

# INTERNATIONAL TROPICAL TIMBER ORGANIZATION

## ITTO

### PROJECT PROPOSAL

<b>TITLE:</b>	SUSTAINABLE FOREST MANAGEMENT FOR THE FOREST PRODUCTION AREA OF THE NORTHERN AND NORTHEASTERN REGIONS OF THE DEPARTMENT OF ANTIOQUIA, COLOMBIA
<b>SERIAL NUMBER:</b>	PD 438/06 Rev.2 (F)
<b>COMMITTEE:</b>	REFORESTATION AND FOREST MANAGEMENT
<b>SUBMITTED BY:</b>	GOVERNMENT OF COLOMBIA
<b>ORIGINAL LANGUAGE:</b>	SPANISH

#### SUMMARY

This project will be implemented in a forest area covering 277,123 hectares situated in the municipalities of Nechí, El Bagre, Zaragoza, Segovia and Remedios, all of which are in the Forest Production Area of CORANTIOQUIA. The development objective is to contribute to integrated socioeconomic development and environmental protection in the North and Northeast of the Department of Antioquia. The specific objective is to launch a participatory forest management process to foster the rational use of production forests and environmental protection. To achieve this objective, the project will act as a catalyst and will provide support to the process, with a view to reaching a consensus-based vision among key stakeholders regarding the use and sustainable management of the Magdalena Medio Forest Reserve. To this end, the project will implement a Management Plan for the Reserve, train forest workers, forest owners, loggers, assistants and carriers, and support the strengthening of local forest organisations.

**EXECUTING AGENCY:** AUTONOMOUS CORPORATION OF CENTRAL ANTIOQUIA (CORANTIOQUIA)

**COOPERATING GOVERNMENTS:** ---

**DURATION:** 36 MONTHS

**APPROXIMATE STARTING DATE:** UPON APPROVAL

<b>BUDGET AND PROPOSED SOURCES OF FINANCE:</b>	<b>Source</b>	<b>Contribution in US\$</b>
	ITTO	547,917
	CORANTIOQUIA	624,556
	<b>TOTAL</b>	<b>1,172,473</b>

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## Abbreviations and definitions

### Abbreviations

CORANTIOQUIA	Corporación Autónoma del Centro de Antioquia (Autonomous Corporation of Central Antioquia)
FINAGRO	Fondo para el Financiamiento del Sector Agropecuario (Agricultural Sector Finance Fund)
INCODER	Instituto Colombiano de Desarrollo Rural (Colombian Institute for Rural Development)
INCORA	Instituto Colombiano de la Reforma Agraria (Colombian Institute for Land Reform)
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
JAC	Junta de acción comunal (Community Action Board)
MMA	Ministerio de Ambiente, Vivienda y Desarrollo Territorial (Ministry for the Environment, Housing and Land Development)
NGO	Non Governmental Organisation
NTFP	Non Timber Forest Product
RFMM	Reserva Forestal del Magdalena Medio (Magdalena Medio Forest Reserve)
SINA	Sistema Nacional Ambiental (National Environmental System)
UMATA	Unidad municipal de asistencia técnica agropecuaria (Municipal unit for agricultural technical assistance)
ZFP	Zona Forestal Productora (Production Forest Area)
ZRFMM	Zona de Reserva Forestal del Magdalena Medio (Magdalena Medio Forest Reserve Zone)

### Definitions of terms used within the Colombian context

“**Baldíos**” (*wastelands*): Non-allocated state lands that may be allocated according to public usefulness and social benefit criteria

**Cadastral Area:** Area of land that is registered in the municipal cadastre system.

**Land lot deed:** Private document containing the transfer details of a real estate property, including all its characteristics, and which only becomes public, i.e. becomes fully legal when it is recorded in the relevant Office for Registration of Public Instruments.

**Possession:** Holding of property or of rights by a person, which together to the intention of taking up ownership of the property or rights, becomes civil possession. Possession may be exercised by the owner or by a simple holder who enjoys and uses it even when they are not the owner.

**Lot:** Land of variable area and defined boundaries, used as the unit of the cadastral system.

**Cadastre Control:** Registration in a cadastre system of the key data of a lot.

**INCORA Title:** Administrative Resolution of the National Institute for Land Reform granting individual and collective property rights over a lot, to a community or person complying with statutory requirements.

“**Veredas**”:  
Administrative land units /districts into which a municipality's land is divided.

**Zona de Reserva Forestal del Magdalena Medio (Magdalena Medio Forest Reserve Zone):** Special management area established under Law 2 of 1959 to conserve and manage its natural resources in an orderly manner. It covers 352,484 hectares in the Department of Antioquia.

**Zona Forestal Productora (Production Forest Area):** Land that must be permanently preserved with natural or man-made forests for the purpose of supplying forest products

## **PART I: CONTEXT**

### **1. Origin**

Decree No. 1791 of 1996 (Forest Use System) passed by the Ministry for the Environment, Housing and Land Development, requires regional Autonomous Corporations to define the boundaries and regulate production forest areas according to equitable and environmental sustainability criteria. On this basis, the Autonomous Corporation of Central Antioquia (CORANTIOQUIA) submitted pre-project PPD 84/03 Rev. 1 (F) "Formulation of a sustainable forest management project for the forest production area of the northern and north-eastern regions of the Department of Antioquia, Colombia" to the ITTO. The pre-project involved several consultancies to consolidate the information required to develop a project proposal for the sustainable management of forests in the North and Northeast of the Department of Antioquia. Consultancies were carried out on the following:

- land holding schemes;
- forest harvesting systems;
- community characteristics;
- processing of forest inventories for database purposes.

Consultancies were also carried out with a view to organising dissemination and validation workshops on the results of the studies. These workshops were held in the Municipality of Nechí on 28 February 2006, in the Municipalities of El Bagre and Zaragoza on 2 and 3 March 2006 respectively, and in the Municipalities of Segovia and Remedios in March 2006.

This project proposal was formulated on the basis of the results and recommendations of the above consultancies, as well as the expectations of the representatives of interested groups that took part in the workshops for validation and dissemination of consultancy results.

The project area covers 277,123 hectares of forests, as shown in Table 1. This area includes settlements in the municipalities of Nechí, El Bagre, Zaragoza, Segovia and Remedios, which are situated within the Forest Production Area in the jurisdiction of CORANTIOQUIA. The five municipalities belong to the El Cauca and Antioquia Northeast sub-regions identified by CORANTIOQUIA as the Land Unit Offices of Panzenú (Nechí, El Bagre and Zaragoza) and Zenufaná (Remedios and Segovia).

### **2. Sectoral Policies**

Colombia has sufficient legal instruments to ensure the sustainable management of its forest resources (see also ITTO 2005). Law No. 2 on National Forest Economy and Conservation of Renewable Natural Resources was passed in 1959. This law was complemented by various decrees including Decree No. 2811 "National Code for Renewable Natural Resources and Protection of the Environment" of 1974, and Decree No. 1971 "Forest Utilisation Regime".

Law No. 99 of 22 December 1993 established the Ministry for the Environment, Housing and Land Development (MMA), and organised the National Environmental System (SINA); furthermore, other provisions established regional autonomous corporations that are responsible for implementing environmental policies developed by the MMA. Decree No. 1791 of October 1996 set up the Forest Utilisation Regime to provide guidelines for forest utilisation taking into account environmental requirements. After the adoption of this decree, forest use in Colombia attached more importance to conservation and environmental protection aspects, and to the allocation of major financial resources to the development of forest planning and administration programmes. Law No. 79 of 1986 established protection forest reserves for the purpose of conservation and preservation of water sources.

In 2000, the National Forest Development Plan (Plan Nacional de Desarrollo Forestal - PNDF) was approved. It provided the elements to manage forest areas and integrate the forest production chain. This plan is the guiding instrument for national forest policy to the year 2020.

**Table 1: Examples of provisions in the new forestry law that apply to this project**

<b>Area</b>	<b>Reference in the law</b>	<b>Quote</b>
Conservation and sustainable management	Article 2, " <i>General principles and provisions</i> " paragraph 1	Natural forests and the establishment of plantation forests on forest lands are declared to be a national priority and of strategic importance for the country's development.
Deforestation and illegal logging	Article 2, " <i>General principles and provisions</i> " paragraph 4	Actions must be adopted and jointly implemented by the State, civil society and the production sector in order to arrest deforestation and illegal logging, with a view to equitable access to resources and their integrated utilisation within the framework of the fundamental requirements of ecosystem and biological diversity conservation.
Peace and civil coexistence	Article 2, " <i>General principles and provisions</i> " paragraph 5	The State shall promote the development of the forest sector in recognition of the economic, social and environmental benefits that this sector provides to the country. The development of the forest sector is declared to be a national priority with a view to peace and coexistence.
Integrated management of natural forests	Article 2, " <i>General principles and provisions</i> " paragraph 8	The objective of integrated forest management is to maintain a sustainable level of productivity of timber and non-timber forest resources and environmental services, substantially conserving the original characteristics of their ecosystems and their biodiversity.
Forest Management Regulation	Article 11. <i>General Forest Management Regulation Plan.</i>	Within no more than two (2) years from the date of promulgation of this law, Regional Autonomous Corporations and Sustainable Development Corporations will develop and approve a General Forest Management Regulation Plan for their respective jurisdictions, including areas within forest reserves, in accordance with the provisions herein.

Besides current policies and strategies, the project complies with the new Forestry Law 1021 of 2006, which is aimed at promoting the sustainable development of the Colombian forest sector within the framework of the National Forest Development Plan. Table 1 above shows specific examples of provisions in the new law that are relevant to this project.

Table 1 above shows how the project relates to the new Forestry Law of Colombia. However, the law defines very specific issues in relation to the obligations, functions and commitments of the central government, which is represented here by the Ministry for the Environment, Housing and Land Development (MAVDT) and the Regional Corporation (please note this is a "regional corporation" and not a "development corporation" as mentioned in the Expert Panel's recommendations – there are other corporations in the country that are designated as "development corporations"). These functions, obligations and commitments are as follows:

- The State shall promote the development of the forest sector in recognition of the economic, social and environmental benefits that this sector provides to the country. This is a priority action to ensure peace and civil coexistence.
- The State shall promote the wide dissemination of the significance of forest values at the national, departmental and municipal levels.
- The State, through MAVDT, shall develop the national policy for the sustainable management of natural forests.
- Both MAVDT and the Corporation should have established special forest units by May 2007 as stipulated in Article 9 of the Forestry Law.
- Within a maximum of two (2) years from April 2006, the Corporation shall develop and approve a General Forest Management Regulation Plan for the areas under its jurisdiction, including forest reserves as established by the Forestry Law.
- The Corporation shall review the applications received and shall issue and monitor forest harvesting permits.

- The Corporation shall approve the forest management plan formulated on the basis of forest inventory data for the commercial harvesting of natural forests.
- The following instruments shall be used for the monitoring and control of sustainable forest harvesting in natural forests: harvesting manifests as regulated by MAVDT; raw material supply manifests; forest transport waybills; forest inspections to be carried out by the CORPORATION.

### **3 Programmes and operational activities**

Current management practices are based on the legal framework, in particular Law 79-86 that provides protection forest reserve areas for the purpose of conservation and preservation of water sources including:

- Forests and natural vegetation at the head of waterways, covering no less than two hundred metres in diameter.
- Forests and natural vegetation in a strip no less than one hundred metres wide and parallel to the maximum tide marks.
- Forests and natural vegetation in the national territory situated three thousand metres and more above sea level.

With regard to forest sustainable management, Colombia actively participates in the initiatives geared to implement instruments that help assess progress towards sustainability. Recognising that Criteria and Indicators are an instrument that contributes to Sustainable Forest Management, and as part of the actions relating to the implementation of the PNDF, in particular the “Natural Forest Management and Utilisation” sub-programme, the MMA with support from ITTO, implemented the project “Implementation and Evaluation of Criteria and Indicators for Sustainable Forest Management” between 1998 and 2001. The outputs of this project included the definition of criteria relating to enabling conditions for sustainable forest management, forest resource security, forest ecosystem health and condition, forest production, biological diversity, soils and water resources, and economic, social and cultural aspects (see MMA 2002).

The Ministry for the Environment, Housing and Land Development also has a Biodiversity Programme for the conservation and restoration of priority forest and non-forest ecosystem areas in strategically important eco-regions, and for the protection of endangered and limited-range species.

Special programmes and incentives to foster forest management include forest sector finance mechanisms. Financial resources and instruments for forest development are based on law No. 16/90 that appointed FINAGRO as the body responsible for the administration of compulsory investment targeting economic activities within the rural sector.

In Antioquia, CORANTIOQUIA implemented the “Regional Environmental Management Plan 1998-2006”. The Corporation is going through the diagnostic phase for the preparation of the “Regional Environmental Management Plan 2007-2017”. This Plan is expected to be adopted in December 2006.

Interesting activities relating to the restoration of degraded forests are in progress in the Department of Antioquia. CORANTIOQUIA implements and promotes activities for the restoration of degraded forest landscapes by establishing production plantations. In this same Department, ITTO is financing project PD 24/03 (F) “*Alternative Financing Model for Sustainable Forest Management in San Nicolás. Second Phase - Non-Kyoto Restoration Areas*”. This project is implementing activities agreed with local communities in relation to the Clean Development Mechanism and is promoting forest land restoration and conservation, valuing of non-traditional goods and products and environmental services other than carbon sequestration.

During the implementation of pre-project PPD 84, CORANTIOQUIA contacted CORNARE, given its experience with ITTO work, to provide support regarding the work of the Organization, particularly in relation to management of resources and submission of financial reports. In fact, the Corporation hired the services of the same accountant used by CORNARE.

Regarding operational activities, CORANTIOQUIA has an "Environmental Information System" service that includes a modern Geographic Information System. This service, assigned to the Planning and Corporate Strategy Sub-Directorate (Subdirección de Planeación y Estrategias Corporativas), implements the strategic planning for the Geographic Environmental Information System which manages, develops and implements the Corporate Environmental and Geographic Information System with a view to articulating it with the National Environmental System (SINA), helping develop environmental management, providing decision-making support and guiding the generation of environmental awareness in the country.

## **PART II: THE PROJECT**

### **1. Project Objectives**

#### **1.1 Development Objective**

The development objective of the project is to contribute to integrated socioeconomic development and environmental protection in the North and Northeast of the Department of Antioquia.

#### **1.2 Specific Objective**

The specific objective is to launch a participatory forest management process to foster the rational use of production forests and environmental protection.

### **2. Justification**

#### **2.1 Problem to be addressed**

This project proposal was developed on the basis of consultancy work for the diagnosis of the socioeconomic context and forest use status in the RFMM. After intensive meetings with forest user groups in the region, the consultants submitted to CORANTIOQUIA a number of reports rich in information and including recommendations on possible actions to improve forest management and the standard of living among users. The reports also identified a range of groups with an interest in using the forests; the groups included owners, users, loggers, transport contractors, user cooperatives and associations, municipalities, etc.

The consultants organised workshops to validate consultancy outcomes. The expectations of interested groups were recorded and taken into consideration in the development of this proposal.

The core issue emerging from the reports and from observation of the situation in the region is that forest management in the RFMM is not sustainable. This core issue served as the basis for a full analysis of the problem and of the solutions, as summarised in Figures 1 and 2. Firstly, the direct consequences were examined, which appear in the shape of two processes: "Further expansion of the agricultural frontier" and "Degradation of the forest resource base". Then a number of causes of this core issue were identified by way of a hierarchy of cause-effect lines. The three immediate causes included:

#### **Insufficient mobilisation of interested parties**

Sustainable forest management is achieved where there is consensus among interested groups on a vision for such management. In this respect, existing information shows unsatisfactory levels of inter-institutional coordination and of social involvement. Mechanisms for such coordination are still lacking and social involvement processes have [not] been developed. Therefore it is very important to accelerate participatory processes for various interested groups so that a consensus-based vision of forest management and sustainable resource management can be achieved.

#### **There is no forest management regulation plan for the integrated utilisation of forest resources.**

One of the factors hindering non conflicting management is community forest land titling. Forest management is not viable without a full cadastre of private lands.



**Table 2: Summary of interest group analysis**

<b>Group</b>	<b>Characteristics</b>	<b>Problems, needs</b>	<b>Strengths, Potential</b>	<b>Type of involvement in the project</b>
Rural forest owners		Lands without a title; insufficient economic options	Desire to receive collaboration; believe in institutions	Direct beneficiaries
Leasers	Forest owner under lease contract. Able to perform or pay for logging work.	Insufficient economic options		Direct beneficiaries
Loggers	Have logging equipment.	Obsolete technology; lack of investment capital for suitable equipment; lack of training	Desire to receive collaboration; believe in institutions	Direct beneficiaries
Carriers	Carrier of timber on mules. Owner of mules only in exceptional cases	Insufficient economic options; lack of structure; irregularity.	Desire to receive collaboration; believe in institutions	Direct beneficiaries
Transport operators	Have mules or vehicles.	Lack of training and organization for drying and storage	Believe in institutions	Direct beneficiaries
Cooperatives and associations of forest operators		Lack of support for the development of new marketing channels	Recognised by the law; believe in institutions; can invest	Direct beneficiaries
Community Action Boards	Grassroots organizations at the level of "veredas" ( <i>districts</i> )	Lack of training	Recognised by the law; presence in "veredas" when others do not exist.	Direct beneficiaries
Municipalities		Need support for land cadastre.	Are close to users; can include forests in development plans.	UMATAs can cooperate with the project

One of the consequences of the lack of a Management Plan is the pressure from agricultural and mining activities for a change in land use. Land use close to the boundary of paddocks generally implies cutting down all timber and then transforming the area into paddocks or fields for agricultural crops. This is why forests are losing large areas to cattle farming in the Northeast municipalities and to illegal crops in the Bajo Cauca region.

Another major factor is the limited capability of land management directorates to intervene effectively in management and conservation of forest resources and monitoring land use. As a result, obligations provided in management plans are not met. Land use includes unauthorised tree species and sizes, because there are no checks by officers who are duly trained in timber knowledge. Tree selection and logging are carried out by decision of the logger and according to the logger's relationship with the forest, i.e. whether he is the owner, leaser or a relative of the owner's. In general, forest use follow-up tasks delegated by CORANTIOQUIA to UMATAs and/or municipal Environmental Secretariats under past cooperation agreements which were meant to monitor compliance, are not performed for lack of sufficient numbers of trained personnel in the municipalities. Furthermore, municipalities are not even aware that some of these tasks have been delegated to them.

The components and contents of the General Forest Management Regulation Plan (as opposed to the Forest Management Plan to be implemented in the field), they have not yet been defined because even though the new Forestry Law is already in force, these issues are still in the process of being regulated under the leadership of the MAVDT. The reference framework used at the moment is the document prepared by MAVDT in cooperation with ACOFORE and ITTO support –

“Technical Guidelines for the Sustainable Management and Regulation of Natural Forests” – which contains the elements of the Plan.

The methodology to be used includes:

- a) Identification and definition by the CARs of forest production areas to be subject to management and designated as forest management units.
- b) Mapping of FMUs at an appropriate scale.
- c) Collection of secondary (biotic, abiotic, social, cultural, economic) information.
- d) Collection of (quantitative and qualitative) primary information on biotic, abiotic, social, cultural and economic aspects, records, and consultations with direct and indirect stakeholders related to forest management.
- e) Processing and analysis of the primary and secondary information collected and development of database.
- f) Final formulation of FMRP with stakeholders involved.

The contents of the Plan will include chapters on General Characterisation, Guidelines for Sustainable Forest Management Unit Planning and Sustainable Management Prescriptions, as well as a final chapter on Guidelines to Prevent and Mitigate Negative Environmental and Social Impacts.

### **There is an irrational forest use in the RFMM**

The most important causes of this situation are described by Arteaga Castaña (2002). The forest use system has remained at the basic cottage industry level and is characterised by the use of chainsaws for tree logging, timber bucking and sawing. Small scale transport of timber from the felling site to storage areas is done by mules. In lowland municipalities with rivers or large watercourses, small scale transport is done by water. In more rugged terrain such as in the municipalities of Zaragoza, Segovia and Remedios, most small scale transport up to the road is by mule. For timber transport, district roads are only passable in the summer. For all these reasons, there are low levels of forest harvesting in the Northeast and Bajo Cauca Antioqueño forests, with an average 28% of the harvestable volume.

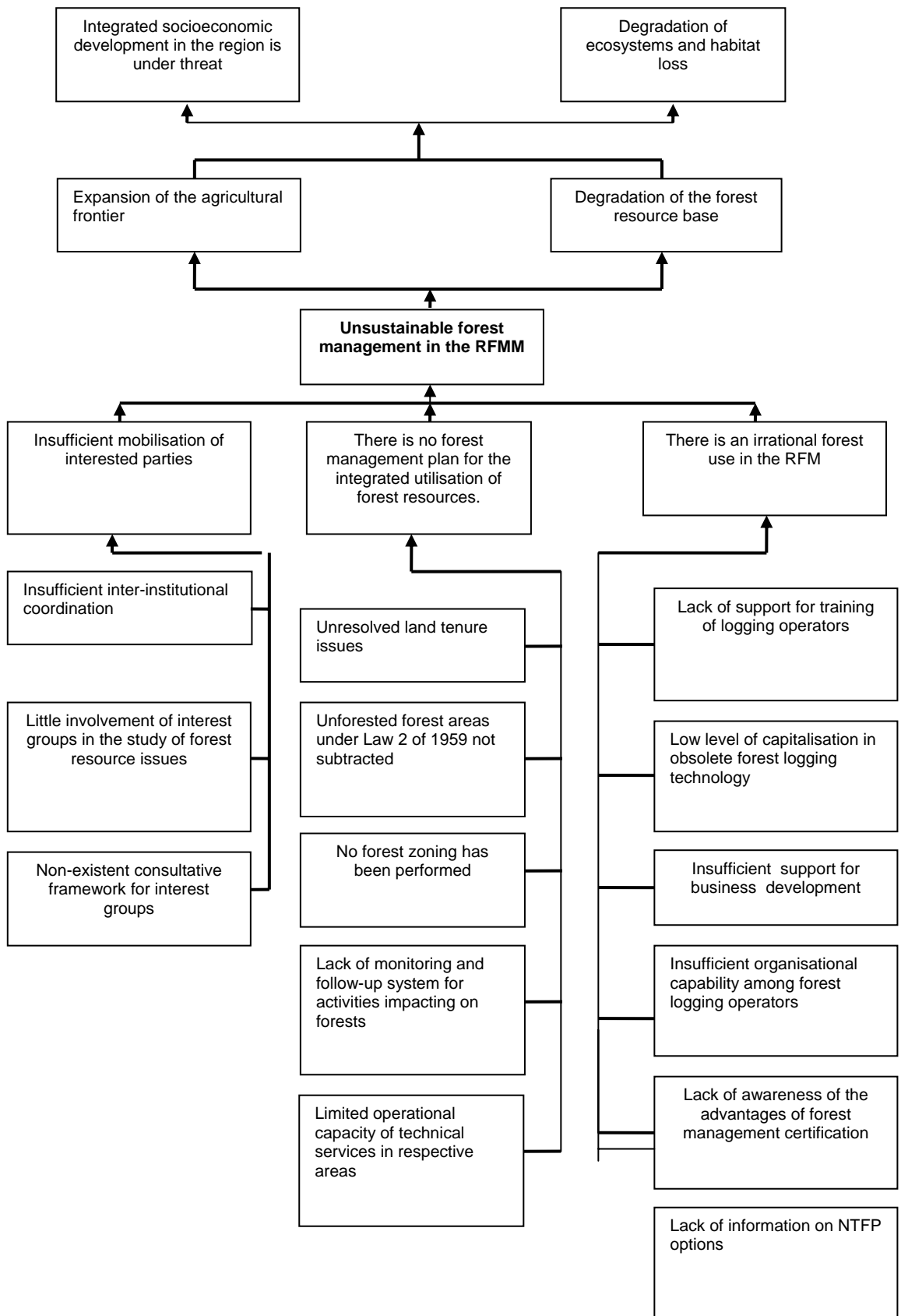
Species logging is selective and does not take into account natural regeneration cycles. Silvicultural measures are not implemented. Logged-over forests show degradation of commercial species, mainly abarco, canelo, cedar and mahogany; this situation is worsening with ongoing current uses that do not implement silvicultural measures. Remaining forests still contain valuable sources of regeneration species, but no restoration or management activities are implemented based on natural regeneration management.

There is a very inequitable relationship between trade or intermediaries and forest users or loggers, with large profits for the former and only survival resources for the latter. This means that there are no surplus resources left for forest management. The main marketing line is the delivery of capital and labour involving loggers or forest owners so that they may sell timber and pay their debt. Traders who are also permit holders have commission agents who purchase the timber. The advantage of the permits is that they facilitate pricing and payment terms. The imbalance lies in the fact that the settler or logger only receives between 15% and 30% of the final trade value of the timber. The transport operator may receive up to 35%.

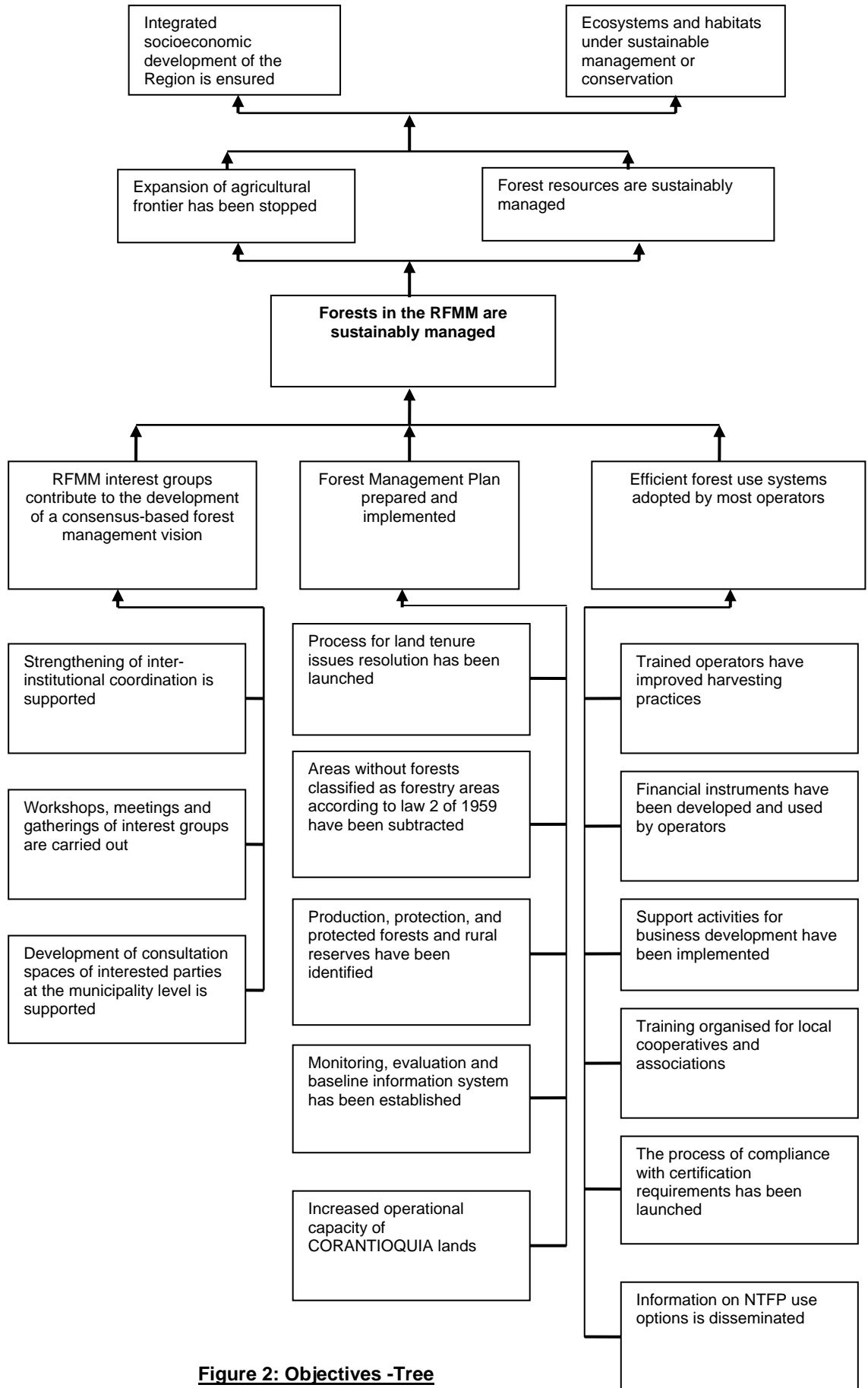
It is also noteworthy that there is a lack of safety in logging operations. Persons involved in forest use (loggers, assistants and carriers) do not take any safety precautions. Loggers spend an average 8 years in the current working conditions before they retire completely from this activity or do it occasionally as a result of waist/back, kidney and ear disorders.

One of the proposed solutions to prevent the fast destruction of forests in the RFMM is to provide support for timber workers associations in the various municipalities by way of training them to achieve sustainable forest utilisation (Arteaga Castaña 2002). Loggers in those associations should be empowered to reduce the enormous proportion of profit that goes to intermediaries.

It is important to support timber loggers associations so that they can overcome the irregularity of their forest operations to gain the right profit on domestic and international markets.



**Figure 1: Problem-Tree**



**Figure 2: Objectives -Tree**

## 2.2 Intended situation after project completion

The consultation process of RFMM interest groups will have matured and a consensus-based vision of forest resource management will be implemented. Adjustments of the RFMM actual area and of the cadastre of private land property will have been made. Timber loggers will have received practical training to improve their operations, and they will be applying such training. The Management Plan will be under implementation and will be the baseline for RFMM socioeconomic activities. The reinforced presence of services of CORANTIOQUIA in the area of the project will help improve follow-up of utilisation activities and supply technical services to users.

## 2.3 Project Strategy

The key guiding principles of the project, according to article 10 of Law No. 1021 of 2006 are as follows:

- An ecosystem approach to conservation and sustainable management of biodiversity and forests.
- Management, conservation and restoration activities for forest ecosystems.
- Support for the development of forest production chains.
- Support for institutional development.
- Support for economic and financial sustainability.

This requires the development of a close collaboration with all stakeholders directly or indirectly interested in ZRFMM forest resources. These stakeholders include forest owners, local communities, timber cooperatives and associations, timber transport operators, municipal councils, local NGOs, universities, and public bodies. The project will provide CORANTIOQUIA with support to design processes to develop this cooperation.

The project will use a participatory approach, developing processes to be adopted by the beneficiaries. This approach will help interested groups participate in the development of a consensus-based vision for the sustainable use and management of forests in the region. The development of processes to mobilise and train beneficiaries will take into account the need to advance one step at a time, to achieve the sustainable changes required for awareness-building, perception and analysis of problems, and socioeconomic development priorities.

The steps proposed to implement this participatory development approach are the following:

The sections on the problem analysis, strategy and logical framework, all contain the required elements to explain the current situation and what the project hopes to achieve. The recommendation does not specify which aspects the project should focus on. In order to ensure the clarity of the project as far as possible, we have formulated a set of indicators that appear on pages 12-13 under bullets a-g. Furthermore, the logical framework worksheets (pages 22-23) now includes the indicators and means of verification proposed for the various project activities.

- a. **Organise consultations to review the current situation:** participatory study workshops will be organised in each municipality to examine the status of forest use and management, in an attempt to develop a common vision of the threats to such resources, their potential, and solutions that will contribute to their rational use. In addition, the forest zoning proposal will be validated to serve as a basis for the development of the Management Plan. **Indicator: Workshop. Means of Verification: List of participants with their signatures or fingerprints and ID number.**
- b. **Zoning for Management:** Accurate definition of actual forest areas, subtracting those that are not under the "Second" Law of 1959, and identification of production, protection and conservation areas and rural reserves. **Indicator: Number of hectares of forest areas; number of hectares of production forests; number of hectares of non-forest areas, protection areas, conservation areas and rural reserves. Means of verification: maps and reports.**
- c. **Management Plan:** A Management Plan will be prepared on the basis of biophysical and socioeconomic data and of the results of consultations. **Indicator: document with maps. Means of verification: document in printed and electronic formats.**

- d. **Forest management plans:** Besides the need for management plans required to authorise uses, forest owners will be encouraged to plan for the integrated utilisation of their resources, under a pilot and demonstration scheme. **Response to Recommendation #6: The forest management plans will be formulated by the communities under the supervision of the Corporation, with the possible participation of the FOREST AGENT, a position created by the new forestry law. Indicator: forest management plan. Means of verification: document in printed and electronic formats.**
- e. **Strengthen local forest utilisation and management organisations:** The project will provide support to relevant existing cooperatives and associations, and will support efforts to create a consultation space among interested groups, on the management and use of forests in the region. **Indicator: persons trained. Means of verification: list of persons trained duly identified (name, ID, signature or fingerprint).**
- f. **Participatory monitoring and evaluation:** A participatory monitoring and evaluation system will be established to monitor progress in the implementation of the Management Plan. **Indicator: monitoring and evaluation visits. Means of verification: report.**

## 2.4 Target beneficiaries

Direct project beneficiaries will include:

- Forest owners whose properties are not registered on the cadastre will be able to access the legalisation of their properties. Model properties selected by the project will receive advice to improve their operation systems.
- Timber loggers, including sawyers, carriers, and transport operators, will benefit from the support provided by the project mainly by way of training to improve their operations.
- Logger cooperatives and associations and Community Action Boards (JACS) will benefit from the project help in negotiating conditions for credit access.

Project beneficiaries will also include CORANTIOQUIA as it will be able to fulfil its commitment to implement the RFMM Management Plan.

## 2.5 Technical and scientific aspects

Forests in the Antioquia Northeast and Bajo Cauca regions are classified as mostly moist tropical forests, according to Holdridge's life zones or vegetation formations. Climate ranges include biotemperatures above 24° C, a range of annual average rainfall between 2,000 and 4,000 mm, and altitude between 0 and 1,000 metres. Response to the second part of recommendation #5: Stratified statistical forest inventories have been implemented in the project's areas of influence, covering 10,000 ha of forest, with a sampling intensity of 1.5% for all species with a DBH of at least 10cm, and an error margin of less than 15% and 95% probability rate. This information is currently available in the data bank that was set up with ITTO resources under pre-project PPD 84, the final output of which was precisely this project proposal.

We have also gathered information from these inventories on several timber species, including: Abarco (*Cariniana pyriformis*), Almendrón (*Caryocar sp.*), Amargo (*Machaerium sp.*), Cagüi (*Caryocar sp.*), Cedro (*Cedrela odorata*), Laurel (*Nectandra sp.*), Nazareno (*Peltogyne panuculata*), Roble (*Tabebuia rosea*), Sapán (*Clathrotropis brachypetala*), and Vela de Cuba (*Gustavia sp.*) among others; commercial volumes per hectare, phyto-sociological and structural information about the forest and information on diversity indexes, among others. This is the reason why the consultant did not include an activity related to the implementation of a forest inventory despite being asked to do so, but we do agree, however, that it is necessary to gather new information, so as to update existing data, by implementing an inventory over 240 ha, which will then be analysed with the software that the Corporation acquired for this purpose. The cost of this inventory will be US\$50/ha.

In Colombia, many forests have been declared special management ecosystems to ensure their preservation and better utilisation. Antioquia's North and Northeast tropical forests, situated in the

departmental regions under the Panzenú and Zenufaná Land Unit Offices respectively, were declared Forest Reserve Zones (ZRF) in 1959; this was to serve as the basis for the development of the forest economy in the country and for the protection of soils, water and wildlife resources, defining them as “protection forest zones” and “general interest forests”. These forests have been subjected to constant pressure from settlers who log them in unsuitable manners because of their lack of technical practices and knowledge of rational utilisation of forest resources. Other people log and trade valuable timbers without the relevant forest permits or licences required by law, or set up grazing lands after using slash-and-burn practices in the forest to establish extensive livestock systems or illegal crops that do not benefit the local population at all. These have forced the environmental authority of this departmental zone, CORANTIOQUIA, to allocate major efforts and financial resources to try to stop their destruction and, in the future, to establish links between the local population with rational logging systems and forest valuation of these valuable tropical forests.

The Magdalena Medio Forest Reserve Zone (ZRFMM) covers 352,484 hectares (Gutiérrez Moreno 2005). The Forest Production Area (Zona Forestal Productora - ZRF) covers 277,123 hectares of this. Of this area, 171,770 hectares are vacant State-owned lands (see Table 3), in other words, these lands have never been occupied or at least, have never been registered in the municipal cadastre systems. The cadastre area (see Table 4), which does not correspond exactly to the remaining area, is mostly (84.5%) in possession i.e. the land is occupied but there is no title deed of any kind. The remaining area is shared among the other forms of land tenure, property under INCORA titles and property under title. There is a high concentration of land in lots over 200 hectares that cover 38% of the total cadastre area, then there are lots of between 100 and 200 hectares on 28%, then lots of between 51 and 100 hectares covering 22% and so on until the smallest area lots. There are 1,687 lots in total, with the most numerous being those between 51 and 100 hectares with 24.5% of the total, then those between 21 and 50 hectares with 22.4%, and the rest (Table 5). The smallest lots of between 0 and 1 hectare, i.e. 12.2% of the total number of lots, only cover an area equivalent to 0.02% of the cadastre area. There are 1,687 lots in total with an average area of 81.4 hectares.

Five municipalities have jurisdiction on the ZRF, with 57 "veredas" in total; the El Bague Municipality has the highest number of "veredas", followed by the Municipality of Remedios. El Bague Municipality has the largest area within the Forest Production Area and has the largest amount of vacant land, followed by Segovia and then Remedios and Nechí, since Zaragoza does not have any land in this category. Remedios is the second largest Municipality in the Forest Production Area but the largest in terms of lots under occupation and in possession, as illustrated in the table of areas by tenure modality.

**Table 3: Vacant areas and tenure modalities by Municipality**

Municipalities	Vacant land		Possession		Deeds		INCORA	
	hectares	%	hectares	%	hectares	%	hectares	%
<b>Nechí</b>	6,623	3.8	18,063	15.6	3,279	21.5	3,584	58.5
<b>El Bague</b>	72,835	42.4	27,009	23.3	1,506	9.8	165	2.7
<b>Zaragoza</b>	0		10,519	9.1	194	1.3	0	0
<b>Segovia</b>	50,468	29.4	13,078	11.2	2,188	14.4	727	11.8
<b>Remedios</b>	41,844	24.4	47,266	40.8	8,127	53	1,649	27

**Table 4: Cadastre area by tenure modality**

Tenure modality	Occupied area (hectares)	% of Cadastral area
<b>in Possession</b>	115,935	84.5
<b>under title deed</b>	15,294	11.1
<b>under INCORA titles</b>	6,125	4.4

**Table 5: Distribution of lots by size**

Size	N. of lots	% of total lots	Occupied area (hectares)	% Cadastral Area
<b>0 – 1 hectares</b>	200	11.8	30	0.02
<b>2 – 20 hectares</b>	267	15.8	2,922	2.12
<b>21 – 50 hectares</b>	378	22.4	13,234	9.7
<b>51 – 100 hectares</b>	414	24.5	30,272	22
<b>101 – 200 hectares</b>	277	16.4	38,445	28
<b>Over 200 hectares</b>	151	9.1	52,461	38.2

Tables 3, 4 and 5 contain condensed information on the tenure modalities identified for each municipality, the cadastre area by tenure modality and the distribution of lots by size. In the project area of influence it was found that land in possession is the predominant tenure modality, which is normal if we consider that it is a reserve area that cannot be held under title deed. However, we found that 6,125 hectares had been titled (see Table 4) under the now defunct Institute of Agrarian Reform –INCORA (which was replaced by INCODER), in contravention of the forestry law. An interesting fact is that there are 171,770 hectares that appear as national wastelands as if they were unpopulated areas covered by totally free forest stands, whereas in fact this is only true from a legal point of view because they are not registered in the national cadastre. The land is indeed divided into lots of more than 200 hectares, which cover 38.2% of the cadastral area, and smaller lots that cover the remaining 61.2%, with the majority of these covering areas of between 51 and 100 hectares.

The average size of the lots is 81.4 hectares, approximately 50% of which are covered by forests with different degrees of intervention due to the colonization process. This is a gradual process starting with the harvesting of species of high market value and then extending to less valuable species as the demand for these species increases in the market or when new access routes are opened increasing the value of the forests. The last step in the establishment of these lots is the clear-cutting of the remaining forests that contain species of no commercial value or small-diameter species that require less effort to cut down.

In view of the above and of the difficulty in dealing with individual landowners or landholders, we have promoted the participation of communities through community forestry activities. This has allowed us to reduce the rate of illegal activities and to raise awareness among the communities so that they will not plunder existing resources and will use them more efficiently. At the same time, we are developing strategies for the rehabilitation of forests, thus creating job opportunities at the forest-lot level through sustainable management activities. We are also promoting reduced impact logging techniques together with the utilization of non-timber forest products such as seeds for food or other resources for domestic use. These are the activities that are being implemented with small scale and poorer landholders.



In the area of management planning, the following is in place:

- **Forest regulation plan:** This study is performed by Corporations and based on a description of biotic, social and economic aspects; it aims to ensure that the party interested in using the resources in a forest production area carries out activities in a planned manner, thus ensuring the suitable management and sustainable use of the resource.”

- **Forest management plan:** This is the design and description of silvicultural systems and tasks to be applied in the forest to be logged, in order to ensure its sustainability; it is submitted by parties interested in ongoing forest use.

- **Forest harvesting plan:** This is the description of the systems, methods and equipment to be used in the harvesting of forest resources and products, submitted by the parties interested in conducting individual forest operations.

#### **EXPERT PANEL RECOMMENDATION #4:**

#### **CAREFULLY ESTIMATE THE COST OF CARRYING OUT THE EXPLORATORY FOREST INVENTORIES AND OTHER COMPONENTS REQUIRED TO DEVELOP THE OVERALL MANAGEMENT PLAN FOR AN AREA COVERING 277,123 HECTARES.**

As a result of Decree 1791 of 1996, the Corporation has been implementing forest inventories for the formulation of community forest management plans with the aim of gathering information to develop management regulation plans for their respective production areas as required by the aforementioned decree. To date, samples have been taken from 10.790 hectares of forest located within the project’s areas of influence with an average sampling intensity of 1.11% (2,410 plots of 0.05 hectares each), and the information has been systematized in the Forest Inventory Database.

After duly considering the recommendation of the Expert Panel to carefully estimate inventory related costs, we believe, given the size of the area in question, that there is a need to implement an exploratory inventory of 0.05% of the total area. Given that samples have already been taken over an area of 0.04%, a further sampling of 0.01% of the total area would be sufficient to complete the collection of field data, analysis of multiple variables and extrapolation of data for similar locations within the study area.

In view of this, it will be necessary to take inventory samples over an area of 27.7 hectares at a total cost of US\$854/hectare as outlined in Table 6 below.

It should be noted that the Corporation has inventory data for an area of 120.5 hectares i.e. for 0.04% of the total area. We would therefore have inventory information available for a total area of 148.2 hectares, which is equivalent to an inventory sampling of 0.05% of the total area. Once tabulated and processed, the field information will be fed into the database software for forest inventory calculations. The field work will only require the measurement of the following parameters: plot number, tree number, height and circumference. Assuming a daily yield of 0.5 hectares for field work, the cost breakdown per hectare in US\$ is as follows:

**Table 6. Forest inventory costs per hectare**

Activity /input	Value \$	Value US\$
Forest engineer	250.000	217
Assistant technician	100.000	87
Track opener	50.000	43
Identifier /Measurer	80.000	70
Tree marker	50.000	43
Sociologist x 45 days	250.000	177
Digital mapping (ha)	90.21	0.04
Logbooks	60.000	1.15
GPS rental (80 days)	400.000	6.30
Altimeter rental (80 days)	160.000	2.50
Compass rental (80 days)	400.000	2.50
Metal tapes - 5 meters (5 tapes)	56.000	24
Cloth tapes - 5 meters (10 tapes)	30.000	0.47
Diameter tapes (2 tapes )	180.000	2.82
Reflective marking tape (20 rolls)	240.000	3.76
Transport (30 trips)	4.999.980	157
Data entry operator (20 days)	1.000.000	15.70
Computer equipment rental (20 days)	240.000	3.76
Dissemination report		7.85
Final report - printed copy		7.85
<b>TOTAL US\$ / ha</b>		<b>854</b>

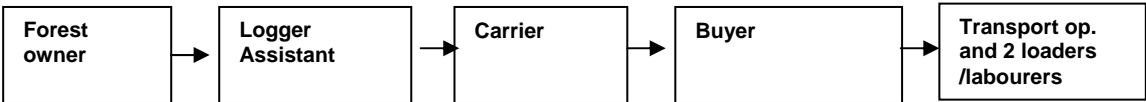
Note: (exchange rate of \$ 2,300 = US\$1 as at 20 February 2007)

**2.6 Economic aspects**

Although the volume of timber taken from the RFMM is relatively significant (annually 100,000 m<sup>3</sup> taken legally and close to 60,000 m<sup>3</sup> of illegal logging), the area is characterised by the lack of large timber companies. Forest logging is carried out by rural owners of the land or contractor loggers who use sledges for transport and place them by the side of the road where buyers turn up. This is a rudimentary system whereby the owner leases the forest to another person who has the chainsaw and mules. The timber is traded by leasing (logger pays the owner for sledges of logged timber), sold at the storage site (logger sells to the best payer on the road), purchased from the forest (logging rights negotiated), and sold at the consumption centre. The most important consumption centres are Bogotá, Bucaramanga, Medellín, Carmen de Apicala, and Puerto Berrío.

Value added processing is limited. Joinery has a limited share at the economic level. There is very limited profit from the trade in timber production as it is not possible to open up their own market as a result of economic, technical and human resource limitations. It is estimated that carriers and other intermediaries are very powerful.

The basic chain of people who are dependent on this activity is as follows:



Each link in this basic chain represents the head of a family, with the exception of the assistant who, in most cases, is a young person who hopes to become a chainsaw operator and does not have any children yet. It is important to bear in mind that although the forest owner, logger, assistant and carrier work in this activity during some parts of the year, particularly in the summer, it is not their only activity. They also work in mining, subsistence agriculture and as day labourers on other properties.

Another link that should be added to this chain as a result of the administration is the technical expert who prepares forest inventories required for management plans that are to be submitted to

CORANTIOQUIA. This new member of the chain is particularly important in the Northeast area, Remedios and Segovia, as he/she derives his/her main resources from forest inventories.

## 2.7 Environmental aspects

A diversity of programmes for the promotion and protection of renewable natural resources have helped advance and complement community forestry through many activities launched by international, national and regional bodies. For CORANTIOQUIA, apart from the PRIAFAS, other actions have been implemented such as the "Environmental system for watershed lands", "Education and environmental promotion to establish a new culture", "Environmental system for mining zones", "Environmental improvement of strategic agro-ecosystems", "Development, management and administration of a system of natural reserves in special management areas and representative environmental formations", "Environmental management of special habitats and ecosystems", "Studies on the Northeast and Bajo Cauca Rural Reserve". The project will not have any negative impact. On the contrary, it will strengthen and complement other efforts to promote the protection of natural resources.

## 2.8 Social aspects

Social development has been affected by a context of armed conflict. There have been obstacles to proper community organisation, to community follow-up and assistance, and to the availability of officials ready to commit their involvement despite grave security risks.

The pre-project completed a study to identify the other social, economic, cultural and environmental aspects that are conducive to the Community - Forest Resources relationship with a view to articulating it into the Corporative Forest Management process and for communities to access forest use under sustainability criteria. The outputs clearly describe the great poverty affecting the region. As a result of the socio-political issue, urban areas have attracted greater attention and more resources from the authorities.

Table 6 provides demographic information. The population is widespread over the forest production area, and is classified according to ethnicity and cultural, political or socioeconomic aspects. There are a considerable number of inhabitants of Coastal extraction, i.e. Colombian Atlantic Coast. The other significant group is from Antioquia or Paisa. African Colombians are a numerous and widespread group. The indigenous group is the least numerous, with three communities located in the forest production area:

- the La Po community in Segovia, duly constituted as a "Resguardo" (*Reserve*) with their respective "Cabildo" (*Congress*).
- the Eterredó community in the La Trinidad "vereda", Municipality of Nechí, who are not organised, are mostly nomads and deal in water-freighted timber.
- the indigenous community of San Juan de Ité, situated in the Municipality of Remedios, without any precise organisation and pending allocation of land.

The Forest Production Area may have a population of some 59,000 inhabitants.

**Table 7: Information on social aspects in the area of the project** (Suárez González 2005)

<b>Municipality</b>	<b>Total Population</b>	<b>Economic Activity</b>
Nechí	10,826 inhabitants (70% African descendants)	Alluvial gold mining, traditional agriculture, extensive livestock farming and forest logging.
El Bagre	46,261 inhabitants (72% African descendants)	Gold mining, agriculture, fisheries, forest logging and livestock farming. Non-legalised land tenure.
Zaragoza	27,293 inhabitants (60% African descendants)	Alluvial gold mining, traditional agriculture, extensive livestock farming and forest logging
Segovia	35,938 inhabitants (70% African descendants)	Mother lode gold mining, traditional agriculture, livestock farming and forest logging
Remedios	24,610 inhabitants	Alluvial gold mining, traditional agriculture, extensive livestock farming and forest logging

There are different types of social organisations among the "vereda" communities. The most significant organisations are the Community Action Boards (JAC) which operate by working on small immediate infrastructure works; they have little management capabilities and very limited opportunities for action. JACs receive sporadic support from local, departmental and national governments. Other organisation forms include Cooperatives whose degree of development varies depending on the "vereda", farmer associations, women's associations, fishers associations, work association companies, ecology groups, timber logger groups and others. They are all characterised by the acute lack of resources, management capabilities and lack of technical assistance.

Land tenure systems in the "veredas" include possession, where the occupant uses the lot but is not its owner, so he/she could not set up a legal business. Many of the lots are covered by public and private deeds as well as by INCORA titles; this allows their owners to exchange or negotiate. There is no clear information on titles within the Forest Reserve Zone, granted after Law No. 2 was passed in 1959.

Although the Zone still has serious law and order problems, it seems to be going through a historic transition in many places where the inhabitants have expressed the desire to launch new projects and others who had left are coming back to their lands.

## 2.9 Risks

Table 6 summarises the risks that could arise in the implementation of this project, as well as relevant mitigation actions. One of the risks includes law and order issues and safety in certain parts of the RFMM. In this respect, it should be noted that the level of violence has dropped as a result of the disarmament process and the reduction of the number of armed groups. Displaced people are returning to their "veredas", local administration authorities are operational, and local communities are able to meet.

**Table 8: Risks and mitigation actions and factors**

<b>Key assumption</b>	<b>Risk</b>	<b>Comment on mitigation actions/factors</b>
Public safety continues to improve	Access to the field is difficult for loggers and technical experts.	There are important signs of promising trends towards peace as described in the text. The current Government has credibility and inspires trust.
CORANTIOQUIA is still determined to improve forest use in the RFMM	Unsuccessful mobilisation of interested groups	This determination will continue <i>inter alia</i> because of the requirement of the new Forestry Law 2006 to adjust management plans to its requirements within two years of its promulgation.
Collaboration of interested parties	Participatory management is difficult; training programme cannot be completed.	Direct users have already stated their willingness to collaborate.

The legality of use is increasing, which is an indicator of peace consolidation. The development of forest activities, which are an important employment generation factor, can contribute to the consolidation of peace in this region.

### **EXPERT PANEL RECOMMENDATION #2:**

***IDENTIFY AND ANALYZE THE RISKS INVOLVED IN PROJECT IMPLEMENTATION IN A MORE DETAILED AND REALISTIC MANNER AND CLEARLY ELABORATE ON THE MITIGATING MEASURES TO BE TAKEN.***

The public order situation that has prevailed in the country is well known because of the violence it has generated and the fact that it is more prevalent precisely where natural forests are located. The Corporation's area of jurisdiction is not immune to this situation, and indeed the NORTH-EASTERN SUBREGION is the area that was most affected by the conflict. This in turn has had an adverse effect on the most vulnerable sector of the population, the farmers, and as a result also

on their subsistence activities, as they have been displaced from their villages and have had to abandon their fields for long periods of time. This is compounded by the problem of illegal crops, which is one of the worst enemies of forests. However, given that public order issues are managed by the President of the Republic, the decisions taken and the strategies implemented by the national government have changed this situation. The dismantling of some armed organizations that played a leading role in the conflict have allowed the rural families return to their farms. This has also given access to these areas to institutionalised work groups who were previously looked upon with suspicion and who needed prior authorization to go into these areas of interest. The work generated in their own farms through this kind of projects allows farmers to earn a salary that helps to alleviate poverty and improve their quality of life, given that their regular farming activities are only at a subsistence level. For obvious reasons, the income earned for these activities is not comparable to that earned through other illegal activities, but the legality issue is a major consideration. The fight against illegal crops has been based on the promotion of programs such as the forest-ranger families program, whereby the communities are given incentives not to establish illegal crops on their properties and implement production projects instead, as is the case with projects implemented in the municipalities of Zaragoza and El Bagre. In this context, the Corporation is implementing forest enrichment and agroforestry programs.

The co-financing of community forest management programs has reduced illegal forest activities, which is one of the major problems related to the management of forests, as there are no control mechanisms in place. This strategy is aimed at making forest owners aware of the fact that they can have access to forest logging permits so as not to be exposed to possible confiscations and, consequently, the loss of their harvested products. Furthermore, the communities are informed that the Corporation is not opposed to forest activities being carried out as long as they are well implemented. The management regulation plan proposed in this project will contain guidelines at the macro level that will facilitate the process and it will no longer be necessary to generate new information if it is already available to the Corporation, while follow-up and monitoring will be made easier with the software purchased by the Corporation for this purpose.

Both the national government, represented by the Ministry for the Environment, Housing and Land Development through the Institute for Environmental Studies (Instituto de Estudios Ambientales – IDEAM) and the Corporations (including CORANTIOQUIA) with jurisdiction over the Magdalena River Reserve, where the area to be managed by this project is situated, is taking measures to ensure the management of these areas, such as the selection of a pilot area in the south of Bolivar which is next to our area, so as to promote forest management strategies.

An important aspect of this process involves the training of local communities, as this will create an environmental culture aimed at the sustainable utilization of existing natural resources. Furthermore, trained communities will become the “environmental managers” of the Corporation in order to achieve the objective of the corporate mission statement. Training in sawdoctoring and equipment maintenance, grinding, felling techniques and timber dimensioning will have a positive effect on the economics of this activity by improving the quality of products and ensuring a more complete utilization of each tree, thus improving efficiency and, as a result, the quality of the products obtained.

The dissemination of the results of the consultancies implemented with ITTO support through pre-project PPD 84 has ensured the cooperation and participation of the local communities and other stakeholders, thus guaranteeing the smooth implementation of this project.

### **3. Outputs**

***Output 1: Groups interested in the RFMM are contributing to the development of a consensus-based vision of the integrated management of natural resources***

The consultation process of interested groups will be extremely important for the success of the project. It is proposed that the project act as a catalyst and that it provide support to the consensus-based vision of key interested groups regarding the sustainable use and management of the RFMM. The project will specifically support the organisation of inter-institutional coordination meetings and awareness-building workshops. It will also support the creation and operation of consultation spaces for interested groups at the municipal and inter-municipal levels.

## **Output 2: Forest management regulation plan developed and implemented**

The Executing Agency will establish a project coordination unit at its headquarters, which will take the more general project decisions, allocate funds to activities included in the operational plans and carry out non-land specific activities. The Executing Agency will also increase the operational capacity of its field offices. Once the coordination has been established, the project will provide technical assistance required by Municipal Councils to accelerate the legalisation of private forest lands and to complete the cadastre of such lands. Prior to this, the competent authority will take the decision to subtract the areas from the RFMM. Under Law No. 2 of 1959 this reserve has an area of 352,484 hectares in the Department of Antioquia. But the area actually under forest cover is 277,123 hectares. The actual area of the Reserve will be zoned in production forests, protection forests, conservation areas and rural reserves. The adjustments to the area of the Reserve, cadastre results and zoning will be used as the basis for the development of a Forest Management Regulation Plan in accordance with the 2006 Forestry Law, as well as a monitoring and evaluation system of its implementation.

The components and contents of the General Forest Management Plan have not yet been defined because even though the new law is already in force, it has not yet been regulated, a process that is currently taking place under the leadership of the Ministry for the Environment, Housing and Land Development (MAVDT). The document prepared by MAVDT in cooperation with ACOFORE and ITTO support – “Technical Guidelines for the Sustainable Management and Regulation of Natural Forests” – is currently being used as reference. As for the components and contents of the General Forest Management Regulation Plan (as opposed to the Forest Management Plan to be implemented in the field), they have not yet been defined because even though the new Forestry Law is already in force, these issues are still in the process of being regulated under the leadership of the MAVDT. The reference framework used at the moment is the document prepared by MAVDT in cooperation with ACOFORE and ITTO support – “Technical Guidelines for the Sustainable Management and Regulation of Natural Forests” – which contains the elements of the Plan.

The methodology to be used includes:

- a) Identification and definition by the CARs of forest production areas to be subject to management and designated as forest management units.
- b) Mapping of FMUs at an appropriate scale.
- c) Collection of secondary (biotic, abiotic, social, cultural, economic) information.
- d) Collection of (quantitative and qualitative) primary information on biotic, abiotic, social, cultural and economic aspects, records, and consultations with direct and indirect stakeholders related to forest management.
- e) Processing and analysis of the primary and secondary information collected and development of database.
- f) Final formulation of FMRP with stakeholders involved.

The contents of the Plan will include chapters on General Characterisation, Guidelines for Sustainable Forest Management Unit Planning and Sustainable Management Prescriptions, as well as a final chapter on Guidelines to Prevent and Mitigate Negative Environmental and Social Impacts.

### **EXPERT PANEL RECOMMENDATION #1:**

***CLEARLY SPECIFY THE LINKAGES BETWEEN THE CONSENSUS-BASED PARTICIPATORY PROCESS (OUTPUT 1) AND THE FOREST MANAGEMENT PLANNING PROCESS (OUTPUT 2). DESCRIBE IN DETAIL THE PARTICIPATORY APPROACH TO BE IMPLEMENTED FOR THE DEVELOPMENT OF THE FOREST MANAGEMENT REGULATION PLAN.***

**Based on the work experience of the Corporation in the field of community forestry, the strategy to be used with the organisations settled in the proposed management area to be regulated will include, as a first step for the formulation of management plans, dissemination and outreaching activities so as to raise awareness on the plan objectives among interested groups, including forest owners that have been organised in community action boards, sawmills, transport operators, territorial agencies and institutions working in the municipality, and the community in general. This will ensure their participation in the development of management plans, but especially in the implementation of field activities to carry out forest inventories (which will offer them access to not only wages but also training in information gathering, tree measurement and volume calculations in their own regional**

unit of measure, which together with species identification is the support information required by the Corporation to issue a harvesting permit or authorisation), as well as receiving environmental training and technical assistance from national and/or municipal institutions.

This relationship will facilitate compliance with reforestation/regeneration guidelines without generating any conflicts and promoting community participation in the identification of non-timber forest products, which are traditionally used by the communities without any valuation or consideration of the need to ensure their sustainability. Furthermore, forest-related community organisation will be promoted to facilitate future self-management and protection of natural resources, which will develop an enhanced sense of ownership in the community. This is important as one of the major problems in these forest areas is the lack of tenure, as economic activities are allowed in forest reserve areas but without the titling of lands, which leads to uncertainties in land ownership status. In addition, with the participation of institutions such as SENA (National Education Service), which is responsible for providing training, particularly in the areas of forestry, primary processing equipment management and maintenance, timber drying and value-added processing, it will be possible to achieve greater efficiency in utilisation. Similarly, the participation of the UMATAS (Municipal Units for Technical Assistance), which are responsible for providing technical assistance in the fields of nurseries and reforestation, will lead to increased efficiency in the implementation of reforestation and restoration strategies in harvested forests. Interested stakeholders will also include municipal and police authorities involved in the control of forest products transport.

The management regulation plan should ensure the involvement and commitment of all stakeholders as the success of the plan will depend on their contribution, because even if they are not directly concerned with the products generated by the forest, they are all related to the services it provides, which in fact benefit the entire population and the municipality as a whole. The zoning process envisaged in the management regulation plan to define effective areas for production, protection, conservation and potential rural reserves is based on a multi-disciplinary approach that requires the support of all stakeholders. All of the above will be reflected in the municipalities' land-use management plans.

**Output 3: *Efficient forest harvesting systems adopted by most operators.***

In order to improve forest harvesting systems, the project will train forest users, forest owners, loggers, assistants and carriers, focusing on equipment maintenance, sharpening of chainsaw chains, bucking techniques, and low-impact felling techniques, on-site processing, personal safety practices, timber storage and drying. The project will disseminate information on options for the harvesting of non timber forest products (NTFP). It will also raise awareness on the advantages of certification of forest management. An FSC consultant will establish a baseline and develop a phased programme towards certification.

**EXPERT PANEL RECOMMENDATION #3:**

***AS ITTO ONLY FINANCIALLY SUPPORTS PROGRESS TOWARDS ACHIEVING SUSTAINABLE FOREST MANAGEMENT AND LEAVES THE VOLUNTARY STEP OF CERTIFYING THE FORESTS AND ITS RELATED COSTS UP TO THE MARKETS AND INDIVIDUAL FORESTLAND HOLDERS, PURSUE THE ATTAINMENT OF FSC FOREST CERTIFICATION EITHER AS A PARALLEL OR A SUBSEQUENT ACTIVITY OF THE EXECUTING AGENCY, BUT COMPLETELY BEYOND THE SCOPE AND OBJECTIVES OF THIS PROJECT.***

The Corporation has accepted the recommendation of the Expert Panel and has excluded the certification component from the project. It should be pointed out that this activity will be carried out by the Corporation with its own resources from its investment plan for 2007-2009.

In order to strengthen forest user communities, the project will implement the following strategies:

- Easier access to credit: consultations will be held to identify credit access modalities. To this end contacts will be established with finance bodies such as FINAGRO to identify financing modalities for users who can offer no guarantees. The project will contribute to the potential extra cost of managing this type of operation.

#### **EXPERT PANEL RECOMMENDATION #5:**

***CLEARLY BREAKDOWN THE COMPONENTS UNDER BUDGET 60: "MISCELLANEOUS" AND JUSTIFY THE NEED FOR ITTO FINANCIAL SUPPORT FOR ITEMS 602, 607 AND 608, AS THEY APPEAR TO BE UNRELATED TO THE ACHIEVEMENT OF THE PROJECT'S OBJECTIVES. CONSIDER FULLY OR PARTIALLY FINANCING THESE PERIPHERAL ACTIVITIES WITH COUNTERPART FUNDS.***

Budget Item 60 "Miscellaneous" has been broken down in Table 7.3 – Yearly Budget by Source – ITTO. In addition, the costs of items 602, 607 and 608 are justified below:

#### **JUSTIFICATION OF ITEM 602:**

##### **Costs of financial institutions:**

These costs refer to the design, identification and implementation of pilot strategies to assist forest users in gaining access to credit from financial institutions, as one of the forest sector weaknesses is limited access to credit facilities, which involves a number of costs for users who are not familiar with the required procedures. Thus, the financial resources requested are related to the additional cost involved in the identification of potential financing models and sources.

Colombian farmers have traditionally been denied access to private bank credit facilities and for this reason they have not been able to use new technologies in their forest harvesting activities. Managing forests without financial resources to carry out the necessary operations is a very difficult task given the degree of undercapitalisation of the communities settled in these forest areas. This activity is directly related to the objective of this project as it is aimed at strengthening the local forest economy by increasing the degree of industrialisation of forest harvesting operations and ensuring the involvement of local stakeholders in the production chain process promoted by the national government.

The communities using this resource have traditionally relied on the good will of intermediaries because of the lack of working capital to carry out further processing activities and thus participate in the last link of the production chain i.e. marketing of products. These communities have no means of production and only have the forest, which is subjected to wasteful practices due to the lack of funding for further processing to add value to the resource. It should be pointed out that the new law that has been recently passed in Colombia (Act No. 1021/06) separates the forest cover from the actual forest land thus allowing landowners to negotiate the rights to the standing timber in their plots without having to leave their properties. In view of the above, this activity will involve the following:

- Support for business development: the project will provide advice for the management of model farms, focusing on the implementation of a model for multiple uses of resources. Technical experts will provide support for the development of micro-management plans for individual farms, incorporating the forestry component into agricultural production, as well as business plans for the properties.
- Training of organizations: an analysis of the needs of user cooperatives and associations will serve to design different types of support. Support will include help for legalisation of property and training management boards.

#### **JUSTIFICATION OF ITEM 607**

##### **Support to municipalities / Law 2 of 1959**

This item refers to the support required by the municipalities to remove from the reserve those areas that have already been affected by colonisation processes so as to facilitate their titling. This requires a number of procedures to be followed as stipulated by MAVDT, which include socioeconomic and environmental surveys based on pre-established specific terms of reference. This activity is related to the project objectives because it offers the possibility to develop and consolidate a rural reserve, which is a project that has been promoted by the municipalities. This activity is complementary to the forest management process, as the legal provisions related to the development of this type of reserves enable rural farmers to have access to specific technical assistance provided by the government as well as soft credit facilities for the management of agricultural crops at the plot level. Thus, the above is



complementary to the forest management regulation plan activities and supports the management of harvested and managed forests.

### **JUSTIFICATION OF ITEM 608**

#### **Support to municipalities for land tenure legalisation**

This item refers to the formalities to be followed by the municipalities in order to legalise the tenure of lands through the registration of rural properties in the municipal land registry so as to clarify the forest land ownership regime. One of the factors hindering smooth land-use planning and management is the lack of forestland titling as the resulting uncertainty erodes the farmers' sense of ownership, which encourages them to harvest the resources as quickly as possible without any consideration for the forest.

Forest management cannot be viable without comprehensive land ownership/tenure information on private lands. The registration of lands in the official land registry allows for the legalisation of sites located in areas that are considered to be vacant wasteland. It should be pointed out that there have been Constitutional Court rulings indicating that "possession is considered to be a fundamental right of individuals and generates the same rights as a land title". Therefore, public forest areas can be subject to forest concessions or association arrangements as envisaged in the new forestry law. The forest policy outlined in CONPES document No. 2834 of 1996 defines a course of action related to the forest ownership regime which includes the review of land tenure status and forest land titles and the designation of public forests, which may be subject to the legal provisions stipulated by the new forestry law.

Similarly, it should also be pointed out that the legalisation and titling of a rural property gives land tenure holders the possibility to gain access to credit facilities from the government and private banks, using their properties as guarantee of obligations acquired.

#### 4. Activities and Inputs

No.	Activity	Inputs (Cost in US\$)
<b>Output 1: Groups interested in the RFMM are contributing to the development of a consensus-based vision of the integrated management of natural resources</b>		
A1.1	Support inter-institutional coordination	1 two-day meeting/year, 15 people, @ 50.-/person/day, 3 years
A1.2	Organise workshops for interested groups	1 workshop/year/; 25 people per event, 3 years: Transport @ 25.-/person; DSA (including accommodation and meals) @ 40.-/person.
A1.3	Support the creation and operation of municipal and inter-municipal consultation spaces	2 two-day inter-municipal meetings per year, 15 people per meeting, 3 years: Transport @ 25.-/person; DSA (including accommodation and meals) @ 40.-/person.
<b>Output 2: Forest Management Regulation Plan developed and implemented</b>		
A2.1	Support municipal operations to subtract unforested areas classified as forests according to Law No. 2 of 1959	6 months of Technicians @ 1,000.-; 5 municipalities.
A2.2	Support municipal operations to legalise private properties	6 months of Technicians @ 1,000.-; 5 municipalities.
A2.3	Zoning of RFMM and development of Management Regulation Plan	CORANTIOQUIA personnel: 5 months of mapping specialist; Sub-contracts: <b>3 months of forest inventory consultancy for 27.7 ha at US\$854/ha</b> ; 2 months of forest management specialist @ 2,000.-; 4 months of specialist in digital satellite photo processing @ 1,200.-/month; 5 satellite images @ 3,000.-/image; production of maps at 50,000 scale: 2,000.-; 300 copies of the Management Plan @ 10.-/copy; 1 inter-institutional meeting for validation purposes, 1 day @ 50.-/person, 15 people. Equipment for CORANTIOQUIA's SIA service: 1 computer with 500 GB hard drive and 2 GB RAM @ 6,100.-; 1 HP-DESIGNJET 4500 plotter @ 15,600.-; paper and ink for plotter @ 3,000.-
A2.4	Design a monitoring and evaluation system for Management Regulation Plan implementation	3 months of specialists (1 forest engineer, 1 socio-economist, 1 systems engineer) @ 2,000.-/month
A2.5	Establish the coordination of the project and increase operational capacity of CORANTIOQUIA lands	CORANTIOQUIA personnel over 3 years: 1 coordinator, 1 Forester and 1 Accountant at headquarters @ 1,600/month/person; 2 engineers in the field @ 1,600.-/month/person, 5 Technical experts in the municipalities @ 800.-/person/month; 7 computers and their peripherals @ 2,000.-/computer. Cost of meetings: 1 Steering Committee meeting per year @ 1,500 per meeting for transport and organization; one Consultative Committee meeting per year @ 1,500 per meeting. Information, media, various publications: 1,000.- per year.-

No.	Activity	Inputs (Cost in US\$)
<b>Output 3: <i>Efficient forest harvesting systems adopted by most operators.</i></b>		
A3.1	Organise training of operators	Training of 200 people in equipment maintenance, sharpening chainsaw chains, timber bucking, safety and ongoing follow-up @ 15.-/person; 3 Experts during 2.5 years @ 1,500.-/expert/month;
A3.2	Design modalities to support operators for access to credit	2 months of consultative work @ 1,600.-/month; contribution to management costs of financial institutions for 20,000.-
A3.3	Support-advice in management of 25 model farms	2 Experts during 2.5 years @ 1,500.-/expert/month; miscellaneous support: 10,000.- (study travel, etc.)
A3.4	Support to the strengthening of organisational capabilities of forest users	Identification of needs and training design: 2 months of consultancy @ 1,500.-/month; 1 two-day training event per municipality, 15 people/municipality @ 40.-/person DSA (including accommodation and meals).
A3.5	Forest certification.	This activity has been removed in accordance with the recommendation of the Expert Panel. The funds allocated to this component have been reassigned for the implementation of exploratory inventories.
A3.6	Conduction of study on potential uses for NTFP and dissemination of information.	3 months of specialists @ 2,000.-/month; 1,000 information sheets @ 1.-/sheet

5. **Logical Framework Worksheets for the Project**

<b>Project components</b>	<b>Indicators</b>	<b>Means of Verification</b>	<b>Assumptions</b>
<b>Development objective:</b> <i>To contribute to integrated socioeconomic development and environmental protection in the North and Northeast of the Department of Antioquia.</i>	By 2009 deforestation will have been stopped; By 2009, the rate of logged timber waste will decrease from the current 60-70% to less than 40% in 2010, and users' income levels will have increased by 30 to 50%; By 2012 RFMM forest management will be certified.	Aerial photographs, reports and field checks.	Public security keeps improving; CORANTIOQUIA's determination to improve forest use in the RFMM continues.
<b>Specific Objective:</b> <i>To launch a participatory forest management process to foster the rational use of production forests and environmental protection.</i>	A consensus-based Management Plan will be implemented by the end of the 3rd year of the project. By the end of 2008, all plans will be under CORANTIOQUIA's control and follow-up. In 2009 over 80% of the interested groups will have favourable views on the consultation process.	Project Reports; Reports of Consultative Committee meetings; Management Plan; Surveys of interested groups.	Public security keeps improving; Interested groups are collaborating; CORANTIOQUIA will appoint suitable staff to implement the project.
<b>Output 1:</b> <i>Groups interested in the RFMM are contributing to the development of a consensus-based vision of the integrated management of natural resources</i>	By the end of 2008 over 80% of interested groups are pleased with their involvement in the forest management process in the RFMM; Recommendations emerging from consultations.	Workshop and meeting reports; survey outcomes.	Interested parties are collaborating.
<b>Output 2:</b> <i>Forest Management Regulation Plan developed and implemented</i>	Non-forest area subtraction operations (Law 2 of 1959) completed before the 9th month of the project; RFMM zoning completed before the 12th month of the project thus allowing forest management; Over the first year CORANTIOQUIA has strengthened land unit capacity to support technological changes in forest uses and to monitor management plans; CORANTIOQUIA has adopted the RFMM Management Regulation Plan before the end of the 2nd year of the project, and such Plan is being implemented during the 3rd year	Project Reports; Management Plan; Management Plan approval document;	Municipal authorities cooperate towards the solution of cadastre issues over private forest properties.

Project components	Indicators	Means of Verification	Assumptions
<p><b>Output 3:</b> <i>Efficient forest use systems adopted by most operators</i></p>	<p>150 users have been trained over the first 2 years of the project and 50 in the 3rd year, and they all indicate their satisfaction by the end of the 3rd year;            At the end of 2009, 90% of users have adopted at least one new technology (e.g. tree felling, transport, timber drying and storage, etc.);            The project helps at least 10 beneficiaries per municipality gain access to credit facilities;            Before the end of the project 25 model farms have made progress with their production systems.</p>	<p>Project report; field controls; satisfaction survey of beneficiaries.</p>	<p>Interested groups are collaborating.</p>

6. Work Plan

Activity	Responsible Party	Year 1 Quarter				Year 2 Quarter				Year 3 Quarter			
		1	2	3	4	1	2	3	4	1	2	3	4
<b>Output 1</b>	Coordinator												
A1.1	Coordinator	■				■				■			
A1.2	Coordinator		■					■				■	
A1.3	Land Unit Offices		■		■		■		■		■		■
<b>Output 2</b>													
A2.1	Land Unit Offices	■	■	■									
A2.2	Land Unit Offices	■	■	■									
A2.3	Coordinator			■	■								
A2.4	Coordinator					■							
A2.5	CORANTIOQUIA	■											
<b>Output 3</b>													
A3.1	Land Unit Offices			■	■	■	■	■	■	■	■	■	■
A3.2	Coordinator		■										
A3.3	Land Unit Offices			■	■	■	■	■	■	■	■	■	■
A3.4	Coordinator		■										
A3.5	Coordinator												
A3.6	Coordinator						■						

## 7. Project Budget

### 7.1 ITTO project budget by activity and component

Outputs/ Activities	Budget Components in US \$							Year
	Project personnel	Sub- contracts	Duty travel	Capital items	Consumable items	Miscel- laneous	Total	
<b>Output 1</b>	<b>0.00</b>	<b>0.00</b>	<b>4500.00</b>	<b>0.00</b>	<b>0.00</b>	<b>10.725.00</b>	<b>15225.00</b>	
A1.1			4500.00				4500.00	
A1.2						4875.00	4875.00	
A1.3						5850.00	5850.00	
<b>Output 2</b>	<b>0.00</b>	<b>98456.00</b>	<b>750.00</b>	<b>35700.00</b>	<b>23000.00</b>	<b>12000.00</b>	<b>169906.00</b>	
A2.1		30000.00					30000.00	
A2.2		30000.00					30000.00	
A2.3		32456.00	750.00	21700.00	23000.00		77906.00	
A2.4		6000.00					6000.00	
A2.5				14000.00		12000.00	26000.00	
<b>Output 3</b>	<b>225000.00</b>	<b>12200.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1000.00</b>	<b>39000.00</b>	<b>277200.00</b>	
A3.1	135000.00					3000.00	138000.00	
A3.2		3200.00				20000.00	23200.00	
A3.3	90000.00					10000.00	100000.00	
A3.4		3000.00				6000.00	9000.00	
A3.5								
A3.6		6000.00			1000.00		7000.00	
<b>TOTAL</b>	<b>225000.00</b>	<b>110656.00</b>	<b>5250.00</b>	<b>35700.00</b>	<b>24000.00</b>	<b>61725.00</b>	<b>462331.00</b>	

## 7.2 CORANTIOQUIA contribution to project budget

Budget Components		TOTAL	Year 1	Year 2	Year 3
<b>10</b>	<b>Project personnel</b>				
	Project Coordinator (50% of time in 11 headquarters)	28.800	9.600	9.600	9.600
	12 Officers in charge of land units	115.200	38.400	38.400	38.400
	13 Mapping Specialist	12.500	12.500		
	14 1 Forest engineer (Headquarters)	57.600	19.200	19.200	19.200
	15 1 Accountant (Headquarters)	57.600	19.200	19.200	19.200
	16 5 Technicians in municipalities	144.000	48.000	48.000	48.000
	17 Annual and final financial audits	106.588	35.529	35.529	35.529
	<b>19 Subtotal</b>	<b>522.288</b>	<b>182.429</b>	<b>169.929</b>	<b>169.929</b>
<b>30</b>	<b>Duty travel</b>				
	31 Travel costs	45'000	15'000	15'000	15'000
	<b>32 Subtotal</b>	<b>45'000</b>	<b>15'000</b>	<b>15'000</b>	<b>15'000</b>
<b>40</b>	<b>Capital Items</b>				
	41 Offices in Medellín	3'600	1'200	1'200	1200
	42 Offices in land units	3'600	1'200	1'200	1200
	42 Offices in Municipal Councils	2'700	900	900	900
	<b>49 Subtotal</b>	<b>9'900</b>	<b>3'300</b>	<b>3'300</b>	<b>3'300</b>
<b>50</b>	<b>Consumable Items</b>				
	51 Miscellaneous consumables	5'400	1'800	1'800	1800
	52 Office supplies	3'600	1'200	1'200	1200
	<b>59 Subtotal</b>	<b>9'000</b>	<b>3'000</b>	<b>3'000</b>	<b>3'000</b>
	<b>SUBTOTAL</b>	<b>586,188</b>	<b>203'729</b>	<b>191'229</b>	<b>191'229</b>
	Management Costs	38,368			
	<b>TOTAL</b>	<b>624,556</b>			



### 7.3 ITTO Budget by year

Budget Components		Total	Year 1	Year 2	Year 3
<b>10</b>	<b>Personnel</b>				
101	3 Experts for user training	135.000	27.000	54.000	54.000
102	2 Experts for property management	90.000	15.000	37.500	37.500
<b>19</b>	<b>Subtotal</b>	<b>225.000</b>	<b>42.000</b>	<b>91.500</b>	<b>91.500</b>
<b>20</b>	<b>Sub-Contracts</b>				
201	Support to municipalities / Law 2 of 1959	30.000	30.000		
202	Support to municipalities for land tenure legalisation	30.000	30.000		
203	Consultations with financial institutions	3.200	3.200		
204	Consultant in organisational capacity	3.000	3.000		
205	Consultancy for <b>forest inventories</b>	23.656	23.656		
206	NTFP Study	6.000		6.000	
207	Zoning and Management Regulation Plan	8.800	8.800		
208	Monitoring and Evaluation System	6.000		6.000	
<b>29</b>	<b>Subtotal</b>	<b>110.656</b>	<b>98.856</b>	<b>12.000</b>	<b>-</b>
<b>30</b>	<b>Duty Travel</b>				
301	Inter-institutional coordination support	4.500	1.500	1.500	1.500
302	Zoning and Management Regulation Plan	750	750		
<b>39</b>	<b>Subtotal</b>	<b>5.250</b>	<b>2.250</b>	<b>1.500</b>	<b>1.500</b>
<b>40</b>	<b>Capital Items</b>				
401	1 500 GB computer	6.100	6.100		
402	1 Plotter	15.600	15.600		
403	7 computers for project coordination	14.000	14.000		
<b>49</b>	<b>Subtotal</b>	<b>35.700</b>	<b>35.700</b>	<b>-</b>	<b>-</b>
<b>50</b>	<b>Consumable Items</b>				
501	NTFP information dissemination	1.000		1.000	
502	5 satellite images	15.000	15.000		
503	Mapping	2.000	2.000		
504	Paper and ink	3.000	3.000		
505	Production of Management Regulation Plan	3.000	3.000		
<b>59</b>	<b>Subtotal</b>	<b>24.000</b>	<b>23.000</b>	<b>1.000</b>	<b>-</b>
<b>60</b>	<b>Miscellaneous (Disaggregate into activities) (These costs are disaggregated in the table of activities and inputs – pages 25-26. The corresponding output and activity appearing in that table is indicated below for each budget item)</b>				
601	Training of 200 users – DSA (meals, accommodation)	3.000	1.000	1.000	1.000
602	Financial institution costs	20.000	4.000	8.000	8.000
603	Miscellaneous support to property management	10.000	3.000	3.500	3.500
604	Support in organisational capacity (training event – 15 people/municipality/2 days; DSA (includes accommodation and meals), US\$40/day)	6.000	6.000		
605	Workshops for interested groups (1 workshop/year at US\$25/person)	1.875	625	625	625
	DSA (includes accommodation and meals) US\$40/day	3.000	1.000	1.000	1.000
606	Operation of consultation spaces (2 meetings/2 days/meeting/year/15 people/transport US\$15/person)	2.250	750	750	750
	DSA (includes accommodation and meals) US\$40/day	3.600	1.200	1.200	1.200
607	Support to municipalities / Law 2 of 1959	30.000	30.000		
608	Support to municipalities for land tenure legalisation	30.000	30.000		
609	Steering Committee meeting (1 meeting/year, transport, organisation)	4.500	1.500	1.500	1.500
610	Consultative Committee meeting (1 meeting/year)	4.500	1.500	1.500	1.500
611	Information, media, publications (1,000 information sheets/year/ US\$1/sheet)	3.000	1.000	1.000	1.000

Budget Components		Total	Year 1	Year 2	Year 3
	<b>69 Subtotal</b>	<b>121.725</b>	<b>81.575</b>	<b>20.075</b>	<b>20.075</b>
	<b>Subtotal</b>	<b>462.331</b>	<b>223.181</b>	<b>126.075</b>	<b>113.075</b>
<b>80</b>	<b>ITTO Administration, Monitoring and Evaluation</b>				
	801 Monitoring costs (US\$10,000/year) (As recommended by the Expert Panel)	30.000			
	802 Evaluation costs	15.000			
	<b>Subtotal 1 (Adjusted value)</b>	<b>507.331</b>			
	803 Programme support costs (8% of Subtotal 1) (Adjusted value)	40.586			
	<b>89 Subtotal</b>	<b>40.586</b>			
<b>100</b>	<b>GRAND TOTAL</b>	<b>547.917</b>			

## **PART III. OPERATIONAL ARRANGEMENTS**

### **1. Management structure**

CORANTIOQUIA will be the executing agency; it will assume full responsibility for the coordination and production of outputs, and will ensure compliance with the major assumptions. CORANTIOQUIA will appoint a Coordinator and an Accountant for the project, who will be based at its Headquarters in Medellín. The Project Coordinator (PC) should be a Forest Engineer with a Master's in Science or higher degree and should have 5 years proven experience in managing forest or similar projects. The PC will be in charge of the coordination and general implementation of the project, and will monitor the team of technical experts (see diagram of administrative structure of the project). CORANTIOQUIA will appoint all the members of this team at the beginning of project activities, as follows:

- 1 Project Coordinator,
- 1 Project Accountant,
- 1 Forest Engineer (Headquarters)
- 2 Heads of Land Unit Offices (foresters),
- 5 forestry technicians in municipalities.

CORANTIOQUIA will set up a Steering Committee (SC) that will operate in accordance with ITTO rules, and will include the following members:

- General Director of CORANTIOQUIA (Chairperson)
- Representative of the Ministry for the Environment, Housing and Land Development,
- ITTO Representative,
- Donor Representative,
- Head of the Inter-institutional Advisory Office of CORANTIOQUIA
- Head of the CORANTIOQUIA Land Unit Offices
- CORANTIOQUIA Land Unit Sub-Directorate

CORANTIOQUIA will also establish a Consultative Committee (CC) with representatives of interested groups including, for example, the following:

- General Director of CORANTIOQUIA (Chairperson)
- Representative of the Ministry for the Environment, Housing and Land Development,
- Key representatives of other ministries at the departmental and local levels,
- Head of the Inter-institutional Advisory Office of CORANTIOQUIA
- Head of the CORANTIOQUIA Land Unit Offices
- CORANTIOQUIA Land Unit Sub-Directorate
- Project Coordinator
- Mayors of the 5 Municipalities of the project area,
- Presidents of the board of forest user cooperatives and associations,
- Key timber industrialists of the project area,
- Representative of NGOs operating in the area of activity of the project,
- Representatives of relevant rural organisations.

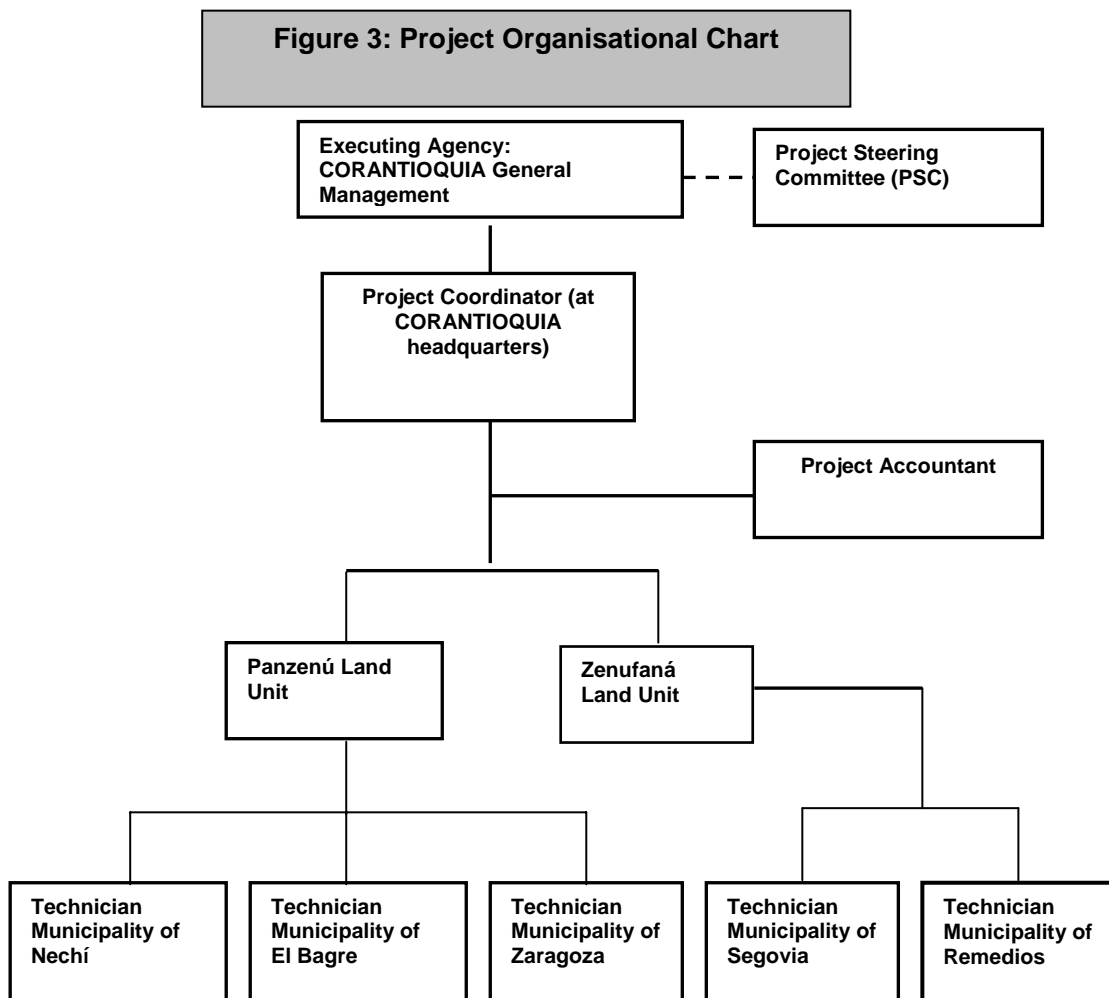
The CC will be a forum for mobilisation towards a consensus-based vision of RFMM management, as well as for information and consultation. It will not be a decision-making body on project objectives, activities and management under any circumstance.

### **2. Control, Evaluation and Reports**

Within 8 weeks of project start-up, the Project Coordinator will prepare an initial report for the first meeting of the Steering Committee. This report will include a detailed Plan of Operation for the first 12 months. The Yearly Plan of Operation (YPO) will be based on the Project Logical Framework and on activity details as defined in the project proposal. It will include resources needed, assign responsibility for each activity and present the schedule for the implementation of activities on a monthly or weekly basis.

Every 6 months CORANTIOQUIA will send progress reports to the ITTO Secretariat according to the "ITTO Manual for Project Monitoring, Review and Evaluation". Progress reports will be sent in March 2007, September 2007, March 2008, September 2008, March 2009 and September 2009. Consultancy reports will be sent to the ITTO Secretariat as well. The project completion report will be sent to the Secretariat within 3 months of project completion. The first ITTO monitoring mission will take place in March-May 2007 or June-September 2007, depending on the starting date. These missions will examine project progress on the basis of compliance with the logical framework indicators, compliance with rules and procedures relating to ITTO projects, and implementation of recommendations and decisions of the Project Steering Committee.

Correct monitoring based on the indicators in the Logical Framework of the project will require the Coordinator and team of technicians to determine the appropriate method for data collection and processing. The Project Coordinator will submit the concept of a monitoring and evaluation system (MES) for the project at the first Steering Committee meeting.



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

Upon project completion an independent evaluation mission will analyse and summarise project achievements, focusing on lessons learnt for the future or for other similar projects. The evaluation mission will make recommendations for future activities and for the sustainability of project outputs.

## PART IV. TROPICAL TIMBER FRAMEWORK

### **1. Compliance with ITTA 1994 objectives**

In its efforts to arrest deforestation in the Department of Antioquia - Colombia, the project will contribute to the global fight against tropical deforestation. Furthermore, the project is consistent with ITTA 1994, particularly with respect to the following objectives stated in article 1 of the Agreement:

- (c) *To contribute to the process of sustainable development:* The project will implement activities to contribute to sustainable forest management in the RFMM and will focus on local community sustainable development needs.
- (d) *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:* The project will implement activities to improve RFMM forest management, to arrest deforestation and to improve timber utilisation.
- (l) *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:* The project will support the development of a Management Plan for the RFMM that will serve as the basis for the sustainable use of timber from the forests of the region. Zoning of the region in production, protection and conservation areas will be the basis of the search for ecological balance.

As an active member of ITTO, Colombia stated its commitment towards the Organisation's Objective 2000. In 1993, the members identified 4 key areas of action in order to achieve this Objective. This project complies with the following:

- Security of forest resources and prevention of deforestation;
- Optimal production of goods and services;
- Improved social conditions and policies in forest management.

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

The project complies with the ITTO Yokohama Action Plan 2002-2006, in the area of Reforestation and Forest Management, and is particularly related to the following goals and actions:

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

Regarding action 7, support will be provided to Colombia to secure the forest resource base through the implementation of forest policy, legislation and associated strategies; to plan land use defining forests suitable for production and providing sufficient representation through protected, reserved and conservation areas; to identify and prevent irregular forestry activities; to incorporate operational knowledge of forest ecosystem behaviour in planning and management guidelines.

#### **Goal 2: *Promote sustainable management of tropical forest resources***

Regarding action 10, support will be provided to Colombia to improve the formulation and implementation of plans for sustainable forest management with particular emphasis on allowable harvestable volumes, to implement appropriate forest harvesting techniques, including reduced impact logging, as a component of sustainable forest management; to improve the productive capacity of natural forests(...) through(...) better utilization of lesser-used species, the promotion of non-timber forest products, assisted natural regeneration, enrichment planting and reforestation; to establish and manage forests for multiple uses in close cooperation with local forest owners and communities living in forest areas;

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## **ANNEX A - PROFILE OF THE EXECUTING AGENCY: CORANTIOQUIA**

### **3.1 Expertise of the executing agency**

Cooperation projects implemented by the agency include:

The project “*Research, Conservation and Management of Moist Tropical Forests in the Antioquia North-Eastern Region through Participatory Actions*” was implemented by CORANTIOQUIA (1996-1998) with IBRD 3692-Co resources, and with the support of the Environment and Natural Resources Management Programme Coordination Unit. Under the same project, the IBRD Micro-Watershed Management Programme was implemented for an area covering six municipalities, including 24 micro-watersheds in the Corporation’s area of jurisdiction. An important aspect of these projects was the participatory training and action strategy for 24 target communities, as well as their co-financing of labour costs, with CORANTIOQUIA providing counterpart financial resources.

Also noteworthy is the experience gained during the development and implementation of the “*Management Plan for the High Andean Moorelands and Forests of the North-Western Region in Middle Antioquia*”, financed by IDB during 1997-1998.

At present, the Corporation is implementing some components of the Green Plan – an internationally funded national programme – in the areas of ecosystem rehabilitation, agroforestry plots, protection reforestation and training, under co-financing agreements with the Ministry for the Environment, Housing and Land Development and UNDP counterpart contributions.

In relation to the Management Project hereby submitted to ITTO, the Corporation has been implementing a project on “*Management and Harvesting of Natural and Planted Forests*”, which involves community forestry and commercial reforestation activities. With regard to natural forests, one of the activities implemented by the Corporation is the formulation of community forest management plans for forest areas of an average of 588 hectares using the Corporation’s own resources. Forest owners must submit a forest management plan as a pre-requisite for the harvesting and transport of forest products. These management plans are developed on the basis of forest inventories, which must be conducted at a sampling intensity of 1.5-2% with a sampling error of less than 15% and 95% probability. While the Corporation has formulated a total of 37 forest management plans for a total area of 22,000 hectares, it has specifically developed 17 management plans for 10,000 hectares in the project’s target production areas. This information has been incorporated into the database established with ITTO support within the framework of pre-project PPD 84. The Corporation is also responsible for the monitoring and follow-up of these management plans. For the formulation of these plans the Corporation has developed a “*Technical Guide*”, which constitutes the terms of reference for management plan development. In addition, the Corporation, through the use of GIS technology, has identified the forest cover in these areas and has all the tools required for this type of work, including a GPS, altimeters, compasses and software for inventory calculations.

### **3.2 Infrastructure of the executing agency**

CORANTIOQUIA has a decentralised structure divided into one main office (headquarters) in Medellín, capital city of the Department of Antioquia, and 8 Land Unit Offices located in the 8 regions of the Department, where the Corporation offices implement programs and projects for the municipalities in their areas of influence. This has enabled the Corporation to carry out social and environmental management activities more efficiently, consolidating its presence in the communities. Two of these regional offices, equipped with up-to-date administrative and logistic equipment and multi-disciplinary professional staff, operate in two municipalities of the regions where the project will be implemented and can therefore serve as focal points for the implementation of activities, thus ensuring streamlining of work and efficiency in the use of technical, logistic and professional resources. The headquarters in the City of Medellín will be responsible for the administration of all human, technical and administrative resources in the administrative, financial, computer, planning, legal, communication and education fields. It is also important to point out the availability of a Geographic Information System (GIS), with state-of-the-art aerial photograph and image processing and digitalisation equipment that will be a fundamental tool for the implementation of forest management activities.



### 3.3 Personnel

The table hereunder lists the CORANTIOQUIA personnel related to the biodiversity area who will be directly or indirectly involved in the project:

Name of officer	Occupation
Oscar Alberto Ramírez Cañaverall	Forest engineer
Guillermo Ramírez Martínez	Forest engineer
Juan Lázaro Toro Murillo	Forest engineer
Rosa Eugenia Galeano Ramírez	Forest engineer
Juan Camilo Restrepo Llano	Zootechnician
Diana Patricia Saldarriaga	Forest engineer
Humberto Sánchez Herrera	Forest engineer
Gloria Lucely Vanegas	Forest engineer
Carlos Enrique Orrego	Forest engineer
Jorge Iván Bustamante	Forest Technician
Luz Marina Álvarez Zapata	Business Manager

## **TERMS OF REFERENCE FOR CONSULTANTS AND SUB-CONTRACTORS TO BE FINANCED WITH ITTO RESOURCES**

### **Response to recommendation #9:**

#### **ANNEX B: TERMS OF REFERENCE FOR PROJECT COORDINATOR**

The Project Coordinator will be in charge of the following:

- Coordination and supervision of all technical and administrative project activities;
- Providing support and guidance to the project team (headquarters of CORANTIOQUIA and rural areas) particularly at critical times such as the start and implementation of the project;
- Monitoring of the use of project funds;
- Preparation and implementation of yearly plans of operation for the project;
- Liaising with ITTO Secretariat and project donors;
- Preparation of progress reports as required by ITTO, and reports for Steering Committee meetings;
- Ensuring that the project management structure allows for the efficient use of resources and preparing terms of reference for each member of the team;
- Ensuring publication and dissemination of project outputs and experiences;
- Liaising with public services, the private sector and civil society in relation to project work;
- Preparation and implementation of a monitoring and evaluation system and implementation for project follow-up;
- Designing and implementing a communication strategy for the dissemination of project achievements;
- Selection of consultants and preparation of their terms of reference in accordance with relevant ITTO regulations.

#### **ANNEX B.: TERMS OF REFERENCE FOR RFMM MANAGEMENT CERTIFICATION CONSULTANT**

The consultant of a certification body will:

- Analyse the situation with reference to FSC principles and criteria, identifying what is missing for current management to comply with certification requirements. This analysis will be done in consultation with and raising the awareness of interested groups relating to the advantages of certification of forest management in the region.
- Determine baselines on the basis of the results of the status analysis and develop a program to improve forest management in the RFMM, with concrete objectives and indicators with a view to obtaining certification by the year 2012.
- Facilitate the commitment of interested groups during the results validation workshop to implement the proposed program.

**ANNEX B: TERMS OF REFERENCE**  
**CONSULTANTS FOR THE TRAINING OF FOREST LOGGERS**  
**(ITTO CONTRIBUTION)**

According to our observations, the main weaknesses identified in the area of forest harvesting are related to poor tree felling, which may lead to the waste of forest resources due to excessive stump height, stem cracking due to internal stress and poor cutting techniques; a lack of discipline in the maintenance of tools and equipment in general; poor chainsaw grinding/sharpening affecting product quality and therefore production costs; poor dimensioning causing economic loss due to unmet market demands and also due to the fact that timber pieces that could be marketed are left behind in the forest. In the area of timber processing, training activities should be focused on further processing in the forest and neighbouring areas so as to increase the value added to the products. These consultants should be Forest Engineers with sufficient experience in the field and will be hired directly or through the National Training Service (Servicio Nacional de Aprendizaje – SENA), which specialises in all aspects of forestry and also has the Timber and Furniture Centre supporting the training process. The consultants will develop training handbooks containing:

- Training in the management of chainsaws for tree felling,
- Training in equipment maintenance,
- Training in chainsaw grinding/sharpening,
- Training in timber dimensioning,
- Training in extraction (minor transport),
- Training in primary processing,
- Training in timber drying and storage.

**ANNEX B: TERMS OF REFERENCE**  
**CONSULTANTS IN FARM MANAGEMENT**  
**(ITTO CONTRIBUTION)**

The consultants in this area should be Forest Engineers with sufficient experience in all stages of forest harvesting. Their role will be focused on the implementation of all steps required for the sustainable management of pilot farms, from the identification of trees to be harvested to the extraction and transport of logs to the timber yard. Their duties will include: design of information gathering activities in felling units based on inventories (100%) of species to be harvested; allocation of tree loggers in the logging area; quality control of operations; compiling records as required for the estimation of production costs; general implementation of reduced impact logging principles; submission of reports as required by the project implementing agency.

**ANNEX B: TERMS OF REFERENCE**  
**CONSULTANT IN ORGANISATION SKILLS**  
**(ITTO CONTRIBUTION)**

This consultant should be a Sociologist, Social Worker, Agricultural Economist or Forest Engineer, with experience in community forestry projects. He/she will be responsible for the motivation, establishment and strengthening of social organisations in the work areas.

**ANNEX B: TERMS OF REFERENCE**  
**FOREST INVENTORY CONSULTANT**  
**(ITTO CONTRIBUTION)**

This consultant should be a Forest Engineer (or a consultancy firm with professional personnel in this or related areas) and should have a post-graduate degree in forestry. The consultant will be in charge of conducting statistical forest inventories as required for the formulation of a Management Regulation Plan. To this end, and on the basis of the cartographic documents obtained, he/she should prepare the design and, based on the pre-sampling survey and the variation coefficient calculated, should determine the appropriate sampling intensity so that the margin of error does not exceed 20% with 95% probability. The information collected should be submitted in electronic format following the specifications of the Corporation for its database, including inventory calculations using the software acquired for that purpose.

## **ANNEX C - CURRICULA VITAE OF THE KEY STAFF**

### **OSCAR ALBEIRO RAMÍREZ CAÑAVERAL**

ID: 71,620,650  
NATIONALITY: Colombian  
DEPARTMENT: Antioquia  
CITY: Medellín  
ADDRESS: Transversal 4 N. 72-78  
EMAIL: [oramirez@corantioquia.gov.co](mailto:oramirez@corantioquia.gov.co)

#### **EDUCATION**

TITLE: Forest Engineer  
UNIVERSITY: National University of Colombia, Medellín Campus  
DATE: August 1997  
TITLE: Specialisation in Environmental Legislation  
UNIVERSITY: University of Medellín  
DATE: October 2004

#### **WORK EXPERIENCE**

ORGANISATION: Regional Autonomous Corporation of Central Antioquia -CORANTIOQUIA-Land  
Unit Sub-Directorate  
POSITION: Expert Professional  
DURATION OF APPOINTMENT: 06 June 1995 to date

ORGANISATION: University of Antioquia  
POSITION: Contractor  
DURATION OF APPOINTMENT: 28 April 1995 to 25 June 1995

### **JORGE IVÁN BUSTAMANTE HERNÁNDEZ**

ID: 70,557,057  
NATIONALITY: Colombian  
DEPARTMENT: Antioquia  
MUNICIPALITY: Envigado  
ADDRESS: Carrera 27G N. 36D sur 96  
EMAIL: [jbustamante@corantioquia.gov.co](mailto:jbustamante@corantioquia.gov.co)

#### **EDUCATION**

TITLE: Forest Engineer  
UNIVERSITY: National University of Colombia, Medellín Campus  
DATE: June 2003

#### **WORK EXPERIENCE**

ORGANISATION: Regional Autonomous Corporation of Central Antioquia -CORANTIOQUIA-Land  
Unit Sub-Directorate  
POSITION: Forest Technician  
DURATION OF APPOINTMENT: 15 June 2000 to date

ORGANISATION: Regional Autonomous Corporation of Central Antioquia -CORANTIOQUIA-  
Panzenú Land Unit Office  
POSITION: Forest Technician  
DURATION OF APPOINTMENT: 31 March 1997 to 08 June 2000

## **GUILLERMO RAMÍREZ MARTÍNEZ**

ID: 6,858,498  
NATIONALITY: Colombian  
DEPARTMENT: Antioquia  
CITY: Medellín  
ADDRESS: Calle 40 Sur N. 30-54 –Apto-201  
EMAIL: [giramirez@corantioquia.gov.co](mailto:giramirez@corantioquia.gov.co)

### **EDUCATION**

TITLE: Forest Engineer  
UNIVERSITY: National University of Colombia, Medellín Campus  
DATE: December 1976

To complement his university studies he has taken training courses and professional training in various areas such as: Remote Sensing; Forest industry; Rural Extension Services; Agroforestry; Forest Inventories

### **WORK EXPERIENCE**

ORGANISATION:: Regional Autonomous Corporation of Central Antioquia -CORANTIOQUIA-Land  
Unit Sub-Directorate  
POSITION: Expert Professional  
DURATION OF APPOINTMENT: June 2000 to date

ORGANISATION: INDERENA  
POSITION: Forest Engineer  
DURATION OF APPOINTMENT: May 1981 to July 1995

## **DIANA MARÍA CARDONA CÁRDENAS**

ID: 42,885,130  
NATIONALITY: Colombian  
DEPARTMENT: Antioquia  
CITY: Medellín  
ADDRESS: Calle 7 N. 39-210  
EMAIL: [dcardona@corantioquia.gov.co](mailto:dcardona@corantioquia.gov.co)

### **EDUCATION**

TITLE: Agricultural Economist  
UNIVERSITY: National University of Colombia, Medellín Campus  
DATE: 1991  
TITLE: Librarian  
UNIVERSITY: University of Antioquia  
DATE: 1991  
TITLE: Specialist in design and evaluation of projects with an emphasis on Finance  
UNIVERSITY: University of Antioquia  
DATE: 2002

### **WORK EXPERIENCE**

ORGANISATION: Regional Autonomous Corporation of Central Antioquia -CORANTIOQUIA-  
Corporate Planning and Strategies Sub-Directorate  
POSITION: Coordinator of Corporate Project Bank  
DURATION OF APPOINTMENT: 1997 to date  
ORGANISATION: University of Antioquia

POSITION: Teacher (substituted for full teacher)  
DURATION OF APPOINTMENT: Year 2005

ORGANISATION: Autonomous University  
POSITION: Teacher  
DURATION OF APPOINTMENT: Semesters I and II, 2003 and semester I, 2004

### **RAFAEL ÁLVAREZ DÁVILA**

ID: 71,577,122  
NATIONALITY: Colombian  
DEPARTMENT: Antioquia  
CITY: Medellín  
ADDRESS: Carrera 83B N. 31-60 Bloque 2, Apto. 510  
EMAIL: [ralvarez@corantioquia.gov.co](mailto:ralvarez@corantioquia.gov.co)

### **EDUCATION**

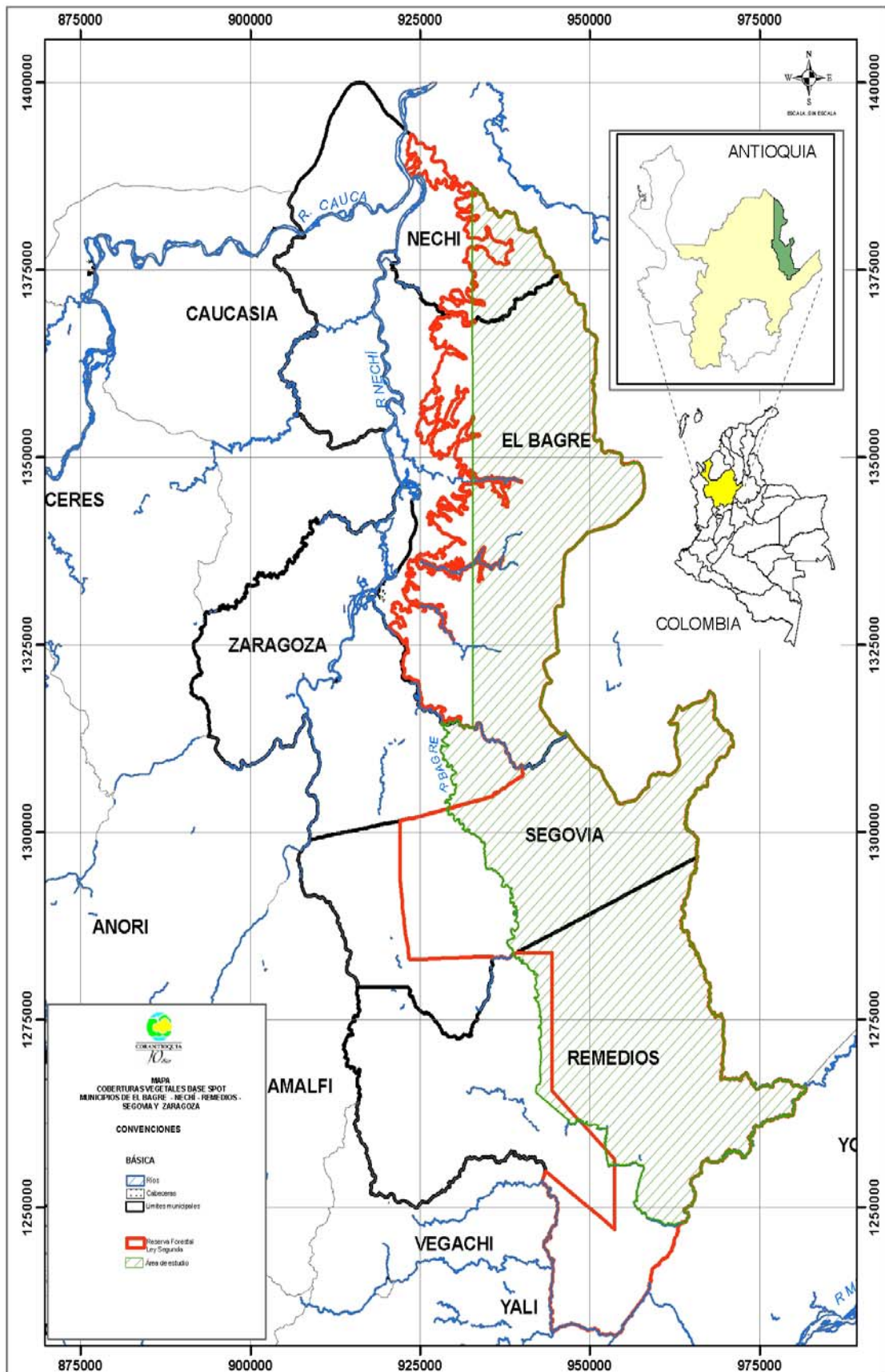
TITLE: Forest Engineer  
UNIVERSITY: National University of Colombia, Medellín Campus  
DATE: June 1993  
TITLE: Specialisation in Geographic Information Systems-GIS and Remote Sensing  
UNIVERSITY: District University of Bogotá  
DATE: December 1994  
TITLE: Specialisation in Regional Urban Planning  
UNIVERSITY: National University of Colombia, Medellín Campus  
DATE: March 2005

### **WORK EXPERIENCE**

ORGANISATION: Regional Autonomous Corporation of Central Antioquia -CORANTIOQUIA-  
Corporate Planning and Strategies Sub-Directorate  
POSITION: Expert Professional  
DURATION OF APPOINTMENT: May 1999 to date  
ORGANISATION: University of Antioquia  
POSITION: Teacher of Basic Information Technology  
DURATION OF APPOINTMENT: June 1996 to December 1997



## ANNEX E: MAP OF PROJECT AREA



**ANNEX – 33rd EXPERT PANEL’S RECOMMENDATIONS AND CORRESPONDING PROJECT MODIFICATIONS**

No.	ITTO Recommendation	Project modifications
1.	Clearly specify the linkages between the consensus-based participatory process (Output 1) and the forest management planning process (Output 2). Describe in detail the participatory approach to be implemented for the development of the forest management regulation plan	Based on the work experience of the Corporation in the field of community forestry, the strategy to be used with the organisations settled in the proposed management area to be regulated will include, as a first step for the formulation of management plans, dissemination and outreaching activities so as to raise awareness on the plan objectives among interested groups, including forest owners that have been organised in community action boards, sawmills, transport operators, territorial agencies and institutions working in the municipality, and the community in general. This will ensure their participation in the development of management plans, but especially in the implementation of field activities to carry out forest inventories (which will offer them access to not only wages but also training in information gathering, tree measurement and volume calculations in their own regional unit of measure, which together with species identification is the support information required by the Corporation to issue a harvesting permit or authorisation), as well as receiving environmental training and technical assistance from national and/or municipal institutions. This relationship will facilitate compliance with reforestation/regeneration guidelines without generating any conflicts and promoting community participation in the identification of non-timber forest products, which are traditionally used by the communities without any valuation or consideration of the need to multiply such products. Furthermore, forest-related community organisation will be promoted to facilitate future self-management and protection of natural resources, which will develop an enhanced sense of ownership in the community. This is important as one of the major problems in these forest areas is the lack of tenure, as economic activities are allowed in forest reserve areas but without the titling of lands, which leads to uncertainties in land ownership. In addition, with the participation of institutions such as SENA (National Education Service), which is responsible for providing training, particularly in the areas of forestry, primary processing equipment management and maintenance, timber drying and value-added processing, it will be possible to achieve greater efficiency in utilisation. Similarly, the participation of the UMATAS (Municipal Units for Technical Assistance), which are responsible for providing technical assistance in the fields of nurseries and reforestation, will lead to increased efficiency in the implementation of reforestation and restoration guidelines in harvested forests. Interested stakeholders will also include municipal and police authorities involved in the control of forest products transport. The management regulation plan should ensure the involvement and commitment of all stakeholders as the success of the plan will depend on their contribution, because even if they are not directly concerned with the products generated by the forest, they are all related to the services it provides, which in fact benefit the entire population and the municipality as a whole. The zoning process envisaged in the management regulation plan to define effective areas for production, protection, conservation and potential rural reserves is based on a multi-disciplinary approach that requires the support of all stakeholders. All of the above will be reflected in the municipalities’ land-use management plans. As can be seen, these two outputs are directly linked.
2	Identify and analyze the risks involved in project implementation in a more detailed and realistic manner, and clearly	The public order situation that has prevailed in the country is well known because of the violence it has generated and the fact that it is more prevalent precisely where natural forests are located. The Corporation’s area of jurisdiction is not immune to this situation, and indeed the NORTH-EASTERN SUBREGION is the area that was



<p>elaborate on the mitigating measures to be taken</p>	<p>most affected by the conflict. This in turn has had an adverse effect on the most vulnerable sector of the population, the farmers, and as a result also on their subsistence activities, as they have been displaced from their villages and have had to abandon their fields for long periods of time. This is compounded by the problem of illegal crops, which is one of the worst enemies of forests. However, given that public order issues are managed by the President of the Republic, the decisions taken and the strategies implemented by the national government have changed this situation. The dismantling of some armed organizations that played a leading role in the conflict have allowed the rural families return to their farms. This has also given access to these areas to institutionalised work groups who were previously looked upon with suspicion and who needed prior authorization to go into these areas of interest. The work generated in their own farms through this kind of projects allows farmers to earn a salary that helps to alleviate poverty and improve their quality of life, given that their regular farming activities are only at a subsistence level. For obvious reasons, the income earned for these activities is not comparable to that earned through other illegal activities, but the legality issue is a major consideration. The fight against illegal crops has been based on the promotion of programs such as the forest-ranger families program, whereby the communities are given incentives not to establish illegal crops on their properties and implement production projects instead, as is the case with projects implemented in the municipalities of Zaragoza and El Bagre. The Corporation is related to these programs under agreement with the Presidency of the Republic. In this context, the Corporation is implementing forest enrichment and agroforestry programs.</p> <p>The co-financing of community forest management programs has reduced illegal forest activities, which is one of the major problems related to the management of forests, as there are no control mechanisms in place. This has facilitated the procedures required to obtain permits and has reduced formulation costs. This strategy is aimed at making forest owners aware of the fact that they can have access to forest logging permits so as not to be exposed to possible confiscations by the authorities and, consequently, the loss of their harvested products. Furthermore, the communities are informed that the Corporation is not opposed to forest activities being carried out as long as they are well implemented. The management regulation plan proposed in this project will contain guidelines at the macro level that will facilitate the process and it will no longer be necessary to generate new information if it is already available to the Corporation, while follow-up and monitoring will be made easier with the software purchased by the Corporation for this purpose.</p> <p>Both the national government, represented by the Ministry for the Environment, Housing and Land Development through the Institute for Environmental Studies (Instituto de Estudios Ambientales – IDEAM) and the Corporations (including CORANTIOQUIA) with jurisdiction over the Magdalena River Reserve, where the area to be managed by this project is situated, is taking measures to ensure the management of these areas, such as the selection of a pilot area in the south of Bolivar which is next to our area, so as to promote forest management strategies.</p> <p>An important aspect of this process involves the training of local communities, as this will create an environmental culture aimed at the sustainable utilization of existing natural resources. Furthermore, trained communities will become the “accomplices” of the Corporation in order to achieve the objective of the corporate</p>
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		<p>mission statement. Training in sawdoctoring and equipment maintenance, grinding, felling techniques and timber dimensioning will have a positive effect on the economics of this activity by improving the quality of products and ensuring a more complete utilization of each tree, thus improving efficiency and, as a result, the quality of the products obtained. The dissemination of the results of the consultancies implemented with ITTO support through pre-project PPD 84 has ensured the cooperation and participation of the local communities and other stakeholders, thus guaranteeing the smooth implementation of this project.</p>
3.	<p>As ITTO only financially supports progress towards achieving sustainable forest management, and leaves the voluntary step of certifying the forests and its related costs up to the markets and individual forestland holders, pursue the attainment of FSC forest certification either as a parallel or a subsequent activity of the Executing Agency, but completely beyond the scope and objectives of this project</p>	<p>This activity will not be carried out with the financial resources of this project. It will therefore be under the responsibility of other financial sources as a complement to other Corporation projects.</p> <p>The funds allocated to this component have been reassigned for the implementation of exploratory inventories.</p>
4.	<p>Carefully estimate the cost of carrying out the exploratory forest inventories and other components required to develop the overall management plan for an area covering 277,123 hectares</p>	<p>As a result of Decree 1791 of 1996, the Corporation has been implementing forest inventories for the formulation of community forest management plans with the aim of gathering information to develop management regulation plans for their respective production areas as required by the aforementioned decree. To date, samples have been taken from 10,790 hectares of forest located within the project's areas of influence with an average sampling intensity of 1.11% (2,410 plots of 0.05 hectares each), and the information has been systematized in the database financed through ITTO Pre-Project PPD 84/03. After duly considering the recommendation of the Expert Panel to carefully estimate inventory related costs, we believe, given the size of the area in question, that there is a need to implement an exploratory inventory of 0.05% of the total area. Given that samples have already been taken over an area of 0.04%, a further sampling of 0.01% of the total area would be sufficient to refresh, update and supplement the data available, incorporating new areas for which no information is available. This would be equivalent to taking samples over an area of 27.7 hectares at a total cost of US\$744/hectare (at the February 2007 exchange rate of \$2,300 = US\$1), amounting to a total of US\$17,839, including the cost of an engineer, an assistant technician, workers (3), mapping (digital format), forms (logbooks) for the collection of information, rent of compass and measurement equipment (GPS, altimeters), measuring tapes and diameter gauges, reflective tape for the marking of surveyed trees, transport, data entry (computer rental, data entry operator, disks), community dissemination, and final report in digital format compatible with the GIS (Geographic Information System) and SIA (Environmental Information Service) systems of the Corporation as well as in hard copy. It should be noted that the Corporation has inventory data for an area of 120.5 hectares i.e. for 0.04% of the total area. We would therefore have inventory information available for a total area of 147.2 hectares, which is equivalent to an inventory sampling of 0.05% of the total area. Furthermore, the forest inventory calculation software acquired by the Corporation will be used to calculate all necessary parameters. Thus, the subcontractor in charge of field work will only need to design the inventory and collect field data, as the</p>

		<p>Corporation already has all the necessary biotic, abiotic, socioeconomic, land tenure and other information as required in accordance with the TORs specified in the “Technical Guidelines for the Sustainable Management of Natural Forests” prepared with ITTO support. The breakdown of costs per hectare (in US\$) is as follows: (yield/day: 0.5 hectares for field work). All components have been calculated based on market values in Colombian pesos and then converted to US\$ at the current exchange rate, and subsequent extrapolation to a hectare to provide an overall value).</p> <p>The forest inventory cost breakdown per hectare is detailed in Table 6.</p>
5.	<p>Clearly breakdown the components under budget item 60 Miscellaneous and justify the need for ITTO financial support for items 602, 607 and 608, as they appear to be unrelated to the achievement of the project’s objectives. Consider fully or partially financing these peripheral activities with counterpart funds</p>	<p>Table 7.3 Yearly project budget by source – ITTO shows a breakdown of components under budget item 60 “Miscellaneous” as requested by the Expert Panel.</p> <p><u>JUSTIFICATION OF ITEM 602:</u></p> <p>Costs of financial institutions:</p> <p>These costs refer to the design of support strategies to assist forest users in gaining access to credit from financial institutions, as one of the forest sector weaknesses is limited access to credit facilities, which involves a number of procedures and costs. Thus, the financial resources requested are related to the additional cost involved in the identification of potential financing models and sources. Managing forests without financial resources to carry out the necessary operations is a very difficult task given the degree of undercapitalisation of the communities settled in these forest areas. This activity is directly related to the objective of this project as it is aimed at strengthening the local forest economy by increasing the degree of industrialisation of forest harvesting operations and linking it to the production chain process promoted by the national government.</p> <p>The communities using this resource have traditionally been relied on the good will of intermediaries because of the lack of working capital to carry out further processing activities and thus participate in the last link of the production chain i.e. marketing of products. These communities have no means of production and only have the forest, which is subject to waste due to the lack of funding for further processing to add value to this resource, as stated in the study on forest harvesting systems financed by ITTO through pre-project PPD 84, which found a low level of efficiency amounting to just 30% of the harvestable volume.</p> <p><b>Resource sustainability will be guaranteed by the possibility to increase the value added to forest products, among other factors.</b></p> <p><u>JUSTIFICATION OF ITEM 607</u></p> <p>Support to municipalities / Law 2 of 1959</p> <p><b>This item has been reclassified and included under item 201 – Subcontracts in the ITTO budget.</b> It refers to the support required by the municipalities to remove from the reserve those areas that have already been affected by colonisation processes so as to facilitate their titling. This requires a number of procedures to be followed as stipulated by MAVDT, which include socioeconomic and environmental surveys based on pre-established specific terms of reference. This activity is related to the project objectives because it offers the possibility to develop a</p>

		<p>rural reserve, which is a project that has been promoted by the municipalities. but has been put on hold due to the lack of resources. There is precise information available on the remaining reserve area for management.</p> <p><u>JUSTIFICATION OF ITEM 608</u></p> <p>Support to municipalities for land tenure legalisation</p> <p><b>This item has been reclassified and included in Item 202 – Subcontracts in the ITTO budget.</b> It refers to the formalities to be followed by the municipalities in order to legalise the tenure of lands, which is consistent with the previous item. The aim is to clearly define the forest land ownership regime. One of the factors hindering smooth land-use planning and management is the lack of forestland titling as the resulting uncertainty erodes the farmers’ sense of ownership, which encourages them to harvest the resources as quickly as possible without any consideration for the forest.</p> <p>Forest management cannot be viable without comprehensive land ownership/tenure information on private lands. The registration of lands in the official land registry allows for the legalisation of sites located in areas that are considered to be vacant wasteland. It should be pointed out that there have been Constitutional Court rulings indicating that “possession is considered to be a fundamental right of individuals and generates the same rights as a land title”. Therefore, public forest areas can be subject to forest concessions or association arrangements as envisaged in the new forestry law. The forest policy outlined in CONPES document No. 2834 of 1996 defines a course of action related to the forest ownership regime which includes the review of land tenure status and forest land titles and the designation of public forests, which may be subject to the legal provisions stipulated by the new forestry law.</p>
6.	<p>Provide separate detailed budgets by activity and source of funding, and by component and source for the ITTO and counterpart contributions, including unit costs, as per the ITTO format.</p> <p>Carefully recalculate the budget’s components by activity (including those items mentioned under miscellaneous expenses) and, based on the final figures obtained by component and source for each activity, redo the required budget tables by component and source of funding</p>	<p>In accordance with the recommendations of the 33rd Expert Panel, separate budgets have been provided by component and by activity for the counterpart contributions, including unit costs. This information is contained in Table 7.2 “CORANTIOQUIA contribution to the project budget”.</p> <p>Following the Expert Panel’s recommendations, the costs detailed in Tables 7.2 and 7.3 have been carefully revised. The figures in these tables have been adjusted as per the recommendations after careful consideration. It should be pointed out that the values for ITTO and CORANTIOQUIA contributions have been revised.</p>
7.	<p>Include an Annex which shows the recommendations of the 33rd Panel and the respective modifications in tabular form. Text incorporated into or deleted</p>	<p>This annex shows the modifications made in response to the Expert Panel’s recommendations.</p>

	<p>from the body of the proposal so as to address the Panel's recommendations should be highlighted (bold and underline) throughout the revised project proposal document.</p>	
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*Provide separate detailed budgets by activity and source of funding, and by component and source for the ITTO and counterpart contributions, including unit costs, as per the ITTO format*

## 7.2 CORANTIOQUIA contribution to the project budget

Budget Components		TOTAL	Year 1	Year 2	Year 3
<b>10</b>	<b>Project personnel</b>				
	Project Coordinator (50% of time in	28.800	9.600	9.600	9.600
11	headquarters)				
12	Officers in charge of land units	115.200	38.400	38.400	38.400
13	Mapping Specialist	12.500	12.500		
14	1 Forest engineer (Headquarters)	57.600	19.200	19.200	19.200
15	1 Accountant (Headquarters)	57.600	19.200	19.200	19.200
16	5 Technicians in municipalities	144.000	48.000	48.000	48.000
17	Annual and final financial audits	106.588	35.529	35.529	35.529
<b>19</b>	<b>Subtotal</b>	<b>522.288</b>	<b>182.429</b>	<b>169.929</b>	<b>169.929</b>
<b>30</b>	<b>Duty travel</b>				
31	Travel costs	45'000	15'000	15'000	15'000
<b>32</b>	<b>Subtotal</b>	<b>45'000</b>	<b>15'000</b>	<b>15'000</b>	<b>15'000</b>
<b>40</b>	<b>Capital Items</b>				
41	Offices in Medellín	3'600	1'200	1'200	1200
42	Offices in land units	3'600	1'200	1'200	1200
42	Offices in Municipal Councils	2'700	900	900	900
<b>49</b>	<b>Subtotal</b>	<b>9'900</b>	<b>3'300</b>	<b>3'300</b>	<b>3'300</b>
<b>50</b>	<b>Consumable Items</b>				
51	Miscellaneous consumables	5'400	1'800	1'800	1800
52	Office supplies	3'600	1'200	1'200	1200
<b>59</b>	<b>Subtotal</b>	<b>9'000</b>	<b>3'000</b>	<b>3'000</b>	<b>3'000</b>
	<b>SUBTOTAL</b>	<b>586'188</b>	<b>203'729</b>	<b>191'229</b>	<b>191'229</b>
	Management Costs	38,368			
	<b>TOTAL</b>	<b>624,556</b>			

**CORANTIOQUIA contribution to the project budget by activity and component**

Outputs /Activities	Budget components in US \$							Year
	Project Personnel	Sub-contracts	Duty Travel	Capital Items	Consumable Items	Miscellaneous	Total	
<b>Output 1</b>	<b>0.00</b>	<b>0.00</b>	<b>15'000.00</b>	<b>0.00</b>	<b>0.00</b>	<b>00</b>	<b>15'000.00</b>	
A1.1			15'000					
A1.2								
A1.3								
<b>Output 2</b>	<b>134'429.00</b>	<b>387'859.00</b>	<b>15'000.00</b>	<b>9'900.00</b>	<b>9'000.00</b>	<b>0.00</b>	<b>556'188.00</b>	
A2.1								
A2.2								
A2.3					9'000			
A2.4								
A2.5	134'429	387'859	15'000	9'900				
<b>Output 3</b>	<b>0.00</b>	<b>0.00</b>	<b>15'000.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>15'000.00</b>	
A3.1			15'000					
A3.2								
A3.3								
A3.4								
A3.5								
A3.6								
<b>TOTAL</b>	<b>134'429.00</b>	<b>387'859.00</b>	<b>45'000.00</b>	<b>9'900.00</b>	<b>9'000.00</b>	<b>0.00</b>	<b>586'188.00</b>	