	TOTAL	ITTO funding	IFT counterpart	Year 1	Year 2
	<b>BUDGET COMPONENT</b>	<b>Qt.</b>							
30	Duty Travel								
31	Trainer DSA				6.714	6.714	0	3.357	3.357
32	Transport Costs - IFT operational				9.576		9.576	4.788	4.788
	Travel & Lodging IFT operational				13.675		13.675	6.838	6.838
	Travel & Lodging IFT extension program				10.675	10.675	0	5.338	5.338
34	Trainee Transport				15.756	15.756	0	7.878	7.878
39	Duty Travel Total				56.396	33.145	23.251	28.198	28.198
40	Capital Items								
41	IFT equipment depreciation (2 yrs): 1 Toyota Hilux, 1 Toyota Bandeirante, 1 Mercedes Truck, 2 MWM Generators				24.210	0	24.210	12.105	12.105
42	Trade-in of Mitsubishi L-200 (4 X 4) pick-up field vehicle for replacement in 2008 less trade-in value of present vehicle				30.579	30.579	0	30.579	0
49	Capital Items Total				54.789	30.579	24.210	42.684	12.105
50	Consumable Items								
51	Materials								
51.1	Safety equipment, medicines, & 1st aid for courses participants				5.425	5.425	0	2.713	2.713
51.2	Safety equipment, medicines, & 1st aid for training crew				6.443		6.443	3.222	3.222
51.3	Technical materials for courses				7.371	7.371	0	3.686	3.686
51.4	Office equipment & supplies				10.415		10.415	5.208	5.208
51.5	Course and extension materials				14.575	14.575	0	7.288	7.288
51.6	Fuel & lubricants - operations		2.013	11	22.143	0	22.143	11.072	11.072
51.7	Fuel & lubricants - training courses				16.250	16.250	0	8.125	8.125
51.8	Food & supplies - IFT operational				28.006		28.006	14.003	14.003
51.9	Food & camp supplies for courses				30.908	30.908	0	15.454	15.454
52	Equipment rental								
52.1	CAT D-6L Tractor	1	5.493	9	49.437	0	49.437	24.719	24.719
52.2	CAT 525 Wheeled Skidder	1	6.866	8	54.928	0	54.928	27.464	27.464
52.3	CAT 938G Loader	1	5.493	8	43.944	0	43.944	21.972	21.972
52.4	Chainsaws Andreas Stihl, S.A.	3	102	9	2.754	0	2.754	1.377	1.377
53	Maintenance & repairs								
53.1	Training camp infrastructure				8.746	0	8.746	4.373	4.373
53.2	Trainee vehicles				19.356	19.356	0	9.678	9.678
53.3	Operational vehicles				19.222		19.222	9.611	9.611
54	Course promotion and communication				11.276		11.276	5.638	5.638
59	Consumables Total				351.199	93.885	257.314	175.600	175.600
60	Miscellaneous								
61	Contingency & petty cash				3.000	3.000	0	1.500	1.500
63	Trainee insurance	316		9	2.844	2.844	0	1.422	1.422
69	Miscellaneous Total				5.844	5.844	0	2.922	2.922
70	Ex. Agency Mgt Costs (6.5% of Activity Budget)				67.408	0	67.408	34.378	33.030
79	Ex. Agency Mgt Total				67.408	0	67.408	34.378	33.030
	Sub-total				1,104,451	435,800	668,651	565,189	539,262
80	ITTO Administration, Monitoring & Evaluation								
81	Monitoring & Evaluation				20.000	20.000	0	10.000	10.000
82	Ex-post evaluation				15.000	15.000	0		15.000
83	Program Support Costs ( of ITTO portion)				37.664	37.664	0	13.354	13.836
84	ABC Monitoring Costs				10.000	0	10.000	5.000	5.000
89	ITTO Administration Total				82.664	72.664	10.000	30.354	43.836
99	GRAND TOTAL				1,187,115	508,464	678,651	595,543	583,098

#### **7.4 Budget explanation**

**Assessment by the Thirti-fourth Panel for proposal PD 432/06 Rev.1 regarding financial and budget aspects of the project are addressed as follows:**

1. **The Panel recommended (No. 1) that the time frame of the budget be extended from 18 to 24 months without increasing the budget.**
  - **The period in the proposal was extended from 18 to 24 months.**
  - **The ITTO portion of the budget was not changed.**
  - **However, since the original budget was proposed 18 months ago, it has increased by 30% because of:**
    - **The devaluation of the exchange rate between the US\$ : Br. Real, caused a 16% increase in the budget, and**
    - **The Inflation rate over the past 18 months, which accounted for an additional 8%. The costs of fuel and air travel increased at a higher rate.**
  - **All the increases have been allocated to the counterpart budget, including the shift of the ABC monitoring costs from ITTO to Counterpart funding as per recommendation No. 7.**
2. **The Panel recommended (No. 6) that we justify van rental and the purchase of a vehicle or eliminate these to reduce the budget.**
  - **We reduced the total budget allocation for these line items from \$94,600 to \$46,335.**
  - **The van rental is needed to transport the course participants between Belém and the training site, which is a 435 Km highway trip. The law does not allow us to transport personnel in a truck on the highway.**
  - **The vehicle cost was reduced considerably by maintaining the old truck and trading in a smaller student support vehicle. The resale value was discounted from the vehicle cost.**
3. **The national monitoring costs (No. 7) were transferred from the ITTO to the counterpart budget in agreement with ABC/MRE.**
4. **In a telephone conversation with Mr. John Leigh, it was agreed that the audit costs (No. 8) would be maintained in the ITTO budget because other IFT donors are not willing to pay for this cost associated with the ITTO project.**
5. **We revised the budget and provided the additional detail (broken down by ITTO and IFT counterpart funding) requested in recommendation (No. 9.) All personnel details (both for the ITTO and the counterpart budget) are provided by unit costs and identified by person. The terms of reference for key project personnel is attached in Annex B.**

## PART III. OPERATIONAL ARRANGEMENTS

### 1. Management Structure

The project steering committee will comprise one representative of ITTO, ABC, IFT and IBAMA (CENAFLO is an operational unit of IBAMA) and the newly created Brazilian Forest Service (SFB).

The IFT is the lead executing agency. Its Executive Director will act as project coordinator and will be responsible for project implementation. IFT staff will administer the project. Cenaflo will nominate one of its staff as its technical representative for the project. A bimonthly project meeting will be held (this may be virtual) to review progress and confirm plans for the following period. The project coordinator will produce a Note of the Meeting recording key points.

### 2. Monitoring, Reporting and Evaluation

Timetable	
Description	Dates
1. Project initiation	1. 15 March 2008
2. First Project Progress Report	2. 1 October 2008
3. Steering committee meeting	3. 15 February 2009
4. Second Progress report	4. 1 April 2009
5. Third Progress report	5. 1 October 2009
6. Project Completion report	6. 15 May 2010

#### *Project progress reports*

The IFT project coordinator will prepare and submit project semester progress reports. Financial reports will be prepared monthly for internal management purposes and a summary provided with the semester progress reports at per the ITTO reporting manual.

#### *Project completion report*

IFT will prepare and submit the project completion report to ITTO within two (2) months of project completion.

#### *Project technical reports*

IFT maintains its training documentation on its website. Updates of this documentation arising from this project will be produced as necessary and made public through the website.

### ***Monitoring, review and steering committee visits***

The steering committee will meet during the ITTO monitoring mission.

### ***Evaluation***

The project will be subject to *ex-post* evaluation in accordance with Guidelines established by the ITTO Manual of Project Monitoring, Review and Evaluation.

## **3. Future Operation and Maintenance**

### ***Continued use of assets***

The IFT will continue to use the assets provided for the same purposes. IFT will provide the standard ITTO request after project completion to maintain the assets if as expected the project has continuity.

### ***Continuation of program following project termination***

Demand for the training proposed in this project will probably continue to increase as government policies to stimulate legal access to forest resources take effect.

The proposed program supports the Brazilian government agency, CENAFLO, in its objective of promoting the adoption of good forest management and reduced impact logging practice through strengthening and directing its training programme in line with national forest policies based on the accumulated experience of IFT.

This official program of support to sustainable forest management in the Brazilian Amazon will continue following project termination. The IFT will also continue as a primary part of the network of forestry training centres idealized by the government and will continue to seek investments from national and international sources to support its training program.

The Brazilian Forest Service and CENAFLO will be encouraged to coordinate a proposal for training to ITTO's thematic program. This should have a participatory design phase and seek significant investment so that gains in forest governance in the region can be consolidated and are replicated throughout the region.

IFT was conceived after 10 years of forest management, demonstration, research, training, and capacity building by FFT. The concept behind the establishment of IFT was to develop a permanent Brazilian entity which would continue to build on the now 12 years of experience in the Brazilian Amazon. From the figures in the appendix, it can be noted that the number of participant has increased each year and the demand was never satisfied. The emphasis of the program also changed from a RIL program to a Forest Management program which did not only consider forest industry but at present also deals with community forestry and the small producer.

Within the national framework the continued work has a strong demand in the newly developed program by the Brazilian Forest Service in the creation of the "Forestry District" in addition to the decentralization of forest management on private land which is now the responsibility of each state. Both the GoB and a number of states have sought the services of IFT. On an international scale some other Amazon basin countries have requested IFT services and IFT has sent training instructors to various countries. In addition the program with ACTO (OTCA) which was instituted has provided very good results in the training and capacity building of decision makers from the 8 member countries making IFT a point of reference for FM-RIL capacity building and training.

Although financing is always a problem, considering the importance and the demand, IFT is confident that future financing will be available for a continuous program of sustainable forest management development in the Amazon Basin.

#### **PART IV. THE TROPICAL TIMBER FRAMEWORK**

##### **1. Compliance with ITTA Objectives**

This project proposal is consistent with the following ITTA objectives:

- To contribute to the process of sustainable development;
- To enhance the capacity of members to implement a strategy for achieving exports of tropical timber and timber products from sustainably managed sources by the year 2000;
- To promote and support research and development with a view to improving forest management and efficiency of wood utilization as well as increasing the capacity to conserve and enhance other forest values in timber producing tropical forests;
- To encourage members to support and develop industrial tropical timber reforestation and forest management activities as well as rehabilitation of degraded forest land, with due regard for the interests of local communities dependent on forest resources;
- To encourage members to develop national policies aimed at sustainable utilization and conservation of timber producing forests and their genetic resources and at maintaining the ecological balance in the regions concerned, in the context of tropical timber trade; and

##### **2. Compliance with ITTO Yokohama Action Plan**

This project is in compliance with the action plan strategy in shifting focus from the development of national forest policies and legislation toward implementation on the ground, especially at the forest management unit level. This would include, for example: supporting efforts to strengthen forest law enforcement; more training and capacity building; and wider application of reduced impact logging (RIL). The project's central concern is to enable field implementation of SFM by building capacity amongst the key implementers of SFM and the key government bodies involved in SFM regulation.

It supports the following cross-cutting actions:

- Encourage and assist producing member countries to identify and address constraints in their implementation of sustainable forest management and the sustainable development of the forest industry to enhance the contribution of the forest sector to national objectives;
- Enhance public relations, education and outreach activities in order to better raise awareness of the purpose and activities of the Organization and of the fact that sustainable forest management can be an economically, socially and environmentally viable land use;
- Support the sharing of information, knowledge and technology to improve sustainable forest management, product processing, utilization and understanding of the marketplace as related to ITTO's priorities

- Support demonstration and pilot projects in all areas of its substantive work, especially on a regional basis; and

The project supports the following goals and actions within the Reforestation and Forest Management section:

**GOAL 1: Support activities to secure the tropical timber resource base**

- Support the effective enforcement of forest laws and regulations that ensure sustainable forest management and secure the production base;
- Encourage members and assist them, where appropriate, to:
  - Secure the forest resource base through the implementation of forest policy, legislation and associated strategies, revised and updated where appropriate, which address:
    - National guidelines and regulations for forest utilization which ensure local stakeholder rights and secure conservation and environmental services.
  - Identify and prevent irregular forestry activities; and
  - Identify shortcomings in enforcement of forest laws and regulations, and overcome them.

**GOAL 2: Promote sustainable management of tropical forest resources**

- Promote the implementation of ITTO guidelines and C&I and review and improve these as necessary;
- Promote the implementation of sustainable forest harvesting, including RIL;
- Establish and promote the implementation of an auditing system for ITTO's Criteria and Indicators for Sustainable Management of Natural Tropical Forests; and
- Encourage members and assist them, where appropriate, to:
  - Implement appropriate forest harvesting, including RIL, as a component of sustainable forest management;
  - Apply the ITTO C&I, and, if necessary, adapt them for national and regional use; and
  - Strengthen training institutions and intensify training of forestry personnel and other stakeholders in silviculture, RIL and resource assessment, and in the management of both natural forests and timber plantations.

## ANNEX A. EXECUTING AGENCY PROFILE

### 3.1 The Expertise of the Executing Agency

The IFT is a non-governmental organization whose mission is to promote sustainable development by promoting the adoption of good forest management practice in the Amazon region contributing to the improvement of the quality of life of its population and the conservation of its natural resources.

IFT promotes and improves forest management in the Amazon through a unique programme that integrates training, extension, and applied research. IFT provides hands-on training and capacity building that promotes better stewardship of forest resources and continually upgrades forest management practices through applied research. IFT is widely recognized for helping to initiate reduced impact logging across the Amazon.

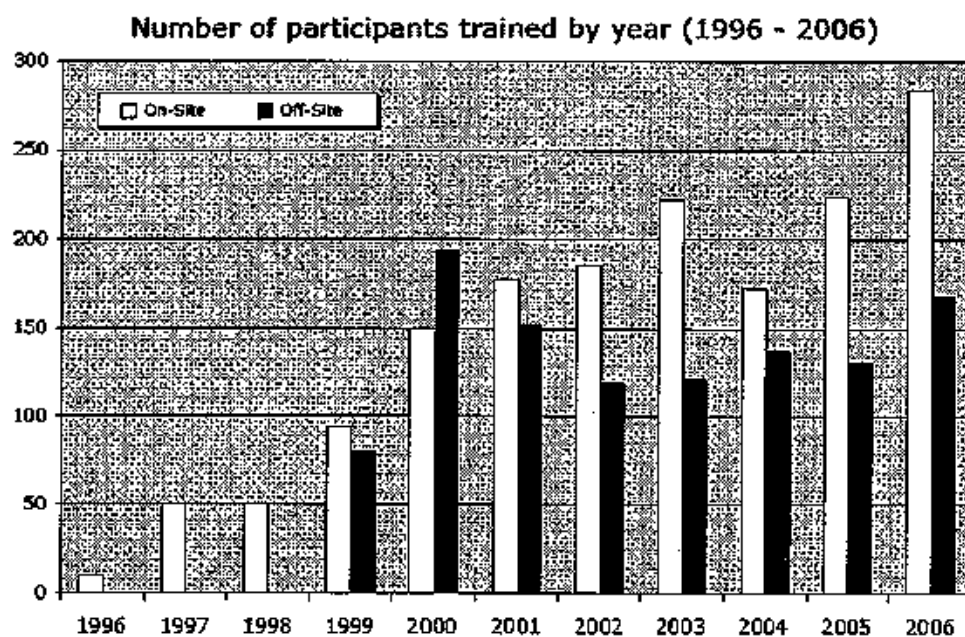
IFT's training programme embraces all facets of forest management and production from traditional manual systems, mechanized operations, and harvest planning to the oversight of a vertically integrated forestry operation, and from small individual or community operations to large-scale industrial production. The training consists of practical, hands-on courses tailored to different target groups. The courses are offered at IFT's principal training centre in eastern Pará as well as in community or private company forests. The training programme is also dynamic and adaptive; it has evolved to incorporate lessons from applied research and expanded to include a broader array of objectives including NTFPs and multiple-use forest management.

IFT has experience of training diverse target groups (Fig 1). At present, IFT annually trains 300 to 350 people (Fig 2) of which about 20% are from communities. The long term average for communities is lower (7%), as courses tailored for communities began in 2001. The largest percentage of trainees is from the forestry technical schools. These forestry technical schools were only established in the Brazilian Amazon after IFT initiated the training programme and the IFT training programme is part of the study programme of all schools. The demand for the graduate technicians is high due to the IFT extension programme in Forest Management and many of these forest technicians come from the interior and small communities. The proportion of female trainees has remained constant at 20%, of which 55% are from technical schools and universities.

One additional target group is the land owners who want to have their forests "certified". At present all the 7 enterprises whom are FSC certified in the Brazilian Amazon have had training by IFT, which comprises over 1,800,000 ha. of forest land under good forest management practices.

Over the the past 11 years IFT/FFT have concentrated on Forest Management and Reduced Impact Logging in the form of demonstration models, training, capacity building and extension events. These activities have in part taken place at the Cauaxi training site but also to a great extent in other locations (Fig 3). Not only in the Brazilian Amazon but also in ther Amazon Basin countries. During this period over 3,500 participants have taken part of the hands on training events offered by IFT/FFT.

**Figure 1**



**Figure 2**

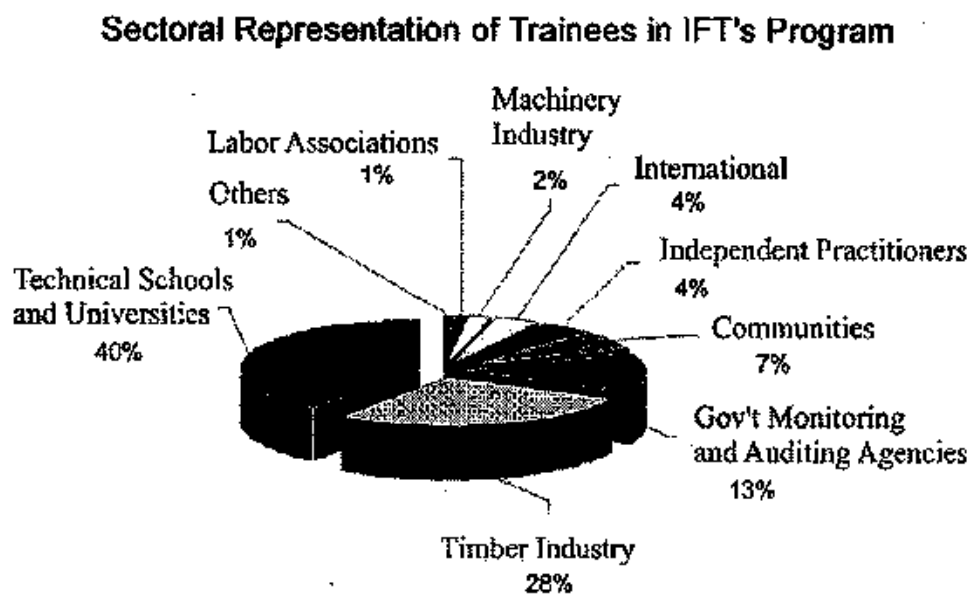
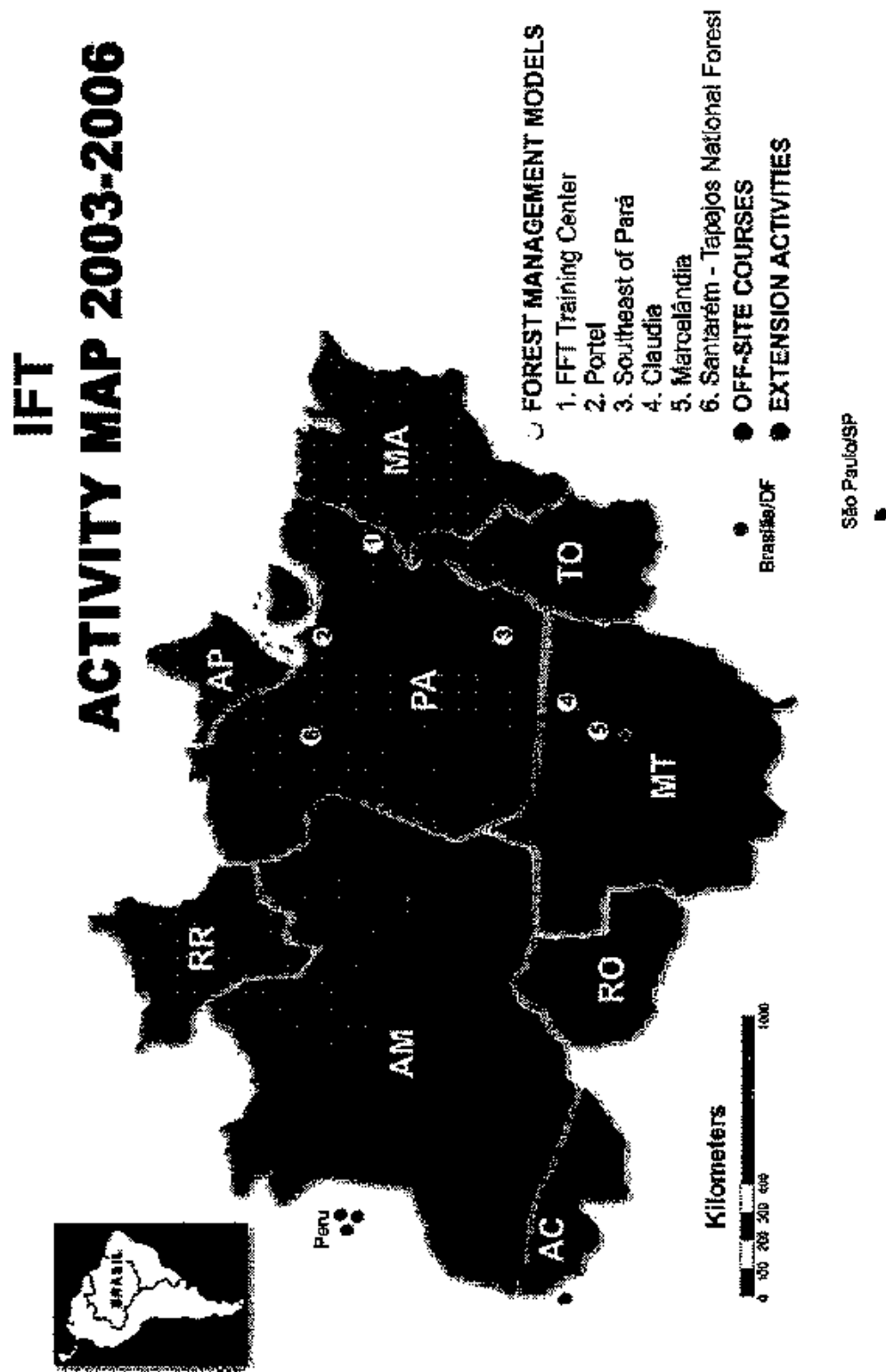


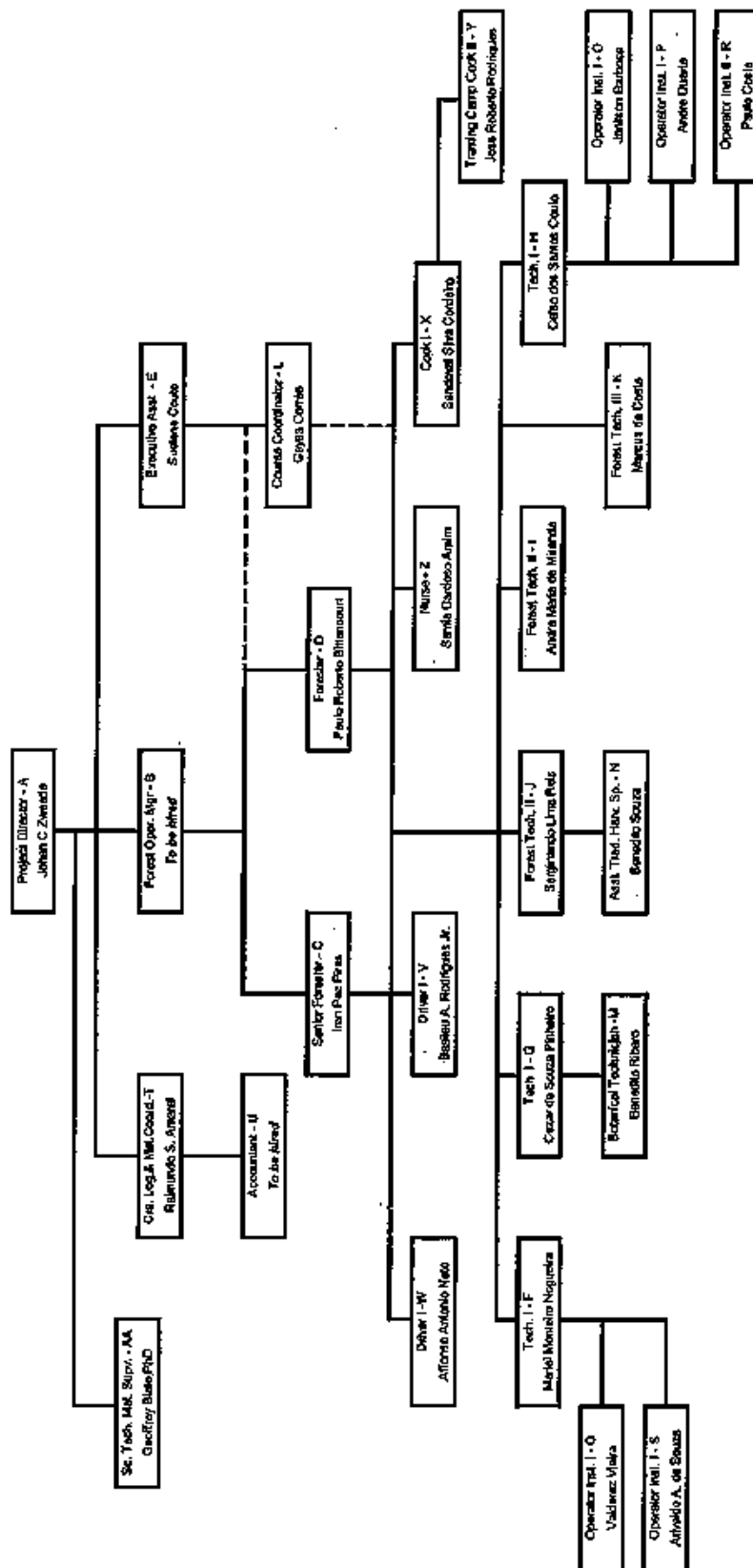


Figure 3



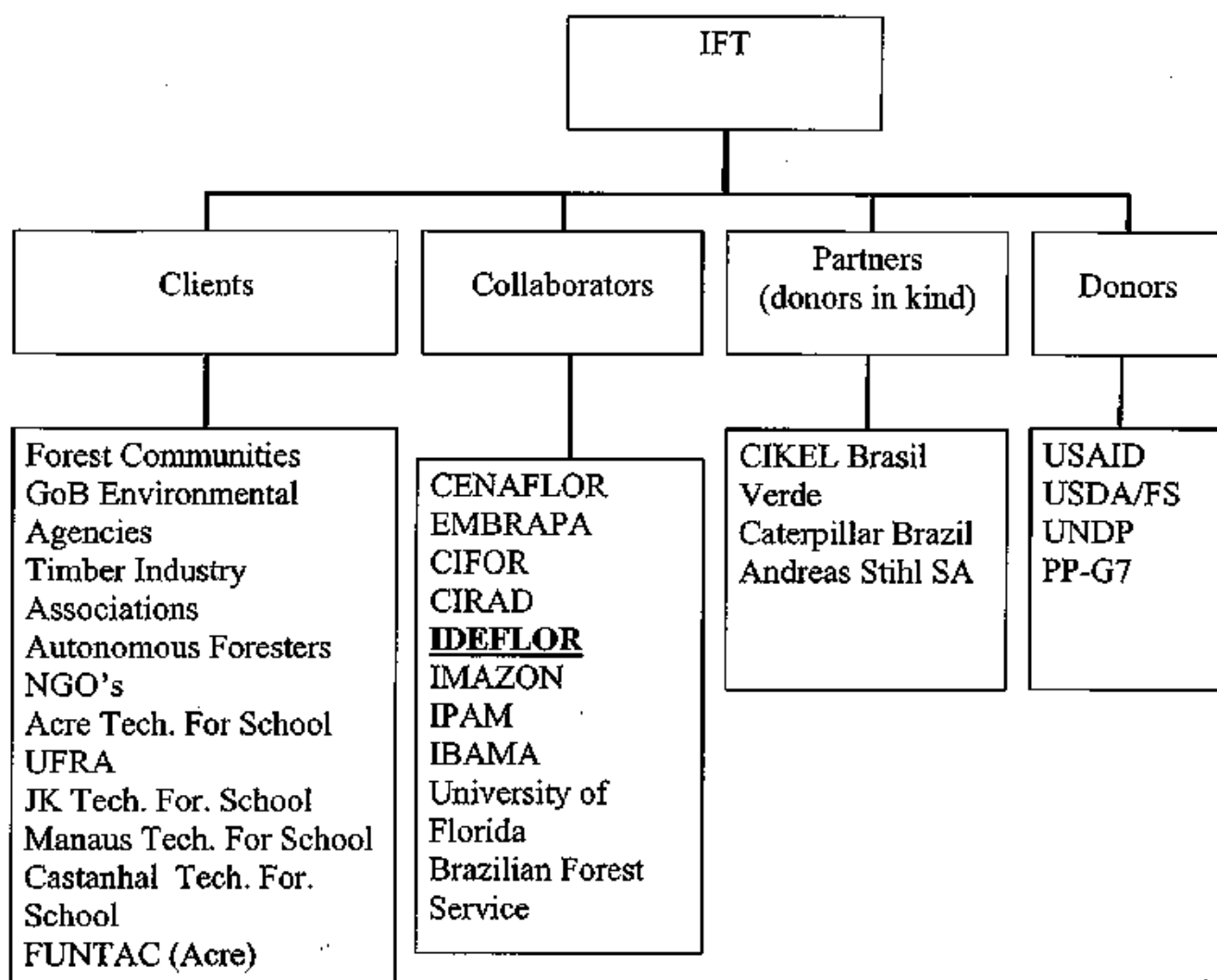
IFT's internal organizational chart is given in Figure 4 and its relationship with partners in Figure 5 below. This structure enables it to carry out a training programme for approximately 350 people per year.

**Figure 4** IFT Organizational chart



[ ] = Project staff in ITTO Budget (letter right top indicates TOR)  
 [ ] = Project staff FFT counterpart funds (letter right top indicates TOR)  
 NOTE: field support and rural laborers (Clique counterpart) for training program are not included.

**Figure 5 IFT partners**



The main projects conducted by IFT in the last 3 years and the Donor agencies which are financing them are given in the following table.

	Project Title	Donor
1	Research and implementation of Forest Management Models – training and extension in the Brazilian Amazon	US Forest Service
2	Socio-economic development and forest management in the new arteries of the Amazon	USAID (Green Highways Consortium)
3	Sustainable Communities and Landscapes: A Proposed Programme to Sustain Natural Ecosystems and Enhance Local Livelihoods in Brazil's Amazon and Atlantic Forest Regions	USAID (Alpha Consortium)
4	Improving acceptance of forest sector stakeholders for the use of new technologies in forest management project administration and reduced impact logging.	Promanejo-PPG7-Brazil
5	Disseminate, train and develop capacity in the technical viability of forest management and reduced impact logging in the Amazon region.	Promanejo-PPG7-Brazil
6	Support for the consolidation of the IFT's Training Centre at the Cauaxi holding.	Promanejo-PPG7-Brazil
7	Establish a community forest management model to include NTFP and support training activities with selected in-migrant communities	Government of The Netherlands
8	Project contract with ACTO (OTCA) for decision maker training courses for the 8 member countries.	ACTO - GoB

#### List of Projects and Projects submitted to the ITTO

As the Fundação Floresta Tropical<sup>5</sup> the following ITTO funded projects have been implemented

- 1) 2003-2005 Development of human resources in sustainable forest management and reduced impact logging in the Brazilian Amazon PD 206/03 (F)
- 2) 1998-2000, On-Site Training for Tropical Foresters and Forestry Trainers PD 45/97 Rev.1 (F).

### 3.2 The Infrastructure of the Executing Agency

The IFT training camp and associated equipment and machinery, located at Cauaxi, Paragominas, Pará, is a key resource for tropical forestry training, extension and research. It has 2800 hectares of demonstration forest with research studies and management models from 1-12 years old. There are a further 3200 hectares available for new training events. Mechanized logging machinery and other forestry equipment enable different forest management options to be taught with hands-on experience. A new area was established for training in community forestry and includes simplified harvesting of wood products and NTFP. The camp has recently renovated lodging and teaching facilities (600 m2) with computing facilities (8 laptops and

<sup>5</sup> IFT was officially established in 2002, as the successor organization of Fundação Floresta Tropical (FFT-Brazil), a major program established in 1995 in Brazil by the International Tropical Forest Foundation. FFT-Brazil sought to accelerate the adoption of forest management and reduced-impact logging (RIL) techniques across the Amazon through practical training, demonstration, and applied research. As the program matured, this goal expanded and the need for a uniquely Brazilian entity emerged. FFT/IFT's success is based on this history and the broad engagement of private landowners, industry, the conservation community, government agencies, and donors.

printer), internet communication and diverse small forestry equipment such as GPS, measuring tapes etc.

Logging equipment includes one skidder, one D6M tractor and one front-end loader located in Cauaxi through partnership with Caterpillar Brasil SA and five chainsaws through partnership with Andreas Stihl SA. Vehicles for transport include one 4WD ½ ton truck, one ¾ ton personnel transport truck, one mini-van, and one 4WD pick up truck.

Cikel Verde S.A. supports the program through in-kind donation of the land, fuel, maintenance of equipment, and forest laborers at the Cauaxi site.

The IFT headquarters in Belém, Pará has 200 sq m of office space furnished with fax, multi-functional photocopier, telephone exchange, 3 laptops and 12 computers and a server in wireless network and 5 printers. Material storage facilities and meeting room.

### 3.3 Budget

IFT's budget for the last three years is given in the following table. However, it should be considered that this budget was during the FFT/IFT transition phase. The combined budget for the two entities is approximately \$ 1,000,000 annually. During the transition phase there was no distinguished operational difference between the two entities. It should also be considered that FFT will phase out by the end of 2007 and all activities will be performed by IFT which will include the total budget. This does not consider in-kind donations from partners (see Fig. 5)

	IFT - Annual Budget US\$		
	2003	2004	2005
Personnel	112,045	236,671	447,016
Travel costs	14,850	41,964	46,157
Capital items	452	32,930	25,482
Consumables	43,769	106,622	160,576
Others	88	2,180	27,199
Total	171,204	420,367	706,430

### 3.4 Personnel

Level	Number
Post-graduation degree	1
Graduation degree	7
Middle level technician instructors	6
Technician operator instructors	5
Field support personnel	7
Administrative personnel	1
Other – in kind field workers	6
Total staff in forestry related activities	33

## **ANNEX B. TERMS OF REFERENCE OF KEY PERSONNEL**

### **ITTO Project National Experts**

#### **TOR - A**

##### **Function: General Director**

**Title:** Project director

##### **Qualifications:**

- Degree in Forestry and Forest Management
- 30 years of direct forest management experience in the Brazilian Amazon with expertise in reduced impact logging
- 25 years experience in project management, personnel management and training
- Specific experience working with – and creating linkages among – government, industry, NGOs and international development institutions
- Fluent in Portuguese and English, Spanish desirable

##### **Responsibilities:**

- Manage and supervise all project activities including preparation, training, evaluation and follow-up
- Manage and supervise all project personnel
- Manage project finances and supervise accounting
- Supervise selection of course participants
- Meet with Steering Committee to review results and at other times as needed
- Meet with independent auditor to review financial accounts
- Approve purchase of all capital items
- Supervise and approve acquisition and transport of all equipment and materials
- Supervise development of training materials
- Approve progress reports
- Report to Board of Directors and Donors

## **TOR - B**

### **Function: Forest Operations Manager**

**Title:** Forester

#### **Qualifications:**

- Professional with 6 years of experience in tropical forestry and in education or training
- Specific forest management and RIL experience in the Brazilian Amazon.
- Specialization in community forest management and small riverine producers.
- Minimum 5 years experience in project coordination and administration
- Strong communication and organizational skills
- Proven leadership abilities
- Proven abilities to coordinate and negotiate with key stakeholders including government agency officials
- Fluent in Portuguese and Spanish, English desirable

#### **Responsibilities:**

- Substitute for the Director in his absence
- Coordinate logistical and technical aspects of project (establishing contact with applicants, communicating with candidates, helping schedule courses, updating course content and materials, compiling/distributing course evaluation and trainee recommendations)
- Maintain dialogue between FFT, the Steering Committee and ITTO
- Coordinate courses and extension activities
- Responsible for fulfilling course requirements
- Write progress reports in accordance with ITTO guidelines
- Assist in participant selection process
- Assist in development of training materials
- Provide lectures on costs & benefits of FM-RIL
- Provide lectures on community forestry and small producers
- Coordinate production of training materials
- Assist in development of course promotional materials
- Assist in the coordination of technical and operational materials.
- Help acquire imported technical and safety equipment

## **TOR - C**

### **Function: Senior Forester**

**Title:** Senior Forester

#### **Qualifications:**

- Brazilian national
- Fluent in Portuguese, Spanish desirable
- Minimum 3 years experience in administration of forestry activities, forest management, forest harvesting and silviculture in the Amazon

- Experience in the function of forest harvesting equipment and implementation of RIL operations
- Knowledge and experience in data collection and processing
- Good communication skills and proven capacity to train others
- Experience conducting seminars and giving lectures
- Proven ability to manage and relate to employees
- Knowledge of and ability to enforce safety and hygiene regulations

**Responsibilities:**

- Coordinate and directly participate in field activities
- Coordinate and participate in data processing and analysis
- Participate in the development of training materials
- Assist in planning and developing course activities
- Develop and give lectures about various FM-RIL activities and methods
- Supervise all project personnel and provide leadership on all project activities
- Enforce safety and hygiene regulations for all course related activities
- Assign work details to field crew on a daily basis

**TOR - D**

**Function: Forester**

**Title: Forester**

**Qualifications:**

- Brazilian national
- Fluent in Portuguese; Spanish desirable
- Minimum 3 years experience in administration of forestry activities, forest management, forest harvesting and silviculture in the Amazon
- Knowledge of RIL methods for forest harvesting machines
- Knowledge and experience in data collection and processing
- Good communication skills and proven capacity to train others
- Proven capacity to give lectures to a variety of audiences
- Knowledge of and ability to enforce safety and hygiene regulations

**Responsibilities:**

- Coordinate and directly participate in field activities
- Coordinate and participate in data processing in the field
- Develop and give lectures about various FM-RIL methods
- Organize and facilitate debates about the field practices
- Enforce safety and hygiene regulations for all course related activities
- Assign work detail to field crew and supervise their activities
- Substitute for the Senior Forester in his absence.



### **TOR - E**

**Function:** Executive Assistant

**Title:** Executive Assistant

**Qualifications:**

- Degree in Business Administration
- Minimum 8 years experience in functions of coordination and administration
- Strong communication and organizational skills
- Proven abilities to coordinate and negotiate with key stakeholders including government agency officials
- Fluent in Portuguese and English, Spanish desirable

**Responsibilities:**

- Selection of course participants
- Provide support in extension events and training
- Negotiate courses with government agencies, stakeholders, educational institutions
- Supervise development of training materials
- Represent the institution in seminars, workshops and similar events
- Give lectures related to institutional objectives
- Provide accurate information on IFT activities to Board of Directors
- Elaboration of progress reports
- Report to Board of Directors and Donors

### **TOR - F**

**Function:** Forest Technician logging and forestry machine specialist

**Title:** Technician I

**Qualifications:**

- Brazilian national
- Fluent in Portuguese, Spanish desirable
- Professional with more than 5 years experience implementing FM-RIL methods in the Amazon
- Professional with more than 5 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Specific experience in mechanized harvest activities
- Proven ability with heavy equipment use and chainsaw practices
- Manual map-making (Draftsman) skills
- Proven ability to supervise field crews
- Good communication skills
- Computer skills (including ArcView, Excel, and Access)
- Knowledge of and ability to enforce safety regulations

**Responsibilities:**

- Supervise crews during execution of field activities
- Review and disseminate practical and theoretical knowledge during the courses
- Develop and improve training materials for courses on heavy equipment and chainsaws use.
- Provide lectures on the use of heavy equipment and chainsaw practices and maintenance
- Discuss field practices with crews and with course participants
- Develop and give lectures on logging methods with emphasis on safety
- Be able to substitute as lecturer for other FM-RIL activities
- Be able to provide lectures on manual map making and different types of maps in FM-RIL
- Enforce safety regulations for all course related activities
- Assign work to field crew

**TOR - G**

**Function: Forest Technician pre-harvest and post harvest activities specialist**

**Title: Technician I**

**Qualifications:**

- Brazilian national
- Fluent in Portuguese, Spanish desirable
- Professional with more than 5 years experience implementing FM-RIL methods in the Amazon
- Professional with more than 5 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Specific experience in carrying out pre-harvest and post harvest components of FM-RIL
- Knowledge of silvicultural treatments and the ability to provide instruction on the same.
- Proven ability to supervise field crews
- Good communication skills
- Computer skills (including Excel and Access)
- Knowledge of and ability to enforce safety regulations

**Responsibilities:**

- Supervise crews during execution of field activities
- Review and disseminate practical and theoretical knowledge during the courses
- Discuss field practices with crews and with course participants
- Develop and give lectures on pre harvest activity methods
- Develop and give lectures on silvicultural post harvest practices
- Be able to substitute for other field activities in harvest and planning
- Computer skills (including Excel and Access)
- Provide lectures on inventory data processing.
- Enforce safety regulations for all course related activities
- Assign work to field crew

## **TOR - H**

**Function:** Forest Technician harvest planning specialist

**Title:** Technician I

### **Qualifications:**

- Brazilian national
- Fluent in Portuguese, Spanish desirable
- Professional with more than 5 years experience implementing FM-RIL methods in the Amazon
- Professional with more than 5 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Specific experience in harvest planning, including roads, skid trails, and drainage systems.
- Understand the use of heavy equipment used in FM-RIL methods
- Proven ability to supervise field crews
- Good communication skills
- Computer skills (including Excel and Access)
- Familiarity with special technical equipment used in land surveys, road layout, and general planning.
- Ability to use and conduct courses in road layout and block layout, skid trail layout.
- Knowledge of and ability to enforce safety regulations

### **Responsibilities:**

- Supervise crews during execution of field activities
- Be able to substitute other technical trainers in any other FM-RIL activity
- Review and disseminate practical and theoretical knowledge during the courses
- Discuss field practices with crews and with course participants
- Develop and give lectures on harvest planning activity methods
- Provide lectures on heavy equipment use in FM-RIL
- Enforce safety regulations for all course related activities
- Assign work to field crew

## **TOR - I**

**Function:** Forest Technician

**Title:** Technician II

### **Qualifications:**

- Brazilian national
- Fluent in Portuguese, Spanish desirable
- Professional with more than 3 years experience implementing FM-RIL methods in the Amazon
- Professional with more than 3 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Proven ability to supervise field crews

- Good communication skills
- Computer skills and in particular with, Excel, Access, ArcView and other mapping programs
- Knowledge of and ability to enforce safety regulations

**Responsibilities:**

- Supervise crews during execution of field activities
- Review and disseminate practical and theoretical knowledge during the courses
- Discuss field practices with crews and with course participants
- Give lectures on pre harvest, harvest and post harvest activities methods
- Provide lectures on computer use in FM-RIL and in particular ArcView and inventory processing
- Substitute for (or assist) Technician I in field training of participants
- Enforce safety regulations for all course related activities
- Assign work to field crew

**TOR - J**

**Function: Community Forestry Specialist**

**Title: Forest Technician**

**Qualifications:**

- Brazilian national
- Fluent in Portuguese, Spanish desirable
- Professional with more than 4 years experience implementing FM-RIL methods in the Amazon
- Professional with more than 3 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Proven ability to supervise field crews
- Good communication skills
- Computer skills and in particular with, Excel, Access, ArcView and other mapping programs
- Knowledge of and ability to enforce safety regulations

**Responsibilities:**

- Supervise crews during execution of field activities
- Review and disseminate practical and theoretical knowledge during the courses
- Discuss field practices with crews and with course participants
- Give lectures on pre harvest, harvest and post harvest activities methods
- Provide lectures on computer use in FM-RIL and in particular ArcView and inventory processing
- Substitute for (or assist) Technician I in field training of participants
- Enforce safety regulations for all course related activities
- Assign work to field crew

### **TOR - K**

**Function:** Forest Technician

**Title:** Technician III

**Qualifications:**

- Brazilian national
- Fluent in Portuguese; Spanish desirable
- Professional with more than 2 years experience implementing FM-RIL practices in the Amazon
- Proven ability to supervise field crews
- Good communication skills and prior training experience
- Experience giving lectures
- Computer skills
- Knowledge of and ability to enforce safety regulations

**Responsibilities:**

- Supervise crews during execution of field activities
- Discuss field practices with crews and with course participants
- Support Technician I and II in their training activities
- Enforce safety regulations for all course related activities
- Assign work detail to field crew

### **TOR - L**

**Function:** Course Coordinator

**Title:** Course Coordinator

**Qualifications:**

- Bilingual - Spanish, Portuguese and English desirable
- General computer skills (e.g., word processing, spreadsheets, and preparation of summary tables)
- Good communication (writing and speaking) and organizational skills

**Responsibilities:**

- Coordinate all administrative activities related to trainees
- Organize and maintain all course materials, correspondences and contacts
- Provide management with summaries of participant requests for evaluation
- Provide information to all those interested how to participate in the courses
- Make travel arrangements and purchase necessary tickets

## **TOR - O**

**Function:** Crawler tractor operator and instructor

**Title:** Operator Instructor I

### **Qualifications:**

- Brazilian national
- Fluent in Portuguese
- Professional with more than 15 years experience operating various crawler tractor models
- Development training in a factory or authorized technical assistance provider
- At least 5 years experience in implementation of FM-RIL practices in the Amazon
- At least 5 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Good communication skills
- Ability to monitor the operation and maintenance of machines and related equipment
- Knowledge of safety regulations

### **Responsibilities:**

- Convey RIL operating methods of the crawler tractor and related equipment as needed throughout the project
- Use appropriate operational techniques designed to reduce the impact of the machines on the forest
- Provide lectures and disseminate knowledge about the operation and maintenance of the machines and related equipment during the course
- Observe safety regulations

## **TOR - P**

**Function:** Skidder operator and instructor

**Title:** Operator Instructor I

### **Qualifications:**

- Brazilian national
- Fluent in Portuguese
- Professional with more than 15 years experience operating various models of articulated, wheeled tractors
- Development training in a factory or authorized technical assistance provider
- At least 5 years experience in implementation of FM-RIL practices in the Amazon
- At least 5 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Good communication skills
- Ability to monitor the operation and maintenance of machines and related equipment
- Knowledge of safety regulations

### **Responsibilities:**

- Convey RIL operating methods of the crawler tractor and related equipment as needed throughout the project

- Use appropriate operational techniques designed to reduce the impact of the machines on the forest
- Provide lectures and disseminate knowledge about the operation and maintenance of the machines and related equipment during the course
- Observe safety regulations

### **TOR - Q**

**Function: Sawyer and instructor**

**Title: Operator Instructor I**

#### **Qualifications:**

- Brazilian national
- Fluent in Portuguese
- Professional with more than 10 years experience operating chainsaws
- Development training in a factory or authorized technical assistance provider, including mechanics, operation, maintenance and cutting techniques
- At least 5 years experience in implementation of FM-RIL practices with application of directional felling methods in the Amazon
- At least 5 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Good communication skills
- Ability to monitor the operation and maintenance of chainsaws in the field
- Knowledge of safety regulations

#### **Responsibilities:**

- Convey RIL operating methods of the crawler tractor and related equipment as needed throughout the project
- Use appropriate operational techniques designed to reduce the impact of tree felling on the residual forest
- Review and disseminate knowledge about the operation and maintenance of chainsaw during courses
- Observe safety regulations

### **TOR - R**

**Function: Loader operator and instructor**

**Title: Operator Instructor II**

#### **Qualifications:**

- Professional with more than 5 years experience
- Experience operating and maintaining heavy machines
- Good communication skills
- Ability to monitor the operation & maintenance of machines and related equipment in the field

- Knowledge of safety regulations

**Responsibilities:**

- Convey RIL operating methods of the loader as needed throughout the project
- Use appropriate techniques to reduce the impact of machine use on the forest
- Review and disseminate knowledge about the operation and maintenance of the loader during the courses
- Be able to substitute other equipment operators on a variety of machines
- Observe safety regulations

**TOR - S**

**Function: Sawyer and instructor**

**Title: Operator Instructor I**

**Qualifications:**

- Brazilian national
- Fluent in Portuguese
- Professional with more than 10 years experience operating chainsaws
- Development training in a factory or authorized technical assistance provider, including mechanics, operation, maintenance and cutting techniques
- At least 5 years experience in implementation of FM-RIL practices with application of directional felling methods in the Amazon
- At least 5 years experience giving lectures and conducting courses in FM-RIL in the Amazon
- Good communication skills
- Ability to monitor the operation and maintenance of chainsaws in the field
- Knowledge of safety regulations

**Responsibilities:**

- Convey RIL operating methods of the crawler tractor and related equipment as needed throughout the project
- Use appropriate operational techniques designed to reduce the impact of tree felling on the residual forest
- Review and disseminate knowledge about the operation and maintenance of chainsaw during courses
- Observe safety regulations



## **ITTO Project Administration Personnel**

### **TOR - T**

**Function:** Course Logistics & Materials Coordinator

**Title:** Course Logistics & Materials Coordinator

**Qualifications:**

- Brazilian national
- Fluent in Portuguese; Spanish desirable
- At least 20 years experience in business administration with an emphasis in purchasing and acquisition of materials, supplies and equipment, for forest management projects in the Amazon
- Proven ability to provide logistical support to field crews and to maintain field vehicles
- Accounting knowledge and experience

**Responsibilities:**

- Acquire all necessary materials, supplies and equipment for courses
- Provide all logistics support for courses and field activities
- Maintain all vehicles associate with participant travel and course activities in good order
- Acquire provisions and necessary food supplies for courses
- Maintain direct communication with field crews

### **TOR - U**

**Function:** Accountant

**Title:** Accountant

**Qualifications:**

- Brazilian national
- Fluent in Portuguese; Spanish and some English desirable
- Accounting specialization
- 10 years experience in business administration with an emphasis in project accounting in the Amazon

**Responsibilities:**

- Maintain accurate and up-to-date accounting records for the ITTO project
- Maintain direct communication with project director

## **ITTO Project International Experts**

### **TOR - AA**

**Function:** Scientific Advisor / Reporting Specialist

**Title:** Scientific Adviser and Reporting Specialist (bi-lingual)

#### **Qualifications:**

- PhD or equivalent in tropical forest management
- Fluent in English
- Proficient in Portuguese and Spanish
- Good communication skills
- Knowledge of forestry and conservation issues in the Brazilian Amazon
- Long term experience providing scientific technical assistance to Instituto Floresta Tropical
- Demonstrated ability to write and compile ITTO project reports
- 10+ experience providing scientific and technical advice to tropical forestry projects
- Experience developing and peer-reviewing forest management training materials

#### **Responsibilities:**

- Provide scientific and technical advice for course development, training modules, and training materials
- Scientific advice on FM and RIL
- Peer-review all training and extension materials
- Provide technical assistance as needed to the Project Director and Project staff
- Help acquire necessary technical materials and information for the project from vendors, and scientific sources, outside Brazil
- Help Project Director and IFT staff develop and prepare ITTO progress reports and Annual Operating Plans.

ANNEX C. TERMS OF AGREEMENT

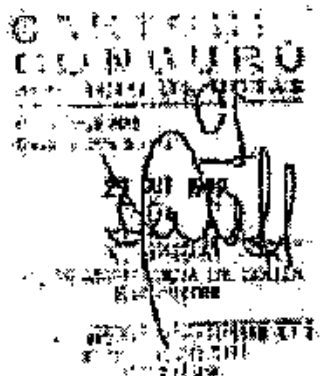


TERMO DE COMPROMISSO

Pelo presente Termo, estamos nos Comprometendo, pelo prazo de vinte anos, que a área de 1.000ha na Fazenda São Capim de propriedade do Grupo Cikel, cedida para a FFT - Fundação Floresta Tropical com o objetivo de pesquisas e treinamento no manejo de Búfalo Indígena, garantindo disponibilidade e integridade para as fins especificadas.

Batido em 25 de Outubro de 1995

  
CIKEL COMÉRCIO E INDÚSTRIA S/A  
Manoel Pereira Dias





Belém, June 07th, 2006.

Mr. Johan C. Zweede,  
Executive Director  
Instituto Floresta Tropical  
Rua dos Mundurucus, 1613 - Jurunas  
Belém, Pará, Brazil

Dear Mr. Zweede,

In regards to this proposal which Instituto Floresta Tropical is submitting to the International Tropical Timber Organization, whose title is "Training to encourage adoption of sustainable forest management in the Brazilian Amazon", Cikel Brasil Verde Madeiras Ltda will provide counterpart support for the proposed training activities to the extent we have done during the past 10 years. This will include providing the land and forest resources at Cauaí and Rio Capim properties, for the years of 2007 through 2009 in order to carry out the proposed project.

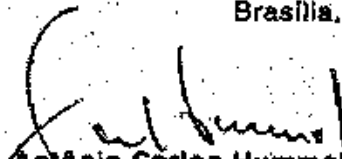
Sincerely yours,

  
Manoel Pereira Dias  
General Director  
Cikel Brasil Verde Madeiras Ltda

## **Termo de Parceria**

O Cenafior – Centro Nacional de Apoio ao Manejo Florestal, Centro Especializado ligado à Diretoria de Florestas do Ibama – Instituto Brasileiro do Meio Ambiente e dos Recursos Renováveis, sediado em Brasília – DF, SCEN – Setor de Clubes Esportivos Norte, Trecho 02 – Edifício Sede do IBAMA, representado por seu Diretor Sr. Antônio Carlos Hummel e de outro lado o IFT – Instituto Floresta Tropical, entidade sem fins lucrativos, inscrita no CNPJ/MF sob o n.º 05.388.409/0001-40, sediado em Belém – PA, na Rua dos Mundurucus, 1613 – Jurunas, representado por seu Diretor-Executivo, Sr. Johan Cornelis Zweede resolvem estabelecer entre si uma parceria para que sejam cumpridos os objetivos da proposta de projeto ABC/MRE n.º 01/2005 – OIMT – Organização Internacional de Madeiras Tropicais. Ambas as partes estão cientes e aprovam o conteúdo da proposta submetida e se comprometem a cumprir os princípios de uma boa parceria.

Brasília, 17 de janeiro de 2006.

  
**Antônio Carlos Hummel**  
**Diretor de Florestas**  
**IBAMA**

## ANNEX D. LETTER OF SUPPORT



MINISTÉRIO DO MEIO AMBIENTE  
SERVIÇO FLORESTAL BRASILEIRO

Ordem: 014 /SFBMMA

Brasília, 04 of September, 2006

ITTO – International Tropical Timber Organization

To Whom It May Concern:

The mission of the Ministry of the Environment and Brazilian Forest Service is to promote sustainable development by balancing the use and conservation of the Brazilian forests. In writing this letter, we would like to bring to light the extremely important contribution made by the Institute Foresta Tropical – IFT, and show how their work supports the goals of the Brazilian Government as it aims to increase sustainable forest management for production in natural forests, which will satisfy the demands of national industry. In addition, the Brazilian Government wants to ensure that sustainable forest production supports local families and community forestry while protecting two million hectares of highly valued ecological areas intended for forest management.

To meet these goals, the Government has created policies focusing on the forest sector, which includes forestry credits, technical assistance and access to forest information and technology. IFT strategically fits into all these efforts, while also providing help to reduce the levels of forest degradation in the Amazon by providing technical assistance and building capacity for sustainable forest practices.

After passing a recent bill regulating public forests by using sustainable forest management as a means for production, all available support from an institution prepared to systematically train all the professionals involved is very welcome. IFT is a unique organization that holds the capacity to meet immediate training needs. To provide an example of the importance of IFT, today almost every certified timber company operating in the Amazon has staff trained by IFT.

The National Forest Management Support Center (CENAFLO), a body created by IBAMA that focuses on the integration of the Amazon Forest Training Centers, has collaborated directly with IFT in order to provide training as well as standardize training activities across the Amazon.

IFT's focus is on training and capacity-building, together with outreach activities and awareness campaigns. IFT provides train to trainers, monitoring, and assessment courses as well as develops innovative technologies to improve forest management practices. All of these activities can contribute to strengthen forest policy initiatives.

IFT has also demonstrated over the time the capacity to fulfill its goals and targets according to its commitments.

The goal of training 10 thousand people over the next 10 years set by IFT, is a benchmark that will represent a tremendous contribution to the promotion of conservation and sustainable management of the forests in Brazil.

Sincerely,

  
Tasso Rezende de Azevedo  
Director General  
Brazilian Forest Service

## ANNEX E. COST AND BENEFITS OF REDUCED IMPACT LOGGING

Although any and all logging alters the forest in some form, minimizing the physical impacts of logging in most tropical forests is an important first step towards sustainable production. Reduced Impact Logging (RIL) presents standards for mitigating the impacts of logging activities. RIL is a fundamental component of forest management (FM) wherein the main objective is to ensure sustainable production of timber products while simultaneously maintaining diversity of native species as well as essential ecological processes and services. Conventional logging practices typically ignore these objectives. Although RIL<sup>6</sup> is not equivalent to sustainable forest management, it is an important step in that direction.

In conventional logging operations, trees that otherwise could have been extracted during the initial harvest are either lost or damaged. In Brazil, for example, between 16-26% of felled volume is never recovered (much of it never found) by tractor operators (Johns et al. 1996, Holmes et al. 2001). Further, trees that could be extracted during the subsequent harvest in 25-30 years are damaged. At a minimum, this doubles the cutting cycle (Uhl et al. 1997, Barreto et al. 1998), resulting in a delay in future revenues. Finally, both logging crews and machines work inefficiently causing unnecessary ground disturbance, double the amount caused by RIL, and increasing operational and maintenance costs (Johns et al. 1996, Holmes et al. 2001).

Poor logging also results in excessive canopy loss (Uhl and Vieira 1989), increased likelihood of fire (e.g., Holdsworth and Uhl 1997, Nepstad et al. 1999), and potential invasion by vines and grasses (Pinard et al. 1996), each of which can accelerate losses to the region's biota. These impacts may cause forest conversion to other land uses. However, even in permanent production forests, the physical changes resulting from unplanned logging may negatively affect biodiversity (Fimbel et al. 2001). The potential extirpation of commercially traded species is particularly relevant to the tropical timber trade because it precludes sustainable management.

The benefits of RIL methods have been well established throughout the tropics (e.g., Johns et al. 1996, Pinard and Putz 1996, Uhl et al. 1997, Barreto et al. 1998, Holmes et al. 2001, Putz et al. 2001). Compared with conventional logging practices, RIL reduces damage to the soil and canopy, protects future crop trees, and decreases wood waste by at least 50%. Moreover, this reduction in damage combined with the decreased likelihood of catastrophic fires and forest conversion translate into substantial savings in stored carbon as well as improved prospects for biodiversity conservation.

FM-RIL also generates significant social benefits because its implementation requires a broad range of specific skills, which provides an opportunity for professional growth. Such opportunities do not exist in conventional logging because the same worker carries out a number of functions. With productive employment in the rural areas, qualified personnel remain in the region instead of migrating to urban centers.

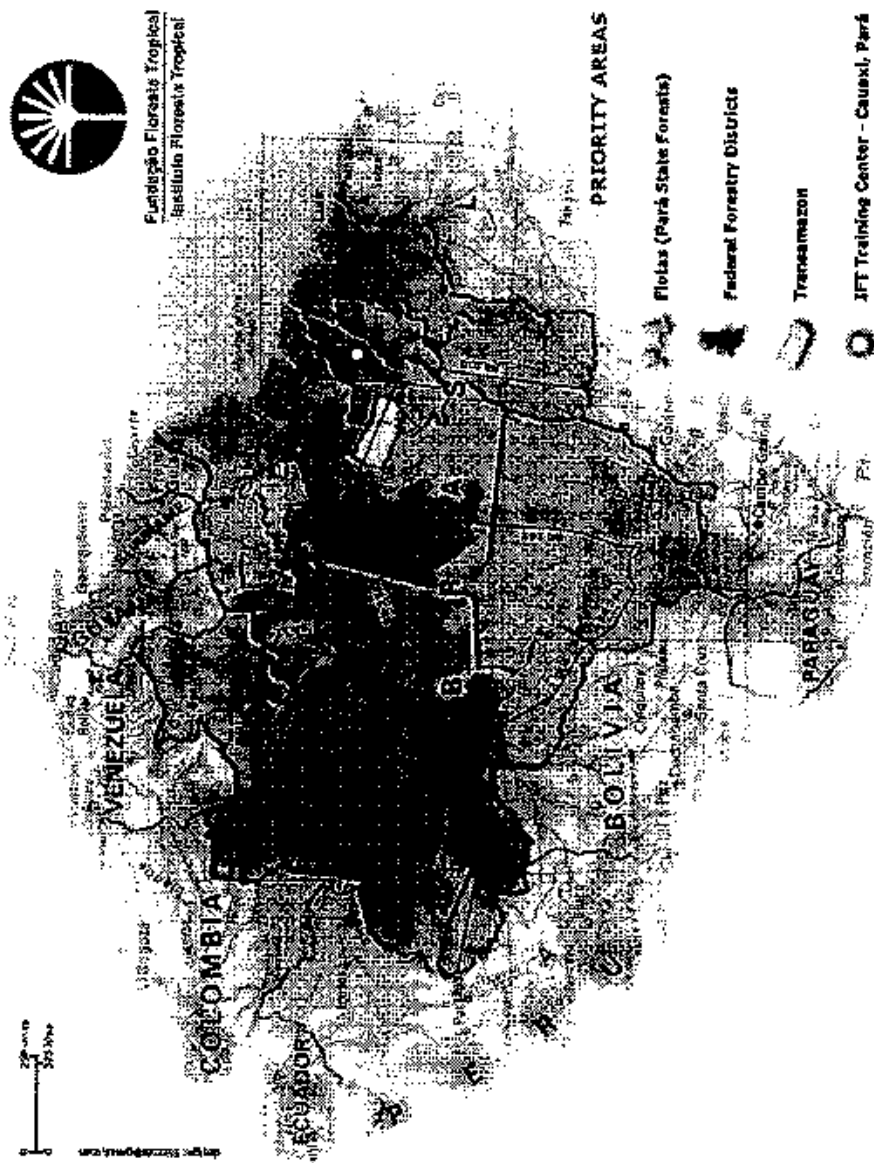
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<sup>6</sup> Dykstra and Heinrich (1996) outlined the key elements of RIL: pre-harvest inventory and mapping of trees; pre-harvest planning of roads and skid trails; pre-harvest vine cutting; directional felling; low stumps; efficient utilization of felled trunks; optimum width of roads and skid trails; winching of logs to planned skid trails; optimal size of landings; minimal ground disturbance and slash management.

Although research conducted in hill dipterocarp forests in Malaysia found that RIL was less profitable to implement than conventional logging (Tay 1999), the financial benefits of implementing RIL in the eastern Amazon have now been well documented (Barreto et al. 1998, Holmes et al. 2001). The cost-benefit study conducted by Holmes et al. (2001), in particular, has helped persuade many forest sector stakeholders in the Brazilian Amazon to invest in FM-RIL.



# ANNEX F. MAP OF PRIORITY AREAS FOR SFB AND ITTO PROJECT



## ANNEX G. REFERENCES

- Barreto, P., P. Amaral, E. Vidal, and C. Uhl. 1998. Costs and benefits of forest management for timber production in eastern Amazônia. *Forest Ecology and Management* 108:9-26.
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## ANNEX H. TECHNICAL PANEL RECOMMENDATIONS

	Recommendation	Action	Section
1	Based on the Executing Agency's prior record in timely project implementation and the current over ambitious timeframe allocated for the implementation of the project's activities, consider extending the project's timeline to 24 months without increasing the budget;	We extended the project's timeline to 24 months as recommended. The project now is scheduled to start in March 2008 and end in March 2010. We kept the ITTO portion of the budget the same, but had no choice but to increase the total budget because inflation and devaluation of the US dollar (vs. the Real) greatly increased the cost of the project compared to when the budget was originally developed.	Project summary (Cover page, p. 1); Budget and Budget explanation (II, 7.4, p. 40-47); Monitoring, Reporting, and Evaluation (III, 2, p. 49)
2	Match the project's problem analysis with its design and outputs. Minimize or desist in the development of demonstration forests, as these would not become self-sustainable after project completion;	We improved the project's design so that it matches better with the core problem elucidated in the problem analysis. We also revised the narrative in various places so that the connections between the context, the problem, the project strategy, and the objectives and outputs are clearer.  Since the project was originally proposed, the demonstration areas were completed with other funds. They will be used to enhance learning during training courses and, where possible, to enhance extension events. We removed the development of new demonstration areas from the budget.	Project objectives, (Section II, 1; p. 8); Outputs (II, 3, p. 16); Activities (II, 4, p. 17); Origin (I, 1.1, p. 5-6), Sectoral Policies (I, 1.2, p. 6), Problem (II, 2.1, p. 8), Intended Situation after Project (II, 2.2, p. 9), Project Strategy (II, 2.3, p. 9-10); Budget (II, 7, p. 40).
3	Take into account all available voluntary forest certification schemes in Brazil, rather than randomly pre-selecting a specific scheme;	Mention of FSC certification has been changed to "independent certification" or "third-party certification".	Annex A, (EA profile p. 41)
4	Strengthen overall the Logical framework, by providing concrete qualitative and quantitative milestones as indicators and means of verification and by including realistic assumptions;	We substantially strengthened the LF as recommended. We listed various milestones (both qualitative and quantitative) as well as means of verification for all objectives and outputs. In addition, we listed various assumptions pertaining to the objectives, outputs, indicators, and means of verification	Logical Framework (II, 5, p. 18)
5	Include the terms of reference for the international consultants;	Included	Annex B

	<b>RECOMMENDATION</b>	<b>Action</b>	<b>SECTION</b>
6	Properly justify the need to purchase vehicles in addition to the van rental, or eliminate these and reduce the budget accordingly;	We included a section after the budget worksheets to explain and justify various line items in the budget. Our justification for the van rental and vehicle purchase is explained there. The van is needed to transport course participants between Belém and the training site. The needed vehicle's cost was reduced.	Budget Explanation (II, 7.4, p. 48)
7	Transfer the national in-house project monitoring costs required by ABC/MRE to the project's counterpart budget;	After consulting with ABC/MRE, we transferred the cost for project monitoring to the counterpart budget. See Budget Explanation.	Budget (II, 7.3, p. 46) Budget Explanation (II, 7.4, p. 48)
8	Include the costs of the independent annual and final audits in the budget as a counterpart contribution;	As noted for No. 6, we included a section after the budget worksheets to explain and justify various line items in the budget. We kept this line item in the ITTO portion of the budget because none of IFT's other donors are willing to pay for an audit on the proposed project, which is funded by ITTO.	Budget (II, 7.3, p. 46) Budget Explanation (II, 7.4, p. 48)
9	Provide separate detailed budgets by component and source of funding for the ITTO and counterpart contributions, particularly as regards Personnel, and include unit costs for each (as per the annexed terms of reference); and	We revised the consolidated yearly budget in accordance with the recommendation.	Budget (II, 7.3, p. 46)
10	Include an Annex which shows the recommendations of the 34 <sup>th</sup> Panel and the respective modifications in tabular form. Modifications should be highlighted (bold and underline) throughout the revised project proposal document.	Implemented and responded to the best of our ability.	Annex H